



The *U.S. Courts Design Guide* is dedicated to

The Honorable Robert S. Vance 1931–1989 United States Court of Appeals, 11th Circuit

Judge Vance was the first chairman of the Space and Facilities Committee of the Judicial Conference of the United States. His leadership significantly influenced the development of the *Design Guide* and the future of the federal judiciary.

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► The 2007 Edition

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PREFACE

Since the original publication of the *U.S. Courts Design Guide* in 1991, the federal judicial system has experienced facilities-related problems caused by heightened security needs, automation, significant caseload increases, and fiscal constraints. To address these problems, this fifth edition of the *U.S. Courts Design Guide* is intended for use by judges, architects, engineers, General Services Administration (GSA) personnel, and court administrators who will be involved in federal court construction projects.

The standards in this edition of the *Design Guide* are applicable to the design and construction of new buildings and annexes; all new leases; and repair and alteration projects in which new space, including courtrooms and chambers, is planned for an entire court unit.

This edition of the *Design Guide* was prepared under the direction of the Space and Facilities Committee (formerly the Committee on Security and Facilities) of the Judicial Conference of the United States. The revisions were approved by the Judicial Conference, the policy-making body of the federal court system. This fifth edition replaces all previous editions. Prior to submission to the Judicial Conference for approval, the *Design Guide* was reviewed by judges, clerks of court, librarians, probation officers, staff attorneys, bankruptcy administrators, circuit and district court executives, the U.S. Marshals Service, and the GSA.

The first edition of the *Design Guide* was initially developed over three years in a cooperative effort between the federal judiciary and a team of experts in space planning, security, acoustics, mechanical and electrical systems, and automation.

Direction for this effort was provided by the federal judiciary and the National Institute of Building Sciences. During this three-year period, existing court facilities were visited in all regions of the United States. The facility study included small, medium, and large federal court operations.

The *Design Guide* translates the requirements of the federal judiciary into criteria for the design and construction of court facilities. The *Design Guide* must keep pace with suggestions for changes arising from the application of criteria in the courts and the construction program administered by the GSA.

A long-term cost-containment initiative and planning objective of the Committee on Space and Facilities is to impose tighter constraints on future space and facilities costs. In September 2004, the Judicial Conference requested that the Committee achieve this goal by conducting a comprehensive review of the current edition of the *Design Guide*. This new edition is the result of that comprehensive review.

This edition will ensure that the *Design Guide* continues to reflect accurately the functional requirements of the courts. It incorporates new criteria in response to current economic constraints so that court facilities will serve the judiciary now and in the future.

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John G. Roberts, Jr. Chief Justice of the United States



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Glossary

1

This chapter outlines the intent of the Design Guide, how to use this publication and its contents, and briefly describes the organization of the federal court system, its administrative functions, and the judicial process.

INTRODUCTION AND THE FEDERAL COURT SYSTEM

Introduction

▶ Scope

The comprehensive design guidelines contained in this document describe the types of spaces commonly associated with facilities for the U.S. Court of Appeals (USCA), the U.S. District Court (USDC), and the U.S. Bankruptcy Court (USBC). The *Design Guide* includes criteria for accommodating courts in both multi-tenant and leased facilities.

The design guidelines presented in this document apply to the design and construction of new buildings, annexes, all new leased space, and repair and alterations projects in which new space is being configured for an entire court unit, including courtrooms and chambers.

▶ Objectives

The *Design Guide* has three major objectives. First, it serves as a planning tool for federal judges and key judicial personnel who are directly involved in the design of a federal court facility. Second, it provides relevant information for the General Services Administration (GSA) and an architectural/engineering (A/E) team to effectively plan, program, and design a functional, aesthetically appropriate, and cost-effective court facility. The information enables judges and judicial personnel to collaborate effectively with the GSA and the A/E team throughout a project's design and documentation phases. The *Design Guide* also provides information for the A/E team and specialists regarding

security, acoustics, telecommunications, data, and audiovisual systems. Finally, the *Design Guide* provides the Judicial Conference of the United States, through its Committee on Space and Facilities, and the Administrative Office of the U.S. Courts (AOUSC) with policy guidance for the overall planning, programming, and design of federal court facilities throughout the United States and its territories.

The *Design Guide* contains state-of-the-art design criteria for courthouses. Users should read all introductory text carefully to understand the scope, function, and intent of the design guidelines presented, and their relationship to the design process.

Revisions to the Design Guide

From 1997 to 2006, the Judicial Conference endorsed the following revisions to the 1997 edition of the *Design Guide*:

- Reduced chambers space
- Reduced chambers built-in bookcases
- Required standard configurations for chambers and courtrooms by court type
- Reduced staff private offices and open workstations sizes
- Reduced central, satellite, and unstaffed court library spaces
- Revised public spaces in district and bankruptcy clerks' offices to accommodate new work practices

- Eliminated specific space for alternative dispute resolution proceedings
- Eliminated jury boxes and jury facilities for bankruptcy judge courtrooms
- Added new guidance on public spaces and atria
- Revised guidance on providing a special proceedings courtroom
- Eliminated child development centers in court facilities
- Revised requirement for ballistic glazing
- Revised policy for access flooring as a building system
- Developed alternative designs for probation and pretrial services offices
- Made the approval process for exceptions for the judicial circuit councils, the Committee on Space and Facilities, and the Judicial Conference of the United States more specific
- Eliminated references to federal public defenders' offices in new courthouses, with the exception of the trial preparation suite
- Updated building systems (mechanical, electrical, and low voltage), lighting design, and acoustics standards to improve the effectiveness of the systems
- Revised central mail facilities design standards

Programming and Budgetary Notes

Programming and budgetary notes found throughout the *Design Guide* provide assistance with decisions to be made during the development of courthouse projects. The notes include both judicial branch policy and lessons learned from completed projects. The notes supplement the criteria in the *Design Guide*; their purpose is to provide direction in using the flexibility of the *Design Guide* to develop justifiable and cost-effective federal courthouse projects.

► Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space management role by reviewing district-wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space management program (28 USC (§332)).

and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions to the *Design Guide* must be approved by the respective circuit judicial council.

► General Programming Notes

The *Design Guide* is intended to be a performance document. Criteria for any space or grouping of spaces must be considered in conjunction with the specific needs of the court office or function for which space is being designed.

Criteria in the *Design Guide* do not represent space entitlements. The criteria apply to an array of space types that must be justified based on the specific purpose of each project. Facility plans, programs, and designs must include only the space needed to satisfy the functional and security requirements of the court.

Differences between the space in an existing facility and the criteria in the *Design Guide* are not justification for facility alteration and expansion. In such cases, alternatives to space expansion are investigated before any additional space is requested.

Design architects and court staff are prohibited from adding spaces not originally contemplated in the approved prospectus or design program. Increasing the floor area or building volume is also prohibited.

► General Budgetary Notes

Renovation and new construction occur when the court and circuit judicial council identify space needs through the judiciary's asset management planning process and document these needs in the long-range facilities plan. The GSA determines by what method the space is provided—for example, by the construction of a new building, the renovation of an existing building, a lease, or other means.

Any action taken by a court or circuit judicial council that would lead to extravagance in courthouse construction or renovation is prohibited; however, the Judicial Conference recognizes and strongly supports a pragmatic approach to design that includes the use of durable and sustainable materials. This approach ensures that courthouses constructed now will last well into the future.

How to Use This Book

▶ Fiscal Considerations

The *Design Guide* is both a design and financial commitment document. The Judicial Conference's space-rental budget correlates to the design standards contained in the *Design Guide*.

► Architectural Programming Considerations

The *Design Guide* lists and describes all major spaces and spatial groupings contained in federal courthouses. The number of major space groupings required for a particular court building shall be determined by the program of requirements submitted by the judiciary. Individual project circumstances dictate which of the major space groupings should be included in a building program.

► Relevant Chapters for Trial Courts

Three figures at the end of this chapter (Figures 1.1-1.3) identify the relevant chapters that provide information on the policy and standards for each court unit within the three types of courts: USCA, USDC, and USBC. The information in these chapters, along with technical information found in Chapters 12–16, are to be used to design the various types of court projects.

► Adjacency Diagrams

Adjacency diagrams are provided in Chapters 3 through 11. Each diagram represents an idealized arrangement of the required types of spaces, circulation patterns, and access points. Effort must be made during the design process to maintain the arrangements illustrated in the adjacency diagrams. In practice, however, this may not be possible.

It is important for users of the *Design Guide* to understand what the diagrams do and do not represent. Adjacency diagrams describe only circulatory relationships among spaces; they are not floor plans, which normally describe exact spatial sizes, configurations, and corridor distances between spaces. The boxes in the adjacency diagrams represent spaces and show only relative sizes. Regular shapes do not imply

that actual spaces must be rectangular. Similarly, irregular shapes convey no particular form, since physical conditions, external constraints, and design considerations might dictate other configurations. In addition, the relationships between spaces along circulation routes indicate only adjacencies, not approximate distances. The location of spaces on one side of the diagram or another does not necessarily fix their position on any side of a planned facility or office. Circles showing vertical circulation do not indicate the number or specific location of elevators or stairwells; for example, while a diagram may indicate two circles showing vertical freight circulation, the requirements for a freight elevator might be accommodated by a single elevator.

The adjacency diagrams include three circulation patterns: public, restricted, and secure. Each is indicated by a different line style and weight. A dotted line represents public traffic patterns used by lawyers, spectators, media representatives, and other individuals. Restricted circulation patterns within and between office spaces are represented by broken lines. Restricted circulation is generally used by judges, courtroom deputy clerks, court security officers, authorized visitors, and administrative or clerical support staff. A solid line represents secure circulation for prisoner movement; secure circulation must not intersect public or restricted circulation.

Although the lines used to indicate traffic patterns imply the existence of corridors, this is not always the case. In some instances, a circulation pattern is subsumed by another space, such as when lobby space is used as a public circulation area. In other instances, a circulation pattern might intersect an indicated space—for example, where public traffic intersects a reception counter used to control access from waiting areas to restricted spaces. Any uncontrolled intersection of differing circulation patterns constitutes a breach of security and must be avoided. Additionally, lines indicating circulation do not describe egress requirements.

Large black dots on the adjacency diagrams indicate either transition or circulation termination points, that is, termination points for public or restricted circulation, points of transition from one circulation type to another (e.g., public to restricted or external to internal), or transition points from a circulation type to a given space (e.g., from public access to a reception area).

Keyto S ymbols

• • • • Public Girculation

Restricted Girculation

Secure@irculation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when motinuse

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access,
Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolp@int

Public Wattical Girculation

Restricted Vertical Girculation

Secure Vertical Girculation

Freight Wertical Girculation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Vertical circulation is also shown on the adjacency diagrams. A circumscribed P indicates vertical public circulation for movement between floors. A circumscribed R indicates restricted vertical circulation, extending to secure parking within the building and connecting with restricted circulation on other floors. A circumscribed F indicates vertical circulation for the movement of freight and other bulky items. A circumscribed S indicates vertical secure circulation exclusively for in-custody defendants and security officers of the U.S. Marshals Service (USMS).

Access to facility circulation patterns, offices, and individual space types is indicated on the adjacency diagrams by arrows. Outlined arrows denote public entry or access points; solid arrows denote restricted and secure entry or access points. For both types of arrows, access types are further distinguished with numbers. Please refer to the keys of the individual adjacency diagrams for additional information.

The types, numbers, and sizes of spaces shown on the adjacency diagrams should not be interpreted literally as specific requirements; instead, the actual types, numbers, and sizes of spaces must be determined on a case-by-case basis, depending upon the program, design, applicable building codes, and other requirements.

For certain spaces, such as courtrooms and judges' chambers suites, the number of boxes shown on the adjacency diagrams does not necessarily indicate the number of actual spaces in a planned facility. The diagram should be used as a guide for determining the space required.

► Organization of the Design Guide

The Design Guide consists of 16 chapters, a glossary, and an index.

Figures 1.1, 1.2, and 1.3 at the end of this chapter indicate relevant chapters for U.S. Court of Appeals projects, U.S. District Court projects, and U.S. Bankruptcy Courts projects, respectively, while Figures 3.5, 3.6, and 3.7 in the "Planning for U.S. Courthouses" chapter illustrate adjacency relationships.

Chapter 1: Introduction and the Federal Court System outlines the intent, the use, and the contents of the *Design Guide*, and briefly describes the organization of the federal court system, its administrative functions, and the judicial process.

Chapter 2: Courthouse Programming and Budgetary Considerations includes a guide to supporting documents; describes the process used to plan, program, design, and construct federal court facilities; and discusses strategies for developing cost-effective courthouses to accommodate the judiciary's current and future needs. The budgetary responsibilities of the judiciary, the GSA, and other courthouse project participants are also described.

Chapter 3: Planning for U.S. Courthouses contains general design guidelines for judges and judicial personnel working with an A/E team to design a new court facility. In addition, the chapter assists A/E team members in understanding the functional and spatial relationships among the major components of a court facility, and the need for separate circulation systems. The chapter describes the major spaces in each of the three court types (USCA, USDC, and USBC) and spaces common to all courthouses, contains a typical floor plate for a courtroom floor, and discusses collegial versus collocated judges' chambers and courts in multi-tenant buildings.

Chapters 4 through 11 contain specific design guidelines to assist the A/E team in the design of a new court facility. Each chapter addresses a major functional category of space or grouping of spaces. These chapters include discussions of functions and activities, user capacities, and specific design requirements, and contain programming and budgetary notes, a list of possible space types, and adjacency diagrams.

Chapter 4: Courtrooms and Associated Spaces contains specific design guidelines for appellate courtrooms and for district, magistrate, and bankruptcy judges' courtrooms.

Chapter 5: Jury Facilities describes specific design guidelines for the jury assembly suite, trial jury suite, and grand jury suite.

Chapter 6: Judges' Chambers Suites describes specific design guidelines for the resident and non-resident chambers suites of circuit, district, magistrate, and bankruptcy judges.

Chapter 7: Central Court Libraries contains specific design guidelines for circuit headquarters libraries, satellite libraries, and unstaffed libraries.

Chapter 8: Clerk's Office contains specific design guidelines for clerks' offices of the USCA, USDC, and USBC.

Chapter 9: Probation and Pretrial Services Offices contains specific design guidelines for the offices of probation and pretrial services personnel.

Chapter 10: Other Court Units contains specific design guidelines for the Office of the Circuit Executive (USCA), the Office of the Bankruptcy Administrator, the Office of the Bankruptcy Appellate Panel clerk (BAP), the Office of the Senior Staff Attorney (USCA), the Office of the Pre-argument/Conference Attorney (USCA), the Office of the District Court Executive (USDC), and the trial preparation suite for the federal defender.

Chapter 11: Common Building Spaces defines specific design guidelines for shared judges' conference rooms, news media rooms, central mail and package screening stations, central mail facilities, bulk and archival storage, and communications equipment rooms and risers.

Chapter 12: Tenant Improvements and Furnishings contains specific design criteria for finishes, built-in millwork, and movable furniture.

Chapter 13: Interior Signage contains specific standards for interior signage.

Chapter 14: Acoustics contains specific acoustic criteria for various areas of the courthouse.

Chapter 15: Building Systems contains specific technical requirements relevant to courthouse functions and spaces. Generic performance criteria for these systems are provided within the GSA's *Facilities Standards for the Public Buildings Service* (GSA P-100).

Chapter 16: Building Security describes security requirements for court facilities.

The appendix provides a useful glossary of abbreviations used in the Design Guide.

► Changes to the *Design Guide*

Any suggestions for modifications to the *Design Guide* should be forwarded to the chief of the AOUSC Space and Facilities Division.

The Federal Court System

▶ Introduction

As established by the Constitution, the federal courts constitute one of three coequal branches of our national government. The other two branches are the executive and legislative. Unlike the members of the executive and legislative branches (i.e., President, Vice President, senators, and representatives), who are elected for a set number of years, members of the judiciary and the Court of International Trade are appointed for life, as set forth in Article III of the Constitution. U.S. Supreme Court justices, circuit judges, and district court judges are appointed to office by the President, with the approval of the Senate. Judges are subject to removal from office only through impeachment, as provided in the Constitution. The Constitution also prohibits lowering the pay of federal judges. These two forms of protection allow federal judges to make decisions, even unpopular ones, without fear of removal from office or reduction of salary.

► Types of Federal Courts

Article III of the Constitution provides for a Supreme Court and whatever other federal courts Congress considers necessary. The number of federal judges is small. While the Supreme Court and its justices are located in Washington, D.C., most members of the federal judiciary are dispersed throughout the United States and its territories.

Trial Courts. Congress divided the country into 94 federal judicial districts, each with its own USDC. The USDCs are the federal trial courts, where cases are tried, witnesses testify, and juries serve.

In the federal trial courts, broadest judicial responsibility is given to district judges. District judges conduct a wide range of judicial proceedings, including hearings, bench trials, and jury trials. Proceedings occur in both civil and criminal cases. Only district judges are authorized to conduct major criminal trials.

There are currently 678 authorized district judgeships. Typically, 1 to 5 district judges are located in small to medium-sized court facilities; however, in several large metropolitan areas, 15 or more district judges are located in a single facility. Generally, one trial courtroom is required for each district judgeship.

Magistrate and bankruptcy judges assist district judges by conducting some of the proceedings in the federal trial courts. Both are appointed by circuit and district judges and serve for a set number of years.

Magistrate judges exercise jurisdiction in a narrower range of cases than district judges, as determined by statute and a delegation of authority from district judges. Magistrate judges hear preliminary matters in criminal cases and try minor criminal cases. Under certain circumstances, magistrate judges may conduct the full range of proceedings in civil cases, up to and including jury trials. Bankruptcy judges have authority under federal bankruptcy law to act over all matters involving debtor-creditor relationships. Bankruptcy judges conduct a variety of civil hearings and, in very limited circumstances, may conduct civil jury trials.

Courts of Appeal. Congress grouped the 94 USDCs into 12 regional circuits and a federal circuit and established within each circuit a single USCA. Litigants who lose in the USDC may appeal their case to the USCA, which reviews cases to see whether the trial judge applied the law correctly. The USCA also reviews cases decided by the tax court and various federal agencies, such as the National Labor Relations Board. The USCA is the final stop for most litigation in the federal system. There are currently 179 circuit judges authorized to review cases in the 13 circuits, including the Federal Circuit. Typically, one to five circuit judges are located in a few cities in the various circuits. Occasionally, many more judges are housed in a single location. Only one headquarters courtroom (en banc courtroom) exists within each circuit. One or more auxiliary, or panel, courtrooms might be located throughout each circuit. Most federal court facilities, however, do not house circuit judges or courtrooms.

¹ Fiscal year 2007 authorized permanent judgeships.

The Supreme Court. The U.S. Supreme Court is the highest court in the land. Cases from the 13 appellate courts and the highest courts of each state can be appealed to the Supreme Court. The Supreme Court is not required to hear every case brought before it. In fact, each year the Supreme Court agrees to hear less than 10 percent of the appeals presented. The courtroom and other facilities for the nine Supreme Court justices are located in the Supreme Court Building in Washington, D.C. Design criteria for the Supreme Court are not included in the *Design Guide*.

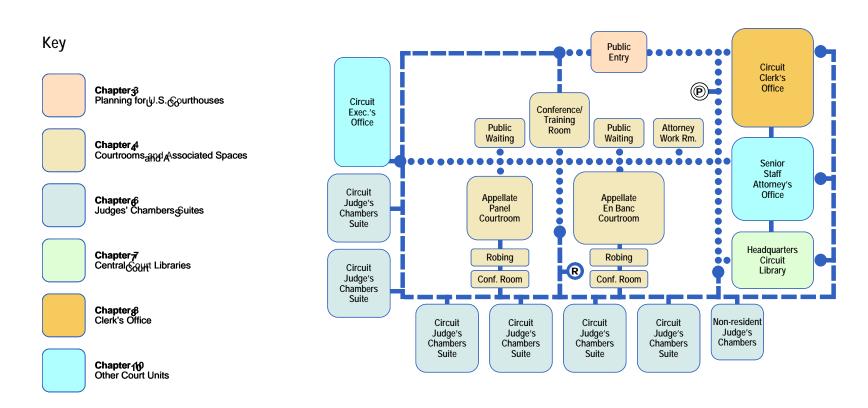
Administration of the Federal Courts

Federal judges, as members of the judicial branch of government, are responsible for the efficient operation of the federal courts. Policies for federal courts are established by a committee of federal judges, called the Judicial Conference of the United States. The Judicial Conference is chaired by the Chief Justice of the U.S. Supreme Court. Standing committees of judges have policy responsibilities that are exercised on behalf of the Judicial Conference. Furthermore, in each of the various circuits, administrative oversight is carried out through committees called circuit judicial councils. Day-to-day administration in the circuits and districts is the responsibility of chief judges; however, within the broad parameters of established policies, federal judges have a considerable degree of independence concerning the operation of their respective courts.

The federal judiciary is served by the AOUSC, which is located in Washington, D.C. The AOUSC performs a wide range of administrative duties to assist the operation of the federal courts. Other administrative officers directly responsible for carrying out judicial work include clerks of court and circuit and district court executives.

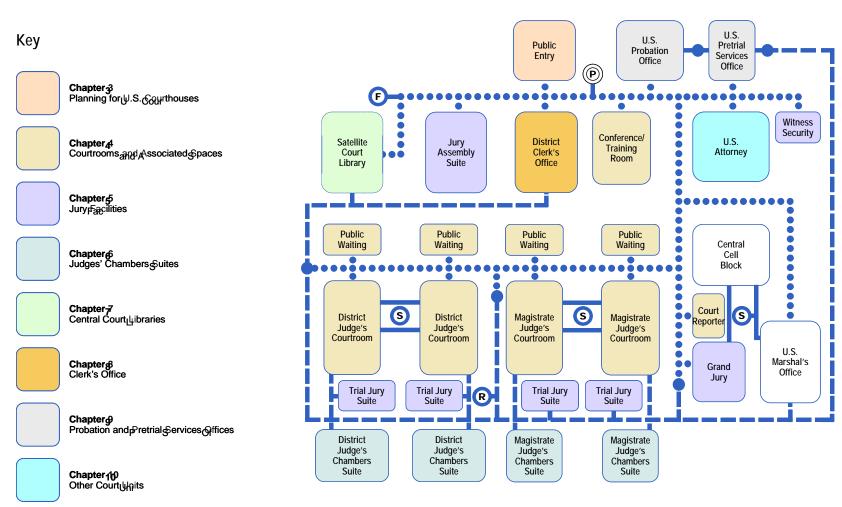
Section 462 of title 28, United States Code, gives the Director of the AOUSC authority to provide accommodations for the courts, "but only if the judicial council of the appropriate circuit has approved the accommodations as necessary" and directs that the Administrator of General Services shall provide the accommodations that the Director requests.

Figure 1.1 U.S. Court of Appeals – Relevant Chapters



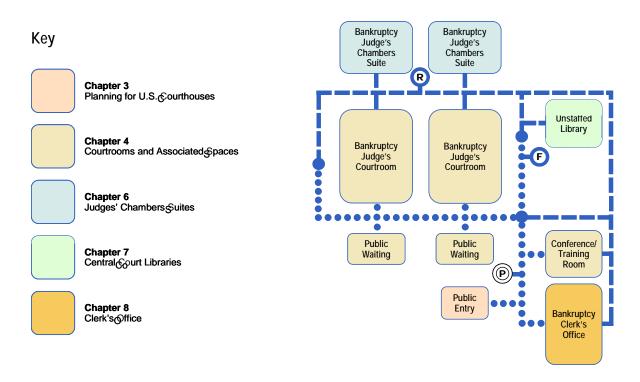
Note: The adjacency diagram is intended only as an illustration.

Figure 1.2 **U.S. District Court – Relevant Chapters**



Note: The adjacency diagram is intended only as an illustration.

Figure 1.3 U.S. Bankruptcy Court – Relevant Chapters



Note: The adjacency diagram is intended only as an illustration.

2

This chapter describes the process used to plan, program, design, and construct federal court facilities and provides strategies for developing cost-effective courthouses to accommodate the judiciary's current and future needs. The budgetary responsibilities of the judiciary, the General Services Administration (GSA), and other courthouse project participants are also described.

COURTHOUSE PROGRAMMING AND BUDGETARY CONSIDERATIONS

Introduction

Federal courthouse space and ceiling requirements are developed through a multifaceted process of planning, programming, design, and construction. This process includes a project team composed of the judiciary (judges, court unit executives, court project architects or assistant circuit executives for space, circuit judicial councils, and Administrative Office of the U.S. Courts [AOUSC] management and professional staff), consultants (architects, engineers, audiovisual engineers, registered communications distribution designers, acoustic and lighting engineers, and U.S. Marshals Service [USMS] systems and equipment engineers), the GSA, the USMS, other federal agencies, and contractors. The project team is required to make informed decisions about the judiciary's functional needs while effectively controlling project costs. The project team must consider efficiency, value, life-cycle cost, and budgetary impact when making design decisions.

The application of criteria presented in the *Design Guide* will help direct project decisions toward producing functional, cost-effective facilities. The *Design Guide* allows flexibility and supports efforts to define criteria and explore solutions that enhance performance and that are fiscally responsible. The criteria presented in this document *do not* represent an entitlement of space, furnishings, or finishes.

Supporting Documents

The references listed below represent program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses.

▶ General References

- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Handbook of Fundamentals, most current edition
- Architectural Barriers Act Accessibility Standard (ABAAS)

This document contains scoping technical requirements for implementation of the Architectural Barriers Act (ABA) of 1968 and is the new GSA accessibility standard which replaced the UFAS on May 9, 2006. This standard applies to all federal projects. http://www.access-board.gov/ufas/ufas-html/ufas.htm

 Design Notebook for Federal Building Lobby Security, GSA and USMS, undated

The goal of this publication is to illustrate how effective security screening and the related equipment and personnel can be integrated into the design of lobby spaces in new courthouses. The notebook includes prototype designs as well as typical details.

 Facilities Standards for the Public Buildings Service (GSA P-100), 2005 or most current edition

Court facilities are built under the GSA's construction program. Facilities Standards for the Public Buildings Service establishes design standards and criteria for new buildings, major and minor alterations, and work in historic structures for the Public Buildings Service (PBS) of the GSA. The publication includes criteria for the site; building structure (including seismic design); building mechanical and electrical systems; building services such as elevators, fire protection, and security; and general office design. The publication also contains references to appropriate building codes. In contrast, the Design Guide covers only those criteria pertaining to the unique functions of the U.S. courts. Where appropriate, the Design Guide directly references criteria found in Facilities Standards for the Public Buildings Service. www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8195&channelId=14201

- Illuminating Engineering Society of North America (IESNA) Lighting Handbook,
 9th Edition, Chapter 10, "Lighting Design Guide"
- Interagency Security Committee (ISC) Security Design Criteria for New Federal Office Buildings and Major Modernization Projects, Medium-High-Level Construction, GSA, most current edition
- Pricing Desk Guide, GSA Public Building Service (PBS), most current edition
 The Pricing Desk Guide presents the policies and procedures that the PBS uses to price real estate and related services to Federal agencies.

 http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_DOCU_MENT&contentId=10312&noc=T
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume One, Courthouse Management Group Engineering and Architectural, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Two, Electronic Security and Hardware, most current edition

 Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Three, Judicial Security Systems Requirements and Specifications, most current edition

Security equipment identified in the *Design Guide* will be furnished by the USMS. Detailed specifications for security equipment and criteria for USMS administrative and secure spaces are found in *USMS Publication 64*.

• Site Security Design Guide, GSA, (June 2007 or most current edition)

The Guide establishes the principles, elements and the process that should be followed when designing site security at any federal project whether it is new or existing.

http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_BASI_C&contentId=23429&noc=T

Telecommunications Cabling Standards

 Telecommunications Industry Association (TIA) and Electronics Industries Alliance (EIA), TIA/EIA-568-B Series, Commercial Building

Telephone/Data Procurement Policy

- ANSI/CSA/TIA/EIA-942, Telecommunications Infrastructure Standard for Data Centers
- TIA/EIA-569-A, Commercial Building Standards for Telecommunications Pathways
- Vulnerability Assessment of Federal Facilities, Level IV Buildings, Department of Justice (June 2007 or most current edition)

In addition, the following related guides and manuals published by the Administrative Office of the U.S. Courts (AOUSC) should guide architectural and engineering decisions.

► Administrative Office of the U.S. Courts References

Documents or references relating specifically to policies and procedures within the judiciary are available through the Space and Facilities Division of the AOUSC.

• "AnyCourt" (Program of Requirements)

The judiciary's automated space-planning tool is used to provide a court's space program of requirements based on personnel data documented in the long-range facilities plan approved by the circuit judicial council.

• Courtroom Technology Manual, (August 1999 or most current edition)

The Courtroom Technology Manual defines the roles of the GSA, architectural/engineering teams, and technical consultants for courthouse technology projects and provides technical standards for infrastructure, video evidence presentation systems, videoconferencing systems, and sound systems. http://www.uscourts.gov/misc/courtman.pdf

 Discovering Justice, "The Judicial System: An Overview of the U.S. Federal Legal System"

The mission of this website, which is maintained by a nonprofit organization headquartered in the Joseph Moakley U.S. Courthouse in Boston, Massachusetts, is to teach about the role of the justice system in American democracy. Through this organization's programs, judges dedicate their time to serve as teachers, educating the public about the federal judiciary. www.discoveringjustice.org/judicial/index.shtml

Guide to Judiciary Policies and Procedures

The *Guide to Judiciary Policies and Procedures* is the official medium by which guidance and information are provided to the judiciary in support of its day-to-day operations. The guide also codifies policies that are promulgated by the Director of the AOUSC and/or approved by the Judicial Conference of the United States. Contributing offices and divisions within the AOUSC are responsible for maintaining their information in a current condition.

This document also provides information on the funding, authorization, and documentation required for new furnishings. In addition, information is provided on the hierarchy system for furniture quality and furniture types per position/level of courthouse staff and cost ceilings

■ U.S. Courts, "The Federal Judiciary," www.uscourts.gov

- United States Courthouse Design and Construction Process (June 2007 or most current edition)
- United States Courts Courtroom Mock-up Evaluation and Assessment Report, Gulfport, MS; Helena, MT; Miami, FL; Orlando, FL (December 2002 or most current edition)
- United States Courts Moving Guide: A Handbook for Relocating or Expanding Court Operations (1996 or most current edition)
- United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition

This sourcebook of technical information about U.S. federal courthouses was written for design professionals and the judiciary. Please refer to Chapter 4, "Courtrooms and Associated Spaces," for thumbnail sketches of courtroom types, together with summary descriptions.

The Space and Facilities Division (SFD) of the AOUSC has available upon request post-occupancy evaluation reports of completed courthouse and courtroom designs, courthouse videos, and other documentation of the lessons learned from completed projects.

Design professionals who use the *Design Guide* are expected to possess knowledge of and access to literature pertaining to their particular skill areas. Such professionals are also expected to use government, industry, and consensus-based standards in applying *Design Guide* criteria to the design of court projects.

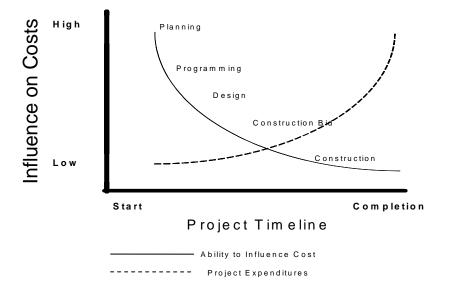
General Cost-Control Strategies

The cost of a courthouse is primarily determined by the size of the building, including both the area (the size and number of spaces) and the volume (the floor-to-floor heights). The size is determined by evaluating the functional requirements of the court (planning), applying the criteria in the *Design Guide* to determine space

needs (programming), and developing efficient spatial relationships (design). For each courthouse, construction materials and methods must be selected to satisfy the court's requirements and achieve an optimum balance of up-front initial costs and life-cycle costs.

New buildings provide the opportunity to explore cost-saving strategies while defining the functional needs of the courthouse. The project development process for a courthouse facility in an existing structure represents a greater challenge in creating a balance between function and cost-effectiveness and, therefore, demands greater flexibility in defining the program and its relationship to the *Design Guide*.

Figure 2.1
Cost Influence Graph



The AOUSC, judges, and court unit executives must be a part of the initial planning and program development process to ensure that all requirements are addressed. Before beginning the program development and design phases, the GSA and the judiciary should work together to reach an agreement on the appropriate budget for tenant improvements and shell and core costs. As the cost influence graph in Figure 2.1 shows, the greatest opportunity to influence project cost occurs in the planning and programming phases.

Management participation in the planning and programming phases is very important to ensure cost-effectiveness during design and construction. As the project progresses toward the design and construction phases, the cost of implementing changes increases.

► Construction Cost Benchmarking

The GSA construction cost benchmarks are the estimates used for project budgets.

The cost of constructing judicial facilities is typically higher than the cost of constructing standard federal office buildings, due to the courts' special requirements, such as security and specialized spaces, such as courtrooms. (See Table 2.1 for a summary of constructed costs by building element.)

► Funding Responsibilities

Rental fees paid by the judiciary to the GSA are based on an occupancy agreement (OA) executed by the GSA and the AOUSC. The OA identifies shell and core, tenant improvements, parking, and GSA fees. With very few exceptions, the GSA's rental rates include standards contained in the *Design Guide*. The project team should refer to the GSA's *Pricing Desk Guide*.

The *Design Guide* works in conjunction with the GSA criteria to define which features and finishes are provided by the GSA as part of the construction cost and which must be funded separately by the judiciary. Tenant improvement features, such as service counters and ballistic-resistant glazing, result in the judiciary paying either a higher rental rate or a one-time reimbursable charge.

Please refer to Table 2.2 for details concerning the funding responsibilities of the judiciary, the GSA, and court-related agencies.

▶ Programming and Design Cost-Control Considerations

A facility program that is too rigidly defined does not allow for growth and flexibility. Since a project can take seven years from initiation to completion, a rigid program may result in redesign change orders. To avoid this redesign cost, the AnyCourt program of requirements will be used by the GSA and the architectural/engineering firm to determine the court's needs. The judiciary allows for program growth, with detailed 10- and 30-year housing requirements (as specified in the AnyCourt).

Typically, the GSA designs and constructs courthouses to meet a court's 10-year requirement on a 30-year site. For courthouses, 30-year needs must be considered to avoid having to relocate the courts from a building after it has been constructed. On all prospectus-level construction projects, the GSA must require the design architect to provide a plan for accommodating the 30-year needs of the court on the acquired site and to demonstrate how the plan complements the project's 10-year housing requirements.

A well-designed courthouse includes a flexible strategy for relocation, expansion, and movement of spaces to address not only the 10-year requirements but also the court's 30-year growth requirements. The following three approaches should be evaluated in the initial design of a court building.

Adjoining Sites. Adjoining sites should be set aside for future expansion in conjunction with a design that anticipates adding courtrooms, judges' chambers suites, and associated facilities, or providing expanded court-related office areas.

Convertible Spaces. Court-related offices initially located in the courthouse can be relocated from the facility to allow expansion of the court. Vacated spaces can be converted into courtrooms and/or associated and support facilities. Major court-related offices with the least need to be adjacent to the court include the U.S. attorney's office. In addition, areas housing non-court-related offices may be converted to court space, or shell space may be constructed and finished as needed.

Future Expansion. Additional space can be provided within court and court-related spaces to accommodate future expansion. The amount of space set aside should be based on growth projections contained in the court's long-range facilities plan. Vertical expansion should not be considered as a viable option because of the noise and other disruptions to court operations.

For internal expansion and convertible spaces, the following design considerations apply:

- Creating "structural zones" to accommodate present and future needs
- Constructing court-related office areas with a high bay structure if these offices are to be set aside for future courtroom expansion
- Anticipating the location of future chambers and courtrooms so that judges will have continued access to restricted elevators and circulation patterns
- Planning acoustic isolation to accommodate future offices requiring privacy from the public, but not confidential privacy within the offices
- Creating "mechanical zones" to accommodate the present and future off-hours needs and/or air-handling needs of courtrooms and chambers
- Designing for the expansion and movement of spaces to allow for the relocation and reuse of workstations, partitions, HVAC equipment and registers, lighting fixtures, electrical outlets, and communication systems

The size of a courthouse can incorporate space-saving approaches, such as the following:

- Staffing projections reflecting current staffing, allocation policy, and trends.
- Operational efficiencies, such as limiting the number of conference rooms, training rooms, libraries, and other office support spaces by sharing among court units

- Efficient designs reducing the amount of space needed for circulation
- Shared courtrooms and judicial support spaces such as conference rooms
- Multiuse jury assembly areas and grand jury suites
- Collocating similar functions (e.g., probation and pretrial services offices) so that they can share resources

Other space-saving measures include the following:

- Circulation space in the courthouse is reduced when spaces are organized vertically and corridor lengths are minimized. Double-loaded corridors (rooms on both sides of a hallway) must be provided where practical. Circulation requirements are further reduced by organizing mechanical and electrical shafts, elevators, exit stairs, and public toilets around a central core.
- Building volume can be minimized by locating courtrooms, which require greater floor-to-floor heights than office space, on as few floors as possible. Additionally, building volume can be reduced by using mezzanine space when grouping low structural bay spaces (i.e., chambers and support space) around high bay spaces (i.e., courtrooms).
- Administrative space can be minimized by providing the clerk's office and records shelving with contiguous space on a single floor. Storage for bulk supplies, inactive records, furniture, and equipment must be located in basement areas, on the same floor as the loading dock, or in space provided for long-term expansion. Storage space is also cheaper to rent outside the courthouse, at half the cost of office space.

► Site Design Cost Drivers

Courthouse construction and operational costs are greatly influenced by the site and environmental characteristics that define the building's footprint, orientation, and exterior appearance. The size of the site may determine the cost and availability of secured or public parking and govern strategies for future expansion. Access to the site, current setback requirements, and the location of other federal agencies will influence security considerations. Additional expenses may be incurred for specialized lighting or landscaping to mitigate site conditions. Generally, a square or rectangular site has proved to be the most cost-effective.

► Architectural Design Cost Drivers

The most cost-effective court building generally has a rectangular or square footprint and a ratio of 0.3 to 0.6 exterior wall area to contained space for a five-story building. Facilities with low ratios of wall area to space also tend to be more efficient because of reduced circulation requirements, HVAC system costs, and energy consumption.

Other architectural considerations for cost-effective courthouses include the following:

- Spaces sized so that the most efficient structural spans can be used.
- Heavy live load areas such as libraries and file storage grouped around core areas where structural strengthening can be provided economically.
- Non-square angles and rounded areas have been proven to waste space. Also, areas with non-square angles require custom-designed furniture, resulting in additional cost.
- Windows and glazed areas are sized appropriately. Glazing costs are higher in judicial facilities in order to address blast, seismic, and ballistic threats.
- Exterior wall detailing is simplified, especially on upper floors. This allows the
 use of high-quality materials on lower floors where they can be appreciated.
- Skylights increase HVAC costs and can cause maintenance problems. Windows, borrowed light, and clerestories should provide natural light at lower initial and life-cycle costs.

Value Engineering and Life-Cycle Costing

Value engineering is a method of calculating the value received for the dollars spent over the lifetime of a building, with the emphasis placed on obtaining the maximum life-cycle value. These calculations must include the cost of construction, operation, and repair of the facility, and the efficient delivery of services. If value engineering is not applied until the later stages of design or after the design is completed, it may cause an examination of alternative design solutions; the substitution of materials, finishes, or systems; and a reevaluation of project priorities. The maximum life-cycle value may result in increased initial construction costs in exchange for decreased operation costs over the useful life of the building system. Value engineering must not be a vehicle for reducing the initial construction cost of the building. The construction cost per square foot is not the only measure of value when considering the efficiency of the total facility. The life-cycle cost of a building will reflect the efficiency of a building long after it is built and occupied. Life-cycle cost analysis usually addresses the trade-offs between initial cost and the 10- to 20-year payback period, or the expected life of a building component. Because the useful life of a federal courthouse can range from 50 to 100 years, persons conducting life-cycle cost analysis must consider the following:

- The payback period for each building component must take into account the useful life of a federal courthouse.
- The functions performed in the building might change or be relocated over time.
- The location of a particular building system, fixture, or finish must take into account special conditions that arise in federal courthouses.

Typical Federal Courthouse Project Development Process

► The Planning, Programming, Design, and Construction Process

A typical project development process includes four phases:

- Planning. The planning phase includes evaluation of workloads, staffing levels, procedures, organizations, and administrative requirements.
- Programming. The programming phase translates functional requirements into a space needs (housing) plan and defines the project's design objectives.
- Design. Drawings and specifications for constructing the facility are developed in the design phase through an iterative process of increasing detail.
- Construction. Materials and labor are organized to implement the design in the construction phase.

A typical project development process for a federal courthouse is described below. Not all projects will follow this exact sequence of events. Cost evaluation and control opportunities occur at each step and must be addressed by the court, the GSA, and all consultants.

▶ Planning Phase

Before the project begins, a group of court personnel responsible for facility planning and development must be formed, consisting of judges and representatives of the judiciary family. The group must be cost-conscious and creative in developing efficient court facilities. The services of a design and construction professional working directly for the court may be needed to ensure complete and thorough compliance with the *Design Guide*.

Asset Management Planning (AMP). In March 2006, the Judicial Conference adopted, in concept, an asset management plan (AMP) process as an objective methodology that identifies costs and benefits of alternatives to enhance the current long-range facility planning process. Asset management planning holistically assesses facilities, identifies non-prospectus- and prospectus-level new construction and renovation space projects, considers costs and benefits of specific housing strategies, and determines the best strategy by city to meet current and future operational needs.

The court begins planning by evaluating existing facilities and identifying any space deficiencies. Concurrent with the evaluation of existing facilities, the court identifies

current and future caseload and staffing requirements. The criteria in the *Design Guide* are combined with these data to identify and develop alternative housing strategies to meet the court's short- and long-term needs. These housing strategies might include leases, minor or major repair and alteration projects, or new courthouse solutions. Accurate data and justifiable assumptions are essential to ensure maximum cost-effectiveness. The resulting long-range facilities plan documents the court's immediate and long-term facility requirements, recommended potential strategies, and cost-benefit analysis and must be approved by the chief judge of the district and reviewed by the circuit judicial council. AMPs are used by the judiciary to identify, justify, and prioritize projects that become part of the judiciary's five-year plan of courthouse construction projects. The five-year plan is a national prioritized list of proposed court construction projects approved by the Judicial Conference.

► Program Development Phase

The detailed programming, design, and construction of federal courthouses is the responsibility of the GSA. The GSA initiates a project as requested in the judiciary's five-year plan. The GSA's development process begins with a long-range/community plan that identifies the federal government's facility resources and requirements in a given geographic area. The plan identifies other agencies that may use space in a courthouse for long-term or interim occupancy. The design of facilities for the long-range needs of the courts and overall project budgets will be greatly influenced by these decisions. Projects are reviewed by the GSA's Center for Courthouse Programs (CCP). The CCP ensures consistent, excellent and cost-effective delivery of the courthouse construction program. The CCP is responsible for the management of new federal courthouse construction and the modernization of existing courthouses.

The GSA retains the services of a consulting architect or planner to produce a feasibility study. The feasibility study is a programming document that further defines the project scope and budget. It uses the court's long-range facilities plan, the court's AnyCourt program of requirements, and the GSA construction cost benchmark as a base for development. AnyCourt provides detailed square footage requirements for each court function, based upon the AMP and supplemental information provided by the judiciary.

The study addresses site acquisition, design and construction, building systems, and tenant support services, as well as related design issues such as security, court electronic systems, telecommunications, and funding. The study contains a project implementation strategy, including project scheduling, cost-control measures, and other factors.

The purpose of the construction cost benchmark is to establish a budget that provides sufficient funding to deliver a new court facility that meets all *Design Guide* requirements.

The construction cost benchmark is based entirely on information developed in the courthouse program. Because subsequent changes are difficult and more expensive to make as a project progresses, each court must help ensure that its courthouse program is accurate and complete. Features or systems not included in the initial cost estimate will not be funded if they are identified later in the process.

▶ Determining the Number of Courtrooms per Courthouse

The following policy statement, adopted by the Judicial Conference, encourages courts to take several factors into account when considering the construction of additional courtrooms.

- Recognizing how essential the availability of a courtroom is to the fulfillment of the judge's responsibility to serve the public by disposing of criminal trials, sentencing, and civil cases in a fair and expeditious manner, and presiding over the wide range of activities that take place in courtrooms requiring the presence of a judicial officer, the Judicial Conference adopts the following policy for determining the number of courtrooms needed at a facility:
- With regard to all authorized active judges, one courtroom must be provided. In addition, with regard to senior judges who do not draw a caseload requiring substantial use of a courtroom, and visiting judges, the judicial circuit council should utilize the following factors, as well as other appropriate factors, in evaluating the number of courtrooms at a facility necessary to permit them to discharge their responsibilities.

- An assessment of workload in terms of the number and types of cases anticipated to be handled by each such judge.
- The number of years each active judge is likely to be located at the facility until eligible to take senior status.
- An evaluation of the current complement of courtrooms and their projected use in the facility and throughout the district in order to reaffirm whether construction of an additional courtroom is necessary.
- An evaluation of the use of the special proceedings courtroom and any other special-purpose courtrooms to provide for more flexible and varied use, such as use for jury trial.
- An evaluation of the need for a courtroom dedicated to specific use by visiting
 judges, particularly when courtrooms for projected authorized judgeships are
 planned in a new or existing facility.

In addition, each circuit judicial council has been encouraged by the Judicial Conference to develop a policy on sharing courtrooms by senior judges when a senior judge does not draw a caseload requiring substantial use of a courtroom.

The following assumptions, endorsed by the Judicial Conference in March 1997, should be considered to determine courtroom capacity in new buildings, new space, or space undergoing renovation. This model allows assumptions to be made about caseload projections and the time frames in which replacement, senior, and new judgeships will occupy the new facility. The model affords flexibility to courts and circuit judicial councils when making decisions about the number of courtrooms to construct in a new facility since adjustments to the assumptions can be made to reflect a specific housing situation "on line".

- The number of new judgeships approved by the Judicial Conference and recommended for approval by Congress, and the year approval is expected.
- The number of years senior judges will need a courtroom after taking senior status (a 10-year time frame is recommended).

- The average age of newly appointed judges at the court location.
- Caseload projections based upon the district's long range facilities plan (other caseload measures, such as raw or weighted filings, might also be considered).
- The percentage of the total district caseload handled at the location.
- The ratio of courtrooms per active and senior judge (at present, the model assumes a ratio of one courtroom per judge).
- The number of years it will take for a new judgeship to be approved by the Judicial Conference and Congress once weighted filings reach the level that qualifies a court for an additional new judgeship (a three-year time frame is recommended).
- The number of years before a replacement judge will be on board after a judge takes senior status (a two-year time frame is recommended).
- The year the judges are expected to take senior status once they become eligible (a court or council should assume that a judge will take senior status when eligible)

The planning assumptions listed above are subject to modification for just cause by courts in consultation with the respective judicial council.

In addition, the following factors should be taken into account:

- The availability of district courtrooms for other proceedings and the sharing of courtrooms should be considered.
- Circuit judicial council approval is required for special proceedings courtrooms located apart from the district's headquarters. Approval is also needed for en banc appeals courtrooms located outside circuit headquarters courthouses.

A special proceedings courtroom may be provided for a new court building planned with fewer than four district judge courtrooms in states with small, widely dispersed populations, to accommodate multiparty trials in those locations. The court shall submit a justification for providing such a courtroom to the circuit judicial council for final approval by the Committee on Space and Facilities. If the Committee disagrees with the requirement, the Judicial Conference shall make the final determination.

► Sizing Courthouse Support Spaces

Certain design decisions are based on the number of people served by the courthouse (the number of exits and restrooms, etc.). Most building codes have square footage allotments per person. Such allotments, which vary by building type, generally yield an estimate far exceeding the actual population in court facilities. The primary cause of this overestimation is the failure to adequately consider the following two factors:

- First, some users of a courthouse have different facilities requirements at various times of the day, resulting in duplicate spaces. For example, in a typical day, a single juror might occupy the jury assembly room, jurors' lounge, courtroom jury box, trial jury room, and other spaces. Similarly, a judge might use a private chambers office, judges' conference room, and courtroom.
- Second, a simple count of the number of seats in a courtroom does not accurately yield the size of the spectator population. Because spectator seating is used in the jury selection process, the average size of a jury panel largely determines the number of seats provided in the spectator area (usually 65 to 85). A typical U.S. District Court (USDC) trial usually attracts fewer than a dozen spectators.

For the above reasons, population estimates for court facilities should take into account the different types of space, the users of the space, and overlapping space use.

Design Phase

When project design funding has been authorized and appropriated, the GSA selects the design architect/engineer with input from the courts, in accordance with the requirements of the Brooks Act (40 USC Sections 541–544). The courts must actively participate throughout the selection process to become familiar with the various design teams and to ensure that each team understands the court's facility requirements. Court participation is important because once a design team is selected, the success of a project depends on the ability of all parties to communicate effectively.

During the design stage, after a more definite cost estimate has been generated, a construction prospectus is submitted to Congress for the authorization and appropriation of construction funds. If appropriations are lower than requested, or if construction bids are higher than estimated, the courts, the GSA, and consultants may have to modify the facility program and redesign the project to meet the appropriated budget.

Construction Phase

Once a construction prospectus is funded, a contract is awarded. The contract might specify that the GSA contractor identify opportunities for cost savings. The courts must be aware of the functional and cost impact of changes made during construction.

► Construction Costs of Judicial Facilities by Building Element

Table 2.1 provides an overview of relative construction costs for major components of federal courthouses.

Table 2.1 Construction Costs of Judicial Facilities by Building Element¹

	SHARE OF TOTAL	
ELEMENT	COSTS	MAJOR VARIABLES
Foundations ²	1%–4%	- Local Soil Conditions - Water Table - Number of Floors
Substructure ³	0.5%-3.5%	Basement RequirementsSoil CapacityWater Table
Superstructure	10%–18%	-Spans - Live Loads - Seismic Conditions -Plan Shape
Exterior Closure	7%–17%	 Wall-to-Area Ratio Floor-to-Floor Height Material Selections Amount and Choice of Glazing Wall Detailing
Roofing	0.5%-2.5%	Roof Treatment - Traffic Requirements -Number of Floors
Interior Construction and Tenant Improvements (TIs)	13%–25%	 - Partitions - Lighting - Material Selection - Acoustics/Floor-to-Slab Partitions - Finish Detailing - Security Requirements - Number of Court Units/Specialized Spaces
Conveying Systems	3%–5%	- Traffic Requirements -Number of Core Areas -Cab Detailing - Escalators -Number of Floors
Mechanical (includes raised access flooring)	10%–19%	-Load Requirements - Security and Acoustics - Operating Flexibility - System Selections - Controls - Local Geographic Conditions

ELEMENT	SHARE OF TOTAL COSTS	MAJOR VARIABLES
Electrical	7%–15%	Load Requirements Lighting Levels and Quality Security Operating Flexibility Communications Audio and Video Design
Equipment	0.3%-1.5%	- Scope
Site Work	2%–7%	Utility Service LocationLocal ConditionsAccess/EgressSecurityParking (see notes)
General Conditions, Overhead, and Profit	6%–13%	Project MagnitudeProject ComplexityMarket ConditionsOther RisksLocation

¹ These ranges for building elements do not include any overhead or profit. Overhead and profit are shown as a separate element.

² Foundations, substructure, and roofing percentages will vary by the number of floors and the building

³ If the building includes parking, that area does not count as usable square feet in the gross square feet of a new courthouse construction project.

Table 2.2 **Funding Responsibilities**

BUILDING COMPONENT	GSA BUDGET COST	JUDICIARY BUDGET COST	FUNDED BY OTHERS
Base Building	Site Improvements	None	None
	Building Envelope and Structure	None	None
	Building Systems (HVAC, plumbing, electrical)	None	None
Exterior Materials	Exterior facade materials of brick, stone, glass, precast, metal, or similar materials`	None	None
Finishes in Interior Public Spaces	Courtroom lobbies on each floor finished as an extension of the main public lobby spaces; all areas and corridors connecting the main public lobby on the primary entry level to all courtroom lobbies finished at a quality level equivalent to the main public lobby; and public corridors connecting other office areas finished at standards described in the Facilities Standards for the Public Buildings Service.	None	None
Finishes in Courtrooms, Judges' Chambers, Associated Spaces and Offices	Per requirements outlined in Chapter 12 of the U.S. Courts Design Guide (USCDG)	None. Levels beyond those specified in Facilities Standards for the Public Buildings Service and the USCDG cannot be provided without first consulting with the GSA, which will then consult with the Judiciary or executive branch agencies such as U.S. Attorney or USMS.	Funding policy is the same as for the Judiciary

Table 2.2 Funding Responsibilities (cont'd)

BUILDING COMPONENT	GSA BUDGET COST	JUDICIARY BUDGET COST	FUNDED BY OTHERS
Fixed Furniture	Because GSA is responsible for providing most "fixed" improvements in the tenant spaces, the GSA project budget should include fixed improvements that are attached to the building, such as counters, cabinets in urinalysis laboratories and testing facilities, service units and biosafe central mail facility. The only chairs included as a GSA budget cost are all jury and witness chairs, (including Grand Jury trial rooms) which are fixed improvements and typically installed with a fixed base. One (1) attorney lectern will be part of each courtroom and is included in the GSA project budget. The GSA project budget also includes the cost of all fixed furnishings such as the judge's bench, jury box, witness box, courtroom deputy clerk's station, law clerk's station, fixed public seating, railings separating public seating from the well of the courtroom, and cabinetry and fixed bookcases in the judge's chambers.	None	None
Movable Furniture and Equipment	Two (2) attorney tables per courtroom and two (2) "smart" tables per district, magistrate, and bankruptcy judge courtroom	All movable furniture and equipment. Costs should not be included in the project budget and are budgeted separately by the judiciary in a furniture acquisition plan (FAP).	Funding policy is the same as for the Judiciary
Signage	The building signage system will be provided by the GSA, except within internal spaces	Signage (including court seals) within internal judiciary-occupied spaces	Signage within internal executive branch court-related agency spaces

Table 2.2 Funding Responsibilities (cont'd)

BUILDING COMPONENT	GSA BUDGET COST	JUDICIARY BUDGET COST	FUNDED BY OTHERS
Artwork	The GSA administers a federal art- in-architecture program, which commissions specific artists on a building-by-building basis. The GSA should be consulted concerning funding for this program.	None	None
Interior Plantings	Plantings are not included in the GSA budget.	Plantings should not be included without first consulting with the GSA and the judiciary.	Plantings should not be included without first consulting with the GSA and the executive branch court-related agency.
Security Systems	Conduits, closets, and raceways for security systems; appropriate electrical power. Cameras, consoles, conduit and wiring for prisoner holding cells, and other prisoner occupied areas, and main security console.	None	The U.S. Marshals Service (USMS) pays for ballistic glazing for all courtrooms and chambers (or as required) interior security surveillance and monitoring systems, including CCTV cameras and monitors, duress alarm devices, annunciators, and motion detection equipment; electronic security hardware, remote control devices, and communications systems; and the control wiring for each of these security components and systems. This includes "swipe" cards on all interior judiciary spaces, including chambers and courtrooms.
	At the building perimeter, egress controls such as direct or remote monitoring, strike releases, card readers, PIN keypads, or keys and controlling mechanisms; all control and monitoring equipment such as card readers, exterior CCTV, exterior lighting, ballistic glazing at the lobby entrance, blast resistant glass, and intrusion detection systems	None	Control and monitoring equipment within the building is paid for by the USMS.

Table 2.2 Funding Responsibilities (cont'd)

BUILDING COMPONENT	GSA BUDGET COST	JUDICIARY BUDGET COST	FUNDED BY OTHERS
Security Systems	Security door hardware (manual and electronic), raceways, conduits, power wiring, and connections to fire alarm systems for electric locks and strikes	None	The USMS pays for the installation of control wiring to interior electronic locks and strikes.
	Standard, emergency, backup, clean, and predefined electrical power needs, including battery- powered lights (as specified under GSA P-100)		The uninterrupted power supply required for the internal security systems is the responsibility of the USMS (not GSA P-100 required).
Acoustic Planning	Physical treatments (gasketing, etc.) to meet standards	None	None
Clock and Clock Systems	Wall outlets	Building-wide clock systems should not be specified. Movable clocks may be provided as per the judiciary's Guide to Policies and Procedures.	Consult with the executive branch court-related agency.
Audiovisual Equipment	None, except for the design and development of infrastructure specifications for speech reinforcement systems in courtrooms. Includes provisions for microphone amplification and speaker/broadcast systems; conduits for the audio and video system; and built-in or pull-down screens in the courtrooms.	Audiovisual equipment, presentation boards, sound system equipment, and wiring, including options for sound recording systems. These items are budgeted separately by the judiciary and should be included as a contract bid option in the coordinated architect/engineering construction bid package.	Generally not required by an executive branch court-related agency; the policy will be the same as for the judiciary.

Table 2.2 Funding Responsibilities (cont'd)

BUILDING COMPONENT	GSA BUDGET COST	JUDICIARY BUDGET COST	FUNDED BY OTHERS
Telecommunications	The basic building infrastructure for telecommunications wiring, including telephone and data distribution closets, and the vertical and horizontal distribution system (e.g., chases, under-floor ducts, cable trays, raised floors, etc.) are part of the GSA project budget.	Telecommunications equipment, wiring, and service is purchased and installed separately either by the GSA or by the judiciary, and should not be included as a contract bid option in the coordinated architect/engineering construction bid package.	Telecommunications equipment and service are purchased and installed by the executive branch court-related agency.
	Conduits and ducts for court telecommunications are provided for not more than one voice and one data outlet for every 100 NSF (9.3 Nm ²).	Requirements in excess of the 100 NSF standard are to be budgeted by the Judiciary.	
Master Antenna/TV	One (1) conduit from the basement to the roof for one (1) cable master antenna/TV connection to locations listed in this Design Guide, and conduit from the USMS area to the roof for the radio antenna lead are provided in the GSA project budget.	Any required cable TV or master antenna	Any required cable TV or master antenna equipment
Satellite Downlink	One (1) conduit from the roof to the basement for satellite downlink. Roof space structured to accommodate a satellite downlink dish.	Satellite dish, cabling and receptacles.	Any satellite dishes, associated cabling, distribution systems and receptacles.
Computer Equipment	The basic building infrastructure for computer cabling, including the horizontal and vertical distribution system, is provided as part of the GSA project budget.	Computer equipment, including terminals, computer workstations, file servers, and computer cabling and connecting wiring, is the responsibility of the judiciary and should not be included in the project budget.	Computer equipment is purchased and installed by the executive branch court-related agency.

3

This chapter addresses detailed planning concepts for U.S. courthouses. Spaces common to all courts and the functions of the three court types are discussed, along with space allocations for circulation and definitions of area accounting techniques. This chapter concludes with direction for planning the zoning of courthouses and adjacency diagrams illustrating the relationships among various court occupancies.

PLANNING FOR U.S. COURTHOUSES

Introduction

The architecture of federal courthouses must promote respect for the tradition and purpose of the American judicial process. To this end, a courthouse facility must express solemnity, integrity, rigor, and fairness. The facility must also provide a civic presence and contribute to the architecture of the local community.

Courthouses must be planned and designed to frame, facilitate, and mediate the encounter between the citizen and the justice system. All architectural elements must be proportional and arranged hierarchically to signify orderliness. The materials employed must be consistently applied, be natural and regional in origin, be durable, and invoke a sense of permanence. Colors should be subdued to complement the natural materials used in the design.

A U.S. courthouse may house multiple court units, court-related offices, and other federal government agencies. Courthouses must be planned and designed to accommodate the needs of the public, needs of the judges, court staff, U.S. Marshals Service (USMS), other court-related offices. The guidelines set forth in this chapter address the adjacency requirements for judges' and court staff offices and court-related offices (e.g., USMS, U.S. attorney's office), along with sizing and volume factors for common spaces in all buildings, specifically, segments of public spaces such as entrances, lobbies, atria, and corridors. The chapter includes a typical diagram and stacking plan for a multi-level courthouse and a typical court floor layout.

Supporting Documents

A comprehensive guide to supplementary publications can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The references listed below relate specifically to this chapter.

- "AnyCourt" (Program of Requirements), the judiciary's automated space-planning tool used to provide a court's space program of requirements
- Architectural Barriers Act Accessibility Standard (ABAAS)
- Courtroom Technology Manual
- Design Notebook for Federal Building Lobby Security
- Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64), most current edition
- United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, all chapters

Spaces Common to All Courts

Courthouses for the U.S. Court of Appeals (USCA), the U.S. District Court (USDC), and the U.S. Bankruptcy Court (USBC) contain several common elements, including public spaces and atria, secure parking, service areas, heavy traffic areas, clerks' offices, judges' chambers, and court libraries.

► Public Spaces and Atria

The public space should be designed as an integrated continuum of spaces that leads from the building's main entrance to the various public destinations within it. Each segment of space along the continuum performs multiple functions and must be designed accordingly. The functions include ingress/egress, admittance/discharge, security screening, the provision of information/orientation, circulation/conveyance, and accommodation/queuing/waiting/seating.

Entrance. The entrance or entrance vestibule should be clearly visible and recognizable as such from the exterior of the building. The vestibule should be a minimum of 7 feet in depth and able to handle the flow of traffic at peak times.

Security Screening Station. The security screening station should be designed with a nonsecure zone in front of the screening equipment (i.e., metal detectors and X-ray machine). The nonsecure zone should be large enough to provide safe and comfortable queuing during peak load periods. The design team should include a representative from the USMS to ensure that the requirements for the screening equipment are provided in accordance with the *Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications* (USMS Publication 64). The screening station should be integrated with the design of the surrounding architecture.

Lobby. The main occupant and public gathering point is the building lobby on the secure side of the security screening station. The size and shape of the lobby should facilitate the process of understanding the layout of the building. The amount of floor area required for the lobby space will be determined by the number of people who pass through it, as well as by the ways that other segments of the public space are developed.

Atrium. If the design of the public space includes an atrium, there should be no more than one in the building. If an atrium is provided as a substitute for a lobby, it must otherwise be designed to perform all the functions normally performed by the lobby. It is recommended that no atrium should be conditioned space on the exterior of the body of the main building when there is a lobby inside the building that is performing the major entry sequence functions (i.e., screening with queuing, the provision of information, and orientation).

As a volume that connects two or more floors, the atrium's proportional relationships of height to floor area should conform to familiar ratios and responsible budgeting. The relationship of the atrium volume to a source of natural light at its top, side(s), or base is also critical.

Corridors. Corridors convey, orient, and provide places for people to confer and, often, to wait. Corridor lengths and widths vary according to the volume of traffic and the nature of the spaces to which they lead. Basic corridor widths should enable a minimum of four people to pass abreast of each other (one person escorted by two others and a fourth passing from the opposite direction).

Corridors may be developed uniformly throughout the building, that is, with standardized dimensions and layout from floor to floor. More typically, however, the public corridor layout will vary between the ground level and the floors above, and it may also vary on a single floor—for example, from one wing of a building to another. Some portions of the corridor system may be developed on a double-loaded basis, while others are single loaded.

When the corridor is on a courtroom floor, an additional 300 net square feet for appellate courtrooms and 400 net square feet (NSF, 37.2 net square meters [Nm²]) for district and bankruptcy courtrooms must be provided for the public waiting area outside each courtroom. The space for waiting should not obstruct the space for circulation next to it. Single-loaded corridors on court floors may be able to accommodate the required waiting area(s) more easily. Double-loaded corridors on court floors where entrances to the courtrooms are opposite each other may involve an added design challenge to provide sufficient waiting space.

All public corridors should be straight, not unduly long, and comfortably proportioned; all should have access to daylight and views.

Court Staff Entry. Other spaces common to all courts include the court staff entry. Staff entry should be through the central public screening point. If the Building Security Committee and/or the Court Security Committee requires a separate staff entrance, the entrance must be manned by a court security officer and be provided with the required screening equipment. Circulation for judges and others requiring additional security must not intersect public circulation; these individuals must enter through a restricted lobby from secure parking.

Secure Parking. Parking for judges and the USMS must be secure and located within the court building. Refer to Chapter 16, "Building Security," for details of judges' and staff parking.

Service Areas. A building service area requires loading docks with direct restricted entry. The area requires access via freight elevator to all building offices.

Heavy Traffic Areas. All areas generating heavy traffic, such as the clerk's office, cafeteria, and building services, must be located on or adjacent to the main public entry level.

Clerks' Offices. The clerks' offices of the three courts must have convenient access to public circulation, courtrooms, and judges' chambers. See Chapter 8, "Clerk's Office," for a discussion of functions within the clerk's office suite.

Judges' Chambers. Judges' chambers may be located close to a courtroom or clustered in a separate area. Chambers are accessed from restricted circulation with convenient access to the courtroom(s). See Chapter 6, "Judges' Chambers Suites," for a discussion of functions within the judges' chambers suites.

Central Court Libraries. The location of central court libraries must provide access for judges, law clerks, and other court staff by means of a restricted staff corridor. Public access may also be required, as determined by the court. See Chapter 7, "Central Court Libraries," for a discussion of functions within the central court libraries.

Functions of the Three Court Types

► Major Spaces in Each of the Three Courts

The following is a discussion of the major spaces, groupings, and circulation systems in each of the three courts.

U.S. Court of Appeals (USCA). Since the USCA does not conduct trials as does the district court, it requires only two circulation systems: public and restricted. For an overview of the USCA's circulation and adjacency patterns, see Figure 3.3.

The major functional spaces in the USCA are the appellate courtrooms, circuit judges' robing rooms, and circuit judges' chambers suites. For court proceedings, the judges move from their chambers to the judges' conference room, then through the robing room to the courtroom.

The circuit executive's office must have restricted access to judges' chambers and the USCA clerk's office. Since the circuit executive's office often has little contact with the public, the level of public access should be coordinated with each circuit executive.

The office of the senior staff attorney must be located off a restricted corridor, adjacent to both the USCA clerk's office and the central court library, and with easy access to judges' chambers, if possible.

U.S. District Court (USDC). The USDC conducts jury trials for both civil and criminal cases and other court proceedings. The court requires public, restricted, and secure circulation patterns. For an overview of the USDC's circulation and adjacency patterns, see Figure 3.4.

The activities of the USDC focus on the courtroom. The district and magistrate judge courtrooms require direct access from public, restricted, and secure circulation. Associated spaces located near the district courtroom include attorney/witness conference rooms, accessed from public circulation; the judges' conference/robing room (provided only if the judges' chambers are not located close to the courtroom),

accessed from restricted circulation; the trial jury suite, accessed directly from the courtroom or restricted circulation; and prisoner holding cells, accessed from secure circulation.

Jury assembly facilities should be located on a main public entry floor, preferably close to the district court clerk's office. The facilities must have controlled entry and should provide for the convenient movement of jurors to and from courtrooms.

The grand jury suite should be located near the Office of the U.S. Attorney, as that office is responsible for presenting evidence to and obtaining indictments from the grand jury. Grand jurors enter the suite through restricted circulation from a controlled area or an area that is remote from public view.

The U.S. Probation Office requires access from public circulation after the security screening area in the lobby. If the office operates during off-hours, a separate controlled off-hours access point is desirable.

The U.S. Pretrial Services Office also requires access from public circulation after the security screening area at the main courthouse entrance. In addition, the office requires restricted access to the USMS and magistrate judges' courtrooms.

The federal defender's staffed offices are normally located outside the courthouse or other federal facilities housing law enforcement agencies. A small trial preparation area of 450 usable square feet (41.9 Nm²) is provided in the courthouse which includes internal circulation. The staffed office should be located within reasonable walking distance of the courthouse. Since the federal defender's office essentially functions as an independent law office, it must be readily accessible after normal working hours. Whether outside or inside the courthouse, the office must be distanced from the U.S. attorney, USMS, U.S. Probation Office, U.S. Pretrial Services Office, Bureau of Prisons, and other law enforcement agencies.

U.S. Bankruptcy Court. The USBC hears only civil cases. Like the USCA, the USBC needs only two circulation systems: public and restricted. In some locations, jury trials may be held by bankruptcy courts. When this occurs, the USBC should use a vacant USDC courtroom. For an overview of the USBC's circulation and adjacency patterns, see Figure 3.5.

USBC courtrooms are accessed by public and restricted circulation. Similar to those near USDC courtrooms, associated spaces located near the bankruptcy courtroom include attorney/witness rooms, accessed from public circulation, and the judges' conference/robing room (provided only if the judges' chambers are not located close to the courtroom), accessed from restricted circulation.

If located in the building, the bankruptcy administrator or the U.S. Trustee must have access to the USBC clerk's office.

Although the USBC clerk's office must be accessible to the public, staff must have convenient access to courtrooms, judges' chambers suites, and the central court library, as well as the USDC clerk's office (if located in the same building).

Users and Capacities

Users vary according to the size of the courthouse; the type and volume of cases; and the number of maintenance staff, service company/agency personnel, and public. For the purposes of certain references in this *Design Guide*, the following designations apply:

A small courthouse has 5 or fewer courtrooms.

A medium courthouse has 6 to 12 courtrooms.

A large courthouse has more than 12 courtrooms.

Barrier-Free Access

The federal courts are required to conform to the standard of the Architectural Barriers Act of 1968 for new construction and renovation of existing facilities. *The*

If the federal defender's office requests to be located in a courthouse, the office must have written approval from the Committee on Defender Services, and all space sizes and standards will follow staff office sizes and standards for all other court and court-related offices. Any exceptions must be approved by the Committee on Space and Facilities and concurred with by the Judicial Conference.

Architectural Barriers Act Standard (ABAAS) is the GSA accessibility standard. It replaces the pervious UFAS/ADAAG requirements for accessibility. The standard is based on the ADAAG published by U.S. Access Board on July 23, 2004. In addition, GSA policy requires compliance with local accessibility standards if they are more stringent (reference GSA P-100).

All public areas in federal court facilities, including jury facilities, as well as restricted and secure areas, must be made accessible when newly constructed or renovated. Under ABAAS, an "accessible" facility must be usable by persons with disabilities. Disabled persons include not only those with mobility limitations but also persons with sight, speech, or hearing impairments. While the courtroom work areas (judge's bench, clerk's station, bailiff station, etc.) are permitted to be adaptable, ABAAS recommends providing access during initial design and construction instead of adapting the space later. This limits the need for more expensive alterations when accessibility is required.

Accessibility within the courtroom should be achieved with minimum use of well space. The design team should contact the AOUSC for sample courtroom layouts. Access for judges and court personnel may be provided by way of ramps outside the courtroom, within the restricted circulation space.

In addition to facility design, other features can assist disabled persons in the courthouse. First, a sign indicating the availability of assistance should be posted in a prominent place. Second, wireless assisted-listening systems (ALSs) using infrared transmission are to be provided in accordance with ABAAS. An appropriate number of ALS receiving units must be available for use when needed in the courthouse. Wireless ALSs, using infrared transmission, provide flexibility and privacy in the courtroom. ALS controls and emitters must be permanently installed and integrated with the courtroom sound system. The *Courtroom Technology Manual* provides a formula for determining the number of ALS receiver units needed in the courthouse.

Hearing-impaired persons must also be accommodated. In some cases, a sound-reinforcement system is sufficient; in others, a signer is necessary for proceedings involving deaf participants. Courtroom layouts must place the signer within the

reader's field of vision and also provide the reader with a view of the speaker. This allows the participant to observe the speaker's gestures, facial expressions, and other visual cues.

Court participants with disabilities should approach and use the following spaces in the same way as nondisabled participants:

- Public seating
- Litigants' tables
- Jury box
- Witness box
- Lectern

Private work areas, including the judge's bench and the clerk, law clerk, bailiff, and court reporter stations, must be adaptable for accessibility. While all judges' benches and court personnel stations need not be immediately accessible, disabled judges and court personnel must be accommodated if required.

Additional design solutions and information should be obtained from the Space and Facilities Division of the AOUSC.

Space Allocations for Circulation: Gross vs. Rentable Areas

Although building users are frequently unaware of the quantity of square footage allocated to building corridors and aisles, this circulation space often accounts for 30 to 50 percent of the usable space in a building. Rather than attempting to calculate the actual area of this space, space planners multiply the total assigned space, called "net area," by a net-to-usable circulation factor to estimate the amount of square footage to allocate to circulation.

In order to understand this calculation, the project team must understand the terms used to describe building area.

 $^{^{2}\,}$ Adaptable for accessibility means providing maneuvering clearance and other features.

► Space Measurement Standards

Design Guide Space Measurement Standards. Space criteria in the *Design Guide* are presented in terms of net square feet (NSF) and net square meters (Nm²). It is important to note that NSF (Nm²), as used in the *Design Guide*, is not synonymous with ANSI/BOMA's definition of usable space.

- Net square footage (NSF) is the square footage allocated to an assigned space, such as an office, workstation, storage space, or conference room. The sum of all net areas in the building is the total assigned space, also called net square footage. Net square feet are measured to the inside face of walls.
- Circulation space includes corridors, aisles, and other similar space required for occupants to access means of egress and all other functions in and serving their space. Circulation may be fully enclosed, as in a corridor, or unenclosed, as in a phantom corridor in open office configurations.
- Circulation factors are used in conjunction with a space requirements projection. The internal circulation factor is applied to the assignable net square foot area to calculate the required usable square foot area. It accounts for both internal corridors and wall thicknesses between offices. Care must be taken in the application of a circulation factor. For example, if the circulation factor is 25 percent, do not multiply the net square footage by 1.25. Instead, divide the net square footage by 0.75 (Rule: divide by the complement).
- Usable square footage (USF) is a measure of usable area constituting the basis upon which the U.S. Courts will pay rent.
- Total envelope of space is the total usable square feet with the circulation factors applied. A court unit has discretion to reconfigure this total envelope. The circulation factor is inclusive of wall thicknesses.

The NSF criteria in the *Design Guide* do not include space for circulation among programmed spaces or vertical slab penetrating spaces. For example, the net space of a courtroom includes space for circulation within the courtroom; however, it does not account for the additional usable square footage that is calculated for the courtroom's

vertical penetrating slab, or the space for travel to and from the courtroom. Likewise, the net space of a workstation in an open office does not include circulation among workstations.

Space needed to accommodate circulation among programmed spaces varies significantly with each facility's specific design. Determining appropriate internal circulation factors depends upon many issues, such as building configuration, average size and depth of spaces, and the general design of the area (e.g., "compressed" versus "spacious"). Based on a study of completed courthouse designs, the *Design Guide* provides specific values to estimate circulation space requirements for various offices and functional areas of a courthouse.

The NSF criteria in the *Design Guide* also do not account for building support spaces that are included in the building gross area. The building gross area includes public circulation, partitions, mechanical and electrical rooms and risers, elevator shafts, stairs, public corridors and lobbies, public toilets, internal and external wall thicknesses, and other areas.

GSA Space Measurement Standards. The GSA uses the American National Standards Institute (ANSI) and the Building Owners and Managers Association (BOMA) space measurement standard (refer to ANSI/BOMA Z65.1-1996, Standard Method for Measuring Floor Area in Office Buildings).

The following describes the spaces included in the ANSI/BOMA standards for usable, rentable, and gross square feet in a GSA building:

Usable square footage (USF) includes the space occupied by a tenant with circulation between spaces and all other spaces that a tenant can use to house personnel and furniture. For planning purposes, a useful general internal circulation factor is 20 percent usable area.

The usable area of a single organization is the "footprint" of that organization on the floor plan of the building. Usable area excludes building infrastructure spaces such as mechanical rooms, and public toilets.

Under ANSI/BOMA, in the case of vertical slab penetrating spaces such as some courtrooms, an additional rental charge is incurred due to the increase in the judiciary's usable square footage equal to the area of the slab penetration. However, if an entire floor is double height, there is no penetrated slab measured and therefore no increase in usable square footage.

The usable area typically accounts for 67 percent of the total gross area of court facilities. To calculate the total gross area, divide the usable area by 0.67. The resulting value is expressed in gross square feet (GSF) or gross square meters (Gm²).

- Rentable square footage (RSF) is the quantity of square footage tenants pay for in a building. It includes the USF each tenant actually occupies, plus a pro-rated portion of other building spaces, such as a lobby, that are used by all tenants of the building.
- Gross square footage (GSF) is the total enclosed area of a building, including exterior walls. If necessary, the gross area of an existing building can be calculated by measuring the outside surface of the building perimeter of a scaled drawing and computing the interior area.

Metrication

The Metric Conversion Act of 1975, as amended by the Omnibus Trade Act of 1988, establishes the modern metric system (International System of Units) as the preferred system of measurement in the United States. To facilitate the transition to the metric system, English units in the text are followed by metric equivalents in parentheses. Metric units have been rounded to simplify their use in design and construction. Table 3.1 lists the equivalent types of English and metric units used in the *Design Guide*.

Table 3.1 Metrication

MEASUREMENT CATEGORY	ENGLISH UNIT	METRIC UNIT
Area	Square Foot (SF)	square meter (m²)
Length	foot (ft), inch (in)	millimeter (mm)
Thickness	gauge (ga)	millimeter (mm)
Weight/Mass	ounce (oz)	kilogram (kg)
Load	Pounds per Square Foot (PSF)	Pascals (Pa)
Volume	gallon (gal)	Liter (L)
Temperature	degrees Fahrenheit (°F)	degrees Celsius (°C)
Air Flow	Cubic Feet per Minute (CFM)	Liters per Second (L/S)
Illuminance	Foot-Candles (FTC)	lux (lx)

Circulation Requirements for Courthouse Areas

► Public Space³

It is imperative that a consistent method of measuring space be employed in the application of any formula used to form and manage the design of public space. This is especially true when considering the criteria of designing to an efficiency of 67 percent. Efficiency is the ratio of usable area (all net areas assigned to the building occupants plus the circulation around those areas) to gross area (total enclosed area of a building, including exterior walls) without parking. Gross area without parking is used because parking quantities vary significantly from project to project and would skew any formula. Gross area without parking includes upper levels of multistory (unassignable) space. When unassignable space is included in gross area and an efficiency of 67 percent is achieved, it is impossible to generate a high volume of public spaces.

³ Reference GSA P-100 for further guidance.

Strict adherence to ANSI/BOMA standards will regulate the overall volume of buildings because every footprint of every multistory space will count against gross area. The project team should be required to evaluate where to employ multistory spaces, as they count against the gross.

The design and anticipated population of each project will determine how area and volume should be distributed along the continuum. Every project will diverge somewhat from the formula but should not exceed the formula. Recommended area factors for public space are presented in Table 3.2.

Table 3.2
Recommended Public Space Area Factors

BUILDING HEIGHT	PUBLIC AREA FACTOR	PUBLIC VOLUME FACTOR
Low-Rise (0–4 floors above grade, not including a penthouse)	11.0%	22x
Mid-Rise (5–9 floors above grade, not including a penthouse)	9.5%	25x
High-Rise (10+ floors above grade, not including a penthouse)	10.5%	24x

▶ Recommended Benchmarking Formula for Public Space

The factors above are used to calculate the total square feet and volume of public space as follows:

Total Public Area [in square feet (SF)] = Gross Building Area without
Parking x Public Area Factor

Total Public Volume [in cubic feet (CF)] = Total Public Area x Public
Volume Factor

Example: Given a gross building area without parking for a mid-rise courthouse of 200,000 GSF

Total Public Area = 200,000 GSF x 9.5% = 19,000 SF Total Public Volume = 19,000 SF x 25 = 475,000 CF

► Court Space

Courtrooms. The net areas specified in the *Design Guide* are exclusive of the area required to accommodate circulation among spaces. The courtroom is programmed with no internal additional circulation space. Circulation space is added only when considering the courtroom in conjunction with chambers suites and associated facilities. While the amount of circulation space required varies with each facility's specific design, an additional allotment of 17 percent is generally applied to courtroom/chambers floors during preliminary planning to determine the total usable area of the facility. The additional allotment for circulation includes accommodating for the thickness of walls.

Judges' Chambers. Table 6.1 identifies the spaces and NSF requirements within a chambers suite. If necessary, circulation space up to 8 percent of the chambers' net square footage may be added. This circulation factor should accommodate the thickness of the walls. Circulation space may not be added if connecting hallways are not dictated by the design. The amount of circulation space required for courtroom/chambers floors varies with the actual design; however, 17 percent for the entire floor can be applied during preliminary planning. If circulation space is added within the suite, the square footage is included in the 17 percent allowed for circulation on the courtroom/chambers floor.

Jury Facilities. The net areas specified in the *Design Guide* exclude space required to accommodate circulation among the listed spaces. While the amount of required circulation space varies with each facility's specific design, an additional allotment of 13 percent can be applied to the jury assembly area and 11 percent to the grand jury suite during planning to determine the total usable area of the facility (i.e., the estimated total usable area of the facility is equal to the sum of all the net programmed spaces plus 11 to 13 percent). The trial jury suite is programmed as net usable space, with a circulation percentage of 17 percent added as part of restricted circulation on the courtroom/trial jury suite/chambers floor.

Central Court Libraries. The net areas specified in the Design Guide exclude the space required to accommodate circulation. While the amount of required circulation space varies with each facility's specific design, an additional 24 percent can be applied during preliminary planning to determine the total usable area of the facility (i.e., the estimated total usable area of the facility is equal to the sum of all the net programmed spaces plus 24 percent).

Clerk's Office. Net areas specified in the *Design Guide* exclude the space required to accommodate circulation. While the amount of circulation required for the clerk's office varies with each facility's specific design, 24 percent of the net programmed space can be added to determine the total usable area of the clerk's office (i.e., the estimated total usable area of the clerk's office is equal to the sum of all the net programmed spaces plus 24 percent). Refer to Table 8.1 for additional detail regarding space sizes in the clerk's office.

Other Court Units. The net areas specified in the Design Guide exclude space required to accommodate circulation among the listed spaces. While the amount of circulation space required varies among court-related offices and with each facility's specific design, 19 to 21 percent of the net programmed space can be added to determine the total usable area of the court-related offices (i.e., the estimated total usable area of the court-related offices is equal to the sum of all the net programmed spaces plus 19 to 21 percent, depending upon the department). See the criteria for specific judiciaryrelated departments for the percentage to be added. Add 21 percent for circulation within a department if specific criteria are not provided.

Common Building Spaces. The net areas specified in the Design Guide exclude space required to accommodate circulation among listed spaces. While the amount of circulation space required varies with each facility's specific design, 20 percent can be added to the net programmed space to determine the total usable area of the building support facilities (i.e., the estimated total usable area of the building support facilities is equal to the sum of all the net programmed spaces plus 20 percent).

Table 3.3 **Interior Circulation Requirements**

SPACES	% CIRCULATION
Courtrooms ¹	17%
Judges' Chambers ²	8% - 17% ¹
Jury Assembly Area	11%
Grand Jury Suite	13%
Trial Jury Suite	17%
Central Court Libraries	24%
Clerk's Office	24%
Other Courtrooms	19-21%
Common Building Spaces	20%

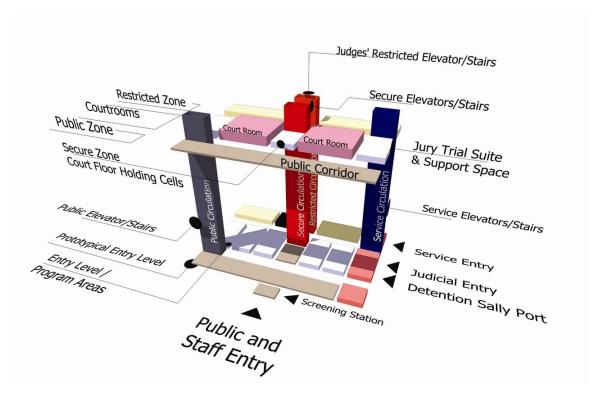
This space enables movement from spaces associated with the courtroom to the courtroom itself.

Varies based upon whether a collegial or collated scheme is selected. Consult with the Administrative Office of the U.S. Courts.

Courthouse Zoning and Building Circulation

Adjacency and circulation among spaces are determined by the movement of people and materials for court activities, security, and public access requirements. To accommodate movement within courthouses, three separate circulation zones must be provided: public, restricted, and secure. Public circulation requires a single controlled entry but allows free movement within the building. Restricted circulation has a controlled interior entry and is limited to judges, court personnel, and official visitors. Secure circulation is intended for prisoners and is controlled by the USMS. There are four separate and distinct entrances to courthouses—for the public and staff, judges, prisoners, and deliveries. Courthouses may also house other federal government agencies, and the team must review and optimize adjacencies between the courts and other government agencies to be located in the building. Figure 3.1 is a typical diagram of a multilevel courthouse.

Figure 3.1
General Organizational Relationships

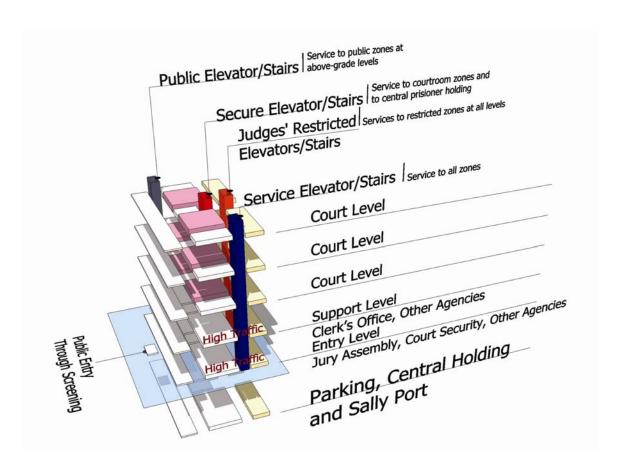


Note: This plan is illustrative and not meant as a standard for design.

Program Stacking

The plan for a courthouse should locate all high-pedestrian-traffic functions on the lower floors and provide dedicated elevator and stairway systems for the public, court staff and judges, freight, and prisoner movement.

Figure 3.2 **Typical Stacking Diagram**



Note: This plan is illustrative and not meant as a standard for design.

Keyto Sy mbols

• • • • Public Circulation

Restricted Girgulation

Secure Gifgylation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolppint

Public Vertical Circulation

Restricted Vertical Circulation

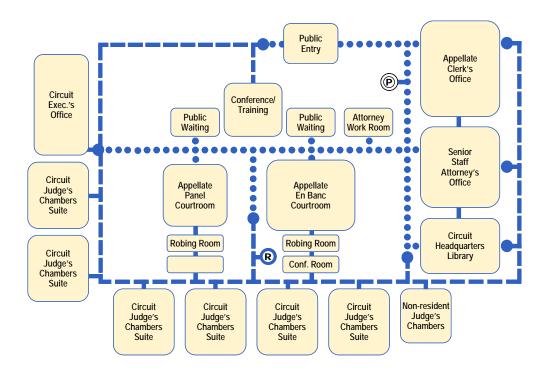
Secure Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, ⊤wo-Way

Figure 3.3 U.S.Court of Appeals Adj acencyRelat ionships



Note: The adjacency diagram is intended only as an illustration.



• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access,
Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure/Access, Prisoner/Security/Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

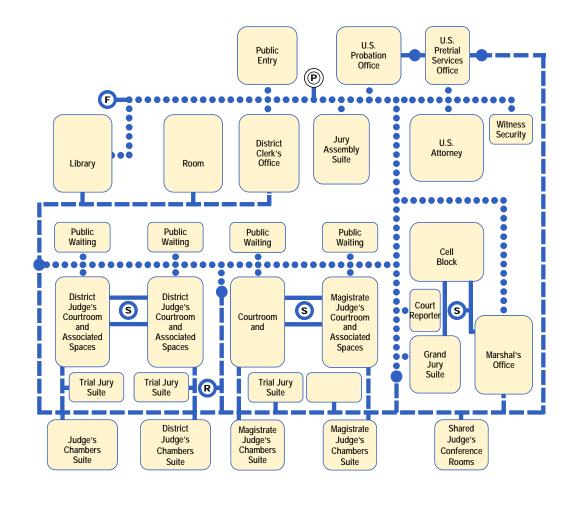
S Secure \(\forall \) ertical Circulation

Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, ⊤wo-Way

Figure 3.4
U.S. District Court Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

Keytto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

1 Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access,
Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted\y/ertical Circulation

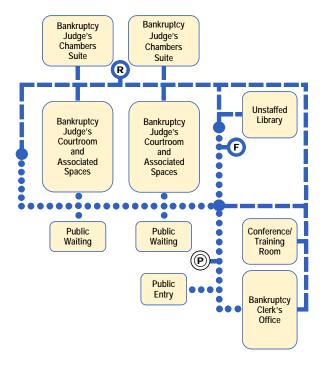
Secure Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, ⊤wo-Way

Figure 3.5
U.S. Bankruptcy Court Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

4

This chapter applies to courtrooms and associated spaces for circuit, district, magistrate, and bankruptcy judges. It provides descriptions of functions and activities, users and capacities, design requirements, and space allocation requirements, and includes adjacency diagrams for courtrooms and associated spaces.

COURTROOMS AND ASSOCIATED SPACES

Introduction

The size and design of each type of federal courtroom varies according to the type of judge who will use it, as well as the functions and activities that the courtroom must accommodate. These functions are largely determined by the types of cases that the court hears, such as appeals, civil, criminal, or bankruptcy cases.

While the U.S. Court of Appeals (USCA) hears all appeals cases and the U.S. Bankruptcy Court (USBC) handles only bankruptcy cases, both civil and criminal cases are heard by the U.S. District Court (USDC) judges. Magistrate judges, who are appointed by each district court, can also handle certain types of civil and criminal cases. The major functions of each type of courtroom—appellate courtrooms, district judge courtrooms, magistrate judge courtrooms, and bankruptcy judge courtrooms—are described in the following sections.

Supporting Documents

A comprehensive guide to supplementary publications can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The references listed below relate specifically to this chapter.

 Architectural Barriers Act Accessibility Standard (ABAAS)

- Courtroom Technology Manual
- United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, Chapter 4.

Programming and Budgetary Notes

Exceptions to the *Design Guide* Standards

Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space-management role by reviewing district-wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space-management program (28 USC (§332 and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions to the standards in the *Design Guide* must be approved by the respective circuit judicial council.

Authority of the Committee on Space and Facilities and Judicial Conference

The authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total envelope for either the court unit or the project as a whole, (2) changing the standard configurations for judges' chambers and courtrooms, and (3) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference will decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

Approvals for En Banc Courtrooms

Specific approval is needed for en banc courtrooms located outside circuit headquarters courthouses. Refer to Chapter 2, "Courthouse Programming and Budgetary Considerations."

Approvals for Special Proceedings Courtroom

Circuit judicial council approval is required for special proceedings courtrooms located apart from the district's headquarters. Refer to Chapter 2, "Courthouse Programming and Budgetary Considerations." Consult with the Administrative Office of the U.S. Courts for further information.

A special proceedings courtroom should be provided only when needed, and there must be at least four district judge courtrooms in the building before one of the four may be designated as a special proceedings courtroom. Provision of more than one such courtroom in any federal court facility requires judicial circuit council approval.

A special proceedings courtroom may be provided for a new court building planned with fewer than four district judge courtrooms in states with small, widely dispersed populations, to accommodate multiple-party trials in those locations.

The availability of district courtrooms for other proceedings and the sharing of courtrooms should be considered. Consult with the Administrative Office of the U.S. Courts for further information.

► USBC "Mega Proceedings"

"Mega proceedings" require bankruptcy judge courtrooms larger than 1,800 net square feet (NSF, 167.2 net square meters [Nm²]). Courts should develop procedures for the routine use of district judge courtroom space to accommodate these large, complex bankruptcy proceedings. In unusual circumstances, a bankruptcy courtroom of 2,400 NSF (223 Nm²) may be programmed, but only if requested by the court and approved by the respective circuit judicial council. A courtroom of this type might be

considered at a location with more than one resident bankruptcy judge if the USBC is not located in the same building as the USDC and there is a need to accommodate mega proceedings on a regular basis. Consult with the Administrative Office of the U.S. Courts for further information.

A cooperative arrangement between the USDC and USBC should ensure that jury facilities are available to the USBC when needed.

► Courtroom Availability

The availability of district judge courtrooms for other proceedings and the sharing of courtrooms should be considered. Refer to Chapter 2, "Courthouse Programming and Budgetary Considerations."

► Normal Daily Usage of Special Proceedings Courtrooms

Special proceedings courtrooms must be assigned for normal daily use, in addition to being used for special proceedings and large multiple-party trials.

► Attorney/Witness Rooms

The number of conference/waiting rooms (typically two) adjacent to courtrooms should be determined by the practices and policies of the court. The rooms should be programmed for multiple functions, such as for use as a news media room and for alternative dispute resolution (ADR) proceedings.

► Attorney Work Room

There shall be only one attorney work room provided per courthouse.

Design Requirements, All Courtrooms

Design requirements for various stations and overall functions are discussed here. More detailed design direction is included for each courtroom type (appellate, district, magistrate, and bankruptcy) in the chapter subsections that follow. Chapter 12, "Tenant Improvements and Furnishings," provides detailed guidelines for the millwork design of courtroom furnishings.

▶ Barrier-Free Accessibility

Courtroom areas used by the public must be accessible to people with disabilities.

Private work areas, including the judge's bench and the courtroom deputy, law clerk, bailiff, and court reporter stations, must be adaptable to accessibility. While all judge's benches and courtroom personnel stations do not need to be immediately accessible, disabled judges and court personnel must be accommodated. It is also recommended that private work areas be made accessible during initial design and construction to avoid more expensive alterations for accessibility in the future. See Chapter 2, "Courthouse Programming and Budgetary Considerations," for references pertaining to barrier-free accessibility within courtrooms. It is the policy of the Judicial Conference that federal court facilities conform with the *Architectural Barriers Act Accessibility Standards* (ABAAS). Specific solutions can be obtained from the AOUSC Space and Facilities Division or refer to the U.S. Access Board's recommendations for accessibility courtroom design contained in "*Justice for All: Designing Accessible Courthouses*," (November 2006).

Court participants with disabilities should be able to approach and use the following spaces in the same way that nondisabled participants do:

- Public seating
- Litigants' tables
- Jury box
- Witness box
- Lectern

Sample floor plans in this chapter illustrate barrier free design accommodations for courtrooms.

▶ Windows

Designing courtrooms with windows requires careful consideration of the benefits, potential problems, and costs. If a courtroom is designed with windows, precautions are necessary to maintain security and environmental controls. A courtroom may have windows (regular or clerestory) or skylights to obtain the benefits of daylight.

Windows and skylights must be sealed, double- or triple-glazed, and equipped to control heat gain/loss, brightness, glare, noise, and dust infiltration. A means of darkening the room must also be provided. To prevent distraction and increase security, higher windowsills or clerestory windows or skylights are more desirable. Exterior windows for all courtrooms must be ballistic resistant (UL Standard 752, Level IV).

► Ceiling Height

Courtroom ceiling heights must be in proportion to the size of the space and the number of people using the space and reflect the solemnity of proceedings. The raised judge's bench and ceiling height contribute to the order and decorum of the proceedings. The ceiling height standards in the *Design Guide* were calculated using generally accepted principles of architectural proportion and by direct observation of effective courtroom designs.

The ceiling is a designed surface. It may be a uniformly flat, neutral plane, or it may have two or more planes and include elements such as soffits, perimeter coves, recesses, and reveals as required to integrate HVAC and lighting into a harmonious design. An adjustment of a ceiling surface may also occur where it meets an exterior curtain wall. In situations where there are several different surfaces at play at different heights above the finished floor, there may be different ways of determining which one(s) is the dominant plane. It is recommended that ceiling heights should be measured from the finished floor to the principal surface that either covers the most amount of ceiling square footage, or the surface that defines the overall character of the ceiling design. The design team must ensure that at no point should the finished ceiling exceed the maximum ceiling height standards set forth in the *Design Guide* or GSA P-100.

Maximum ceiling heights for courtrooms and associated spaces are as follows:

Table 4.1 Ceiling Heights

CDACEC

SPACES	FEET	(mm)
APPELLATE COURTROOMS AND ASSOCIATED SPACES	SIZE	
En Banc Courtroom	18	(5,500)
Panel Courtroom	16	(4,900)
Attorney Work Room ¹		(3,000)
Judges' Conference/Robing Room ²	10	(3,000)

DISTRICT JUDGE COURTROOMS AND ASSOCIATED SPACES		
District Judge Courtroom	16	(4,900)
Special Proceedings Courtroom	18	(5,500)
Attorney/Witness Rooms	10	(3,000)
Attorney Work Room ¹		(3,000)
Judges' Conference/Robing Room ²	10	(3,000)

MAGISTRATE AND BANKRUPTCY JUDGE COURTROOMS AND ASSOCIATED			
Magistrate Judge Courtroom	16	(4,900)	
Bankruptcy Judge Courtrooms	16	(4,900)	
Attorney/Witness Rooms	10	(3,000)	
Attorney Work Room ¹	10	(3,000)	
Judges' Conference/Robing Room ²	10	(3,000)	

Only one per courthouse, not one per court

Ceiling heights that exceed these maximum heights are considered an exception.

► Soundlocks 10

Every courtroom must have a soundlock entry from the public lobby/circulation area. The judges' entry in appellate courtrooms must also have a soundlock.

▶ Judge's Bench

The height and location of the judge's bench expresses the role of the judge and facilitates control of the court. The height of the judge's bench and other courtroom stations is determined by the court. Generally, the judge's bench should be elevated three or four steps (21–24 inches or 525–600 mm) above the courtroom well.

► Courtroom Deputy Clerk Station

The courtroom deputy clerk station must be one step above floor level and set so that the judge and courtroom deputy clerk can easily see and confer with each other. The courtroom deputy clerk also must be able to see and hear all court participants clearly, especially witnesses. The station must be large enough to accommodate a second staff person, who would be present during training or periodic high-volume hearings. The computer must be ergonomically placed without obstructing essential sight lines.

Spectator Area

The public has the right to attend most court proceedings and must be able to see and hear all participants as clearly as possible without impinging upon the proceedings in the well of the courtroom.

For controversial and high-security trials, spectators entering the courtroom will be subject to additional screening. Therefore, accommodation for equipment to detect firearms, bombs, and other weapons should be made at the entrance to the spectator area in the public lobby outside the courtroom.

A rail divides the well and spectator area. The rail must have an accessible gate, at least 32 inches (815 mm) wide, to admit attorneys, witnesses, U.S. Marshals Service (USMS) personnel, and other authorized persons into the well. This rail is optional in USBC courtrooms.

Displays

A wall-mounted writing/display/projection surface, easily viewed by all court participants and spectators, should be provided and may be built into a wall in the courtroom. The surface should be easily accessible to the witnesses. Display surfaces are furniture items funded by the judiciary.

► Image Projection

Projectors, video monitors, and recorders should be stored at a central location for use in the courtroom. A roll-up projection screen should be installed in the courtroom if it will be used on a regular basis. A portable, collapsible projector stand that can be easily stored should also be considered. If it is a built-in, the stand can be recessed

² Provided only when chambers are located in a remote location from the courtroom

into a wall. For presenting medical evidence, a built-in X-ray viewer or shadow box can be integrated with courtroom wall design. A portable unit can be shared by multiple courtrooms. Projection screens are considered equipment items funded by the judiciary. Architectural integration of screens and electrical infrastructure is provided as part of the construction cost.

► Audiovisual Storage

A storage location central to similar courtrooms must be provide for audiovisual equipment, including mobile video monitors and cameras, slide and film projectors, and audio recording/playback equipment. Audiovisual equipment remaining in courtrooms should be built into walls or courtroom furniture. The design team should refer to the *Courtroom Technology Manual*.

► Clock

A clock power outlet should be located in the courtroom directly opposite the bench wall, above the entry door(s).

▶ Public Waiting Areas

Public waiting areas serve as extensions of public lobby and circulation areas adjacent to courtrooms; therefore, the design and furnishing of these spaces must be consistent.

Appellate Courtrooms

Functions and Users and Capacities

▶ Functions

Courtrooms. The primary function of appellate courtrooms is the presentation of oral arguments by counsel to circuit judges. Arguments involve appeals of decisions by the USDC and USBC, as well as by the tax court and various federal administrative agencies. Other functions can include ceremonial events such as the induction of judges newly appointed to the bench.

Judges' Conference Rooms. Judges' conference rooms provide space for meeting, training sessions, case conferences by circuit judges, and other functions involving judges. The facility includes a small service unit where simple food and beverages can be prepared.

Judges' Robing Room. The judges' robing room is an associated facility for appellate courtrooms. Circuit judges use the robing room to don and remove judicial robes before and after courtroom proceedings. User capacity varies according to the number of circuit judges and the type of courtroom (i.e., en banc or panel).

Attorney Work Room. The attorney work room is an associated facility for appellate courtrooms. The facility comprises both a waiting and work area. Attorneys use the work room while waiting to present arguments in USCA proceedings. The work area is used for discussions and last-minute preparation of court presentations. The number of users varies with the number of attorneys waiting to present arguments.

Public Waiting Areas. Public waiting areas are associated facilities for appellate courtrooms. The waiting areas are used by attorneys, spectators, and the news media.

► Users and Capacities

The well of an en banc or panel courtroom must accommodate an en banc or panel judges' bench, court personnel workstations, and at least two counsel tables. For both panel and en banc hearings, a bailiff (in some locations), a courtroom deputy clerk, and at least three law clerks are present.

Judicial Officers. A panel of three judges hears appeals (panel courtroom). Some cases are heard by all judges sitting en banc, except in the Ninth Circuit, which sits in en banc panels.

Bailiff. In some locations, the USCA requires a bailiff. The bailiff is responsible for preparing the courtroom prior to the start of proceedings, announcing cases, and operating the timing system and recording equipment.

Courtroom Deputy Clerk. In appellate courtrooms, the courtroom deputy clerk typically is responsible for announcing cases to be heard and for operating the timing system and recording equipment. The deputy clerk often confers with the judges during proceedings.

Law Clerks. The law clerks provide research assistance to the judges and attend oral arguments.

Security Personnel. Normally, no security personnel are present in the courtroom.

Attorneys. In appellate cases, at least one attorney is present on each side of the case. Counsel must be accommodated in appellate courtrooms with two attorney tables, each seating at least four participants. Additional seating can be provided within the well for attorneys waiting for their cases to be called.

Litigants. Typically, no litigants are present in the well of the courtroom.

Witnesses and Interpreters. No witnesses or interpreters are present in the well of the courtroom.

Jurors. No jurors are present.

Spectators. Spectator seating should be provided as follows: en banc courtroom, seating for 120–150 spectators maximum; panel courtroom, seating for 40-80 spectators.

Design Requirements for Appellate Courtrooms

Design requirements for various stations and overall function are discussed here. More detailed design direction is included in Chapter 12, "Tenant Improvements and Furnishings," for the millwork design of courtroom furnishings.

▶ Judges' Bench

An additional step is recommended in en banc courtrooms. Because circuit judges sit en banc or in panels, benches must be curved or angled to allow the judges to see one another.

► Law Clerk Station

Circuit judges' courtrooms must accommodate a workstation near the bench for at least three law clerks.

▶ Bailiff Station

Circuit judges' courtrooms must accommodate either a chair or a workstation for the bailiff near the judges' bench.

If the bailiff is accommodated with a chair, the probable location must be coordinated with the USMS so that the optimum location of required communication and security system components can be determined.

If the bailiff is accommodated at a workstation, the workstation must be one step above floor level. The station must be set so that the judge and bailiff can easily see and confer with one another.

► Attorney Stations

Attorney stations are not fixed; however, they are located within a defined area of the courtroom well. Attorneys must see and hear other attorneys and be seen and heard by judges and the bailiff. With the permission of the judge, attorneys may use portable computers at or next to counsel tables. In appellate courtrooms, the lectern may be fixed but must be height adjustable.

Table 4.2 lists the space and ceiling requirements for appellate courtrooms

Table 4.2
Space and Ceiling Requirements for Appellate Courtrooms and Associated Spaces

SPACES	NSF	(Nm²)
COURTROOMS		
En Banc Courtroom	3,000	(278.7)
Panel Courtroom	1,800	(167.2)

ASSOCIATED SPACES		
Public Waiting Area	300	(27.9)
Soundlock	80	(7.4)
Public/Attorney Coat Closet	20	(1.9)
Judges' Conference Room ¹	250	(23.3)
Judges' Robing Room ²		
Soundlock	80	(7.4)
Tailand	50	(4.7)
Toilet 1	50	(4.7)
Toilet 2 Attorney Work Room – Waiting Area ³	250	(23.3)
	100	(9.3)
Work Area	120	(11.1)
Equipment Storage Room	100	(9.3)
Exhibits Storage	50	(4.6)

CEILING HEIGHTS		
	FEET	(mm)
Courtrooms	18	(5,500)
Judges' Robing Room	10	(3,000)
Judges' Conference Room	10	(3,000)
Attorney Work Room	10	(3,000)

¹ Allocation of 250 NSF (23.3 Nm²) includes a service unit.

CDACEC

Adjacency and Circulation

The most effective configuration of the courtroom floor minimizes the distance of movement and conflicting circulation patterns of trial participants (Figures 4.1-4.3). Efficient circulation around the courtroom, especially the separation of public and restricted circulation, is more readily achieved by locating the courtroom in the interior of the building. For an overview of this topic, refer to Chapter 3, "Planning for U.S. Courthouses." for circulation factors.

▶ Courtrooms

Appellate courtrooms must provide both public and restricted access. The courtroom is separated from the public corridor by a soundlock. Restricted access is provided separately for judges and court staff: for court staff, just below the bench, and for judges, close to robing and conference rooms, allowing a formal entry from the side or behind the bench. For ceremonial functions, indirect access may also be provided from the bench down to the well. Circulation space behind the bench must allow a judge to arrive and depart without disrupting other judges.

▶ Judges' Robing Room

The judges' robing room must be directly accessible from the associated courtroom through a soundlock; it must also be accessible from a restricted circulation area. To provide a processional path from the courtroom to the robing room to the conference room, a robing room may also directly adjoin the USCA shared judges' conference room. For additional information regarding adjacency and circulation related to robing rooms, see the USCA adjacency diagrams in Chapter 3, "Planning for U.S. Courthouses."

The judges' robing room must allow access to private toilets for the judges' use, with separate men's and women's toilet rooms. The toilets must be provided with a soundlock.

Allocate 100 NSF (9.3 Nm²) plus 25 NSF (2.3 Nm²) per judge for Judges' Robing room.

³ Only one per courthouse, not per courtroom.

▶ Judges' Conference Room

The judges' conference room is accessible from public circulation and adjoining robing room.

► Attorney Work Room

The attorney work room must be accessible from public circulation. It may also be directly accessible from an adjoining appellate courtroom.

► Public Waiting Areas

Public waiting areas are typically alcoves adjacent to, but separate from, public circulation or courtroom lobby areas.

Keytto Symbols

• • • • Public Circulation

Restricted Girqulation

Secure Girgylation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Aggress, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted (Vertical Circulation

S Secure \Vertical Circulation

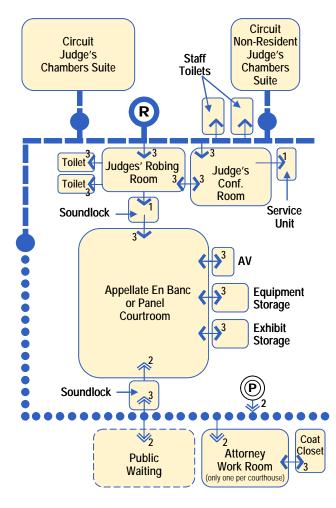
F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Figure 4.1

Appellate (Panel or En Banc Courtrooms) Adjacency Relationships



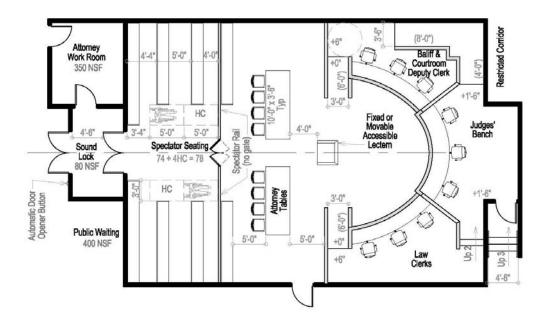
Note: The adjacency diagram is intended only as an illustration.

One set of staff toilets is provided per floor.

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.2 Appellate Panel Courtroom, 1800 NSF (167.2 Nm²)

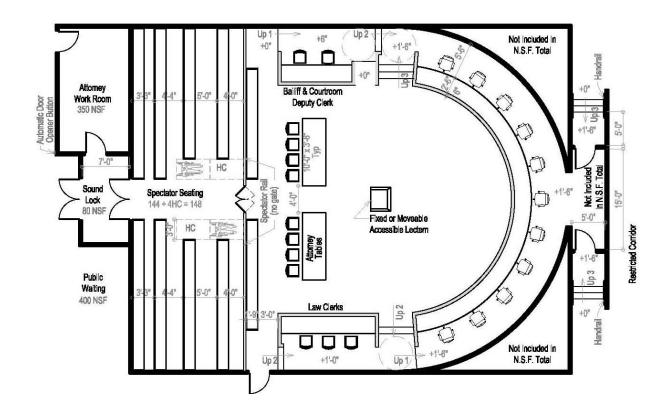


Notes: The floor plan is intended only as an illustration.

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.3
Appellate En Banc Courtroom, 3000 NSF (278.7 Nm²)



Notes: The floor plan is intended only as an illustration.

District Judge Courtrooms

Functions and Users and Capacities

▶ Functions

Courtrooms. The primary function of district judge courtrooms is to conduct criminal and civil proceedings. District judges conduct hearings, bench trials, and jury trials in both civil and criminal cases. Only district judges conduct felony criminal trials.

The well of the courtroom must accommodate a judge's bench, court personnel workstations, a witness box, a 16-person jury box, and at least four counsel tables. This allows for 15–20 lawyers, plaintiffs, defendants, and interpreters. Space must be included for exhibit display and USMS personnel stationed around the perimeter of the well.

In the district judge's courtroom well, 10–20 people typically are present in addition to court personnel and the seated jury. Even larger groups of people are not uncommon. For example, a criminal trial involving six in-custody defendants could generate 50 or more participants, including the judge, courtroom deputy clerk, court reporter/recorder, law clerk, two assistant U.S. attorneys, two case agents, the six defendants and their defense attorneys, 12 deputy marshals, 16 jurors, a witness, and possibly an interpreter. Courtrooms frequently used for cases of this size must be designed with a large well and minimum seating capacity.

Judges' Conference/Robing Room. The conference/robing room is an associated facility for district judge courtrooms only when chambers are located in an area remote from the courtroom (i.e., collegial design). Conference/robing rooms are used for private conferences with attorneys during brief trial recesses, and as a place for trial court judges to store robes and prepare to enter the courtroom.

Attorney/Witness Room. Attorney/witness rooms are associated facilities for district judge courtrooms. Attorneys use the rooms to confer with one another, their clients, and witnesses. Witnesses requiring separation from the general public while in the courthouse use this room while waiting to testify.

Public Waiting Areas. Public waiting areas are associated facilities for district judge courtrooms. The waiting areas are used by attorneys, civil plaintiffs and defendants, out-of-custody criminal defendants, witnesses, spectators, family members, and the news media.

Court Reporter/Recorder Facilities. Court reporters/recorders use this space to prepare and review transcripts and store records and notes.

Attorney Work Room. Only one attorney work room provided per courthouse. It is provided for attorney's to use while waiting to appear in court.

▶ Users and Capacities

Judicial Officers. A single judge presides over civil and criminal proceedings, although a limited number of district cases are heard by panels of three judges.

Courtroom Personnel. In district judges' courtrooms, a courtroom deputy clerk and court reporter/recorder are present. One or two law clerks may also be present at the discretion of the judge.

Courtroom Deputy Clerk. The courtroom deputy clerk typically is responsible for tracking all court activity during the proceedings, including the order of cases called, as well as documenting decisions by the court and tagging and caring for exhibits. The deputy clerk often confers with the judge during proceedings and can swear in the jury and witnesses.

Law Clerks. The law clerks provide research assistance to the judge and may attend courtroom proceedings.

Court Reporter/Recorder. The court reporter/recorder records court proceedings.

Security Personnel. USMS personnel are responsible for the custody and movement of criminal defendants; the safety, security, and privacy of the judge, jurors, and witnesses; the security of the courtroom and safety of its occupants; and maintaining order in the courtroom. Typically, one or more USMS personnel are present in the

courtroom. The total number of USMS personnel depends on the nature of the matter being heard. In criminal cases, two USMS personnel may be present for each incustody defendant in the courtroom.

Attorneys. At least one attorney is present on each side of the case. Trial attorneys can be assisted by paralegals and other staff, all of whom are positioned in the courtroom at the discretion of the presiding judge. In USDC criminal cases, U.S. government attorneys are usually assisted in court by case agents from the investigative agency involved.

Litigants. The number of litigants depends entirely upon the number of parties and the nature and complexity of the case. For civil cases, the number of litigants on each side might range from 1 to 10, although more than 10 litigants is not unusual. In criminal cases, the number of defendants might range from 1 to 20, although cases with more than 20 defendants do occur. Generally, each defendant is represented by an attorney.

Witnesses and Interpreters. Witnesses are used. An interpreter is furnished if required by a witness or defendant.

Jurors. In courtrooms of district judges, the jury for criminal trials consists of up to 16 jurors (12 jurors and 4 alternates) or up to 18 jurors (for special proceedings courtrooms). The jury for civil trials consists of 6 to 12 jurors.

A 12-member jury is typically selected from a panel of 45-60 potential jurors; a 6member jury is selected from 15–25 potential jurors. The number of potential jurors can equal 100 or more in cases with heavy media coverage, multiple parties, or lengthy trials. During impaneling, the potential jurors can be seated in the spectator area of the courtroom. These seats can be made available to the public after the jury has been impaneled.

Spectators. The right to a public trial necessitates a certain volume of general public seating. Demand for spectator, news media, and family seating varies depending on the public interest and the number of parties in a particular case. Most trials will draw only a few or occasional spectators. Spectator seating should be provided as follows: special proceedings courtroom, seating for 100-120; district judge courtroom, seating for 65-85.

Design Requirements for District Judge Courtrooms

Design requirements for various trial participant stations and overall function are discussed here. More detailed design direction is included in Chapter 12, "Tenant Improvements and Furnishings," for the millwork design of courtroom furnishings.

Witness Box

Witnesses must be able to see and hear, and be seen and heard by, all court participants as close to full face as possible. The witness box must accommodate one witness and an interpreter, and the preferences of the presiding judge. Witnesses in the box receive, examine, and return exhibits.

The interpreter must be seated next to or slightly behind the witness and between the witness and the judge; however, the witness must remain the primary focus.

A separate interpreter station, accommodating two staff persons, might be required in some locations.

▶ Jury Box

Jurors must be able to see, hear, and be seen by the judge, attorneys, and witnesses. During witness examination, all jurors must be able to see the attorneys, litigants, and witnesses as close to full face as possible. In addition, there must be a clear line of sight to video evidence presentation monitors if they are used in the courtroom.

Jury boxes for district judges' courtrooms must accommodate 16 jurors; special proceedings courtrooms must accommodate 18 jurors.

The maximum allowable distance between a juror and a litigant sitting at a counsel table across the courtroom well is 40 feet (12,200 mm).

If the witness box is located to one side of an 18-member jury box, two rows of nine jurors will be too far from the witness box.

Jurors must be separated 6 feet (1,825 mm) from attorneys and litigants to prevent the overhearing of private conversations.

Jurors must be separated from the public to avoid interference or intimidation. At least 6 feet (1,825 mm) of space must separate the jury box and rail dividing the spectator seating area and courtroom well.

The floor level of the highest tier of the jury box must be at least one step (6 inches or 150 mm) lower than that of the judge's bench.

The front row of the jury box may be raised one step (6 inches or 150 mm) or on the same floor level as the courtroom well. A raised first row is preferred. If the first row is one step above the well, a ramp must be provided to allow unassisted access for jurors with disabilities using the same path as all other jurors. Gates and openings into the jury box, clear floor space, and vertical clearance shall allow for space to maneuver a wheelchair and for jurors with disabilities to participate from the same position as all other jurors. The front row may have a dedicated wheelchair space or a removable chair to provide the necessary space when needed. Refer to U.S. Access Board for detailed accessibility criteria.

► Law Clerk Station

In a district judge's courtroom, the law clerk station must be set so that the judge and law clerk can easily see and confer with each other.

► Court Reporter/Recorder Station

The court reporter/recorder must be able to see the facial expressions of witnesses, attorneys, and the judge, and hear every word spoken. Thus, the court reporter/recorder station must be located close to the witness box.

Furniture and other equipment used by the court reporter/recorder should be movable so that it can be rearranged easily to suit each court reporter or judge.

U.S. Marshals Service

USMS personnel must be able to see all participants and the public. Although USMS personnel generally do not have fixed workstations in the courtrooms, they are usually provided with chairs that can be moved to suit the needs of a proceeding.

► Attorney and Litigant Stations

Attorney and litigant stations are not fixed; however, they are located within a defined area of the courtroom well.

In district judges' courtrooms, attorneys and their clients must be able to confer in private at their courtroom stations without being overheard by jurors, witnesses, opposing attorneys and litigants, spectators, or others in the courtroom. Attorneys must be able to move easily within the well of the courtroom.

With the permission of the judge, attorneys may use portable computers at or next to counsel tables.

A movable, height-adjustable lectern must be provided for attorneys.

Table 4.3 lists the space and ceiling requirements for district judge courtrooms.

Table 4.3 Space and Ceiling Requirements for District Judge Courtrooms and **Associated Spaces**

SPACES	NSF	(Nm ²)	
COURTROOMS			
Special Proceedings Courtroom	3,000	(278.7)	
District Judge Courtroom	2 400	(223)	

ASSOCIATED SPACES		
Public Waiting Area	400	(37.2)
Soundlock	80	(7.4)
Public/Attorney Coat Closet	20	(1.9)
Judges' Conference/Robing Room ¹	200	(18.6)
Attorney/Witness Room 1	150	(14.0)
Attorney/Witness Room 2	150	(14.0)
Court Reporter/Recorder Office	150	(14.0)
Attorney Work Room – Waiting Area ²	250	(23.3)
Marila Arras	100	(9.3)
Work Area Court Reporter/Recorder Storage	50	(4.7)
Shared Work Room	100	(9.3)
Transcriber/Typist Workstation	50	(4.7)
A/V Room	120	(11.1)
Equipment Storage Room	100	(9.3)
Exhibits Storage	50	(4.6)

CEILING HEIGHTS		
	FEET	(mm)
District Judges' Courtroom	16	(4,900)
Special Proceedings Courtroom	18	(5,500)
Attorney/Witness Rooms	10	(3,000)
Attorney Work Room	10	(3,000)
Judges' Conference/Robing Room	10	(3,000)

Provided when chambers are located on a separate floor

Adjacency and Circulation

The most effective configuration of the courtroom floor minimizes the distance of movement and conflicting circulation patterns of trial participants (Figures 4.4-4.7). Efficient circulation around the courtroom, especially the separation of public and restricted circulation, is more readily achieved by locating the courtroom in the interior of the building. For an overview of this topic, refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

▶ Courtrooms

Typically, district judge courtrooms must provide the following three types of access: (1) public circulation and access for spectators, news media representatives, attorneys, litigants, and witnesses; (2) restricted circulation and access for judges, law clerks, courtroom deputy clerks, court reporters/recorders, and jurors; and (3) secure circulation and access for prisoners and USMS personnel. These three circulation and access patterns must be separate to provide security for all groups. The courtroom must have separate entrances from restricted circulation for the judge; jury, courtroom deputy clerk, and court reporter/recorder; prisoners and USMS personnel; and the public. Entrances for the various groups must be located as close as possible to their stations in the courtroom. Courtrooms are separated from the public corridor by a soundlock.

Judges' Conference/Robing Room

Conference/robbing rooms are required for district, magistrate, and bankruptcy judges' courtrooms only when judges' chambers are located in an area remote from the courtroom (i.e., collegial design).

Conference/robing rooms must be located close to the courtroom and accessible from restricted circulation.

Judges must have access to toilets convenient to the courtroom and accessible through restricted circulation. If necessary, a toilet may be programmed with the conference/robing room.

² Only one per courthouse, not per courtroom.

► Attorney/Witness Room

Attorney/witness rooms must be directly accessible from public circulation. In some instances, access from restricted or secure circulation is also desirable. Restricted access provides a higher degree of privacy and security, especially for sensitive witnesses. An occupancy indicator must be provided for each room (e.g., a small sign or view panel adjacent to the door).

► Attorney Work Room

The attorney work room must be accessible from public circulation. It may also be directly accessible from an adjoining courtroom.

► Public Waiting Areas

Public waiting areas are typically alcoves adjacent to, but separate from, public circulation or courtroom lobby areas.

► Court Reporter/Recorder Facilities

Court reporter/recorder facilities should generally be located near courtrooms. The facilities must be accessible primarily from restricted circulation areas; however, some public accessibility must also be provided to accommodate the public purchase of transcripts.

Keyto Symbols

Public Circulation

Restricted Girgulation

Secure Girgulation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/SecurityStaff

Circulation/Access@ontrolipoint

P **Public Vertical Circulation**

Restricted Vertical Circulation

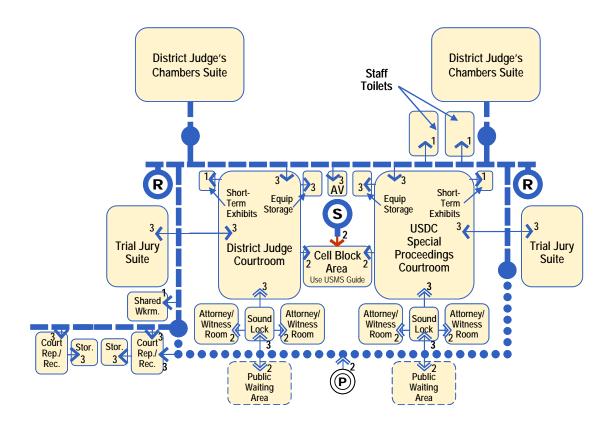
S Secure\Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Figure 4.4 **U.S. District Court Adjacency Relationships**



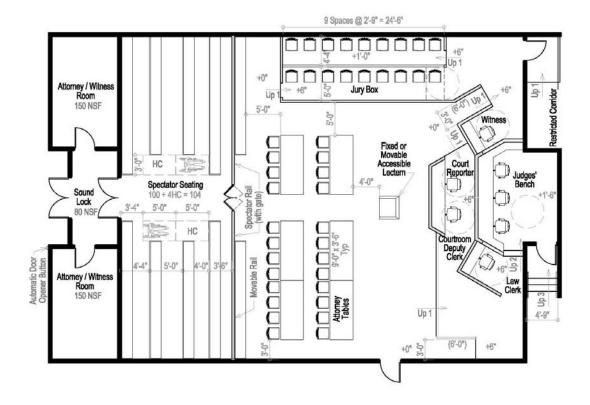
Notes: The adjacency diagram is in tended only as an illustration. Only one set of staff toilets per floor.

Conference/robing room(s) are allowed where chambers are not on the same floor as the courtroom.

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.5
U.S. District Court Special Proceedings Courtrooms, 3000 NSF (278.7 Nm²)

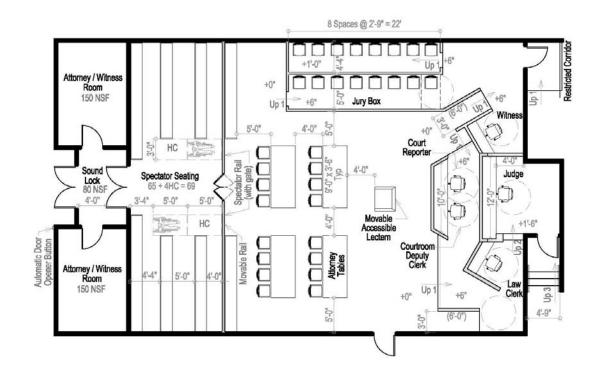


Notes: The floor plan is intended only as an illustration.

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.6 U.S. District Judge's Courtroom – Center Bench, 2400 NSF (223 Nm²)

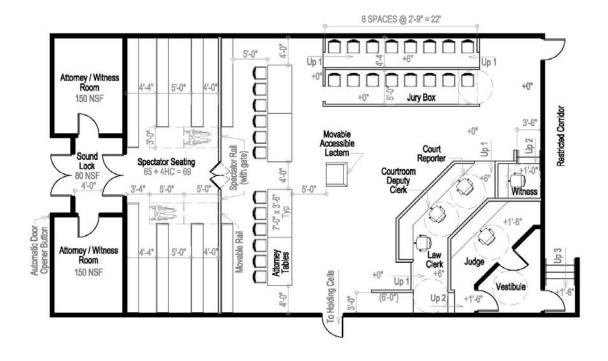


Notes: The floor plan is intended only as an illustration.

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.7 U.S. District Judge's Courtroom – Corner Bench, 2400 NSF (223 Nm²)



Notes: The floor plan is intended only as an illustration.

Magistrate Judge Courtrooms

Functions and Users and Capacities

▶ Functions

Courtrooms. The function of magistrate judge courtrooms is to hold hearings on preliminary matters in criminal cases (e.g., an arraignment, where a defendant is brought before a judge to enter a plea). Magistrate judges preside over these hearings and also conduct misdemeanor trials. Under certain circumstances, magistrate judges conduct the full range of proceedings in civil cases, up to and including jury trials.

Proceedings conducted by magistrate judges typically include multiple defendants or litigants and a number of spectators. The well of the courtroom must accommodate a judge's bench, court personnel workstations, a witness box, a 12-person jury box, and at least two counsel tables for lawyers, plaintiffs, defendants, and interpreters. Space must be included for exhibit display and USMS personnel stationed around the perimeter of the well.

In the courtroom well, 10-20 people typically are present in addition to court personnel and the seated jury. Even larger groups of people are not uncommon. For example, a criminal matter involving six in-custody defendants could generate 50 or more participants, including the judge, courtroom deputy clerk, court reporter/recorder, law clerk, two assistant U.S. attorneys, two case agents, the six defendants and their defense attorneys, 12 deputy U.S. Marshals, 12 jurors, a witness, and possibly an interpreter. Courtrooms frequently used for cases of this size must be designed with a large well and minimum seating capacity.

Judges' Conference/Robing Room. The conference/robing room is an associated facility for magistrate judge courtrooms when chambers are located in an area remote from the courtroom (i.e., collegial design). Conference/robing rooms are used for private conferences with attorneys during brief trial recesses, and as a place for trial court judges to store robes and prepare to enter the courtroom.

Attorney/Witness Room. Attorney/witness rooms are associated facilities for magistrate judge courtrooms. Attorneys use the rooms to confer with one another, their clients, and witnesses. Witnesses requiring separation from the general public while in the courthouse use this room while waiting to testify.

Public Waiting Areas. Public waiting areas are associated facilities for magistrate judge courtrooms. The waiting areas are used by attorneys, civil plaintiffs and defendants, out-of-custody criminal defendants, witnesses, spectators, family members, and the news media.

Court Reporter/Recorder Facilities. Court reporters/recorders use this space to prepare and review transcripts and store records and notes.

Attorney Work Room. Only one attorney work room provided per courthouse. It is provided for attorneys to use while waiting to appear in court.

Users and Capacities

Judicial Officers. A single judge presides over civil and criminal proceedings. A magistrate judge presides over a narrower range of criminal and civil cases than does a district judge.

Courtroom Personnel. In a magistrate judge's courtroom, a courtroom deputy clerk and court reporter/recorder are present. One or two law clerks may also be present, at the discretion of the judge.

Courtroom Deputy Clerk. The courtroom deputy clerk typically is responsible for tracking all court activity during the proceedings, including the order of cases called, as well as documenting decisions by the court and tagging and caring for exhibits. The deputy clerk often confers with the judge during proceedings and can swear in the jury and witnesses.

Law Clerks. The law clerks provide research assistance to the judge and may attend courtroom proceedings.

Court Reporter/Recorder. The court reporter/recorder records court proceedings.

Security Personnel. USMS personnel are responsible for the custody and movement of criminal defendants; the safety, security, and privacy of the judge, jurors, and witnesses; the security of the courtroom and safety of its occupants; and maintaining order in the courtroom. Typically, one or more USMS personnel are present in the courtroom. The total number of USMS personnel depends upon the nature of the matter being heard. In criminal cases, two USMS personnel may be present for each in-custody defendant in the courtroom.

Attorneys. At least one attorney is present on each side of the case. Trial attorneys can be assisted by paralegals and other staff, all of whom are positioned in the courtroom at the discretion of the presiding judge. In criminal cases, U.S. government attorneys can be assisted in court by case agents from the investigative agency involved.

Litigants. The number of litigants depends entirely upon the number of parties and the nature and complexity of the case. For civil cases, the number of litigants on each side might range from 1 to 10, although more than 10 litigants is not unusual. In criminal cases, the number of defendants might range from 1 to 20, although cases with more than 20 defendants do occur. Generally, each defendant is represented by an attorney.

Witnesses and Interpreters. Witnesses are routinely called to testify in trials. An interpreter is furnished if required by a witness or defendant.

Jurors. In magistrate judge courtrooms, the jury for civil trials is determined in consultation with the court. Jury boxes for magistrate judges' courtrooms must accommodate 12 jurors.

A 12-member jury is typically selected from a panel of 45–60 potential jurors; a 6-member jury is selected from 15–25 potential jurors. The number of potential jurors can equal 100 or more in cases with heavy media coverage, multiple parties, or lengthy trials. During impaneling, the potential jurors can be seated in the spectator area of the courtroom. These seats can be made available to the public after the jury has been impaneled.

Spectators. The right to a public trial necessitates a certain volume of general public seating. Demand for spectator, news media, and family seating varies depending on the public interest and the number of parties in a particular case. Most trials will draw only a few or occasional spectators. In a magistrate judge courtroom, seating should be provided for 55-60 persons.

Design Requirements for Magistrate Judge Courtrooms

Design requirements for various stations and overall function are discussed here. More detailed design direction is included in Chapter 12, "Tenant Improvements and Furnishings," for the millwork design of courtroom furnishings.

Witness Box

Witnesses must be able to see and hear, and be seen and heard by, all court participants as close to full face as possible. The witness box must accommodate one witness and an interpreter, and the preferences of the presiding judge. Witnesses in the box receive, examine, and return exhibits.

The interpreter must be seated next to or slightly behind the witness and between the witness and the judge; however, the witness must remain the primary focus.

A separate interpreter station, accommodating two staff persons, might be required in some locations.

► Jury Box

Jurors must be able to see, hear, and be seen by the judge, attorneys, and witnesses. During witness examination, all jurors must be able to see the attorneys, litigants, and witnesses as close to full face as possible. In addition, there must be a clear line of sight to video evidence presentation monitors if they are used in the courtroom.

The maximum allowable distance between a juror and a litigant sitting at a counsel table across the courtroom well is 40 feet (12,200 mm).

Jurors must be separated 6 feet (1,825 mm) from attorneys and litigants to prevent the overhearing of private conversations.

Jurors must be separated from the public to avoid interference or intimidation. At least 6 feet (1,825 mm) of space must separate the jury box and rail dividing the spectator seating area and courtroom well.

The floor level of the highest tier of the jury box must be at least one step (6 inches or 150 mm) lower than that of the judge's bench.

The front row of the jury box may be raised one step (6 inches or 150 mm) or on the same floor level as the courtroom well. A raised first row is preferred. If the first row is one step above the well, a ramp must be provided to allow unassisted access for jurors with disabilities using the same path as all other jurors. Gates and openings into the jury box, clear floor space, and vertical clearance shall allow for space to maneuver a wheelchair and for jurors with disabilities to participate from the same position as all other jurors. The front row may have a dedicated wheelchair space or a removable chair to provide the necessary space when needed. Refer to U.S. Access Board for detailed accessibility criteria.

► Law Clerk Station

In magistrate judges' courtrooms, the law clerk station must be set so that the judge and law clerk can easily see and confer with each other.

► Court Reporter/Recorder Station

The court reporter/recorder must be able to see the facial expressions of witnesses, attorneys, and the judge, and hear every word spoken. Thus, the court reporter/recorder station must be located close to the witness box.

Furniture and other equipment used by the court reporter/recorder should be movable so that it can be rearranged easily to suit each court reporter or judge.

U.S. Marshals Service

USMS personnel must be able to see all participants and the public. Although USMS personnel generally do not have fixed workstations in the courtrooms, they are usually provided with chairs that can be moved to suit the needs of a proceeding.

► Attorney and Litigant Stations

Attorney and litigant stations are not fixed; however, they are located within a defined area of the courtroom well. Attorneys and litigants must see and hear and be seen and heard by one another, the judge, witnesses, jurors, the courtroom deputy clerk, and the court reporter/recorder.

In magistrate judges' courtrooms, attorneys and their clients must be able to confer in private at their courtroom stations without being overheard by jurors, the witnesses, opposing attorneys and litigants, spectators, or others in the courtroom. Attorneys must be able to move easily within the well of the courtroom.

With the permission of the judge, attorneys may use portable computers at or next to counsel tables.

A movable, height-adjustable lectern must be provided for attorneys.

Table 4.4 lists the space and ceiling requirements for magistrate judge courtrooms.

Table 4.4
Space and Ceiling Requirements for Magistrate Judge Courtrooms and Associated Spaces

COURTROOM Magistrate Judge Courtroom 1,800 (167.2) ASSOCIATED SPACES	SPACES	NSF	(Nm ²)
ASSOCIATED SPACES Public Waiting Area 400 (37.2) Soundlock 80 (7.4) Public/Attorney Coat Closet 20 (1.9) Judges' Conference/Robing Room¹ 200 (18.6) Attorney/Witness Room 1 150 (14.0) Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	COURTROOM		
Public Waiting Area 400 (37.2) Soundlock 80 (7.4) Public/Attorney Coat Closet 20 (1.9) Judges' Conference/Robing Room¹ 200 (18.6) Attorney/Witness Room 1 150 (14.0) Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Magistrate Judge Courtroom	1,800	(167.2)
Public Waiting Area 400 (37.2) Soundlock 80 (7.4) Public/Attorney Coat Closet 20 (1.9) Judges' Conference/Robing Room¹ 200 (18.6) Attorney/Witness Room 1 150 (14.0) Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)			
Soundlock 80 (7.4) Public/Attorney Coat Closet 20 (1.9) Judges' Conference/Robing Room¹ 200 (18.6) Attorney/Witness Room 1 150 (14.0) Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	ASSOCIATED SPACES		
Public/Attorney Coat Closet 20 (1.9) Judges' Conference/Robing Room¹ 200 (18.6) Attorney/Witness Room 1 150 (14.0) Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Public Waiting Area	400	(37.2)
Judges' Conference/Robing Room¹ 200 (18.6) Attorney/Witness Room 1 150 (14.0) Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area 100 (9.3) Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Soundlock	80	(7.4)
Attorney/Witness Room 1 150 (14.0) Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area 100 (9.3) Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Public/Attorney Coat Closet	20	(1.9)
Attorney/Witness Room 2 150 (14.0) Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area 100 (9.3) Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Judges' Conference/Robing Room ¹	200	(18.6)
Court Reporter/Recorder Office 150 (14.0) Attorney Work Room – Waiting Room² 250 (23.3) Work Area 100 (9.3) Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Attorney/Witness Room 1	150	(14.0)
Attorney Work Room – Waiting Room² 250 (23.3) Work Area 100 (9.3) Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Attorney/Witness Room 2	150	(14.0)
Work Area Court Reporter/Recorder Storage 100 (9.3) Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Court Reporter/Recorder Office	150	(14.0)
Work Area Court Reporter/Recorder Storage 50 (4.7) Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Attorney Work Room – Waiting Room ²	250	(23.3)
Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	- Work Area	100	(9.3)
Shared Work Room 100 (9.3) Transcriber/Typist Workstation 50 (4.7) AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Court Reporter/Recorder Storage	50	(4.7)
AV Room 120 (11.1) Equipment Storage Room 100 (9.3)	Shared Work Room	100	(9.3)
Equipment Storage Room 100 (9.3)	Transcriber/Typist Workstation	50	(4.7)
	AV Room	120	(11.1)
Exhibits Storage 50 (4.6)	Equipment Storage Room	100	(9.3)
	Exhibits Storage	50	(4.6)

CEILING HEIGHTS		
	FEET	(mm)
Magistrate Judge Courtroom	16	(4,900)
Attorney/Witness Room	10	(3,000)
Attorney Work Room	10	(3,000)
Judges' Conference/Robing Room	10	(3,000)

Provided when chambers are located on a separate floor.

Adjacency and Circulation

The most effective configuration of the courtroom floor minimizes the distance of movement and conflicting circulation patterns of trial participants (Figures 4.8-4.10). Efficient circulation around the courtroom, especially the separation of public and restricted circulation, is more readily achieved by locating the courtroom in the interior of the building. For an overview of this topic, refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

▶ Courtrooms

Typically, magistrate judge courtrooms must provide the following three types of access: (1) public circulation and access for spectators, news media representatives, attorneys, litigants, and witnesses; (2) restricted circulation and access for judges, law clerks, courtroom deputy clerks, court reporters/recorders, and jurors; and (3) secure circulation and access for prisoners and USMS personnel. These three circulation and access patterns must be separate to provide security for all groups. The courtroom must have separate entrances from restricted circulation for the judge; jury, courtroom deputy clerk, and court reporter/recorder; prisoners and USMS personnel; and the public. Entrances for the various groups must be located as close as possible to their stations in the courtroom. Courtrooms are separated from the public corridor by a soundlock.

► Judges' Conference/Robing Room

In a collegial design, conference/robing rooms must be located close to the courtroom and accessible from restricted circulation.

Judges must have access to toilets convenient to the courtroom and accessible through restricted circulation. If necessary, a toilet may be programmed with the conference/robing room.

► Attorney/Witness Room

Attorney/witness rooms must be directly accessible from public circulation. In some instances, access from restricted or secure circulation is also desirable. Restricted access provides a higher degree of privacy and security, especially for sensitive witnesses. An occupancy indicator must be provided for each room (e.g., a small sign or view panel adjacent to the door).

² Only one per courthouse, not courtroom.

► Attorney Work Room

The attorney work room must be accessible from public circulation. It may also be directly accessible from an adjoining courtroom.

► Public Waiting Areas

Public waiting areas are typically alcoves adjacent to, but separate from, public circulation or courtroom lobby areas.

► Court Reporter/Recorder Facilities

Court reporter/recorder facilities should generally be located near courtrooms. The facilities must be accessible primarily from restricted circulation areas; however, some public accessibility must also be provided to accommodate the public purchase of transcripts.

Keyto Symbols

Public Circulation

Restricted Girqulation

Secure Girgulation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted/Access, Direct/Access@ontrol/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/SecurityStaff

Circulation/Access@ontrolpoint

P **Public Vertical Circulation**

Restricted Vertical Circulation

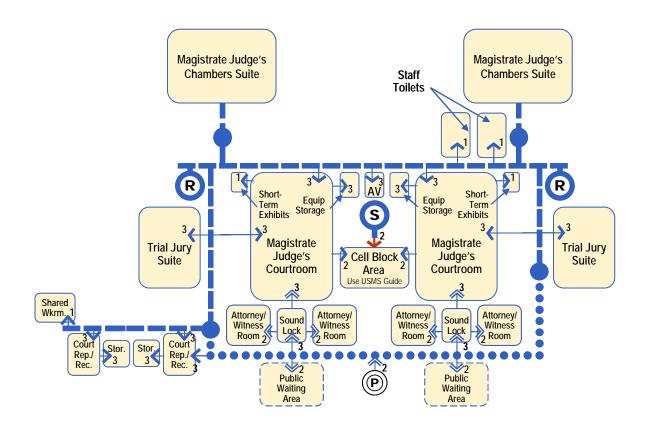
S Secure\Vertical Circulation

Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Figure 4.8 Magistrate Judge Courtrooms Adjacency Relationships



Notes: The adjacency diagram is in tended only as an illustration. Only one set of staff toilets per floor.

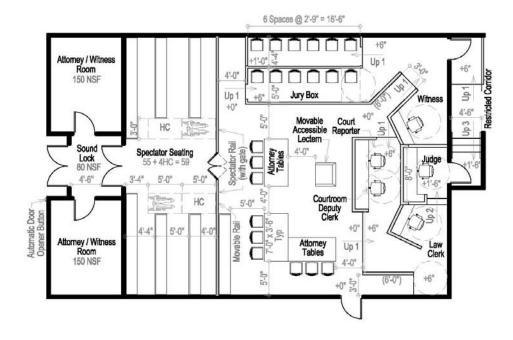
Conference/robing room(s) are allowed where chambers are not on the same floor as the courtroom.

Note:

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.9
Magistrate Judge Courtroom – Center Bench, 1800 NSF (167.2 Nm²)



Notes: The floor plan is intended only as an illustration.

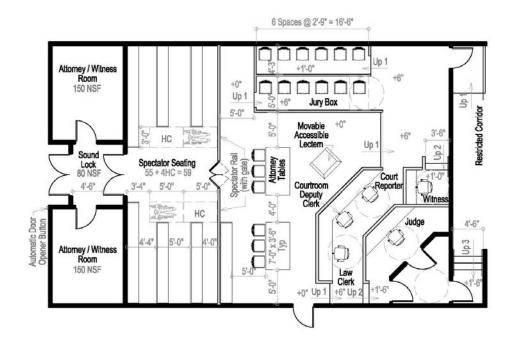
The swinging gate must meet accessibility standards. It may be eliminated to achieve greater accessibility.

Note:

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.10
Magistrate Judge Courtroom – Corner Bench, 1800 NSF (167.2 Nm²)



Notes: The floor plan is intended only as an illustration.

The swinging gate must meet accessibility standards. It may be eliminated to achieve greater accessibility.

Bankruptcy Judge Courtrooms

Functions and Users and Capacities

▶ Functions

Courtrooms. Bankruptcy judges conduct hearings, bench trials, and, in rare situations, jury trials in civil proceedings relating to debtor-creditor relationships. Bankruptcy judges sometimes sit on bankruptcy appellate panels.

Proceedings conducted by bankruptcy judges typically require a well that accommodates a judge's bench, court personnel workstations, a witness box, at least two attorneys' tables, and seating for lawyers, creditors, debtors, plaintiffs, trustees, accountants, and interpreters. Space must also be allowed for the display of exhibits.

Judges' Conference/Robing Room. The conference/robing room is an associated space for bankruptcy judge courtrooms when chambers are located in an area remote from the courtroom (i.e., collegial design). Conference/robing rooms are used for private conferences with attorneys during brief trial recesses, and as a place for trial court judges to store robes and prepare to enter the courtroom.

Attorney/Witness Room. Attorney/witness rooms are associated facilities for bankruptcy judge courtrooms. Attorneys use the rooms to confer with one another and their clients, and witnesses. Witnesses requiring separation from the general public while in the courthouse use this room while waiting to testify.

Attorney Work Room. Only one attorney work room is provided per courthouse. It is provided for attorneys to use while waiting to appear in court.

Public Waiting Areas. Public waiting areas are associated facilities for bankruptcy judge courtrooms. The waiting areas are used by attorneys, civil plaintiffs and witnesses, spectators, family members, and the news media.

Court Reporter/Recorder Facilities. Court reporters/recorders use this space to prepare and review transcripts and store records and notes.

► Users and Capacities

Judicial Officers. A single judge presides over civil proceedings.

Courtroom Personnel. A courtroom deputy clerk, a court reporter/recorder, and a law clerk are present.

Courtroom Deputy Clerk. The courtroom deputy clerk typically is responsible for tracking all court activity during the proceedings, including the order of cases called, as well as documenting decisions by the court and tagging and caring for exhibits. The deputy clerk often confers with the judge during proceedings.

Law Clerk. The law clerk provides research assistance to the judge and attends courtroom proceedings.

Court Reporter/Recorder. The court reporter/recorder records court proceedings.

Security Personnel. In certain instances, USMS personnel will be present.

Attorneys. At least one attorney is present on each side of the case. Other supporting legal staff may be present at the discretion of the presiding judge. The U.S. Trustee might also be represented.

Litigants. The number of litigants varies from 2 to 20 or more; however, no criminal defendants are present.

Witnesses and Interpreters. Witnesses are routinely called to testify in trials. An interpreter is furnished if required by a witness.

Jurors. Juries are rarely used in USBC proceedings.¹

An available magistrate and district judge courtroom should be used for all trials that require a jury. No jury box is provided in a bankruptcy judge's courtroom.

Spectators. Typically, family and friends of litigants, attorneys waiting to appear before the court, the general public, reporters from the news media, and other interested parties will be present. Spectator seating should be provided for 75-82 people.

Design Requirements for Bankruptcy Judge Courtrooms

Design requirements for various stations and overall function are discussed here. More detailed design direction is included in Chapter 12, "Tenant Improvements and Furnishings," for the millwork design of courtroom furnishings.

▶ Witness Box

Witnesses must be able to see and hear, and be seen and heard by all court participants as close to full face as possible. The witness box must accommodate one witness and an interpreter, and the preferences of the presiding judge. Witnesses in the box receive, examine, and return exhibits.

Interpreter(s) must be seated next to or slightly behind the witness and between the witness and the judge; however, the witness must remain the primary focus.

A separate interpreter station, accommodating two staff persons, might be required in some locations.

► Law Clerk Station

In bankruptcy judges' courtrooms, the station must be set so that the judge and law clerk can easily see and confer with each other.

► Court Reporter/Recorder Station

The court reporter/recorder must be able to see the facial expressions of witnesses, attorneys, and the judge, and hear every word spoken. Thus, the court reporter/recorder station must be located close to the witness box.

Furniture and other equipment used by the court reporter/recorder should be movable so that it can be rearranged easily to suit each court reporter or judge.

▶ U.S. Marshals Service

When present, USMS personnel must be able to see all participants and the public. Although USMS personnel generally do not have fixed workstations in the courtrooms, they are usually provided with chairs that can be moved to suit the needs of a proceeding.

► Attorney and Litigant Stations

Attorney and litigant stations are not fixed; however, they are located within a defined area of the courtroom well.

With the permission of the judge, attorneys may use portable computers at or next to counsel tables.

In bankruptcy judge courtrooms, a movable, height-adjustable lectern must be provided for attorneys.

Table 4.5 lists the space and ceiling requirements for bankruptcy judge courtrooms.

Table 4.5 Space and Ceiling Requirements for Bankruptcy Judge Courtrooms and Associated Spaces

COLUMNICATION		
COURTROOM		
Bankruptcy Judge Courtroom	1,800	(167.2)
ASSOCIATED SPACES		
Public Waiting Area	400	(37.2)
Soundlock	80	(7.4)
Public/Attorney Coat Closet	20	(1.9)
Judges' Conference/Robing Room ¹	200	(18.6)
Attorney/Witness Room 1	150	(14.0)
Attorney/Witness Room 2	150	(14.0)
Court Reporter/Recorder Office	150	(14.0)
Attorney Work Room – Waiting Area ²	250	(23.3)
Morle Area	100	(9.3)
Work Area Court Reporter/Recorder Storage	50	(4.7)
Shared Work Room	100	(9.3)
Transcriber/Typist Workstation	50	(4.7)
A/V Room	120	(11.1)
Equipment Storage Room	100	(9.3)
Exhibits Storage	50	(4.6)

CEILING HEIGHTS		
	FEET	(mm)
Bankruptcy Judge Courtroom	16	(4,900)
Attorney/Witness Rooms	10	(3,000)
Attorney Work Room	10	(3,000)
Judges' Conference/Robing Room	10	(3,000)

Provided when chambers are located on a separate floor.

CDACEC

Adjacency and Circulation

The most effective configuration of the courtroom floor minimizes the distance of movement and conflicting circulation patterns of participants (Figures 4.11-4.13). Efficient circulation around the courtroom, especially the separation of public and restricted circulation, is more readily achieved by locating the courtroom in the interior of the building. For an overview of this topic, refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

▶ Courtrooms

Typically, bankruptcy judge courtrooms must provide the following two types of access: (1) public circulation and access for spectators, news media representatives, attorneys, litigants, and witnesses; and (2) restricted circulation and access for judges, law clerks, courtroom deputy clerks, and court reporters/recorders. These two circulation and access patterns must be separate to provide security for both groups. The courtroom must have separate entrances from restricted circulation for the judge; the jury, courtroom deputy clerk, and court reporter/recorder; and the public. Entrances for the various groups must be located as close as possible to their stations in the courtroom. Courtrooms are separated from the public corridor by a soundlock.

Judges' Conference/Robing Room

In a collegial design, conference/robing rooms must be located close to the courtroom and accessible from restricted circulation.

Judges must have access to toilets convenient to the courtroom and accessible through restricted circulation. If necessary, a toilet may be programmed with the conference/robing room.

► Attorney/Witness Room

Attorney/witness rooms must be directly accessible from public circulation. In some instances, access from restricted or secure circulation is also desirable. Restricted access provides a higher degree of privacy and security, especially for sensitive witnesses. An occupancy indicator must be provided for each room (e.g., a small sign or view panel adjacent to the door).

² Only one per courthouse, not per courtroom.

► Attorney Work Room

The attorney work room must be accessible from public circulation. It may also be directly accessible from an adjoining courtroom.

► Public Waiting Areas

Public waiting areas are typically alcoves adjacent to, but separate from, public circulation or courtroom lobby areas.

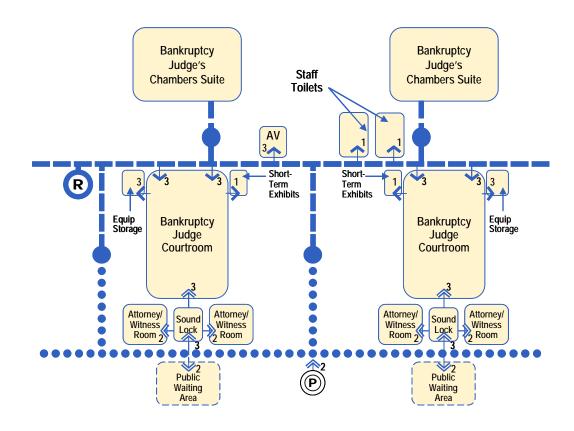
► Court Reporter/Recorder Facilities

Court reporter/recorder facilities should generally be located near courtrooms. The facilities must be accessible primarily from restricted circulation areas; however, some public accessibility must also be provided to accommodate the public purchase of transcripts.

Keytto Symbols

- • • Public Circulation
- Restricted Girgulation
- Secure Girgylation
 - Unscreened Public Access
 - Screened Public Access
 - Screened Public Access, locked when the tinuse
 - Restricted Access, Uncontrolled
 - Restricted Access, Remote Access Control
- Figure Restricted Access, Direct Access Gontrol/Keylock
 - Restricted Access, Counter/Window Service
 - Privacy Lock
 - Secure Access, Authorized Staff
 - Secure Access, Prisoner/Security Staff
 - Circulation/Access@ontrolpoint
 - Public Vertical Circulation
 - Restricted\y/ertical Circulation
 - S Secure Vertical Circulation
 - F Freight Vertical Circulation
 - Direct Visual Access, One-Way
 - Direct Visual Access, ⊤wo-Way

4.11
U.S. Bankruptcy Court Adjacency Relationships



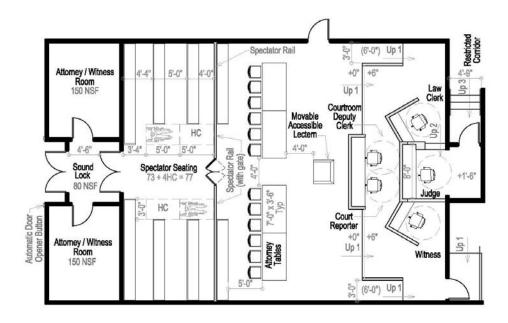
Note: The adjacency diagram is intended only as an illustration.
Only one set of staff toilets per floor.

Note:

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.12
U.S. Bankruptcy Judge's Courtroom – Center Bench, 1800 NSF (167.2 Nm²)



Notes: The floor plan is intended only as an illustration.

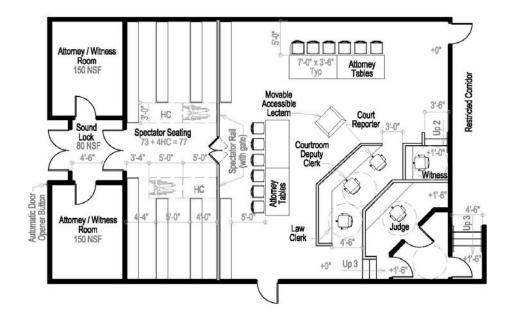
The swinging gate must meet accessibility standards. It may be eliminated to achieve greater accessibility.

Note:

Sample floor plans are furnished for illustrative purposes only and are not meant to serve as standards for design.

For each courtroom plan, design decisions must accommodate local custom and specific requirements. These requirements include the shape of the room, arrangement of furniture, size of the courtroom well, number of seats provided, arrangement of exits, and other features. The guidelines for floor area and ceiling height for each courtroom are intended to be prescriptive.

Figure 4.13
Bankruptcy Judge's Courtroom – Corner Bench, 1800 NSF (167.2 Nm²)



Notes: The floor plan is intended only as an illustration.

The swinging gate must meet accessibility standards. It may be eliminated to achieve greater accessibility.

5

This chapter applies to the areas of the courtroom designed to accommodate the jury selection and deliberation process, including jury assembly areas, trial jury suites, and the grand jury suite. It describes jury functions and activities, users and capacities, design requirements, and space allocation requirements, and contains adjacency diagrams.

JURY FACILITIES

Supporting Documents

A comprehensive guide to supplementary publications can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The reference listed below relates specifically to this chapter.

 United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, Chapter 7.

Programming and Budgetary Notes

► Exceptions to the *Design Guide* Standards

Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space-management role by reviewing district-wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space-management program (28 USC (§332 and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions to the standards in the *Design Guide* must be approved by the respective circuit judicial council.

Authority of the Committee on Space and Facilities and Judicial Conference

The authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total envelope for either the court unit or the project as a whole, (2) changing the standard configurations for judges' chambers and courtrooms, and (3) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference will decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

► Space Envelope Flexibility

A total space envelope for jury facilities will be calculated using appropriate circulation factors, allowances for support-type spaces, and the space standards described in this section. Courts have the flexibility to configure space within the envelope to meet their local needs. However, private office and open workstation sizes should be in compliance with the square footage standards designated in the space and ceiling requirements. If the court unit wishes to change the space standards described in the space and ceiling requirements without exceeding the total envelope of space for the unit, it must seek approval from its respective circuit judicial council.

▶ General Programming Notes

Multiuse Jury Facilities. Jury facilities are generally used intermittently. Courthouse programs should consider multiuse opportunities for jury facilities, including training, conferences, alternative dispute resolution, and so on. Jury assembly areas may be equipped with movable walls to facilitate use for other activities. Alternate functions should be considered when determining furnishings and equipment.

Size of Jury Deliberation Rooms. The size of the trial jury deliberation room is dependent upon the type of court. Jury deliberation rooms for district court judge courtrooms are 350 NSF (32.5 Nm²) and 250 NSF (23.2 Nm²) for magistrate judge courtrooms. One trial jury deliberation room at 500 NSF shall be provided for every four district judge courtrooms. In buildings with fewer than four district judge courtrooms, one of the jury deliberation rooms to be constructed shall be 500NSF. If a special proceedings courtroom is planned, the 500NSF jury deliberation room shall be placed adjacent to it.

Jury Facilities for Bankruptcy Judges. A cooperative arrangement between the U.S. District Court (USDC) and U.S. Bankruptcy Court (USBC) ensures that jury facilities will be available to the USBC when needed, jury facilities shall not be incorporated into the USBC courtroom.

Functions and Activities

The Sixth Amendment to the United States Constitution guarantees the right to a speedy and public trial by an impartial jury. Although the judge decides the law in the case and instructs the jury on the law, it is the jury's role to decide the facts in the case and apply the law on which the judge has instructed it to reach a verdict. In cases in which there is contradictory evidence, it is the jury's job to resolve the conflict and decide what really happened.

Broadly speaking, juries are of two types. A trial jury, which is also called a petit jury, serves in both criminal and civil trials as described above. In federal criminal cases, there are usually 12 jurors and from 2 to 6 alternate jurors. Alternate jurors

replace jurors who become ill, disqualified, or unable to perform their duties. In federal civil cases there are from 6 to 12 jurors. Unlike criminal cases, civil cases do not have alternate jurors.

A grand jury is a group of citizens who listen to evidence of criminal activity presented by the government in order to determine whether there is enough evidence to justify issuing an indictment, in which they charge the defendant with a crime. Federal grand juries have from 16 to 23 members. Unlike petit jurors, who are selected to serve on one trial only, grand jurors serve from a year to three years, sitting one or two days a week, and may hear evidence in many different cases.

Congress requires that each district court develop a plan for selecting jurors. Generally, the selection process begins when the clerk of court randomly draws names from the list of registered voters in the judicial district, and sometimes from other sources, such as the list of licensed drivers. This selected group is called the master wheel. The clerk then sends questionnaires to all the people on the master wheel to determine whether they meet the requirements for jury service. People who fall into certain categories may ask to be excused at this point. The group found eligible to serve and not excused is called the qualified wheel.

The jury administrator then chooses by random means a group of prospective jurors from the qualified wheel, who receive a summons to appear at the courthouse to serve on juries as trials are scheduled. Potential jurors must either wait in the courthouse jury assembly suite or remain available to be used as grand or petit jurors during their term of service. When a jury is needed for a trial, a part of this group, or a panel of potential jurors, is chosen and sent to the courtroom. The trial jurors for the case are then selected from the panel, in the courtroom, during a question-and-answer process called voir dire.

Once a petit jury has been selected for a criminal or civil trial, the lawyers for both sides give their opening statements to provide the jury an overview of the evidence they will present. After the evidence has been presented, the lawyers for each side make their closing arguments to the jury to review the most important features of each side's case. Following the closing arguments, the judge gives instructions to the jury, explaining the relevant law, how the law applies to the case being tried, and

what questions the jury must decide. After receiving its instructions from the judge, the jury retires to the trial jury suite to discuss the evidence and to reach a verdict (a decision on the factual issues in the case).

A grand jury is different from a trial jury, or petit jury. A grand jury determines whether a person may be tried for a crime; a petit jury listens to the evidence presented at the trial and determines whether the defendant is guilty of the charge.

A criminal case formally begins with an indictment or information. An indictment may be obtained when a lawyer for the executive branch of the U.S. government—the U.S. attorney or an assistant U.S. attorney, also referred to as the prosecutor—tells a federal grand jury about the evidence that, according to the government, indicates a person committed a crime. The U.S. attorney tries to convince the grand jury that there is enough evidence to show that the person probably committed the crime and should be formally accused of it. If the grand jury agrees, it issues a formal accusation, called an indictment. After the indictment is issued, the accused person (the defendant) is summoned to court or arrested (if not already under arrest), depending upon the severity of the crime.

The major functions of courthouse spaces designed to accommodate juries are as follows.

► Jury Assembly Suite

Potential jurors receive orientation in the jury assembly area and wait there to be called to a courtroom for jury selection. Jurors often spend long periods waiting; therefore, comfortable and appropriate facilities are needed. Because the jury assembly area significantly impacts the jurors' perception of the justice system, it must reflect the importance of jury service to the administration of justice.

► Trial Jury Suite

The jury uses the trial jury suite throughout the trial and during deliberations at the conclusion of the trial. The deliberations of a trial jury must be strictly confidential. During deliberations, the jury discusses testimony and reviews transcripts, exhibits, and other materials. If audiovisual (AV) or graphical displays were used during the proceedings, the displays might also be reviewed during deliberations. Trial jury deliberations can vary in length from less than an hour to several days.

► Grand Jury Suite

The U.S. Attorney uses the grand jury suite to present evidence and witnesses before grand jurors, who then decide whether to return an indictment and bring a case to trial. Deliberating grand jurors and waiting witnesses must be accommodated in separate, adjacent spaces. Jurors take notes and ask questions during the proceedings.

Users and Capacities

▶ Jury Assembly Suite

The number of users varies, depending on the number of clerical staff, potential jurors (usually between 60 and 200), and courtrooms in the facility.

► Trial Jury Suite

In district judge cases, users consist of up to 18-member juries (12 jurors plus 2 to 6 alternates). In magistrate judge cases, users consist of up to 12 jurors.

► Grand Jury Suite

Users consist of 16 to 23 jurors, U.S. attorney personnel, witnesses, the foreperson, the secretary, and the court reporter/recorder.

Design Requirements

► Ceiling Height

The ceiling is a designed surface. It may be a uniformly flat, neutral plane, or it may have two or more planes and include elements such as soffits, perimeter coves, recesses, and reveals as required to integrate HVAC and lighting into a harmonious design. An adjustment of a ceiling surface may also occur where it meets an exterior curtain wall. In situations where there are several different surfaces at play at different heights above the finished floor, there may be different ways of determining which one(s) is the dominant plane. It is recommended that ceiling heights should be measured from the finished floor to the principal surface that either covers the most amount of ceiling square footage, or the surface that defines the overall character of

the ceiling design. The design team must ensure that at no point should the finished ceiling exceed the maximum ceiling height standards set forth in the *Design Guide* or GSA P-100.

Ceiling heights shall be in accordance with the standard set forth in GSA P-100 except as noted below. Special ceiling heights (above finished floor) in jury facilities spaces are set as follows:

Jury Assembly 10 feet (3,000 mm)

Trial Jury Suite 10 feet (3,000 mm)

Grand Jury Hearing Room 11 feet (3,350 mm)

Ceiling heights that exceed these maximum heights are considered an exception and will require Judicial Conference approval.

► Jury Assembly Suite

In the jury assembly area, a jury clerk station is provided near the check-in counter in the reception area. The workstation must accommodate a desk and movable chair.

Storage must be provided for jurors' personal belongings (i.e., coats, hats, handbags), preferably in the entrance vestibule.

Exterior windows in the jury assembly area, lounges, and staff work areas are encouraged.

► Trial Jury Suite

In the trial jury suite, a sworn-jury custodian station must be provided outside the soundlock entrance. The station must accommodate a work surface with a drawer and an armchair located to allow visual surveillance of the circulation areas leading to the trial jury suite.

Storage must be provided for jurors' personal belongings (i.e., coats, hats, handbags), preferably in the entrance vestibule. Lockable cabinets must be provided for exhibits, audiovisual equipment, and supplies that must be left in the room.

For trial jury suites located above the ground floor, exterior windows are recommended. For trial jury suites on the ground level, provision of indirect daylight through clerestory windows or other design features that maintain security and confidentiality should be considered. In both cases, lighting should be controlled with blinds or drapes.

► Grand Jury Suite

In the grand jury suite, a court security workstation at the entry reception area must be provided. The workstation must accommodate a work surface with a drawer(s) and a swivel-base armchair.

Storage must be provided for jurors' personal belongings (i.e., coats, hats, handbags), preferably in the entrance vestibule. Lockable cabinets must be provided for exhibits, audiovisual equipment, and supplies that must be left in the room.

To help maintain security and privacy, grand jury suites should not have windows; however, if windows are provided, opaque shades must be installed.

¹ 10'-0" above the highest tier of juror seating.

Table 5.1 **Space and Ceiling Requirements for Jury Facilities**

SPACES	NSF	(Nm²)
JURY ASSEMBLY SUITE		
Check-In	100	(9.3)
Jury Clerk's Office, per clerk	96	(9.3)
Coat Closet ¹		
Jurors' Toilets ²		
Service Unit	100	(9.3)
Vending Area, per machine	15	(1.4)
Juror Lounge, per person ³	20	(1.9)
Orientation Area, per person	10	(0.93)
Equipment Storage	150	(13.9)
Supplies Storage (minimum space)	50	(4.6)

TRIAL JURY SUITE		
Soundlock Entry, minimum dimension	50	(4.6)
Sworn-Jury Custodian Station	50	(4.6)
Jurors' Toilets, 2 each @ 50 NSF (4.6 Nm²)	100	(9.3)
Coat Closet	20	(1.9)
Trial Jury Room (@ special proceedings courtroom) ⁴	500	(46.4)
Trial Jury Room (District Judge Courtrooms) ⁴	350	(32.5)
Trial Jury Room (Magistrate Judge Courtrooms) ⁴	250	(23.2)
Service Unit	20	(1.9)
Exhibits Display	50	(4.6)
Video Equipment Closet	10	(0.93)

SPACES	NSF	(Nm ²)
GRAND JURY SUITE		
Entry Area	50	(4.6)
Security Workstation	50	(4.6)
Jurors' Toilets, 2 each @ 50 NSF (4.6 Nm²)	100	(9.3)
Service Unit	20	(1.9)
Witness Room	200	(18.6)
Witness Room	120	(11.1)
Hearing Room	700	(65)
Video Equipment Closet	10	(0.93)
Closet	25	(2.3)

CEILING HEIGHTS		
	FEET	(mm)
Jury Assembly Room	10	(3,000)
Trial Jury Deliberation Room	10	(3,000)
Grand Jury Room ⁵	11	(3,050)

- ¹ Provide 3 lineal inches of coats space (75 mm) per juror.

- Provide 3 infeat inches of coars space (73 min) per jutor.
 Provide juror toilets per code.
 Provide jury lounge space for 20% of jurors.
 One jury deliberation room at 500 NSF (46.4 Nm²) shall be provided for every four District Judge Courtrooms. In courthouses with fewer than four District Courtrooms, one of the Jury Deliberation rooms to be constructed shall be 500 NSF (46.4 Nm²). If a Special Proceedings Courtroom is planned, the 500 NSF (46.4 Nm²) Jury Deliberation Room shall be adjacent.
- ⁵ Ceiling to be 10'-0" above the highest tier of juror seating.

Adjacency and Circulation

► Jury Assembly Suite

The jury assembly area must be easy to find from public entrances and must be conveniently accessible to all jury courtrooms. A reception area located outside the assembly space must be provided. A set of barrier-free toilet facilities for the exclusive use of jurors can be provided inside the space through a soundlock. Access to the courtrooms can be through either public or restricted circulation.

Overall size varies, but the assembly area requires 10 NSF (0.93 Nm²) per person for the number of people expected to be called for jury service. In addition, 20 NSF (1.9 Nm²) per person for 20 percent of the prospective jurors must be provided for a lounge area. The suite must accommodate the necessary furniture with sufficient room for unencumbered movement. The ceiling height must be in proportion to the area of the space. For further detail and the sizes of jury spaces, see Table 5.1.

► Trial Jury Suite

Jurors must access the trial jury suite from public circulation through a controlled access point into a restricted corridor. The jury must not pass through the public seating area of the courtroom when moving to or from the trial jury suite; instead, jurors must access the courtroom directly from the trial jury suite or through a restricted corridor. Trial jury suites must not be located where the public, attorneys, and litigants can see, hear, or gain access to jurors. During deliberations, access to the suite is strictly controlled by the sworn-jury custodian.

▶ Grand Jury Suite

The grand jury suite must be accessible through public circulation, with an entrance controlled by U.S. Marshals Service (USMS) personnel. The suite must be easily accessible to U.S. attorney staff without requiring them to enter the courts' restricted access areas. The suite must be located in an area with light public traffic, and on a floor not occupied by courtrooms. Protected and in-custody witnesses must enter this area through the USMS secure circulation system. During grand jury hearings, the suite must be secure.

Adjacency diagrams (Figures 5.1-5.3) are located on the following pages. The number of spaces shown on the adjacency diagrams is intended only as an illustration; the actual number of spaces required for a specific facility is determined in the building program.

The design team should refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

Keytto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Aggress, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted (Vertical Circulation

Secure (Vertical Circulation

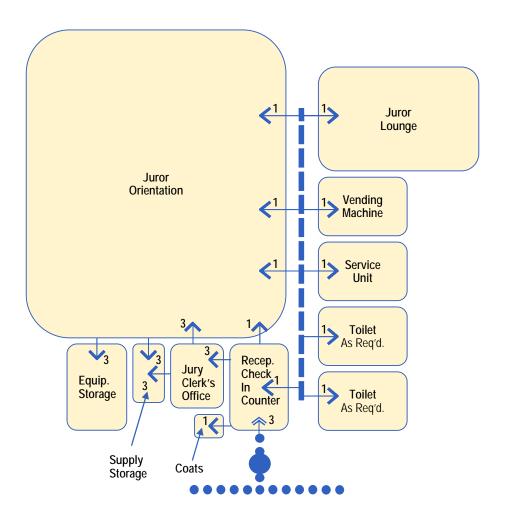
F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual, Access, Two-Way

Figure 5.1

Jury Assembly Suite Adjacency Relationships



Keytto Symbols

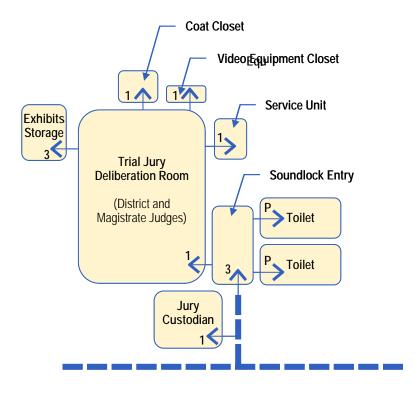
• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when not in use
- Restricted Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access,
 Direct Access Control/Keylock
- Restricted Access, Counter/Window Service
- Privacy Lock
- Secure Access, Authorized Staff
- Secure Access, Prisoner/Security Staff
- Circulation/Access@ontrolpoint
- Public Vertical Circulation
- Restricted Vertical Circulation
- Secure Vertical Circulation
- F Freight Vertical Circulation
- Direct Visual Access, One-Way
- Direct Visual Access, ⊤wo-Way

Figure 5.2
Trial Jury Suite Adjacency Relationships



Keyto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

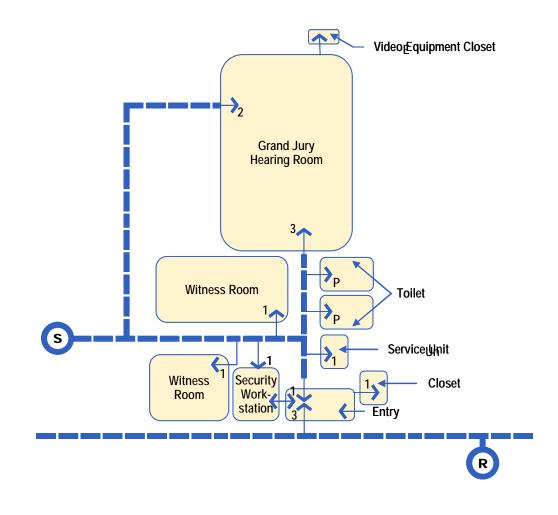
Secure \Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual, Access, Two-Way

Figure 5.3
Grand Jury Suite Adjacency Relationships



6

This chapter applies to judges' chambers suites for the U.S. Court of Appeals (USCA), the U.S. District Court (USDC), and the U.S. Bankruptcy Court (USBC). It describes their functions and activities, users and capacities, design requirements, and space allocation requirements, and contains adjacency diagrams.

JUDGES' CHAMBERS SUITES

Supporting Documents

A comprehensive guide to supplementary publications can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The reference listed below relates specifically to this chapter.

 United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, Chapter 5.

Programming and Budgetary Notes

► Exceptions to the *Design Guide* Standards

Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space-management role by reviewing district-wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space-management program (28 USC (§332 and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions to the standards in the *Design Guide* must be approved by the respective circuit judicial council.

Authority of the Committee on Space and Facilities and Judicial Conference

The authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total "envelope" for either the court unit or the project as a whole, (2) changing the standard configurations for judges" chambers, and (3) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference shall decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

► Standardized Chamber Layouts

All resident and non-resident/visiting judges' chambers suites must be designed in a standard layout based on the type (i.e., circuit, district, magistrate, and bankruptcy judges' chambers). Judges must agree to a standard layout for their court type. Any exceptions to this policy must be approved by the Committee on Space and Facilities. If the Committee disagrees with the request, the Judicial Conference shall decide to grant the exception.

► General Programming Notes

Courtroom Deputy Clerk Location. Each suite can also require a courtroom deputy clerk work area within or close to the chambers suite. When not located in chambers, the deputy clerk work area must be excluded from the total net square feet (NSF) of the chambers suite. This applies to chambers for district, magistrate, and bankruptcy judges.

Circulation in Chambers. Additional circulation space is not to be included in the chambers design unless needed. The design team should refer to Chapter 3, "Planning for U.S. Courthouses" for circulation factors.

Shared Reference (Library) Collections. The total NSF allocated for shared reference collections must not exceed the NSF allotted in chambers suites for this purpose. Space programmed for shared reference collections must be deducted on a pro rata basis from each chambers suite. Although space savings may be minimal, the cost of maintaining two separate collections is significantly reduced. Shared collections may save net programmed space but may increase space required for circulation. Efficient planning may decrease total space requirements and provide enhanced library services. Refer to page 6-4.

Functions and Activities

The chambers suite includes the judge's private chambers (with adjoining private toilet and vestibule), a reference/conference room, work areas, offices, and other associated spaces used by the judge and support staff. See Figures 6.1 through 6.15 for adjacency diagrams and typical/representative layouts of judges' chambers suites.

Judges' chambers suites provide an area for receiving and screening visitors; storage for staff members' and visitors' coats and other belongings; storage for files used by the judge and staff; a small service unit for coffee and light food preparation; a research area for law clerks; a clerical work area for the judge's judicial assistant; and space for a copier, printer, and other equipment.

In addition to judicial assistants and law clerks, many judges also employ unpaid law school externs/interns. Although the guidelines that follow do not formally designate work spaces for externs/interns, workstations are often provided in the suite's reference/conference room.

Users and Capacities

▶ U.S. Court of Appeals

Chief Judge's Chambers Suite. Users consist of the chief judge, three law clerks, and three judicial assistants¹ (or four law clerks and two judicial assistants) if there are five or more authorized judgeships plus six visitors.

Circuit Judge's Chambers Suite. Users consist of one judge, three law clerks, and two judicial assistants (or four law clerks and one judicial assistant), plus two visitors.

▶ U.S. District Court

Chief Judge's Chambers Suite. Users consist of the chief judge, two law clerks, and one judicial assistant (or three law clerks), plus six to ten visitors; the chief judge may have a third law clerk or second judicial assistant if there are five or more authorized judgeships in the district.

District Judge's Chambers Suite. Users consist of one judge, two law clerks, and one judicial assistant (or three law clerks and no judicial assistant), plus six to ten visitors.

Magistrate Judge's Chambers Suite. Users consist of one magistrate judge, one law clerk, and one judicial assistant (or two law clerks and no assistant), plus six to ten visitors.

¹ A judicial assistant is the judge's chambers office manager.

► U.S. Bankruptcy Court

Bankruptcy Judge's Chambers Suite. Users consist of one bankruptcy judge, one law clerk, and one judicial assistant (or two law clerks and no judicial assistant), plus six to ten visitors.

Design Requirements

► General Design Elements

The following is a description of the design elements in the judge's chambers suite.

Privacy. Total enclosure of the judge's chambers suite is necessary for acoustic and visual privacy, to protect confidentiality, and to prevent distraction. An entrance to the judge's chambers located directly off restricted circulation must be provided with a vestibule to ensure confidentiality.

Natural Light. Access to natural light is required for all workstations. Windows are desirable; however, natural light must be controlled to eliminate excessive brightness, glare, or heat.

► Ceiling Height

The ceiling is a designed surface. It may be a uniformly flat, neutral plane, or it may have two or more planes and include elements such as soffits, perimeter coves, recesses, and reveals as required to integrate HVAC and lighting into a harmonious design. An adjustment of a ceiling surface may also occur where it meets an exterior curtain wall. In situations where there are several different surfaces at play at different heights above the finished floor, there may be different ways of determining which one(s) is the dominant plane. It is recommended that ceiling heights should be measured from the finished floor to the principal surface that either covers the most amount of ceiling square footage, or the surface that defines the overall character of the ceiling design. The design team must ensure that at no point should the finished ceiling exceed the maximum ceiling height standards set forth in the *Design Guide* or GSA P-100.

The ceiling height is a maximum of 10 feet above finished floor. Ceiling heights that exceed the maximum height shall be considered an exception.

Specific Design Elements

Judicial Assistant Work Area. The judicial assistant work area must be designed to allow the suite entrance to be continuously monitored.

Space for a computer printer must be conveniently accessible from the judicial assistant work area but separate from the reception area, to maintain the confidentiality of documents being printed.

Law Clerk Office(s). A separate office for each law clerk may be provided. Alternatively, clerks can be provided with semiprivate workstations, either in an alcove or separated by modular partitions, bookcases, and so on, depending on the judge's preference.

Reference/Conference Room. The reference/conference room is used by the judge and law clerks to research and discuss cases, as well as by the judge to meet with other court staff or attorneys. It may also house workstations for externs/interns. Shelving must be provided to accommodate the chambers reference collection. In addition, the area must accommodate a conference table and chairs for up to 12 people.

Requirements for bookshelves are changing because of evolving methods of legal research. The increasing use of electronic databases and a decreasing reliance on bound volumes are resulting in smaller chambers reference collections. The changes in legal research methods provide an opportunity to reduce the court's expenses for maintaining collections and the space needed to house them.

Informal sharing among chambers should be encouraged. Adjacent chambers in new courthouse designs should be encouraged by providing controlled access into each chamber from a shared reference/conference room. This design provides additional flexibility for individual judges to share books.

The sharing of chambers reference collections is currently practiced in some courts and is encouraged when planning courthouse construction projects. In addition to cost savings, sharing collections may offer other advantages such as increasing the depth of the collection available to judges and promoting collegial relations among law clerks and judges. Disadvantages may include reduced convenience or the increased possibility that a desired book may be in use.

The judiciary's Committee on Court Administration and Case Management has identified space-planning scenarios for sharing chambers reference collections. Variations of the scenarios listed below may be adapted to fit the myriad possible configurations for chambers suites.

- In courthouses where chambers suites are clustered on the same floor, there may be a central shared collection augmented by a minimal number of often-used volumes maintained in chambers. This arrangement increases the possibility of providing library staff and offers the greatest opportunity to increase the depth of the collection; however, access to books may be less convenient.
- The collegial arrangement of chambers suites also provides an opportunity for shared conference rooms and other support spaces. A shared conference room may be larger and better equipped than individual conference rooms in chambers suites.
- In courthouses that do not have clustered chambers suites, reference collections may be shared between adjoining suites. A single shared reference/conference room, situated between the suites, with controlled access into each chamber can be used to store books and legal research. This arrangement preserves convenient access to the collection and provides flexibility for individual judges to share books. This scenario places responsibility for administering the collection on the judges' staff.

Storage. The general storage area in the judge's chambers suite must provide the following:

- Space for lateral files or other appropriate filing equipment
- A closet convenient to the reception area that provides hanging and shelf space for visitors' and staff members' coats and other belongings
- Space for general office and coffee/refreshment supplies
- At least one range of bookshelves for each staff member, including the judicial assistant

Within the judge's private chambers, storage should be provided for the following:

- The judge's personal belongings (storage should be lockable)
- Office supplies (in conveniently located drawers or cabinets, large enough to accommodate legal-sized pads and files)
- Files (storage should be lockable; file storage may be located outside the chambers but should have convenient access)
- Law books (shelves should be conveniently located)

Toilet. A private toilet room must be provided in the chambers suite. Access to the toilet should be through a vestibule that also provides access from the chambers to a restricted circulation area. See Table 6.1 for more detail on private toilets.

Table 6.1
Space and Ceiling Requirements for Judges' Chambers Suites

SPACES	NSF	(Nm²)
CIRCUIT JUDGE'S RESIDENT CHAMBERS SUITE	SIZE	
Ludwida Oh a sah ara Office	000	(55.0)
Judge's Chambers Office	600	(55.8)
Judge's Private Toilet	50	(4.7)
Storage	100	(9.3)
Filing Room	140	(13.0)
Law Clerks: 3 @ 150 NSF (13.9 Nm ²)	450	(41.9)
Conference/Reference Room	240	(22.3)
Judicial Assistant Work Space: 2 @ 120 NSF (11.2 Nm²)	240	(22.3)
Copier Area	50	(4.7)
Fax Area	10	(.9)
Service Unit	20	(1.9)
Coat Closet	10	(.9)
Vestibule	50	(4.7)
Reception Area	100	(9.3)
Total NSF ¹	2,060	(191.6)

DISTRICT JUDGE'S RESIDENT CHAMBERS SUITE		
Judge's Chambers Office	500	(46.5)
Judge's Private Toilet	50	(4.7)
Storage	80	(7.4)
Filing Room	140	(13.0)
Law Clerks: 2 @ 150 NSF (13.9 Nm ²)	300	(27.9)
Conference/Reference Room	240	(22.3)
Judicial Assistant Work Space	120	(11.2)
Copier Area	50	(4.7)
Fax Area	10	(.9)
Service Unit	20	(1.9)
Coat Closet	10	(.9)
Vestibule	50	(4.7)
Reception Area	100	(9.3)
Total NSF ¹	1,670	(155.3)

SPACES	NSF	(Nm ²)
MAGISTRATE & BANKRUPTCY JUDGE'S RESIDENT CHAMB	ERS SUITE	
Judge's Chambers	400	(37.2)
Judge's Private Toilet	50	(4.7)
Storage	80	(7.4)
Filing Room	60	(5.6)
Law Clerk	150	(14.0)
Conference/Reference Room	240	(22.3)
Judicial Assistant Work Space	120	(11.2)
Copier Area	50	(4.7)
Fax Area	10	(.9)
Service Unit	20	(1.9)
Coat Closet	10	(.9)
Vestibule	50	(4.7)
Reception Area	100	(9.3)
Total NSF ¹	1,340	(124.7)

CIRCUIT JUDGE'S NON-RESIDENT SUITE (HEADQUARTERS) ²		
Judge's Chambers Office	240	(22.3)
Judge's Private Toilet	50	(4.7)
Law Clerks Open Workstations: 3 @ 64 NSF (5.8 Nm²)	192	(17.9)
Judicial Assistant Workstation & Reception	120	(11.2)
Total NSF ¹	602	(56)

CEILING HEIGHT		
	FEET	(mm)
Chambers Spaces	10	(3,000)

If a different complement of judicial assistants and law clerks is selected, the total NSF shall not be exceeded. If the Courtroom Deputy Clerk is assigned to chambers, a private office of 150 NSF (13.9 Nm2) is provided and has not been included in total chambers net square feet. No additional space shall be provided for the Courtroom Deputy Clerk in the Clerk's Office.

² All other Non-resident Judge's chambers shall be 900 NSF (83.6 Nm2).

Adjacency and Circulation

Each judge's chambers suite is accessible only through restricted circulation. The suite is located to be conveniently accessible to the judge's courtroom and its associated areas, unless a collegial chambers floor scheme is selected.

See the adjacency diagrams that follow (Figures 6.1–6.5) for additional detail regarding adjacency and circulation. Chapter 3, "Planning for U.S. Courthouses," provides a discussion on circulation factors to be used in initial programming and design studies.

Keytto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when Hot in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access,
Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted\yertical Circulation

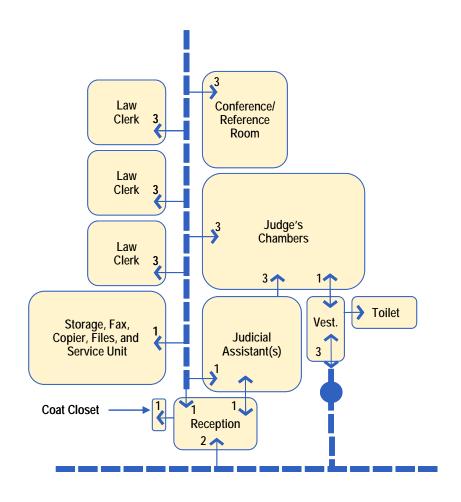
S Secure \Vertical Circulation

Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual, Access, Two-Way

Figure 6.1
Circuit Resident Judge's Chambers
Adjacency Relationships



Keytto Symbols

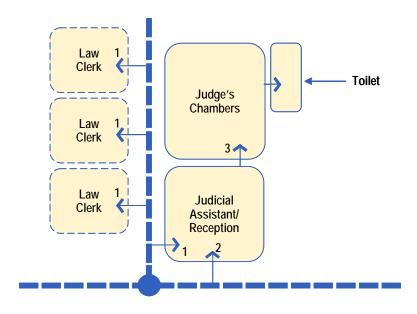
• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when not in use
- Restricted/Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access, Direct Access Control/Keylock
- Restricted/Access,
 Counter/Window Service
- Privacy Lock
- Secure Aggess, Authorized Staff
- Secure/Access, Prisoner/Security/Staff
- Circulation/Access@ontrolpoint
- Public Vertical Circulation
- R Restricted Vertical Circulation
- Secure Vertical Circulation
- F Freight Vertical Circulation
- Direct Visual Access, One-Way
- Direct Visual Access, Two-Way

Figure 6.2
Circuit Judge's Non-resident/Visiting Chambers
(Headquarters and Outside Headquarters) Adjacency Relationships



Keyto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when the injuse

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted\yertical Circulation

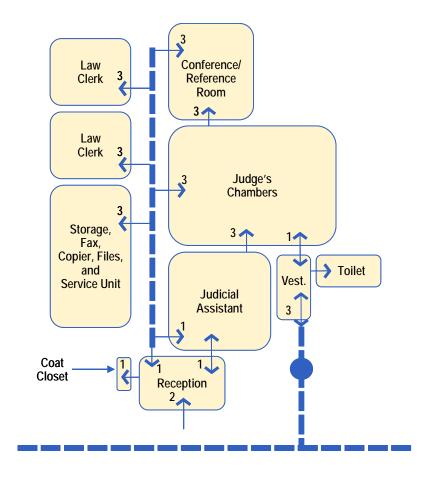
S Secure (Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual, Access, Two-Way

Figure 6.3
District Judge's Resident Chambers
Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

If a courtroom deputy clerk is provided an office in chambers, no additional office shall be provided in the clerk's office.

Keytto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Aggess, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access,
Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure/Access, Prisoner/Security/Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted\y/ertical Circulation

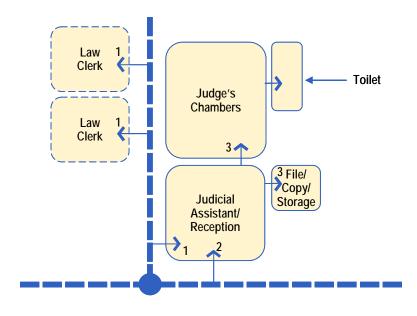
Secure Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, ⊤wo-Way

Figure 6.4
District, Magistrate or Bankruptcy Judge's Visiting Chambers
Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

If a courtroom deputy clerk is provided an office in chambers, no additional office shall be provided in the clerk's office.

Keyto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgulation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

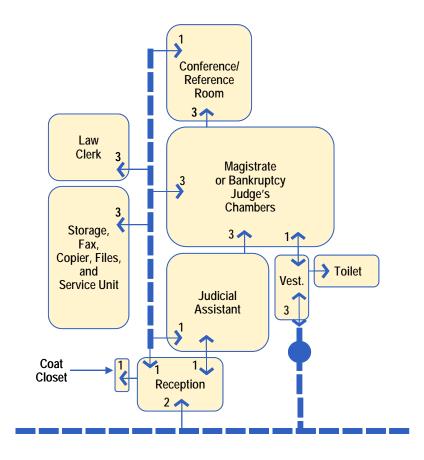
Secure (Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Figure 6.5 Magistrate or Bankruptcy Judge's Resident Chambers Adjacency Relationships

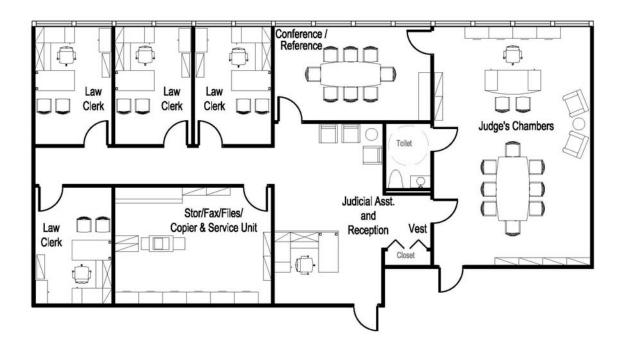


Note: The adjacency diagram is intended only as an illustration.

If a courtroom deputy clerk is provided an office in chambers, no additional office shall be provided in the clerk's office.

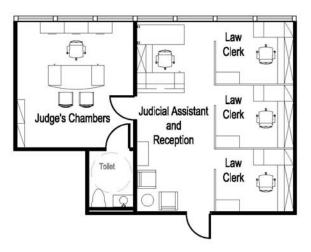
The following figure illustrates sample layouts for chamber suites. The actual design of chambers will vary according to the overall design of the courthouse. The samples have been provided to illustrate adjacencies and relative sizes of spaces.

Figure 6.6 Sample Plan – Circuit Judge's Resident Chambers (2060 NSF)



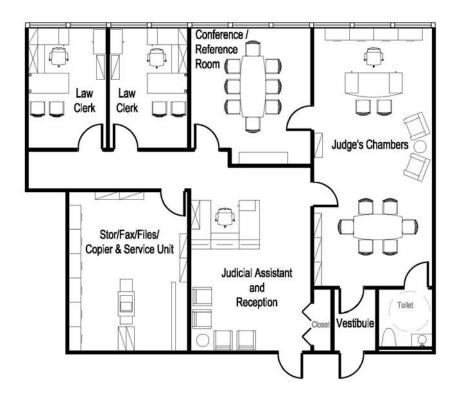
The following figure illustrates sample layouts for chamber suites. The actual design of chambers will vary according to the overall design of the courthouse. The samples have been provided to illustrate adjacencies and relative sizes of spaces.

Figure 6.7 Sample Plan - Circuit Judge's Non-resident Chambers (602 NSF)



The following figure illustrates sample layouts for chamber suites. The actual design of chambers will vary according to the overall design of the courthouse. The samples have been provided to illustrate adjacencies and relative sizes of spaces.

Figure 6.8
Sample Plan –District Judge's Resident Chambers (1670 NSF)



The following figure illustrates sample layouts for chamber suites. The actual design of chambers will vary according to the overall design of the courthouse. The samples have been provided to illustrate adjacencies and relative sizes of spaces.

Figure 6.9 Sample Plan – Magistrate or Bankruptcy Judge's Resident Chambers (1340 NSF)



This chapter applies to central court libraries, including circuit headquarters, satellite, and unstaffed libraries. It describes functions and activities, users and capacities, design requirements, and space allocation requirements, and includes adjacency diagrams.

CENTRAL COURT LIBRARIES

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The reference listed below relates specifically to this chapter.

 United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, Chapter 5.

Programming and Budgetary Notes

► Exceptions to the *Design Guide* Standards

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Authority of the Committee on Space and Facilities and Judicial Conference

The authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total "envelope" for either the court unit or the project as a whole, and (2) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference shall decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

► Space Envelope Flexibility

A total space envelope for central court library will be calculated using appropriate circulation factors, allowances for support-type spaces, and the space standards described in this section. Courts have the flexibility to configure space within the envelope to meet their local needs. However, private office and open workstation sizes should be in compliance with the square footage standards designated in the space and ceiling requirements. If the court unit wishes to exceed the space standards described in the space and ceiling requirements without exceeding the total envelope of space for the unit, it must seek approval from its respective circuit judicial council.

► General Programming Notes

Establishing the Size of Libraries. Specific requirements for central court library collections should be defined by the court in consultation with the circuit librarian.

The lack of availability/proximity of adequate alternate means for obtaining needed materials, such as nearby law library collections and the availability of interlibrary loan arrangements, may impact the size of the library.

The size of a court library is determined largely by the size of its collection. Factors that influence the size of the library, and that must be demonstrated to the satisfaction of the circuit judicial council in order to justify special requirements above guidelines, are listed below. These factors are not intended to be used to unreasonably increase the library size above the spaces listed in Table 7.1.

- Research population needs, including the numbers, types, and jurisdictions of judges served by the library; the numbers of court staff and public users; the size of the library staff; the extent to which chambers law book collections are pooled; the extent to which judges served by the library have reduced their chambers collections, and therefore place greater reliance on the library collection; and the inability to use and the expense of compact shelving and microforms.
- Compact shelving for library collections should be considered where appropriate to reduce the size of the library collection space.
- The library service needs of active circuit, district, magistrate, and bankruptcy judges and their staff, as well as the requirements of judges located outside the courthouse within the same city or a designated radius, must be considered.
- Planning must take into account the need for patron/user space, including court public patron access policies requiring greater space for public access terminals, workstations, and study spaces; the court-approved need for private research areas for judges, law clerks, staff attorneys, and court staff; and the lack of alternative intern, extern, law clerk, and/or staff attorney research study space.

Preferences for Rectangular Spaces. Square or rectangular spaces, with minimum columns and partitions, shall be designed for court libraries.

Cost-Control Issues. The cost of and space for new or shared court library collections should be partially offset by reducing judges' chambers law book collections. When a shared chambers' collection is planned, reducing or increasing the size of a chambers conference/reference room must be approved by the circuit judicial council and shall not exceed the two chambers' envelopes of space.

To reduce unnecessary duplication, the impact of shared chambers law book collections and the coordination of central court library and chambers collections must be considered. Informal sharing among chambers should be encouraged. Adjacent chambers in new courthouse designs should be encouraged by providing controlled access to each chambers from a shared reference/conference room. This design provides additional flexibility for individual judges to share books.

Space for shared chambers law book collections shall be deducted from space allocated to the chambers suites on a pro rata basis. This approach is not considered an exception to the space standards in the *Design Guide*.

The impact on library staffing requirements must be considered when planning court libraries located on more than one floor.

Functions and Activities

Court librarians assist patrons by collecting and organizing legal materials in a court library to support the research process. The central court library is not to be confused with collections maintained in chambers and other court units offices. Central libraries are administered by the U.S. Court of Appeals (USCA) and operate autonomously from circuit to circuit.

Each circuit requires a circuit headquarters library, with satellite and unstaffed libraries provided elsewhere in the circuit as required for court locations.

► Circuit Headquarters Library

The circuit headquarters library is the hub for the administrative operation of each circuit's library services. The library also houses the largest and most complete research collection in the circuit.

Administrative and management functions may include space planning, policy development, personnel, budgeting, and procurement. The circuit headquarters library has specialists and technicians who provide centralized services for the circuit. These services may include cataloging; acquisitions for libraries, chambers, and offices; interlibrary loans; and in-depth research requiring online expertise.

All these functions require office and work space in addition to the stack areas and patron seating typical in any library. Other services and features of circuit headquarters libraries include study areas and computer access for judges and staff, as well as photocopy equipment.

An integrated library system is installed in each circuit headquarters library. The system provides comprehensive library management software, including an online public access catalog of holdings in all libraries within the respective circuit.

Separate or large public atria, reading rooms, entryways, or other purely "ceremonial" spaces that do not house essential library functions shall be avoided. If these spaces are determined by the circuit judicial council to be necessary and they do not cause the library space to exceed the total envelope of space, they may be developed. Consideration must be given to ensure flexible design for future reconfiguration.

► Satellite Library

Satellite libraries are typically established for any court location with at least 10 judges served by the library (whether in the same building or in another location). It is the role of the circuit judicial council to approve the need for and size of a satellite library at a given location. The libraries are usually located in district courthouses and are staffed by one professional or technical staff person (sometimes part-time). Satellite libraries vary in terms of service level and collection size and are staffed based upon the court's needs and number of patrons. The libraries may house shared chambers collections or augment chambers collections.

Similar to the circuit headquarters library, satellite libraries include work space for library staff, photocopy equipment, and study areas and computer access for judges and staff. Additional secure and separate spaces and features may be required if the satellite library is available to the public.

As is the case with the circuit headquarters library, separate or large public atria, reading rooms, entryways or other purely "ceremonial" spaces that do not house essential library functions shall be avoided. If these spaces are determined by the circuit judicial council to be necessary, the inclusion of these spaces shall not cause the library space to exceed the total envelope of space. Consideration must be given to ensure flexible design for future reconfiguration.

► Unstaffed Library

Unstaffed libraries are created in smaller courthouses if the following conditions apply: space is available, judges agree to pool their chambers collections, a group of judges (e.g., bankruptcy) has chambers outside the courthouse, and/or central library staffing support is not available. Occasionally, an unstaffed library is created in the same building as a circuit headquarters or satellite library but located on a different floor.

Users and Capacities

Patrons

- Court personnel who use the libraries include primarily judges, law clerks, staff attorneys, circuit and district court executives' staff, and clerks' staff.
- Other users may include the general public as well as private attorneys, U.S. attorney personnel, and federal defender personnel.

▶ Library Staff

- Library staff include the circuit librarian; deputy circuit librarian; and professional, automation, and technical staff.
- Staffing levels depend upon the size of the collection and the court facility served.

Design Requirements

► Ceiling Height

The ceiling is a designed surface. It may be a uniformly flat, neutral plane, or it may have two or more planes and include elements such as soffits, perimeter coves, recesses, and reveals as required to integrate HVAC and lighting into a harmonious design. An adjustment of a ceiling surface may also occur where it meets an exterior curtain wall. In situations where there are several different surfaces at play at different heights above the finished floor, there may be different ways of determining which one(s) is the dominant plane. It is recommended that ceiling heights should be measured from the finished floor to the principal surface that either covers the most amount of ceiling square footage, or the surface that defines the overall character of the ceiling design. The design team must ensure that at no point should the finished ceiling exceed the maximum ceiling height standards set forth in the *Design Guide* or GSA P-100.

Ceiling heights in library stack areas can vary between a minimum of 8 feet (2,440 mm) and a maximum of 10 feet (3,000 mm) above the finished floor. The ceiling height should be proportional to the library stack area but cannot exceed 10 feet at the maximum ceiling height.

Ceiling heights that exceed the maximum height are considered an exception and will require Judicial Conference approval.

Planning Issues

▶ General

Whenever planning occurs for new libraries, or for relocations or renovations of existing libraries or shared collections in a court, it is strongly encouraged that a representative from the circuit library committee (if existing) and the circuit librarian serve on the space planning committee.

► Circulation/Reference Areas

The circulation/reference desk counter must allow flexibility to accommodate new technologies as well as provide space for computers, printers, and fax machines. Space for returning books must include a book cart area. A computer workstation for the online catalog must be provided near the circulation/reference desk. In Federal Depository Library Program (FDLP) libraries, space must be provided for a public access computer workstation near the circulation/reference desk.

▶ Bookstacks

The area allocated for the collection (stack areas) should be designed as one contiguous rectangle to maximize the efficiency of collection shelving space and to enable future use of compact shelving where appropriate. Non-square angles and rounded areas are to be avoided. When providing such an area is impossible, space allocated to the collection must be increased.

Planning must take into account collection development needs, including the size and "maturity" of the existing library collection, patterns of collaborative collection development among the circuit's libraries, the degree to which centralization and/or specialization of collections is employed to avoid duplication among libraries, the number of states and territories within the circuit, the size and complexity of state law collections, and the number of related state volumes.

Aisles must be at least 36 inches (925 mm) wide, with 48-inch (1,225-mm) cross aisles at the end; each aisle must be no more than seven or eight bookstack units long. A unit of shelving is 3 feet wide by 7 shelves high. Major traffic aisles must be at least 60 inches (1,525 mm) wide.

Floors must accommodate live loads of at least 150 pounds per square foot (PSF), or 7,200 pascals (Pa), for normal stack areas.

Libraries with collections located on more than one floor must be equipped with dumbwaiters large enough to accommodate a library cart.

Compact shelving for library collections should be considered (when funding is available) where appropriate to reduce the size of library collection space. Floors supporting this type of shelving must accommodate live loads of at least 300 PSF (14,350 Pa).

The impact of increased automation (e.g., DVD and online materials) on shelf space and electronic equipment must be considered.

► Court Work Space Requirements

Work space requirements for judges and staff are influenced by the extent of pooled chambers law book collections and the proximity to chambers facilities. Court policies on the public use of the library also affect work space requirements.

Study Spaces

In libraries and unstaffed libraries, group study rooms must have adequate space for tables and chairs. For libraries, a room reserved solely for court personnel may have either tables or study carrels, depending upon court needs.

▶ Periodical Area

Periodical shelving units, newspaper racks, and magazine displays must be arranged with lounge chairs and side tables.

► Technical Services Area

The technical services area must accommodate bookshelf units, worktables, book carts, supply cabinets, and file cabinets. In some libraries, staff workstations can be incorporated into this space. A built-in counter with a sink must be provided; other furnishings must be movable. Other special equipment, such as copiers, a fax machine, and microform duplicator(s), can also be located in this area.

► Microform Area (Patrons and Staff)

Carrels with microform readers/printers must be located near microform storage cabinets.

Because allowable live load requirements for microform storage cabinets can reach 500 PSF (23,950 Pa), equipment selection and location must be coordinated early in the planning process.

► Copier Area (Patrons and Staff)

Each copier area contains a copier, a worktable or counter, and supply storage.

Space Allotments

Table 7.1, Space and Ceiling Requirements for Central Court Libraries, shows three area allotments because each circuit can have three types of libraries. The spaces shown in Table 7.1 for satellite libraries will apply as a limit to all new satellite libraries. For circuit headquarters libraries and existing satellite libraries, library space requirements are determined by the circuit librarian with the approval of the circuit judicial council. The spaces shown in Table 7.1 are intended as a baseline; actual spaces are determined by the program of requirements. Refer to Table 7.1 as a guideline for specific library space size criteria. Justification for changes to the standard sizes to meet the operational needs of the court without exceeding the envelope of space must be demonstrated to and approved by the circuit judicial council.

Table 7.1

Space and Ceiling Requirements for Central Court Libraries

		CUIT HQ SIZE		TELLITE SIZE		TAFFED SIZE
SPACES		(Nm²)		(Nm²)		(Nm²)
LIBRARY SPACES						
Public Entry/Lobby	200	(18.6)	100	(9.3)	0	
Circulation/Reference Desk	500	(46.5)	200	(18.6)	0	
Periodical Area	400	(37.16)	200	(18.6)	100	(9.3)
Reference Catalog	0		0		100	(9.3)
Computer-Assisted Legal Research (CALR): Public	292	(27.1)	96	(8.9)	0	
CALR: Staff	0		0		96	(9.3)
Stack Area 9 NSF/21 LF Shelves	5,000	0 (465)	1,500	(139.5)	500	(46.5)
Study Area: Table	0		280	(26)	140	(13)
Study Area: Carrel	0		128	(11.9)	64	(5.9)
Court Personnel Work Area: 64 NSF (6.0 Nm²) Staff	0		0		128	(11.9)
Seating: 20 seats @ 35 NSF (3.3 Nm²)	700	(65.1)	0		0	
OFFICE SPACES		,				
Circuit Librarian	240	(22.3)	0		0	
Deputy Circuit Librarian	180	(16.7)	0		0	
Professional Staff	150	(13.9)	150	(13.9)	0	
Technical Staff	64	(5.9)	64	(5.9)	0	
OTHER SPACES						
Fax Machine Area	10	(0.9)	10	(0.9)	0	
Copier: Coin-Op Public	80	(7.4)	40	(3.7)	0	
Copier: Staff	40	(7.4)	40	(7.4)	40	(7.4)
Microform Area: Public & Staff 35 NSF (3.3 Nm²)/Machine 15 NSF (1.4 Nm²)/Cabinet	200	(18.6)	100	(9.3)	0	
Supplies Storage	100	(9.3)	100	(9.3)	0	
Technical Services Area	400	(37.2)	200	(18.6)	0	
Storage Area	0		0		100	(9.3)
Freight Mail Receiving 9 NSF/Shelf	200	(18.6)	100	(9.3)	0	
Shelving Area	500	(46.5)	250	(23.2)	0	
CEILING HEIGHTS						
					FEE	Γ (mm)
Stack Area						
Minimum					8	(2,400)
Maximum					10	(3,000)

Adjacency and Circulation

All libraries require accessibility from restricted circulation areas, although public access can also be required. Libraries must accommodate evening and weekend hours without compromising security. Entrances and exits must be located so that library staff can monitor them during on-duty hours.

▶ Library Components

Computer-Assisted Legal Research (CALR). CALR stations must be located where they can be closely monitored by library staff.

Staff Offices. Library staff offices must be located near entrance and circulation/reference areas. Technical staff require workstations in or near the technical services area.

Microform Area (Patrons and Staff). The microform area must be located near the reference area.

Copier Room (Patrons and Staff). The public copier(s) must be coin-operated and located near the circulation/reference areas. The staff copier must be located near the staff offices and technical services area.

Support Spaces. Areas for supply storage, general storage, the mail room, freight staging, and shelving must be located near the technical services area. In addition, the freight staging area must be conveniently accessible to the building loading dock.

Refer to the adjacency diagrams in Figures 7.1 through 7.3 for additional information regarding adjacency and circulation in libraries.

These adjacency diagrams must be interpreted to respond to the specific space and ceiling requirements for the circuit headquarters, satellite, and unstaffed libraries as determined by the court and circuit librarian and approved by the circuit judicial council. The number of spaces shown on the adjacency diagrams is for illustrative purposes only; the building program determines the actual number of spaces required for a specific facility. The design team should refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

• • • • Public Circulation

Restricted Girgulation

Secure@irgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when the tinuse

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access,
Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

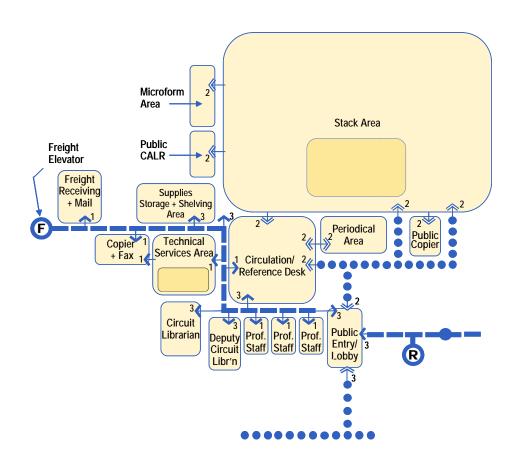
S Secure Vertical Circulation

Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Figure 7.1
Circuit Headquarters Library Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration. Mailroom may be remote.

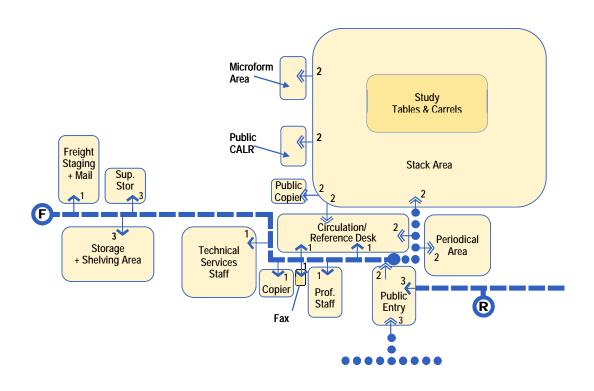
• • • • Public Circulation

Restricted Girgulation

Secure Gifgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when not in use
- Restricted Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access, Direct Access Control/Keylock
- Restricted Access, Counter/Window Service
- Privacy Lock
- Secure Aggress, Authorized Staff
- Secure/Access, Prisoner/Security/Staff
- Circulation/Access@ontrolpoint
- Public Vertical Circulation
- Restricted (Vertical Circulation
- Secure Vertical Circulation
- Freight Vertical Circulation
- Direct Visual Access, One-Way
- Direct Visual Access, Two-Way

Figure 7.2
Satellite Libraries Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration. Mailroom may be remote.

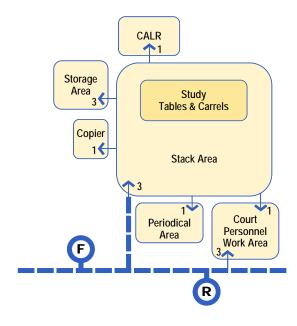
• • • • Public Circulation

Restricted Girqulation

Secure Girgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when not in use
- Restricted Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access, Direct Access Control/Keylock
- Restricted/Access,
 Counter/Window Service
- Privacy Lock
- Secure Access, Authorized Staff
- Secure Access,
 Prisoner/Security Staff
- Circulation/Access@ontrolpoint
- Public Vertical Circulation
- Restricted\y/ertical Circulation
- S Secure \/ ertical Circulation
- Freight Vertical Circulation
- Direct Visual Access, One-Way
- Direct Visual Access, Two-Way

Figure 7.3
Unstaffed Libraries Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

8

This chapter applies to the clerks' offices of the U.S. Court of Appeals (USCA), the U.S. District Court (USDC), and the U.S. Bankruptcy Court (USBC). It describes functions and activities, users and capacities, design requirements, and space allocation requirements, and includes adjacency diagrams.

CLERK'S OFFICE

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The reference listed below relates specifically to this chapter.

 United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, Chapter 9.

Programming and Budgetary Notes

► Exceptions to the *Design Guide* Standards

Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space-management role by reviewing district-wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space-management program (28 USC (§332 and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions to the standards in the *Design Guide* must be approved by the respective circuit judicial council.

Authority of the Committee on Space and Facilities and Judicial Conference

The authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total envelope for either the court unit or the project as a whole, and (2) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference shall decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

► Space Envelope Flexibility

A total space envelope for a clerk's office will be calculated using appropriate circulation factors, allowances for support-type spaces, and the space standards described in this section. Courts have the flexibility to configure space within the envelope to meet their local needs. However, private office and open workstation sizes should be in compliance with the square footage standards designated in the space and ceiling requirements. If the court unit wishes to change the space standards described in the space and ceiling requirements without exceeding the total envelope of space for the unit, it must seek approval from its respective circuit judicial council

▶ General Programming Notes

Space Standards for Clerk's Office Personnel. Space standards in the *Design Guide* for clerk's office personnel must be allocated according to benchmark occupational groups described in the judiciary's *Human Resources Manual* and the clerk's office space requirements (Tables 8.1 and 8.2) in this chapter.

Shared Spaces. Any decision to share various space areas shall be left to the discretion of all courts and court units, the design team should consult with the courts and AO. The sharing of various space areas between different courts and units should be considered when courts are collocated in the same building, but only when doing so would be practical and economical and would not compromise functional ability.

Conference and Training Spaces. Conference and training rooms in the clerk's office must accommodate the number of managers and first-line supervisors. See the clerk's office space requirements (Tables 8.1 and 8.2) for specific size criteria. Requirements for larger conference and training spaces must be accommodated in shared conference/training rooms or multiuse spaces within the courthouse.

Staff Toilet Rooms and Breakrooms. Staff toilets are provided to ensure there is no inappropriate contact that would compromise the judicial process by the parties or participants in cases.

The staff toilets and breakrooms must be located within restricted circulation on floors with court-related offices. For courthouses housing more than one court unit, the design team should consider a shared staff breakroom. Consideration should be given to staff use of public restrooms rather than programming separate facilities. If separate staff toilets are necessary, only one set of men's and women's toilets per floor should be provided.

Functions and Activities

A clerk's office receives files, documents, and filing fees from attorneys; maintains case dockets and court calendars; distributes court directives, including notices, subpoenas, and summonses; responds to public inquiries; and serves as a central source of public information for the court. In addition, each clerk's office performs the specialized functions required by the particular court it serves. For example, the USDC clerk's office assists with jury management.

The level and type of activity at the clerk's public intake counter varies greatly with the type of court served. The appellate courts differ significantly from the other two types of courts in terms of the nature of the cases heard. The USCA clerk's office continues to manage a high volume of paper case filings and may also provide public reception services for the staff attorney's office. Most business is conducted by mail. Public traffic volume is generally low except on hearing days, when attorney traffic can be relatively high. The USDC and USBC clerks' offices generally experience peaks of public traffic at the counter in the early morning and afternoon, with a constant but moderate stream of traffic throughout the remainder of the day. However, with the implementation of electronic case filing, public traffic at the counter is decreasing. Additional space may be required behind the counter for additional monitors, printers, scanners, and other types of office equipment. A large clerk's office can establish a separate counter to accommodate various activities, such as pro se filings.

The implementation of case management/electronic case filing (CM/ECF) by the courts has changed the process in which filings are processed by the clerk's office. CM/ECF has increased the number of filings that a clerk can process, thereby improving the office's overall productivity and efficiency. Staff and space function have been impacted by CM/ECF. The higher the level of CM/ECF adoption, the lower the number of visitors there will be to the intake counter.

Due to electronic case filing, the USDC and USBC clerks' offices no longer experience a large volume of public visitors but do require larger spaces for the public to access documents at a computer access station, either in the public area or the records examination area. Spaces are provided for the public to view, print, and/or scan documents.

Users and Capacities

▶ U.S. Court of Appeals Clerk's Office

User capacity varies depending upon the number of USCA clerk's office staff, circuit judges and support staff, other USCA staff (e.g., staff attorneys), private and government attorneys, legal messenger services, news media representatives, and the general public.

▶ U.S. District Court Clerk's Office

User capacity varies depending upon the number of USDC clerk's office staff; district judges, magistrate judges, and support staff; court reporters/recorders; private and government attorneys; legal messenger services and other attorney support services; title companies and other private concerns researching court records; news media representatives; and the general public.

▶ U.S. Bankruptcy Court Clerk's Office

User capacity varies depending upon the number of USBC clerk's office staff, bankruptcy judges and support staff, bankruptcy administrator staff (where applicable), court reporters/recorders, U.S. Trustee staff, private and government attorneys, legal messenger services and other attorney support services, title companies and other private concerns researching court records, private copying vendors, news media representatives, and the general public.

Users vary according to the size of the courthouse; the type and volume of cases; and the number of maintenance staff, service company/agency personnel, and public. For the purposes of certain references in this *Design Guide*, the following designations apply:

A *small courthouse* has 5 or fewer courtrooms. A *medium courthouse* has 6 to 12 courtrooms. A *large courthouse* has more than 12 courtrooms.

Design Requirements

► Ceiling Height

The ceiling is a designed surface. It may be a uniformly flat, neutral plane, or it may have two or more planes and include elements such as soffits, perimeter coves, recesses, and reveals as required to integrate HVAC and lighting into a harmonious design. An adjustment of a ceiling surface may also occur where it meets an exterior curtain wall. In situations where there are several different surfaces at play at different heights above the finished floor, there may be different ways of determining which one(s) is the dominant plane. It is recommended that ceiling heights should be

measured from the finished floor to the principal surface that either covers the most amount of ceiling square footage, or the surface that defines the overall character of the ceiling design. The design team must ensure that at no point should the finished ceiling exceed the maximum ceiling height standards set forth in the *Design Guide* or GSA P-100.

Ceilings in the clerk's office and all restricted corridors used by staff, are to be a minimum of 9 feet (2,740 mm) and a maximum of 12 feet (3,660 mm) in height. The ceiling height should be proportional to the largest open area (i.e., deputy clerk workstations) but cannot exceed 12 feet at the maximum point.

Ceiling heights that exceed the maximum height are considered an exception and will require Judicial Conference approval.

► Mail Room

Requirements for the central mail rooms are provided in Chapter 11, "Common Building Spaces." Within the clerk's office, a space is required for the sorting and distribution of mail after it has been delivered from the central mail facility.

Acoustics

The public counter area must be acoustically separate from adjacent open work areas. Acoustic requirements are provided in Chapter 14, "Acoustics."

▶ Video

At least one master antennae television (MATV) outlet and/or connection to the satellite broadcast system must be provided in the conference room. The design team should consult with the Space and Facilities Division of the AOUSC.

8-3

Table 8.1

Space and Ceiling Requirements for Court of Appeals Clerks' Offices

PRIVATE OFFICES 240 (22.3)	SPACES	NSF	(Nm²)
Clerk of Court Visiting Office	PRIVATE OFFICES		
Chief Deputy Clerk	Clerk	240	(22.3)
Manager 180 (16.7) Professional Administrative and Line Positions 150 (14.0) Attorney 150 (14.0) OPEN WORKSTATIONS Executive Secretary/Reception Area 170 (15.8) Operational and Administrative First-Line Supervisor 96 (8.9) Operational and Administrative Court Support Positions 64 (6.0) Counter and Cashier Workstation 45 (4.2) PUBLIC SPACES Queuing Area/Work Areas 105 (9.8) Public Counter (including cashier stations)/per person 5 LF Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area ¹ 105 (9.8)	Clerk of Court Visiting Office	150	(14.0)
Professional Administrative and Line Positions 150	Chief Deputy Clerk	180	(16.7)
Attomey	Manager	180	(16.7)
DPEN WORKSTATIONS	Professional Administrative and Line Positions	150	(14.0)
Executive Secretary/Reception Area 170 (15.8)	Attorney	150	(14.0)
Operational and Administrative First-Line Supervisor 96 (8.9) Operational and Administrative Court Support Positions 64 (6.0) Counter and Cashier Workstation 45 (4.2) PUBLIC SPACES Queuing Area/Work Areas 105 (9.8) Public Counter (including cashier stations)/per person 5 LF Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum 300 (27.9) Forms Storage 150 (14.0) Equipment Storage 150 (14.0)	OPEN WORKSTATIONS		
Operational and Administrative Court Support Positions	Executive Secretary/Reception Area	170	(15.8)
Counter and Cashier Workstation 45 (4.2) PUBLIC SPACES Queuing Area/Work Areas 105 (9.8) Public Counter (including cashier stations)/per person 5 LF Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum 150 (14.0) Equipment Storage 150 (14.0)	Operational and Administrative First-Line Supervisor	96	(8.9)
PUBLIC SPACES Queuing Area/Work Areas 105 (9.8) Public Counter (including cashier stations)/per person 5 LF Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Inactive Records Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum Maximum 150 (14.0) Equipment Storage 150 (14.0) Equipment Storage Minimum Minimum 150 (14.0)	Operational and Administrative Court Support Positions	64	(6.0)
Queuing Area/Work Areas 105 (9.8) Public Counter (including cashier stations)/per person 5 LF Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Inactive Records Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0) Minimum 150 (14.0)	Counter and Cashier Workstation	45	(4.2)
Queuing Area/Work Areas 105 (9.8) Public Counter (including cashier stations)/per person 5 LF Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Inactive Records Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0) Minimum 150 (14.0)	PUBLIC SPACES		
Public Counter (including cashier stations)/per person 5 LF Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0)		105	(9.8)
Accessory Stand-up Work Counter/per person 25 (2.3) Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 9 (.9) Inactive Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0) Equipment Storage 150 (14.0) 300 (27.9)			(515)
Plus Open Area 100 (9.3) Public Pay Copier 100 (9.3) Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0)	, , , ,	25	(2.3)
Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0)	· · · · · · · · · · · · · · · · · · ·	100	
Records Exam Area/per person 25 (2.3) Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area ¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0)	Public Pay Copier	100	(9.3)
Plus Open Area 125 (11.6) Public Access Computer Station 35 (3.3) Public Pay Fax 35 (3.3) GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0) Minimum 150 (14.0)	, ,	25	
Public Pay Fax GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage Minimum 150 (14.0) Minimum 150 (14.0)	Plus Open Area	125	
Public Pay Fax GENERAL OFFICE SPACE Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage Minimum 150 (14.0) Minimum 150 (14.0)	Public Access Computer Station	35	(3.3)
Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage Minimum 150 (14.0) 300 (27.9)	,	35	(3.3)
Secured Storage, per shelf unit 8 (.7) Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum Forms Storage 150 (14.0) Equipment Storage Minimum 150 (14.0) 300 (27.9)	GENERAL OFFICE SPACE		
Active Storage, per shelf unit 9 (.9) Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies Minimum 150 (14.0) Maximum 300 (27.9) Forms Storage 150 (14.0) Equipment Storage Minimum 150 (14.0) Equipment Storage Minimum 150 (14.0) 300 (27.9)		8	(.7)
Inactive Records Storage, per shelf unit 9 (.9) Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies	· ·	9	
Transfer Box Storage 50 (4.7) Work Area¹ 105 (9.8) Supplies 150 (14.0) Minimum 300 (27.9) Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0) 300 (27.9) 300 (27.9)	<u> </u>	9	
Work Area¹ 105 (9.8) Supplies (14.0) Minimum 300 (27.9) Forms Storage 150 (14.0) Equipment Storage 150 (14.0) Minimum 150 (14.0) 300 (27.9) 300 (27.9)	v ,	50	(4.7)
Minimum 150 (14.0) Maximum Forms Storage 300 (27.9) Equipment Storage 150 (14.0) Minimum 150 (14.0) 300 (27.9)		105	(9.8)
Maximum Forms Storage 300 (27.9) Equipment Storage 150 (14.0) Minimum 150 (14.0) 300 (27.9) 300 (27.9)	Supplies		,
Maximum	Minimum	150	(14.0)
Equipment Storage 150 (14.0) Minimum 300 (27.9)	Martin	300	(27.9)
Equipment Storage 150 (14.0) Minimum 300 (27.9)	Maximum Forms Storage	150	
Minimum 150 (14.0) 300 (27.9)			. ,
Maximum 300 (27.9)		150	(14.0)
	Maximum	300	(27.9)

SPACES	NSF	(Nm²)
Financial Vault	150	(14.0)
Copier Area (per Copier)		
Low Volume	50	(4.7)
Medium Volume	80	(7.4)
High Volume	120	(11.2)
Conference Room (fewer than 20 occupants)	300	(27.9)
Conference Room (20 or more occupants)	400	(37.2)
Computer Training Room		
Small/Medium Courthouse (12 or less courtrooms)	200	(18.6)
Large Courthouse (13 or more courtrooms)	300	(27.9)
Fax	10	(.9)
Shared Printer	50	(4.7)
Evidence Vault		
Minimum	80	(7.4)
N.A	150	(14.0)
Maximum Shredder	25	(2.3)
Staff Breakroom ²		
Minimum	200	(18.6)
N.A	600	(558)
Maximum 3 Staff Toilets ³	100	(9.3)
Exhibit Storage Room	100	(9.3)
Coat Closets	20	(1.9)
Mail Work Area	100	(9.3)
Safe	20	(1.9)

CEILING HEIGHTS		
	FEET	(mm)
Clerk's Office Suite		
Minimum	9	(2,743)
Maximum ⁴	12	(3,658)

Space allowance for Work Area: 15 NSF (1.4 Nm²) per staff member. Minimum area is 105 NSF (9.8 Nm²).

Area requirements for Staff Breakroom: Allocate 25 NSF (2.32 Nm2) for every 3 staff members plus 20 NSF (1.9 Nm2) for a service unit. The minimum Staff Breakroom requirement is 200 NSF (18.5 Nm2) and the maximum is 600 NSF (55.7 Nm2).

³ Only one set of Staff Toilets per floor.

The ceiling height should be proportional to the largest open area (i.e., deputy Clerk Work stations) but cannot exceed 12 feet at the maximum point.

Table 8.2 **Space and Ceiling Requirements for District and Bankruptcy Court** Clerks' Offices

SPACES	NSF	(Nm²)
PRIVATE OFFICES		
Clerk	240	(22.3)
Clerk of Court Visiting Office	150	(14.0)
Chief Deputy Clerk	180	(16.7)
Deputy Clerk in Charge	180	(16.7)
First-Line Supervisors	180	(16.7)
Manager	180	(16.7)
Professional Administration and Line Positions	150	(14.0)
Courtroom Deputy ¹	150	(14.0)
Pro se Law Clerk	150	(14.0)
OPEN WORKSTATIONS		
Operational and Administrative Support First-Line Supervisor	96	(8.9)
Executive Secretary/Reception Area	170	(15.8)
Deputy Clerk	64	(6.0)
PUBLIC SPACES		
Public Counter and Clerk Workstation, Including Cashier Stations		
Small Courthouse (5 or less Courtrooms)		
10 LF of Counter Space @ 10 ft depth	100	(9.3)
Medium Courthouse (6 to 12 Courtrooms)		()
15 LF of Counter Space @ 10 ft depth	150	(14.0)
Large Fourthouser (\$3 or mere Gruttonms)	250	(18.6)
Public Scanning Workstation, and Public Pay Copier		
Small Courthouse (5 or less Courtrooms)		
2 Open Workstations at 64 NSF (51.1 Nm²)	128	(11.8)
Plus Open Area	110	(10.2)
Medium Courthouse (6 to 12 Courtrooms) 3 Open Workstations at 64 NSF (51.1 Nm²)	100	(47.7)
Plus Open Area	192 110	(17.7) (10.2)
1 lus Open Alea	110	(10.2)
Large Courthouse (13 of 189 reference (1510 profile)	320	(29.5)
Plus Open Area	110	(10.2)
Records Exam Area, Including Public Fax and Computer Access Station		
	100	(9.3)
Small Courthouse (5 or less Courtrooms) Medium Courthouse (6 to 12 Courtrooms)	150	(14.0)
Large Courthouse (13 or more Courtrooms)	180	(16.7)
Large Coara Oddo (10 of More Coara Como)	100	(10.7)

SPACES	NSF	(Nm²)
Queuing Area	SIZE	/ /
	100	(9.3)
Small Courthouse (5 or less Courtrooms) Medium Courthouse (6 to 12 Courtrooms)	150	(14.0)
Large Courthouse (13 or more Courtrooms)	180	(16.7)
GENERAL OFFICE SPACE		
Inactive Storage, per shelf unit	9	(.9)
Active Storage, per shelf unit	9	(.9)
Secured Records Storage, per shelf unit	8	(.7)
Transfer Box Storage	50	(4.7)
Work Area ²	105	(9.8)
Supplies		
Minimum	50	(4.7)
	100	(9.3)
Maximum Equipment Storage		` '
Minimum	50	(4.7)
	150	(14.0)
Maximum Financial Vault	150	(14.0)
Copier Area (per Copier)		,
Low Volume	50	(4.7)
Medium Volume	80	(7.4)
High Volume	120	(11.2)
Conference Room (fewer than 20 occupants)	300	(27.9)
Conference Room (20 or more occupants)	400	(37.2)
Computer Training Room		,
Minimum	200	(18.6)
	300	(27.9)
Maximum Fax	10	(.9)
Shared Printer	50	(4.7)
Evidence Vault		
Minimum	80	(7.4)
<u> </u>	150	(14.0)
Maximum Shredder	25	(2.3)
Staff Breakroom ³		()
Minimum	200	(18.6)
	600	(558)
Maximum Staff Toilets ⁴	100	(9.3)
Otali Tolloto	100	(0.0)

Table 8.2
Space and Ceiling Requirements for District and Bankruptcy Court Clerks' Offices (cont'd)

SPACES	NSF	(Nm ²)
Exhibit Storage Room	100	(9.3)
Coat Closets	20	(1.9)
Mail Work Area	100	(9.3)
Safe	20	(1.9)

CEILING HEIGHTS		
	FEET	(mm)
Clerk's Office Suite		
Minimum	9	(2,743)
Maximum ⁵	12	(3,658)

¹ If not included in Chamber.

Adjacency and Circulation

Convenient and direct circulation must be provided for all clerks' offices due to the potential volume of public traffic (Figures 8.1 and 8.2). Clerk and court staff must have quick and convenient restricted access to and from courtroom and chambers and for the district court clerk's office access to and from the jury assembly.

The number of spaces shown on the adjacency diagrams (Figures 8.1 and 8.2) is for illustrative purposes only; the actual number of spaces required for a specific facility is determined in the building program.

The design team should refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

² Space allowance for Work Area: 15 NSF (1.4 Nm²) per staff member. Minimum area is 105 NSF (9.8 Nm²).

³ Area requirements for Staff Breakroom: Allocate 25 NSF (2.32 Nm²) for every 3 staff members plus 20 NSF (1.9 Nm²) for a service unit. The minimum Staff Breakroom requirement is 200 NSF (18.5 Nm²) and the maximum is 600 NSF (55.7 Nm²).

⁴ Only one set of Staff Toilets per floor.

The ceiling height should be proportional to the largest open area (i.e., Deputy Clerk Workstations) but cannot exceed 12 feet at the maximum point.

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when the tinuse

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access,
Direct Access Control/Keylock

Restricted Access,
Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access,
Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted (Vertical Circulation

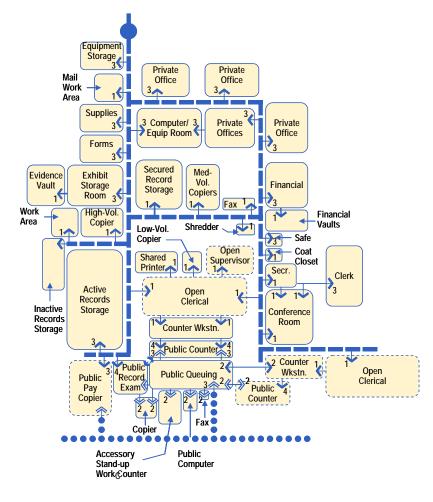
S Secure \Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, ⊤wo-Way

Figure 8.1
Court of Appeals Clerk's Office Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when the tinuse

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access,
Counter/Window Service

Privacy Lock

Secure Aggress, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

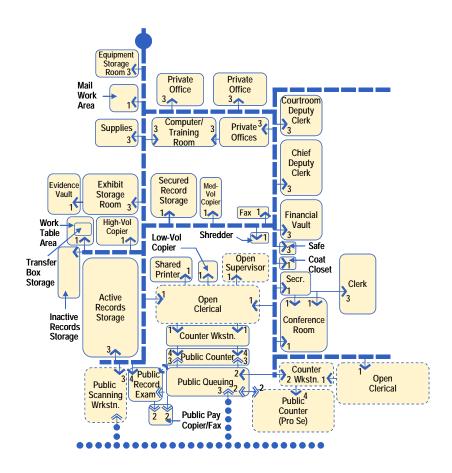
Secure Vertical Circulation

Freight Vertical Circulation

Direct Visual, Access, One-Way

Direct Visual Access, ⊤wo-Way

Figure 8.2
District and Bankruptcy Clerks' Offices Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

9

This chapter applies to the U.S. Pretrial
Services Office (PSO) and the U.S. Probation
Office (PO), which are components of the U.S.
District Court (USDC). In some courts the
offices function independently of each other,
and in other courts they are a combined unit.
The chapter describes their functions and
activities, users and capacities, design
requirements, and space allocation
requirements, and contains
adjacency diagrams.

PROBATION AND PRETRIAL SERVICES OFFICES

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The reference listed below relates specifically to this chapter.

 United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, Chapter 10.

Programming and Budgetary Notes

► Exceptions to the *Design Guide* Standards

Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space-management role by reviewing district-wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space-management program (28 USC (§332 and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions to the standards in the *Design Guide* must be approved by the respective circuit judicial council.

Authority of the Committee on Space and Facilities and Judicial Conference

The authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total envelope for either the court unit or the project as a whole, and (2) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference shall decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

► Space Envelope Flexibility

A total space envelope for probation and pretrial services office will be calculated using appropriate circulation factors, allowances for support-type spaces, and the space standards described in this section. Courts have the flexibility to configure space within the envelope to meet their local needs. However, private office and open workstation sizes should be in compliance with the square footage standards designated in the space and ceiling requirements. If the court unit wishes to change the space standards described in the space and ceiling requirements without exceeding the total envelope of space for the unit, it must seek approval from its respective circuit judicial council

► Space Standards for PSO and PO Personnel

Space standards for PSO and PO personnel must be allocated according to the benchmark occupational groups described in the judiciary's *Human Resources Manual* and the space requirements (Table 9.1) in this chapter, Space Standards for Clerk's Office Personnel.

► General Programming Notes

Opportunities for Shared Support Spaces

- Locating the PSO and PO in close proximity provides an opportunity for shared support spaces.
- The urinalysis toilet, supplies storage closet, and testing and specimen storage room may be shared by the PSO and PO; however, access to the shared facility is required within each office's restricted circulation.
- An electronic monitoring equipment storage/repair room may be shared by the PSO and PO; however, access to the shared room is required within each office's restricted circulation.
- The secure computer terminal/printer and secure LAN equipment rooms may be combined and shared by the PSO and PO; however, access to the shared room is required within each office's restricted circulation.
- Conference rooms in PSO and PO offices must accommodate the number of managers and first-line supervisors. See the PSO and PO space and ceiling requirements (Table 9.1) for specific size criteria. Requirements for larger conference and training spaces will be accommodated in shared conference/training rooms or multiuse spaces within the courthouse as described in Chapter 11, "Common Building Spaces."
- Conference rooms should be shared by court units off common areas whenever possible.
- The fax workstation, computer/printer, and shredder should be shared by the PO and PSO whenever possible.

Staff Toilet Rooms and Breakrooms. The staff toilets and breakrooms must be located within restricted circulation on floors with court-related offices. For courthouses housing more than one court unit, the design team should consider a shared staff breakroom. Consideration should be given to staff use of public restrooms rather than programming separate facilities. If separate staff toilets are necessary, only one set of men's and women's toilets per floor is provided. Consult with the Administrative Office of the U.S. Courts for more detailed information.

Functions and Activities

The primary mission of the PSO and the PO is essentially the same, which is to provide the court with thorough, verified information on individuals so as to enable informed release or detention decisions. Their goal is also essentially the same, which is the successful completion of the term of supervision, during which an individual commits no new crimes, is held accountable for his or her actions and responsibilities toward others, and prepares for continued success through improvements in his or her conduct and condition.

The main difference between the PSO and the PO is the time period when each is engaged with an individual, with the transfer of responsibility from the PSO to the PO coming at the time the defendant has been convicted of a crime.

The PSO and PO both supervise persons released into their custody, reasonably ensure community safety, and investigate and supervise persons referred to diversion programs. Officers recommend, implement, and monitor compliance with the conditions of release, and work to facilitate an individual's reintegration into the community as a law-abiding and productive member of society. Officers from both organizations interact with law enforcement, enforce court conditions, supervise defendants and offenders, and recommend sentences. They advise judicial officers by interpreting sentencing guidelines, investigate backgrounds, testify in court, and learn case law. Finally, they assist individuals by administering drug treatment, identifying and solving problems, and providing counseling and referrals to community agencies.

The nature of these officers' work often requires them to be placed in potentially dangerous situations, both in their offices and throughout the community. They have

the power to make arrests, although arrests are normally performed by the U.S. Marshals Service (USMS), and they may be granted authority by a court to carry and use weapons, although not all do.

Following an arrest, a PSO officer interviews the individual about his or her family, residential, employment, financial, educational, health, and criminal history. The information is verified, the individual's flight risk and potential danger to the community are assessed, and a recommendation is made regarding potential release from pretrial custody. The report is submitted to the judge, prosecutor, defendant, and defense attorney.

In the case of the PO, once a defendant has been found guilty, an officer conducts additional interviews and prepares another report, which assists the court in its sentencing function and serves as a detention resource for the Bureau of Prisons (BOP). PO officers are community corrections professionals who serve as officers of the court and as agents of the U.S. Parole Commission. They are responsible for the supervision of persons conditionally released to the community by the courts, the Parole Commission and BOP, and military authorities.

Users and Capacities

Users vary according to the size of the courthouse; the type and volume of cases; and the number of maintenance staff, service company/agency personnel, and public. For the purposes of certain references in this *Design Guide*, the following designations apply:

A *small courthouse* has 5 or fewer courtrooms. A *medium courthouse* has 6 to 12 courtrooms. A *large courthouse* has more than 12 courtrooms.

Design Requirements

► Ceiling Height

PO and PSO office ceiling height shall be in accordance with the standards set forth in GSA P-100.

Ceiling heights that exceed the maximum limit are considered exceptions and will require Judicial Conference approval.

► Reception Counter

A reception counter is provided with counter-to-ceiling break-resistant glazing.

In leased locations where weapons screening is not performed at the main entrance of the building, the PSO and PO will work with the USMS to provide bulletresistant glazing. The AOUSC should be consulted to determine whether additional accommodations for screening equipment will be necessary at a particular leased location.

▶ Urinalysis Toilet

Urinalysis toilet rooms are used solely for collecting urine specimens in a secured and supervised environment. Each room must accommodate both the person providing the specimen and an officer to visually monitor the collection process, either directly or through the use of an observation mirror mounted in the room.

Barrier-free access must be provided to each room, ideally through two doors. One door is to be used by the offender from the unsecured public waiting room, and the other door for the officer from the secured private office space. However, if space planning allows only one room access point, it is preferred that it be from the unsecured public waiting room. This will eliminate the need for the offender to enter the secured space only to provide a specimen.

Any doors into a urinalysis toilet must be locked at all times, except when the room is in use. Additionally, the design of the room must prevent any other potential entry, such as through partitions, the ceiling plenum, a pipe chase, or other similar means.

► Urinalysis Supplies Storage

The urinalysis supplies storage closet must be securable. The room and all storage closets in it must have door locks and the same partitioning as the toilet room(s) and testing laboratory. Any means of access through the ceiling plenum or similar spaces must be eliminated.

The urinalysis toilet room(s) and testing lab must be adjacent to supplies storage. The storage area must be accessible through restricted circulation only.

► Urinalysis Testing and Specimen Storage Room

In some cases, the testing of urinalysis specimens will be undertaken outside the PSO and PO offices, thereby eliminating the need for a testing laboratory. Even if this is the case, there will still be the need for secured specimen storage until such time that the specimens may be transported off-site. The specimens will be stored in a refrigerator or freezer.

The room must accommodate the following items:

- Two countertop enzyme multiplied immunoassay technique (EMIT) machines, each requiring a footprint area of at least 30 inches (775 mm) deep by 60 inches (1,525 mm) wide; 110-volt dedicated power; and additional adjacent counter space at a height of 44 inches (1,125 mm) above finished floor level
- Two operator stools
- A double stainless steel sink with disposal, set in a millwork base cabinet at least 8 feet (2,425 mm) long with a counter height of 44 inches (1,125 mm) above finished floor level; adjacent 110-volt convenience outlets; and millwork storage cabinets above and below
- Two full-sized refrigerators with freezers, one for specimens awaiting testing and the other for chain-of-custody storage of specimens with positive test results (If a testing laboratory is not required, these refrigerators/freezers should be housed in the urinalysis supplies storage room.)
- Trash disposal
- Chemical-resistant, laboratory-type finishes on all countertops

Both the urinalysis testing laboratory and specimen storage, as applicable, must be accessible only from the restricted office circulation. These rooms and all storage closets in them must have door locks and the same partitioning as the urinalysis rooms.

► Electronic Monitoring Equipment Storage/Repair Room

The equipment needed to monitor one individual currently requires approximately 3 cubic feet of space. The boxes are normally about 3 feet (925 mm) long by 1 foot (300 mm) wide by 1 foot (300 mm) deep and are stored on steel shelving units. The storage/repair room also contains a millwork base cabinet at least 8 feet (2,425 mm) long, with a counter height of 44 inches (1,125 mm) above the finished floor; adjacent 110-volt convenience outlets; and millwork storage cabinets above for use in equipment repair. The door to the room must have a lock and be accessible only from the secured office circulation.

Secure Computer Terminal/Printer and Secure LAN Equipment Rooms

Computer terminal/printer and LAN equipment rooms must be equipped with a secure cipher lock, card reader, or keypad to limit entrance to authorized personnel. Any means of access through the ceiling plenum, a pipe chase, or other similar spaces must be eliminated.

▶ Office Size Alternatives and Interview Room Allocations

For the PSO and PO, there are two options for office sizes and interview room allocations.

1. Officers shall be provided a 150 NSF (13.9 Nm²) private office. Design layouts must facilitate egress for the officers in an emergency. If this option is selected, no interview rooms are provided (see Figure 9.1).

OR

2. Officers shall be provided a 120 NSF (11.1 Nm²) private office with interview rooms based on the following formula: one 120 NSF (11.1 Nm²) interview room for 7 or fewer officers, two interview rooms for 8 to 11 officers, three interview rooms for 12 to 15 officers, and so on. The design of both the offices and the interview room are required to facilitate egress in an emergency (see Figure 9.2).

▶ Satellite Offices

To cover a wide geographic area, staffed satellite offices might be needed. These offices must be equipped to perform urinalysis, and they have the same security requirements as a main office. Facilities within the main office must be available for occasional use by officers stationed in satellite offices.

► Staff Breakroom and Toilets

If necessary, the staff breakroom and toilets must be located within restricted circulation when these spaces are collocated on floors with court-related offices.

Acoustics

Acoustic requirements are addressed in Chapter 14, "Acoustics." All interview rooms and offices of PSO and PO supervision officers must be acoustically separate from adjacent areas.

► Heating, Ventilating, and Air-Conditioning

Heating, ventilating, and air-conditioning systems must economically accommodate early morning and late evening hours. See Chapter 15, "Building Systems."

Table 9.1
Space and Ceiling Requirements for Probation and Pretrial Services Offices

SPACES	NSF	(Nm²)
PRIVATE OFFICES	0.77	
Chief Probation Officer	240	(22.3)
Executive Secretary/Reception Area	170	(15.8)
Deputy Chief Probation Officer	180	(16.7)
Manager	180	(16.7)
Professional First-Line Supervisor ¹	180	(16.7)
PSO and PO Officers: Two Options		(1011)
Professional Administrative and Professional Line Positions	150	(13.9)
Office Only	150	(13.9)
1) Office	120	(11.1)
2) Shared Interview Room ²	120	(11.1)
OPEN WORKSTATIONS		
Operational Administrative Support First-Line Supervisor	96	(8.9)
Clerks	64	(5.9)
Counter Workstations	45	(4.2)
GENERAL OFFICE SPACE		
Reception/Waiting, per person	15	(1.4)
Minimum area required	150	(13.9)
Counter/Screening, per staff position	5 LF	(1,525 mm)
Secured Records Storage, per shelf unit	8	(0.74)
Active Records Storage Lateral, per shelf unit	9	(0.84)
Inactive Records Storage Lateral, per shelf unit	9	(0.84)
Transfer Box Storage	50	(4.6)
Worktable	90	(8.4)
Supplies		
Minimum	50	(4.6)
Marrian	100	(9.3)
Maximum Equipment Storage		
Minimum	50	(4.6)
Martinum	150	(13.9)
Maximum ₃ Work Area	105	(9.8)
Copier Area (per copier)		·
Low Volume	50	(4.6)
Medium Volume	80	(7.4)

SPACES	NSF	(Nm²)
Conference Rooms (fewer than 20 occupants)	300	(27.9)
Conference Rooms (20 or more occupants)	400	(37.2)
Fax	10	(0.93)
Shared Printer	50	(4.6)
Vault or Safe		
Minimum	20	(1.9)
Maximum	80	(7.4)
Microform Reader/Printer	35	(3.3)
Microform Storage Cabinet, per cabinet	12	(1.1)
Shredder	25	(2.3)
Staff Breakroom ⁴		
Minimum	200	(18.6)
Marrian	600	(558)
Maximum Staff Toilets ⁵	100	(9.3)
Coat Closets	20	(1.9)
Special Office Spaces		
Toilet for Urinalysis Sample Collection	50	(4.6)
Urinalysis Supplies Storage	25	(2.3)
Urinalysis Testing/EMIT Lab & Sample Storage ⁶	200	(18.6)
Electronic Monitoring Equipment Storage/Repair Room	95	(8.8)
Secure Computer Terminal/Printer Room and LAN server	150	(13.9)
Gun locker	10	(0.93)

CEILING HEIGHTS	
	FEET (mm)
Probation and Pretrial Services Offices	Reference GSA P-100

In a divisional office, first-line supervisors include a supervisory probation clerk and a supervisory probation officer.

120

(11.1)

High Volume

² For 7 or less offices, one shared interview room is allotted. For 8-12 offices, provide two shared interview rooms. For 12-15 offices, provide three shared interview rooms.

³ Space allowance for Work Area: 15 NSF (1.4 Nm²) per staff member. Minimum area is 105 NSF (9.8 Nm²).

⁴ Area requirements for Staff Breakroom: Allocate 25 NSF (2.32 Nm²) for every 3 staff members plus 20 NSF (1.9 Nm²) for a service unit. The minimum Staff Breakroom is to be 200 NSF (18.5 Nm²) and the maximum Staff Breakroom is to be 600 NSF (55.7 Nm²).

⁵ Only one set of Staff Toilets allowed per floor.

Orinalysis Testing/EMIT Lab may not be provided within the PSO and PO offices. If not provided, all urinalysis spaces can be eliminated.

Adjacency and Circulation

Both the PSO and the PO require public access to reception areas during the day and in the evenings. Restricted access for office staff is also required during these times; staff must be able to enter and leave the office without passing through the public reception/waiting area or extensively using the public circulation system. If the office is located in a facility where weapons screening is not conducted at the entry, a magnetometer and X-ray machine may be provided by the USMS. Space must be provided to accommodate this screening equipment. Refer to Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64).

The PO requires proximity to the main public entry area, after the security screening point. If the PO requires off-hours access for staff and clients, the most desirable location is on the main public entry level, with separate off-hours controlled access.

The PSO also requires proximity to the main public entry area, after the security screening point. Access must be provided to the USMS Command and Control Center and magistrate judge courtrooms.

The number of spaces shown on the adjacency diagrams (Figures 9.1 and 9.2) is for illustrative purposes only; the actual number of spaces required for a specific facility is determined in the building program.

The design team should refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

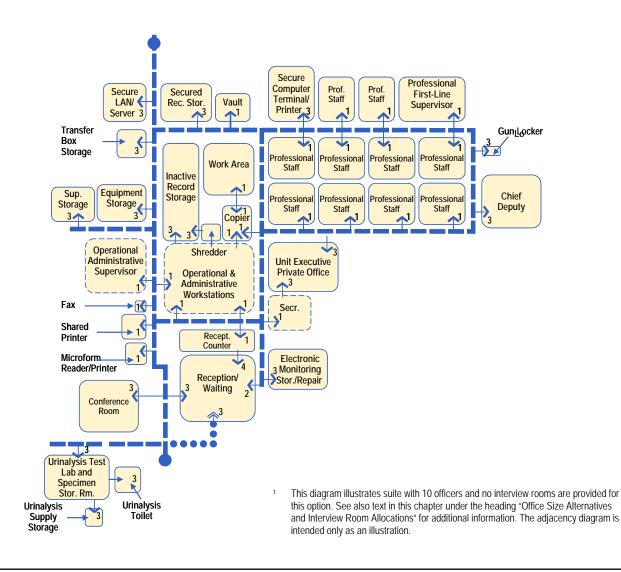
• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when the tinuse
- Restricted Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access, Direct Access Control/Keylock
- Restricted Access, Counter/Window Service
- Privacy Lock
- Secure Access, Authorized Staff
- Secure Access, Prisoner/Security Staff
- Circulation/Access@ontrolpoint
- Public Vertical Circulation
- Restricted\y/ertical Circulation
- Secure Vertical Circulation
- F Freight Vertical Circulation
- Direct Visual Access, One-Way
- Direct Visual Access, Two-Way

Figure 9.1
Option 1: Probation and Pretrial Services Offices, 150 NSF Officer Offices ¹



• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted (Vertical Circulation

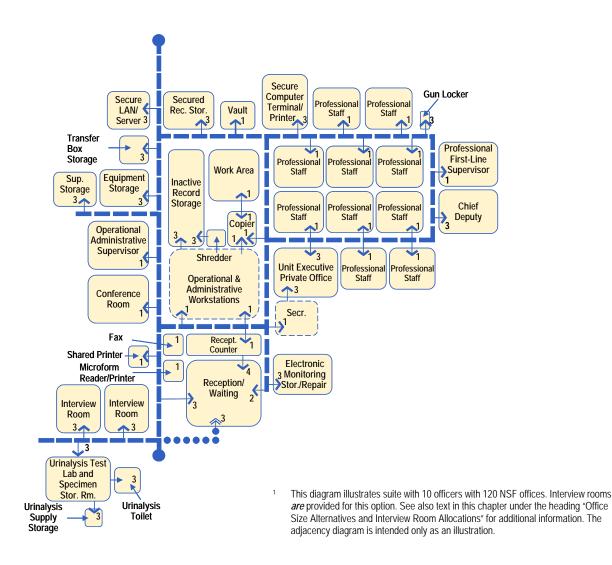
S Secure Vertical Circulation

Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual, Access, Two-Way

Figure 9.2
Option 2: Probation and Pretrial Services Offices, 120 NSF Officer Offices ¹



10

This chapter includes the Office of the Circuit
Executive, the Office of the Bankruptcy
Appellate Panel Clerk, the Office of the Senior
Staff Attorney, the Office of the Pre-argument/
Conference Attorney, the Office of the District
Court Executive, the Office of the Bankruptcy
Administrator, and the Office of the Federal
Defender's trial preparation suite. It describes
offices' functions and activities, users and
capacities, design requirements, and space
allocation requirements, and contains
adjacency diagrams.

OTHER COURT UNITS

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The reference listed below relates specifically to this chapter.

 United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition, Chapter 10.

Programming and Budgetary Notes

► Exceptions to the *Design Guide* Standards

Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space-management role by reviewing district- wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space-management program (28 USC (§332 and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions from to the standards in the *Design Guide* must be approved by the respective circuit judicial council.

Authority of the Committee on Space and Facilities and Judicial Conference

However, the authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total "envelope" for either the court unit or the project as a whole, and (2) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference shall decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

► Space Envelope Flexibility

A total space envelope for a court unit office will be calculated using appropriate circulation factors, allowances for support-type spaces, and the space standards described in this section. Courts have the flexibility to configure space within the envelope to meet their local needs. However, private office and open workstation sizes should be in compliance with the square footage standards designated in the space and ceiling requirements. If the court unit wishes to change the space standards described in the space and ceiling requirements without exceeding the total envelope of space for the unit, it must seek approval from its respective circuit judicial council

▶ General Programming Notes

Staff Toilet Rooms and Breakrooms. The staff toilets and breakrooms must be located within restricted circulation on floors with court-related offices. For courthouses housing more than one court unit, the design team should consider a shared staff breakroom. Consideration should be given to staff use of public restrooms rather than programming separate facilities. If separate staff toilets are necessary, only one set of men's and women's toilets per floor is provided. Consult with the Administrative Office of the U.S. Courts for more detailed information.

Functions and Activities

► Office of the Circuit Executive

The Office of the Circuit Executive provides legal and administrative support in each circuit.

► Office of the Bankruptcy Appellate Panel Clerk

In some circuits, bankruptcy appellate panels hear and determine appeals from judgments, orders, and decrees entered by bankruptcy judges.

► Office of the Senior Staff Attorney

The Office of the Senior Staff Attorney provides legal assistance to circuit judges.

▶ Office of the Pre-argument/Conference Attorney

In some circuits, a pre-argument/conference attorney is provided under the Civil Appeals Mediation Program. The pre-argument/conference attorney assists the court by working to effect settlements in appellate cases.

▶ Office of the District Court Executive

The Office of the District Court Executive provides legal and administrative support for a particular judicial district. Not every district has this office.

► Office of the Bankruptcy Administrator

In some locations, an Office of the Bankruptcy Administrator assists the U.S. Bankruptcy Court (USBC) by overseeing the administration of estates and supervising case trustees and other fiduciaries. Such services are similar to those provided by the U.S. Trustee (executive branch) in other locations.

▶ Office of the Federal Defender's Trial Preparation Suite

The Office of the Federal Defender provides counsel to persons charged with federal criminal offenses who are financially unable to obtain adequate private representation. Federal defenders' staffed offices must be located outside the courthouse unless the federal defender determines that being in such buildings would compromise the organization's mission. If the Judicial Conference Committee on Defender Services approves the request by a federal defender to occupy space in a new courthouse, the comparable office space standards for other court units shall apply. The office must be distanced from the offices of the U.S. attorney. A trial preparation suite of 450 usable square feet (4.7 usable square meters [Nm²]), which includes internal circulation for use by federal defenders during trials, shall be provided in the U.S. District Court (USDC) courthouse.

Users and Capacities

Users vary according to the size of the courthouse; the type and volume of cases; and the number of maintenance staff, service company/agency personnel, and public. For the purposes of certain references in this *Design Guide*, the following designations apply:

A small courthouse has 5 or fewer courtrooms.

A medium courthouse has 6 to 12 courtrooms.

A large courthouse has more than 12 courtrooms.

Design Requirements

▶ Ceiling Height

The ceiling height in other court unit office spaces shall be in accordance with the standards set forth in GSA P-100.

Ceiling heights that exceed the maximum limit are considered exceptions.

▶ Bulk Storage Area

The design team shall collocate all court unit bulk storage areas adjacent to the loading dock and central mail facility.

Table 10.1 Space and Ceiling Requirements for Other Court Units

SPACES	NSF	(Nm ²)
CIRCUIT EXECUTIVE AND DISTRICT COURT EXECUTIVE		
PRIVATE OFFICES		
Circuit Executive/District Court Executive	240	(22.3)
Deputy	180	(16.7)
Assistant Circuit Executive	180	(16.7)
Professional Staff	150	(14.0)
OPEN WORKSTATIONS		
Executive Secretary	170	(15.8)
Professional and Administrative Line Position	96	(8.9)
Operational and Administrative Support Positions	64	(5.6)
GENERAL OFFICE SPACES		
General Reception Area, per visitor	15	(1.4)
Secured Records Storage, per shelf unit ¹	8	(.7)
Active Storage, per file unit	9	(.9)
Inactive Records Storage, per file unit	9	(.9)
Transfer Box Storage	50	(4.7)
Worktable	90	(8.4)
Supplies		,
Minimum	50	(4.7)
	100	(9.3)
Maximum Equipment Storage		
Minimum	50	(4.7)
Markey	150	(14.0)
Maximum 1 Work Area	105	(9.8)
Copier Area (per Copier)		
Low Volume	50	(4.7)
Medium Volume	80	(7.4)
High Volume	120	(11.2)
Conference Room (fewer than 20 occupants)	300	(27.9)
Conference Room (20 or more occupants)	400	(37.2)
Catalog Library ²		
Fax	10	(.9)
Shared Printer	20	(1.9)
Safe		
Minimum	20	(1.9)
Maximum	80	(7.4)

SPACES	NSF	(Nm ²)
Shredder	25E	(2.3)
Staff Breakroom ³		
Minimum	200	(22.3)
	600	(16.7)
Maximum 4 Staff Toilets	100	(9.3)
BANKRUPTCY APPELLATE PANEL (BAP) CLERK		
PRIVATE OFFICES		
Clerk	240	(22.3)
Attorney	150	(14.0)
OPEN WORKSTATIONS		
Deputy Clerks	64	(5.6)
DUDU IO ADEAO		
PUBLIC AREAS	405	(0.0)
Queuing/Work Area ¹ Intake Counter	105 45	(9.8)
		(4.2)
Accessory Stand-up Work Counter	100	(9.3)
Records Examination Area, including fax machine Public Access Computer Stations	35 35	(3.3)
Public Access Computer Stations	35	(3.3)
GENERAL OFFICE SPACES		
Shared Printer Areas	50	(4.7)
Evidence Vault		
Minimum	80	(7.4)
	150	(14.0)
Maximum Equipment Storage		
Minimum	50	(4.7)
Maximum	150	(14.0)
Maximum Mail Work Area/Copier	100	(9.3)
Fax Workstation	10	(.9)
Safe		
Shredder Facility	25	(.23)
Forms Storage	150	(14.0)
Supplies		
Minimum	50	(4.7)
Maximum	100	(9.3)
Maximum	00	(4.0)

Maximum Coat Closets

(1.9)

Table 10.1 Space and Ceiling Requirements for Other Court Units (cont'd)

(Nm ²)
(.7)
(8.)
(8.)
(14.0)
(14.0)
(27.9)
(22.3)
16.7)
(9.3)

CENIOD STAFF ATTORNEY		
SENIOR STAFF ATTORNEY PRIVATE OFFICES		
Senior Staff Attorney	240	(22.3)
Senior Supervising Staff Attorney	180	(16.7)
Other Supervising Staff Attorney	180	(16.7)
Staff Attorneys	150	(14.0)
OPEN WORKSTATIONS		
Executive Secretary	170	(15.8)
Secretary	64	(6.0)
GENERAL OFFICE SPACES		
Reception/Waiting Area	105	(9.8)
Secured Records Storage, per shelf unit	8	(.7)
Active Records Storage, per shelf unit	9	(.9)
Inactive Records Storage, per shelf unit	9	(.9)
Transfer Box Storage	50	(4.7)
Worktable	90	(.9)
Supplies Storage	50	(4.7)
Equipment Storage	50	(4.7)
Work Area ¹	105	(9.8)
Copier Area	50	(4.7)
Conference Room	300	(27.9)
Coat Closets	20	(1.9)
Fax	10	(.9)

SPACES	NSF	(Nm ²)
Shared Printer Area	50	(4.7)
Shredder	25	(.23)
Staff Breakroom ³		
Minimum	200	(18.6)
Maximum	600	(55.8)
Staff Toilets ⁴	100	(9.3)

PRIVATE OFFICES		
Senior Pre-Argument Conference Attorney	240	(22.3)
Conference Pre-Argument Attorney	180	(16.7)
		, ,
OPEN WORKSTATIONS		
Executive Secretary	170	(15.8)
Secretary	96	(8.9)
GENERAL OFFICE SPACES		
Reception/Waiting Area	105	(9.8)
Secured Records Storage, per unit	8	(.7)
Active Records Storage, per unit	9	(8.)
Inactive Records Storage, per unit	9	(8.)
Worktable	90	(.84)
Supplies		
Minimum	50	(4.7)
Maximum	100	(9.3)
Maximum Equipment Storage		
Minimum	50	(4.7)
Maximum	150	(14.0)
Maximum 1 Work Area	105	(9.8)
Copier Area	50	(4.7)
Fax	10	(.9)
Shared Printer	50	(4.7)
Shredder	25	(.23)
Staff Breakroom ³		
Minimum	200	(18.6)
Maximum	600	(55.8)
Maximum 4 Staff Tollets ⁴	100	(9.3)

Table 10.1 Space and Ceiling Requirements for Other Court Units (cont'd)

SPACES	NSF	(Nm ²)
BANKRUPTCY ADMINISTRATOR		
PRIVATE OFFICES		
Bankruptcy Administrator	240	(22.3)
Estate Analyst	150	(14.0)
Administrative Analyst	150	(14.0)
OPEN WORKSTATIONS		
Estate Administrative Clerks	96	(8.9)
GENERAL OFFICE SPACES		
Records, Copier Area, Work Room, Storage	350	(32.6)
Shared Printer Area	50	(4.7)
Reception/Waiting Area	150	(14.0)
Coat Closets	20	(1.9)
Financial Vault	150	(14.0)
Conference Room (fewer than 20 occupants)	300	(27.9)
Conference Room (20 or more occupants)	400	(37.2)
Creditor Meeting Room (341)	1,500	(139.9)
Staff Breakroom ³		
Minimum	200	(18.6)
Mandana	600	(55.8)
Maximum Staff Tollets ⁴	100	(9.3)
FEDERAL DEFENDER'S TRIAL PREPARATION SUITE		
Attorney Offices, 2 @ 150	300	(27.9)
Conference/Reception/Waiting Room	100	(9.3)
Copy/Fax	50	(4.7)

SPACES	NSF	(Nm²)
CEILING HEIGHTS		
	FEET	(mm)
Circuit Executive and District Court Executive	Reference	GSA P-100
Bankruptcy Appellate Panel (Bap) Clerk	Reference	GSA P-100
Senior Staff Attorney	Reference	GSA P-100
Pre-Argument/Conference Attorney	Reference	GSA P-100
Bankruptcy Administrator	Reference	GSA P-100
Federal Defender's Trial Preparation Suite	Reference GSA P-100	

¹ Space allowance for work area: 15 NSF (1.4 Nm²) per staff member. Minimum area is 105 NSF

² For circuit executive's office only. Space allowance: 9 NSF (.8 Nm²) for every 21 linear feet of catalogs. Add 25 NSF (2.3 Nm²) per person and 64 NSF (6.5 Nm²) per CALR station.

³ Area requirements for Staff Breakroom: Allocate 25 NSF (2.3 Nm²) for every 3 staff members plus 20 NSF (1.9 Nm²) for a service unit. The minimum Staff Breakroom is to be 200 NSF (18.5 Nm²) and the maximum staff lounge is to be 600 NSF (55.7 Nm²).

⁴ Only one set of Staff Toilets allowed per floor.

Adjacency and Circulation

The design team should refer to Chapter 3, "Planning for U.S. Courthouses," for circulation factors.

The Office of the Circuit Executive (Figure 10.1) requires restricted access for office staff, circuit judges and their support staff, and other court staff. The need for public access is infrequent but must not be precluded.

Office of the Bankruptcy Appellate Panel (BAP) Clerk (Figure 10.2) requires public access to intake counter and records examination areas. Access for BAP attorney's and staff as well as access to active and bulk storage areas shall be from restricted circulation.

The Office of the District Court Executive (Figure 10.1) requires restricted access for office staff, district and magistrate judges and their support staff, and other court staff. The need for public access is infrequent but must not be precluded.

The Office of the Senior Staff Attorney (Figure 10.3) primarily requires restricted access for USCA staff; limited access from public circulation is also required. The office must be located close to the court library and circuit clerk's office.

The Office of the Pre-argument/Conference Attorney (Figure 10.4) requires public access.

The Office of the Bankruptcy Administrator (Figure 10.5) requires public access.

Office of the Federal Defender's Trial Preparation Suite (Figure 10.6) must be distanced (for example, at a minimum on a different floor) from the Office of the U.S. Attorney, U.S. Marshals Service, U.S. Probation Office, U.S. Pretrial Services Office, Bureau of Prisons, and any other law enforcement agencies as described in 18 USC 1114. This separation is essential due to the federal defender's mission and role in the legal process.

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when Hot in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access,
Counter/Window Service

Privacy Lock

Secure Aggess, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

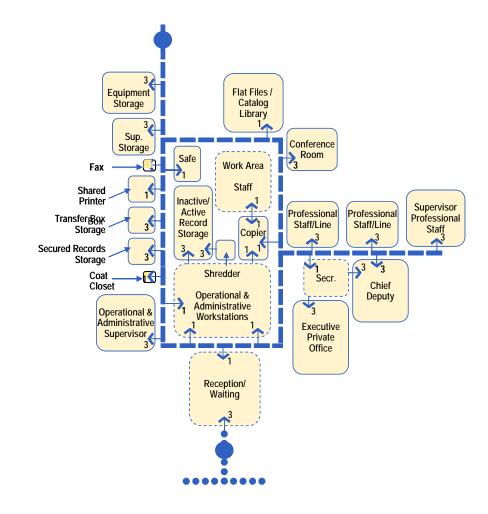
Secure Vertical Circulation

Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, ⊤wo-Way

Figure 10.1
Office of the Circuit Executive and Office of the District Court Executive Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

10-8

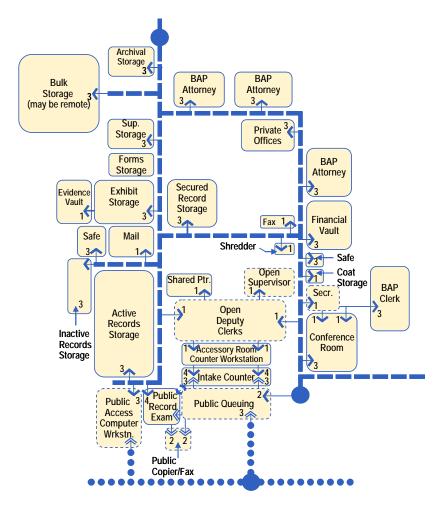
• • • • Public Circulation

Restricted Girgulation

Secure@irgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when not in use
- Restricted Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access, Direct Access Control/Keylock
- Restricted Access,
 Counter/Window Service
- Privacy Lock
- Secure Access, Authorized Staff
- Secure Access,
 Prisoner/Security Staff
- Circulation/Access@ontrolp?pint
- Public Vertical Circulation
- Restricted\yertical Circulation
- S Secure \Vertical Circulation
- F Freight Vertical Circulation
- Direct Visual Access, One-Way
- Direct Visual, Access, Two-Way

Figure 10.2
Office of the Bankruptcy Appellate Panel (BAP) Clerk Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

10-9

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access, Direct Access Control/Keylock

Restricted Access,
Counter/Window Service

Privacy Lock

Secure Aggess, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted\/ertical Circulation

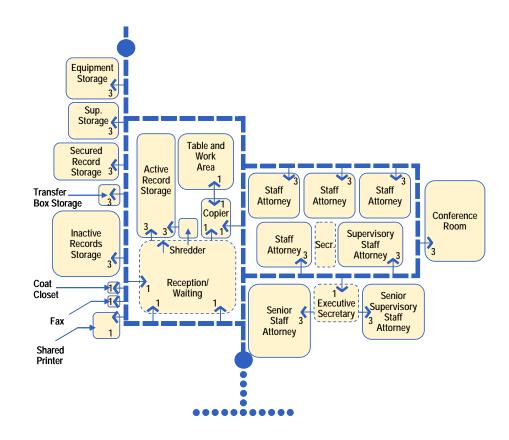
Secure Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Figure 10.3
Office of the Senior Staff Attorney Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

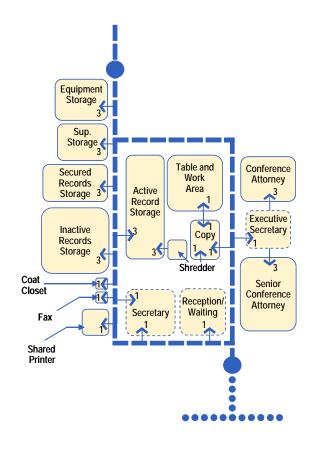
• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when not in use
- Restricted Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access, Direct Access Control/Keylock
- Restricted Access,
 Counter/Window Service
- Privacy Lock
- Secure Access, Authorized Staff
- Secure Access,
 Prisoner/Security Staff
- Circulation/Access@ontrolpoint
- Public Vertical Circulation
- Restricted Vertical Circulation
- Secure Vertical Circulation
- F Freight Vertical Circulation
- Direct Visual Access, One-Way
- Direct Visual Access, Two-Way

Figure 10.4
Office of the Pre-Argument/Conference Attorney Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

Keytto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Access,
Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

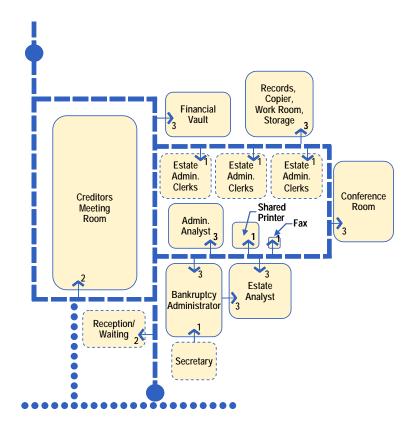
Secure Vertical Circulation

F Freight Vertical Circulation

Direct Visual Access, One-Way

Comparison of the Comparis

Figure 10.5
Office of the Bankruptcy Administrator Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

Keytto Symbols

• • • • Public Circulation

Restricted Girgulation

Secure Girgulation

■ Unscreened Public Access

Screened Public Access

Screened Public Access, locked when not in use

Restricted Access, Uncontrolled

Restricted Access, Remote Access Control

Restricted Aggess,
Direct Access Control/Keylock

Restricted Access, Counter/Window Service

Privacy Lock

Secure Access, Authorized Staff

Secure Access, Prisoner/Security Staff

Circulation/Access@ontrolpoint

Public Vertical Circulation

Restricted Vertical Circulation

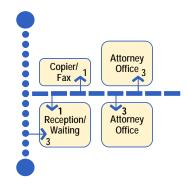
S Secure Vertical Circulation

Freight Vertical Circulation

Direct Visual Access, One-Way

Direct Visual Access, Two-Way

Figure 10.6
Office of the Federal Defender's Trial Preparation Suite Adjacency Relationships



Note: The adjacency diagram is intended only as an illustration.

Federal Defender trial preparation areas may not exceed a total of 450 occupiable square feet.

This chapter applies to common building and court support spaces, including shared judges' conference rooms, judges' dining areas news media rooms, guidance on space for alternative dispute resolution proceedings, mail and package screening areas, central mail facilities, bulk and archival storage, and communications (telecommunications and data) distribution rooms. It describes functions and activities, users and capacities, design requirements, and space allocation requirements, and contains an adjacency diagram.

COMMON BUILDING SPACES

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The references listed below relate specifically to this chapter.

- "AnyCourt" (Program of Requirements), the judiciary's automated space-planning tool used to provide a court's space program of requirements.
- Courtroom Technology Manual
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume One, Courthouse Management Group Engineering Engineering and Architectural, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Two, Electronic Security and Hardware, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Three, Judicial Security Systems Requirements and Specifications, most current edition

United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition

Functions and Activities

Shared Judges' Conference Rooms

Shared judges' conference rooms provide space for meetings, training sessions, and other functions involving all judges in a court. Circuit judges conduct case conferences in these spaces.

One shared conference room is provided for each of the three courts present in the courthouse: appellate, district (and magistrate), and bankruptcy.

Judges' Dining Area

A judges' dining area shall be provided only if the General Services Administration (GSA) plans a cafeteria in the building and shall be located adjacent to the building's cafeteria. The room provides an area separate from the main cafeteria to ensure judges' security and that on-going proceedings are not compromised by inappropriate contact by a member of the public, jury, or other party to the case.

News Media Room

Reporters use the news media room as a base of operations to report on court matters. The news media room is a shared facility for all courts.

► Alternative Dispute Resolution (ADR) Proceeding

ADR proceedings will be accommodated in unoccupied courtrooms and related attorney/witness rooms, trial jury deliberation rooms, or other available conference rooms.

► Mail and Package Screening Area

Adequate space must be provided adjacent to the loading dock or delivery entrance for secure, safe, and efficient screening of all mail and packages delivered to the courthouse.

► Central Mail Facility

The central mail facility is designed to provide a safe location for opening and sorting mail in a contained environment. If a contamination occurs, the mail room is designed to prevent the spread of the threat agent throughout the building. However, all court units housed in the courthouse must agree to open and sort their mail and packages in the central mail facility or the function of the mail facility will be compromised. In a courthouse with U.S. Attorneys or other government agency, separate mail facilities may be required; however, all should be designed to contain a threat agent from spreading throughout the building.

► Bulk and Archival Storage

Space shall be provided adjacent to the loading dock for secure storage of office or related equipment, supplies, and furniture.

► Communications (Telecommunications and Data) Distribution Room

A secured-entrance room is required to house equipment from both telecommunications and data service providers and the demarcation point. A separate main distribution frame (MDF) room and telephone switch room (or area if located in the MDF room) shall be centrally located to maintain recommended cabling distances and may include a cross-connect for an adjacent equipment distribution area.

Telecommunications requirements are based on the size of the switch. Space requirements must provide flexibility for future improvements to the telecommunications system.

Within the communications distribution room, a horizontal distribution area is required for horizontal cross-connects from the distribution point for cabling to the equipment distribution area. In addition, a zone floor distribution area is required for structured cabling for the floor-standing equipment, and an equipment distribution area is required to place equipment cabinets and racks arranged to effectively dissipate heat from electronics.

Users and Capacities

Users vary according to the size of the courthouse; the type and volume of cases; and the number of maintenance staff, service company/agency personnel, and public. For the purposes of certain references in this *Design Guide*, the following designations apply:

A small courthouse has 5 or fewer courtrooms.

A medium courthouse has 6 to 12 courtrooms.

A large courthouse has more than 12 courtrooms.

Shared Judges' Conference Room. The primary users are the judges of the court. The number of users varies with the size of the court and the number of judges.

Judges' Dining Area. The number of users varies according to the number of judges, as noted in the program of requirements.

News Media Room. The number of users varies, as noted in the program of requirements.

Design Requirements

▶ General Design Elements

Building support functions described in this chapter are limited to court-occupied spaces. Many of these areas are related functionally and spatially to general building support areas such as loading docks; refuse areas; mechanical, electrical, plumbing, and elevator service rooms; and so on. Supporting documents should be referred to for detailed spatial requirements and design criteria.

► Ceiling Height

The ceiling is a designed surface. It may be a uniformly flat, neutral plane, or it may have two or more planes and include elements such as soffits, perimeter coves, recesses, and reveals as required to integrate HVAC and lighting into a harmonious design. An adjustment of a ceiling surface may also occur where it meets an exterior curtain wall. In situations where there are several different surfaces at play at different heights above the finished floor, there may be different ways of determining which one(s) is the dominant plane. It is recommended that ceiling heights should be measured from the finished floor to the principal surface that either covers the most amount of ceiling square footage, or the surface that defines the overall character of the ceiling design. The design team must ensure that at no point should the finished ceiling exceed the maximum ceiling height standards set forth in the Design Guide or GSA P-100.

Ceiling heights shall be in accordance with the standard set forth in GSA P-100 except as noted below.

Shared Judges' Conference Room 10 feet (3,000 mm) Judges' Dining Area 10 feet (3,000 mm)

Ceiling heights that exceed the maximum height are considered an exception and will require Judicial Conference approval.

► Central Mail Facility

The design of a central mail facility provides physical countermeasures to prevent the transmittal of biological agents through the mail. Preventive measures that include the central mail facility's location, finishes, equipment, and mechanical separation should be planned at the design stage.

A central mail facility should be constructed for all mail and package opening, sorting, and distribution. This joint-use facility does not preclude individual distribution and mail sorting facilities within court units. If all tenants (both judiciary and non-judiciary) agree to use a central mail facility for opening and sorting mail, the design team shall refer to GSA's Facilities Standards for the Public Buildings Service (P-100) for size and design specifications. A central mail facility is considered to be building joint-use space, with all tenants funding their organizations' pro rata share of the facility.

Table 11.1 Space and Ceiling Requirements for Common Building Spaces

SPACES	NSF	(Nm²)	
SHARED JUDGES' CONFERENCE ROOMS ¹			
Minimum	200	(18.6)	
	600	(55.7)	
JUDGES' DINING AREA ²			
Minimum	200	(18.6)	
Maximum	300	(27.8)	
NEWS MEDIA ROOM			
Small Courthouse (5 or less courtrooms)	150	(13.9)	
Medium Courthouse (6 to 12 courtrooms)	250	(23.2)	
Large Courthouse (13 or more courtrooms)	450	(37.1)	
CENTRAL MAIL FACILITY ³			
GSA P-100 Small/Medium Courthouse (12 or less courtrooms)	880	(81.7)	
GSA P-100 Large Courthouse (13 or more courtrooms)	1,100	(102.1)	
_		_	
DELIVERY, DISPOSAL, AND STORAGE AREAS			
Loading Dock	See Building Program/ GSA P-100		
Temporary Storage	See Building Program/ GSA P-100		
Archival Storage Areas	See Building Program/ AnyCourt		
Mail- and Package-Screening Stations	System	dicial Security s Requirements ecifications.	

USMS Volume III Publication 64

SPACES	NSF	(Nm ²)
EQUIPMENT ROOMS AND RISERS		
Telephone Switchroom	As noted program requiren	n of
Communications Server Room		
Small Courthouse (5 or less courtrooms)	400	(37.2)
Medium Courthouse (6 to 12 courtrooms)	800	(74.3)
Large Courthouse (13 or more courtrooms)	1,200	(111.5)
Telecommunications Closets ⁴		

CEILING HEIGHTS	
	FEET (mm)
Shared Judges' Conference Room	10 (3,000)
Judges' Dining Area	10 (3,000)
New Media Room	GSA P-100
Central Mail Facility	GSA P-100
Delivery, Disposal and Storage	GSA P-100
Equipment Room and Risers	GSA P-100

- Conference Room at 100 NSF (9.2 Nm²) plus 25 NSF/judge (2.3 Nm²/judge). Square footage allocation for minimum and maximum is inclusive of 20 NSF (1.9 Nm²) for a service unit.
- Dining area allocation is 15 NSF (1.4 Nm²) per judge plus 20 NSF (1.9 Nm²) service unit. The minimum allocation is 200 NSF (18.6 Nm²) and the maximum allocation is 300 NSF (27.8 Nm²) inclusive of the service unit.
- ³ Areas given are exclusive of the mail- and package-screening area on the loading dock. Only one Central Mail Facility is funded for new construction.

 The space allocation for Telecommunications Closets is 110 NSF (10.2 Nm²) for every 10,000
- NSF (930 Nm²) of program area.

Adjacency and Circulation

Public access must be provided for vendors and other service providers. Delivery personnel must enter the building through the loading dock area after first notifying the appropriate personnel. Reference Figure 11.1 for adjacencies.

► Shared Judges' Conference Room

The shared judges' conference room shall be in a central location to allow access for all judges. The conference room must be accessible from the courtroom by restricted circulation or a controlled reception area.

▶ Judges' Dining Area

The dining area must be placed adjacent to the cafeteria.

▶ News Media Room

The news media room shall be placed on the ground floor or adjacent to a courtroom. The room must be accessed only from public circulation.

► Central Mail Facility

The mail room should be located adjacent to the loading dock on an exterior wall.

► Bulk and Archival Storage

Equipment, furniture, and court or tenant storage must be accessed from restricted circulation and conveniently located near the loading dock and service elevator to allow for easy movement of materials throughout the building. In the archival storage area, each court-related office must have access only to its assigned space, as this area houses case records, administrative files, and other confidential materials.

► Communications Distribution Rooms

To prevent vandalism, access to communications distribution rooms must be strictly controlled, especially when the rooms are located on public corridors. The switch room or area within the main communications distribution room must be secured with controlled access.

Keytto Symbols

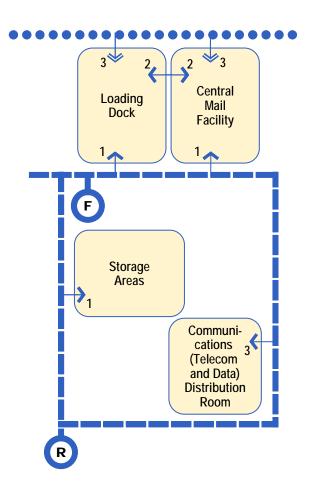
• • • • Public Circulation

Restricted Girgulation

Secure Girgylation

- Unscreened Public Access
- Screened Public Access
- Screened Public Access, locked when Thot in use
- Restricted/Access, Uncontrolled
- Restricted Access, Remote Access Control
- Restricted Access, Direct Access Control/Keylock
- Restricted Access, Counter/Window Service
- Privacy Lock
- Secure Access, Authorized Staff
- Secure Access, Prisoner/Security Staff
- Circulation/Access@ontrolpoint
- Public Vertical Circulation
- Restricted Vertical Circulation
- Secure\Vertical Circulation
- F Freight Vertical Circulation
- Direct Visual Access, One-Way
- Comparison of the Comparis

Figure 11.1
Common Building Support Spaces Adjacency Relationships



Note: Locate communications equipment room on outside wall closest to communication service utility entrance. The number of spaces shown on the adjacency diagram is intended only as an illustration; the actual number of spaces required for a specific facility is determined in the building program.

Note: The adjacency diagram is intended only as an illustration.

This chapter addresses tenant improvements (interior finishes and millwork) and furnishings for all areas of the courthouse. GSA P-100 finishes shall be applied wherever requirements are not addressed in this chapter.

TENANT IMPROVEMENTS AND FURNISHINGS

Introduction

Tenant improvements are the finishes and fixtures that typically take a space from the "shell" condition to a finished, usable condition. The tenant improvement allowance is the funding source provided by the General Services Administration (GSA) that enables the space to be built out to meet the court's specific requirements. There are two components in the tenant improvement allowance: general and customization. The general tenant improvement allowance takes the unfinished shell to the standard GSA level of finish for office space. The customization allowance provides funding to meet court specific requirements.

- Tenant Improvements Interior Finishes. The finish section of this chapter includes the judiciary's requirements and GSA P-100 finish levels.
- Tenant Improvements Millwork. The millwork section of this chapter addresses millwork, doors, and some furniture items that are built into and procured as part of the GSA construction process.
- Furnishings. The *Design Guide* identifies furnishings provided by the GSA as well as some loose furnishings that are funded by the judiciary. Furnishings are itemized in the Design Guide for the purpose of assisting designers during the conceptual design and the coordination of electrical requirements.

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The references listed below relate specifically to this chapter.

- Facilities Standards for the Public Buildings Service (GSA P-100)
- Guide to Judiciary Policies and Procedures, Chapter 5, "Property Management and Furniture," Parts C, D, and E
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume One, Courthouse Management Group Engineering Engineering and Architectural, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Two, Electronic Security and Hardware, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Three, Judicial Security Systems Requirements and Specifications, most current edition

 United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference, most current edition

Programming and Budgetary Notes

► Appropriate Level of Millwork and Finishes

Tenant improvements such as millwork and finishes in the interior of the courthouse must reflect the seriousness of the judicial mandate and the dignity of the judicial system. To this end, the finishes, millwork, and furnishings selected for a courthouse facility must express solemnity, integrity, rigor, and fairness. Any action taken by a court or circuit judicial council that would lead to extravagance in courthouse construction or renovation is prohibited; however, the Judicial Conference of the United States recognizes and strongly supports a pragmatic approach to design that includes the use of durable and sustainable materials. This approach ensures that courthouses will last well into the future. Colors should be subdued and complement the natural materials used in the design.

The materials employed must be consistently applied and durable, and must invoke a sense of permanence. Products with sustainable characteristics (i.e., regionally produced, natural, recycled content, and recyclable) should be utilized but must still meet the other criteria established for product selection.

The selection of finish materials must be appropriate for the specific space uses and compatible with the project budget.

A limited palette of finishes that responds to construction cost limitations, optimizes life-cycle costs, and satisfies functional requirements should be selected for each project.

The use of exotic woods is prohibited.

Maintenance costs and other life-cycle costs of finish materials must be considered.

Tenant Improvements - Interior Finishes

This section includes information on finish materials and design requirements for the use of finishes. The finish schedule, Table 12.1, shows an example of finish selections for special-use areas of the courthouse. The table is intended to illustrate what can be provided within the tenant improvement budget.

Finish Materials

When selecting any courthouse finish, the following must be considered:

- Finishes represent a standard or benchmark of durability, functionality, and sustainability and are not intended to dictate specific design solutions or treatments.
- Finishes selected must meet the most stringent codes under which the facility is governed. Standards referred to shall be the most current edition adopted by the international, federal, or local code authorities.
- Accepted industry standards for products and installation appropriate to the conditions, use, and substrate shall be utilized for the selection and specification of all materials.

▶ Floors

Carpet (CPT) and Carpet Tile (CPTT) Carpet shall be commercially branded nylon with soil-hiding characteristics. The product shall have a medium color range. The dye method utilized must have dye lots adequate to meet open area layout sizes. The backing system, with the recommended installation method, must be documented as warranted for use over access flooring and capable of being removed for floor access and reinstalled. Long-term appearance retention ratings for carpets utilized shall be 2.5 for moderate traffic levels, 3.0 for heavy traffic, and 3.5 for severe traffic, per the Carpet and Rug Institute (CRI) appearance retention rating guidelines. The tuft bind of loop pile carpets shall be 20 pounds for heavy and severe wear areas.

All carpet shall have a minimum density of 4,000 threads per inch and a quickrelease backing for access to raised flooring, and shall adhere to the CRI's appearance retention rating guidelines for foot traffic per ASTM-5252 Hexapad as outlined in the following spaces:

- Public Spaces Severe 3.5–4 (Chapter 3)
- Courtrooms and Associated Spaces Heavy 3.0–3.5 (Chapter 4)
- Jury Facilities Moderate 2.5–3.0 (Chapter 5)
- Judges' Chambers Suites Moderate 2.5–3.0 (Chapter 6)
- Central Court Libraries Heavy 3.0–3.5 (Chapter 7)
- Clerk's Office Heavy 3.0–3.5 (Chapter 8)
- Other Court Units Heavy 3.0–3.5 (Chapters 9 and 10)

Ceramic Tile (CT). Use ceramic tile floor that meets ANSI A137.1 specifications for ceramic tile, installed using Tile Council of America Handbook methods; thin-set waterproof mastic method F122 is a preferred method if appropriate for the substrate and product selected.

Vinyl Inset Tile (VIT). Use the raised flooring system manufacturer's vinyl tile or a similar finish for high traffic areas (e.g., copier and file rooms). VIT flooring for central mail facilities minimizes the contamination of the underfloor system during a biochemical incident. This system should also be used for the probation and pretrial services office urinalysis lab.

▶ Bases

Ceramic Tile (CT). Provide a ceramic tile base that is 4 inches (100 mm) high, with a sanitary cove and a bull nose top, meeting ANSI A137.1 specifications for ceramic tile, installed using Tile Council of America Handbook methods. Thin-set waterproof mastic method F122 is a preferred method if appropriate for the substrate and the product selected. In addition, the system shall have tile trim pieces on corners and edges.

Vinyl or Rubber Base (V/RB). The vinyl or rubber base shall be a minimum of 4 inches (100 mm) in height. The profile of the base shall be appropriate for the flooring material and flooring installation method. The selection should allow the replacement of the flooring material without necessitating replacement of the base. Selection of a timeless color should be considered to reflect the potential for use with more than one generation of flooring. Use a straight base with carpet and a cove base with noncarpet floors.

Wood Base (WDB). All wood bases shall be solid hardwood decorative moldings and shall be fabricated and installed in compliance with the American Woodworking Institute (AWI) premium-grade standards. The wood base shall be finished with stain and a clear sealer. Minimize the variety of wood species on the project to support the maintenance of the initial project budget and long-term life-cycle costs. The use of Convention on International Trade in Endangered Species (CITES) listed threatened wood species is prohibited in courthouse projects.

▶ Walls

Acoustic Fabric Wrapped Panel (AFWP). Sound-absorbing wall systems are required for courtrooms and other sound-sensitive areas.

Fabric Wall Covering (FWC). Fabric wall coverings must be perforated on any exterior building walls.

Paint (PNT) (over gypsum board). Paints shall be low-volatile organic compound (VOC) products. The paint finish shall be determined by the space use and shall be scrubbable to the extent that is considered current best practice.

- Paint 1 (PNT1). Latex with eggshell finish. Preferred finish, unless indicated otherwise.
- Paint 2 (PNT2). Latex with semigloss finish. To be used in wet areas such as service units and restroom wet walls.
- Paint 3 (PNT3). Water-based catalyzed epoxy or equivalent. To be used for the urinalysis lab.

Ceramic Wall Tile (CWT). Three feet above the finished floor (AFF), with semigloss paint above for toilets.

Wood (WD). All wood used in courthouses shall be fabricated and installed in compliance with AWI standards. Wood shall be finished with stain and a clear sealer. Minimize the variety of wood species on the project to support the maintenance of the initial project budget and optimize long-term life-cycle costs. The use of CITES-listed threatened wood species is prohibited in courthouse projects.

- Paneling (Pln) and Wainscot (Wnst). AWI premium-grade hardwood veneer.
- Architectural Trim (chair rail, crown molding, pilasters, and partial column surrounds). Use AWI premium-grade solid hardwood decorative moldings. Trim and decorative moldings include but are not limited to base, chair rail, crown and panel molds, caps, moldings, and pilasters, as required for design.

▶ Ceilings

Acoustic Ceiling Tile (ACT). Lay-in acoustic tile systems must support both the design intent and the functional requirements of the spaces in which they are used. Functional requirements include but are not limited to the acoustic requirements of the space, lighting sources and needs, and above-ceiling access requirements. The specification details of the product should be selected to support long-term durability, with special consideration given where local environmental conditions or space uses might impact the product.

Paint (PNT) (over gypsum board). Paints shall be low-VOC products. The paint finish shall be determined by the space use and shall be scrubbable to the extent considered current best practice.

- Paint 1 (PNT1). Latex with eggshell finish
- Paint 2 (PNT2). Latex with semigloss finish

Acoustic Plaster (AP). Acoustic plaster finish is a sound-rated interior spray-applied texture finish for ceilings and other noncontact surfaces. It is intended for use over base-coat plaster, concrete, metal decks, and gypsum panels.

Design Requirements for Finishes

The selection of finishes for each project must address concerns about the image, construction costs, life-cycle costs, and maintainability of the project budget. While each construction project's budget must be maintained, life-cycle cost issues are a priority when selecting project finishes. Life-cycle cost considerations include but are not limited to reducing maintenance issues and costs, improving product durability, and maximizing the long-term appearance retention of products utilized. Limiting the number of different products selected can make higher-quality products more affordable while also limiting maintenance procedures. Extra care should be taken in selecting materials for points where routine use would damage, discolor, or soil materials, such as in electrical switch-plate locations.

Below are requirements that apply to the selection of finishes throughout the courthouse:

- A palette of finishes for each space type in the courthouse shall be selected and must be consistently applied throughout the courthouse. The palette of finishes can have variations in color and texture but the overall design must complement the interior architecture. Once a palette of finishes is selected, the approved palette shall be made the standard for the courthouse for future renovations and alterations.
- Equivalent spaces shall utilize the same finishes.
- Finishes selected must consider light reflectance (luminance).
- Acoustic treatment, detailing, or material must be provided as required to meet noise criteria specified in Chapter 14, "Acoustics."
- Where access to infrastructure maintenance is above the ceiling, accessible finished ceiling assemblies should be used. Other ceiling elements, such as soffits, perimeter coves, recesses, and reveals, should be provided as required to integrate heating, ventilating, and air-conditioning (HVAC); lighting; and sound systems into a harmonious design.

 Where access to the electrical system, low-voltage systems (communications and audiovisual systems), and HVAC installed within the raised access flooring requires upgrades or maintenance, the raised access flooring finish must be easily removed and reinstalled without the additional expense of full removal and replacement of the finish. Refer to the section on floor finishes.

► Public Spaces

The interior architecture of public spaces in the courthouse should reflect a civic presence. Elevator lobbies on floors housing courts must be considered an extension of the main public lobby spaces. Similarly, for floors currently not housing courts but designated for court occupancy to meet future growth requirements, public and elevator lobbies must be designed with the proper physical structure and dimensions so that equivalent finish levels can be added. All finishes must be compatible with the overall architectural characteristics of the building.

Some designs for public spaces utilize a uniform palette of materials and finishes throughout the length of the procession, with minimal or no variations from inside the lobby to the doors of the courtroom. Alternative approaches involve changing materials and finishes from one segment of the procession to the next. Other design requirements include the following:

- The materials and finishes must be able to stand up to heavy use and frequent cleaning with cleaning solutions and maintenance equipment.
- Hard, non-sound-absorptive surfaces in public areas, in particular in the main building entrances and atrium, introduce clamorous acoustics that detract from decorum and are fatiguing to security personnel at the screening station. The design of the public spaces should mitigate acoustic problems.

► Courtrooms and Associated Spaces

Courtrooms. Finishes in the courtroom must reflect the seriousness and promote the dignity of court proceedings. Finishes are an integral part of the courtroom's architectural design. The materials and colors must be consistent with the overall quality of that design.

The following specific requirements apply to courtrooms:

- Decorative moldings include base, chair rail, crown, panel molding, caps, and other moldings. Trim and molding may be used in the space as dictated by the design or existing building design details.
- Since walls are the primary surface for acoustic treatments in a courtroom, the design must consider the need and optimize the location for sound absorbency, diffusing, and/or reflecting surfaces.
- Ceilings are another primary sound-reflection surface in the courtroom, providing useful early reflection to all parties within the courtroom. In general, ceilings shall be sound-reflecting gypsum board or similar. As determined on a case-bycase basis, some limited sound-absorbing treatment may be necessary on the ceiling in order to meet the acoustic standards, depending on the architectural design. Ceiling finishes can be more pronounced in courtrooms than in spaces with lower ceilings.

Attorney Work Rooms and Attorney/Witness Rooms. Walls should be low maintenance, and the wall design must consider light reflectance and acoustics. The ceiling must provide sound absorption and attenuation, ceiling design must consider light reflection, and floors must be carpeted for acoustics. A chair rail must be provided in attorney/witness rooms.

News Media Room. Select carpet for this space in order to deaden footfall noise, hide stains, and retain appearance under the rolling traffic of TV equipment loads.

Jury Facilities

Jury Assembly Area. Furnishings and finishes must reflect the importance of jury service. Prospective jurors should be provided with a comfortable environment in which to carry out their jury service.

▶ Judges' Chambers Suites

The finishes in judges' chambers suites should reflect the design quality of the courtroom: chambers should be viewed as an extension of the courtroom.

The following specific requirements apply to judges' chambers:

- The application of paneling must be limited to wainscot and accent details to achieve the desired design objective.
- Trim and molding may be used in the space as dictated by the design or existing building design detailing.
- The degree of acoustic privacy specified in Chapter 14, "Acoustics," for chambers, conference rooms, and support offices must be considered in the selection of wall construction and finishes.

► Central Court Libraries

The following finish requirements shall be addressed when selecting central court libraries' finishes:

- Outside corners of walls must be protected to prevent damage by book carts.
- Coffered ceilings shall be avoided.
- The carpet selected for the library must be able to accommodate heavy traffic and rolling book carts.
- Storage and work areas must have water- and mar-resistant floor finishes. The design team should consider using vinyl composition tile.

► Clerk's Office

Public areas of the clerk's office must be provided with durable finishes compatible with the design style of the courthouse's public areas.

▶ Probation and Pretrial Services Offices

Urinalysis Testing Lab, Sample Collection, and Supply Storage. Walls in these rooms shall be water-based catalyzed epoxy paint or another equally cleanable, durable material. The floor finish shall be vinyl inset tile.

► Shared Building Spaces

Central Mail Facility. Finishes shall be easy to clean and decontaminate. Walls in these rooms must be water-resistant gypsum board finished with water-based catalyzed epoxy paint. The floor finish shall be vinyl inset tile. Ceilings must be acoustic tile.

Sample Finish Schedule

Table 12.1 shows an example of finish selections for a U.S. courthouse. The sample is from a successful federal courthouse project that was designed and constructed within the tenant improvement (TI) construction budget allotment. The schedule shows a range of finishes to meet aesthetic quality expectations and project constraints. These finish schedules should not be considered to be prescriptive. The design team must develop a finish schedule that complements and maintains the integrity of the building's architectural design and style while meeting the project's quality requirements and cost limitations. Consult with the Administrative Office of the U.S. Courts.

Table 12.1 Sample Finish Schedule

SPACES

SPACES	FINISHES				
	FLOOR	BASE	WALLS	CEILING	
COURTROOMS					
		Stained WDB	Stained wood veneer paneling flanked by WC above wood veneer wainscot w/ architectural trim	Acoustic plaster/ painted GB	
			Side: Painted GB above wood veneer wainscot w/ architectural trim		
			Back: AFWP above wood veneer wainscot w/ architectural trim		
JUDGES' CHAMBERS JUDGE'S CHAMBERS OFF					
CPT	ICE	Stained WDB	FWC above wood veneer wainscot	ACT	
JUDGES' CONFERENCE/R	EFERENCE ROOM				
		Stained WDB	FWC above wood veneer wainscot	PNT/ACT Soffit	
TOILET					
		СТ	CT wainscot to 3'-0" AFF on wet wall only, PNT on all other walls	PNT	
RECEPTION AREA					
	CPT	Stained WDB	FWC above wood veneer wainscot	ACT	
SUDICIAL ASSISTANT OFF	ICE				
	CPT	Stained WDB	FWC above wood veneer wainscot	ACT	
PAW CLERK OFFICE					
	CPT	Stained WDB	PNT	ACT	
FAX/COPY/WORK ROOM		1//55	5117		
СТ	VCT	V/RB	PNT	ACT	

FINISHES

Table 12.1 Sample Finish Schedule (cont'd)

SPACES	FINISHES				
	FLOOR	BASE	WALLS	CEILING	
SERVICE AREA					
	VCT	V/RB	PNT	ACT	
CHAMBER CORRIDOR					
	CPT	Stained WDB	FWC/PNT	ACT	
COURTROOM DEPUTY OFFICE					
272212721272	CPT	V/RB	PNT	ACT	
STORAGE/CLOSET	ODT	\/\DD	DUT	A O.T.	
	CPT	V/RB	PNT	ACT	
ASSOCIATED SPACES					
ATTORNEY/WITNESS ROOM					
	СРТ	Stained WDB	Side: Painted GB above wood veneer wainscot	ACT	
			Back: AFWP above wood veneer wainscot		
JUDGES' CONFERENCE/ROBING RO	OOM				
	CPT	Stained WDB	FWC above wood veneer wainscot	PNT/ACT	
SOUNDLOCK					
	CPT	Stained WDB	PNT	PNT	
ATTORNEY WORK ROOM					
	CPT	Straight Rubber Base	FWC	ACT	
APPELLATE ROBING ROOM					
	CPT	Stained WDB	FWC w/ architectural trim	ACT	
TRIAL JURY SUITE					
	CPT	V/RB	FWC/PNT	ACT	
GRAND JURY SUITE	ODT	\//DD	EMO/DNIT	AOT	
II IDODC: TOIL ET	CPT	V/RB	FWC/PNT	ACT	
JURORS' TOILET		CT	PNT	PNT	
		UI	FINI	FINI	

Table 12.1 Sample Finish Schedule (cont'd)

SPACES		FINISHES	
FLOOR	BASE	WALLS	CEILING
OTHER COURT UNITS AND SPECIAL FACILITIES			
SHARED JUDGES' CONFERENCE ROOM			
CPT	Stained WDB	Chair rail & FWC	ACT
CIRCUIT EXECUTIVE PRIVATE OFFICE			
СРТ	Stained WDB	Chair rail & FWC	ACT
SENIOR STAFF ATTORNEY PRIVATE OFFICE			
СРТ	Stained WDB	Chair rail & FWC	ACT
CLERK OF COURT PRIVATE OFFICE			
СРТ	Stained WDB	Chair rail & FWC	ACT
CHIEF PROBATION/PRETRIAL SERVICES PRIVATE OFFICE			
CPT	Stained WDB	Chair rail & FWC	ACT
CIRCUIT LIBRARIAN PRIVATE OFFICE			
СРТ	V/RB	Chair rail & FWC	ACT
STACK AREA			
	V/RB	PNT	ACT
BANKRUPTCY ADMINISTRATION OFFICE			
CPT	V/RB	Chair rail & FWC	ACT
CONFERENCE ATTORNEY PRIVATE OFFICE			
СРТ	V/RB	Chair rail & FWC	ACT
DISTRICT COURT EXECUTIVE PRIVATE OFFICE			
CPT	V/RB	Chair rail & FWC	ACT
BANKRUPTCY/APPELLATE CLERK PRIVATE OFFICE			
CPT	V/RB	Chair rail & FWC	ACT
PROBATION URINALYSIS LABORATORY			
CPT VIT	V/RB	PNT	ACT
ACT - Acoustic Tile Ceiling AFWP - Acoustic Fabric Wrapped Panel CPT - Carpet CT - Ceramic Tile	GB - (PNT -) VCT -)	Fabric Wall Covering Gypsum Board Paint 1: Latex eggshell finish Vinyl Composition Tile Vinyl Base/Rubber Base	

Tenant Improvements - Millwork

This section is intended to provide requirements for the overall quality and amounts of millwork in the courthouse. This section addresses funding responsibilities, materials, and design requirements and includes a schedule (Table 12.2) indicating the millwork in each type of space in the courthouse. For specific information on station plans, sections, details, and dimensions refer *United States Courts, Courthouse Design Reference Manual: An Architect's Desk Reference.* Information on the layout of millwork within particular types of spaces is addressed in the space chapters of this document. Refer to Chapters 14-16 for acoustics, building systems, and security requirements that must be addressed in the construction of millwork.

Millwork Funding Responsibilities

All costs for millwork described in this section, including the movable attorney/prosecutor lectern and attorney/litigant tables, shall be funded out of the construction project. This does not include the evidence presentation cart. Any movable items included below must be constructed as part of the millwork to ensure continuity of veneer type, stain, and style.

Materials Requirements

Millwork for courtrooms, courtroom associated spaces, and judges' chambers suites shall be constructed to AWI standards for premium-grade millwork. The millwork in all other courthouse spaces shall be constructed to AWI standards for premium-grade millwork.

Design Requirements for Millwork

► All Spaces

Many components of building systems and security are integrated into millwork and must be able to be serviced, upgraded, or replaced over the life cycle of the courthouse. Millwork pieces must be designed to incorporate these requirements.

Refer to Chapter 4, "Courtrooms and Associated Spaces," for functional layout, proximity, and sight-line requirements. Refer to Chapter 14, "Acoustics," for acoustic requirements; Chapter 15, "Building Systems," for building systems requirements; and Chapter 16, "Building Security," for security requirements. Consult with the Administrative Office of the U.S. Courts for guidance.

► Recurring Millwork Items

Millwork items listed below are used in multiple locations throughout the courthouse.

Doors. All courthouse doors are to be hardwood-veneer solid-core doors unless security requirements for a particular entry cannot be met with this type of door. Wood doors shall be finished with stain and a clear sealer. Use AWI premium-grade solid hardwood door jambs, stops, and casings.

Where doors are a part of soundlocks, the doors should be overlapped and gasketed, and finished with an absorptive finish.

Use of sidelights at office doors should be considered for light transmission if they can be accommodated within the project's TI allowance.

All central mail room doors should be metal with a glass inset 4 inches (100 mm) wide by 25 inches (625 mm) long for a vision panel, an automatic closer, and seals around the edges.

Service Units. Service units shall be standard-size plastic-laminate upper and lower wall-mounted cabinets and countertops with an integral sink of a durable material. Intermediate shelves shall be provided in both upper and lower cabinets. Adjacent to the sink, one drawer minimum should be provided for food preparation utensils and other supplies. Units shall be laid out to accommodate some or all of the following: a microwave oven, a sink, a coffeemaker, and a refrigerator; refer to the millwork schedule to determine which appliances are required in which locations. A wall-mounted shelving unit above the sink area to accommodate the microwave oven may be provided as an option. A service unit in the judges' conference room for the en banc courtroom shall be custom-grade wood.

▶ Courtrooms

Millwork is an integral part of courtroom design. The durability, functionality, and quality of the millwork must reflect and complement the aesthetics and dignity of the courtroom. The relative heights of furniture and the dimensions of work surfaces are critical to efficient courtroom operation.

A very significant element of courthouse design is the accessibility to justice. For this reason, accessibility of courtrooms is a requirement for the design and construction of courtroom millwork.

Audiovisual equipment, including mobile video monitors and cameras, projectors, and audio recording/playback equipment used in the courtroom, must be accommodated in storage built into walls or courtroom furniture.

A consistent wood veneer finish must be used for all millwork in the courtrooms. Seated work surface heights in the courtrooms shall be consistent within and between courtrooms. The height of the seated work surface shall be determined with the court's approval and shall be 28 to 30 inches (700–750 mm).

The judge's bench, as well as the courtroom deputy and court reporter stations, must accommodate audio-system electronic sound-recording equipment and electronic data devices (computers or terminals), with the necessary openings in the work surfaces drilled or cored to accommodate cabling and fitted with grommets sized to the openings.

Judges' Benches. The height and area of the judge's bench expresses the role of the judge and facilitates control of the court. Generally, the judge's bench should be elevated three to four steps (21–24 inches or 525–600 mm) above the courtroom well. An additional step is recommended in larger appellate courtrooms. The bench work surface must be approximately 28–30 inches (725–750 mm) above the floor level of the judge's station (i.e., normal desk height) and 30 inches (775 mm) deep. Space is provided for a computer that does not obstruct essential sight lines. Each judge shall be provided with a lockable drawer for writing instruments and paper (legal size), and 6 linear feet (91,830 mm) of shelf space.

Because the circuit judges sit en banc or in panels, the judge's bench has a raised cap around the work surfaces. The cap holds papers and contains electronic controls without obstructing the judge's view. Circuit judges' benches must be curved in or angled to allow judges to see one another.

Courtroom Deputy Clerk's Station. A corner or side work surface must accommodate a computer and any other equipment used by deputy clerks. Audiovisual (AV) equipment may be built in to the station or otherwise conveniently located. AV accommodation must be lockable to prevent tampering with the system. Provisions for a printer with sound isolation may be required.

In district, magistrate, and bankruptcy judge courtrooms, a pass-through between the judge's bench and the courtroom deputy can be provided. The pass-through allows for the convenient and inconspicuous transfer of case files and messages.

The station must accommodate the following storage:

- Two built-in file drawers, each a minimum of 20 inches (500 mm) deep, able to accommodate both letter- and legal-sized files
- A lockable drawer for writing instruments and paper (legal size)
- Storage for AV equipment supplies
- An adjustable shelf in the station a minimum of 18 inches (450 mm) deep by 36 inches (925 mm) long for different sized exhibits

Evidence Cabinet (District and Magistrate Judges' Courtrooms). In district and magistrate judge courtrooms, a securable cabinet must be provided near the deputy clerk's station for letter- or legal-sized documents or large bulky objects.

Witness Box (District, Magistrate, and Bankruptcy Judges' Courtrooms). The floor level of the witness box must be two steps (12 inches or 300 mm) above floor level. A ramp shall be provided into the witness box, with a subtle ridge at the step to

prevent chairs from rolling off. A deep, fixed shelf must be provided for the witness to receive, examine, and return exhibits. When needed, a fully enclosed witness box (with gate access) shall be provided to contain witnesses in custody.

The witness chair may be a fixed swivel chair, movable along a floor track or retractable, or a chair that is movable. The witness box must be large enough to accommodate a movable interpreter's chair when needed.

The witness box may be movable to accommodate different types of proceedings and the preferences of the presiding judge.

Jury Box (District and Magistrate Judges' Courtrooms). Fixed-base rocking swivel armchairs shall be provided in the jury box. Chairs shall be selected to fit in the allowed space without the chair arms colliding when the chairs swivel. A fixed shelf for exhibits can be designed as an integral part of the jury box.

Law Clerk Station. A work surface a minimum of 24 inches (600 mm) deep by 60 inches (1,525 mm) wide should be provided at desk height. Where more than one law clerk occupies a station, each clerk should be allocated a work surface area a minimum of 30 inches (775 mm) wide. Where a computer is used, a corner or side work surface should be provided that is sized to support a computer. The computer should be ergonomically placed for the clerk's comfort without obstructing essential sight lines. The front of the work surface must have a rail or barrier a minimum of 4 inches (100 mm) high around the top to prevent paper and materials from falling to the floor.

Two 20-inch (500-mm) deep file drawers should be provided to accommodate both letter- and legal-size files. Lockable storage drawers should be provided to accommodate writing implements and legal pads.

In district, magistrate, or bankruptcy judges' courtrooms, a pass-through between the judge's bench and the law clerk station can be provided to allow for the convenient and inconspicuous transfer of documents and messages.

Bailiff Station (Appellate). A work surface 24 inches (600 mm) deep and 60 inches (1,525 mm) wide must be provided at desk height. Where a computer is used, a

corner or side work surface should be provided that is sized to support a computer. Lockable storage drawers should be provided to accommodate writing implements and legal pads.

Court Reporter/Recorder. Some court reporting/recording technologies require a work surface as part of the station. Work surfaces should be sized to satisfy the requirements of the specific technologies used. The workstation should include a modesty panel.

A lockable, built-in cabinet must be provided for stenographic equipment. Provision of an electrical outlet in the cabinet should be considered to allow the battery of the stenographic equipment to be charged while in storage.

Furniture and other equipment used by the court reporter/recorder should be movable so that it can be rearranged easily to suit each court reporter or judge.

Recording Equipment Cabinet. A cabinet with an adjustable shelf and a drawer must be provided. The drawer should be at least six 6 inches (150 mm) high and lockable. The cabinet should be provided in a location convenient to the court staff operating the recording equipment.

Attorney and Litigant Tables (Movable). Each attorney/litigant table must have a work surface a minimum of 42 inches (1,075 mm) deep and 84 inches (2,150 mm) wide, allowing at least two linear feet per person. A modesty panel should be provided around each attorney/litigant table that is sufficient to shield the jurors' view of incustody defendants when they are manacled in the courtroom. Two 20-inch (500-mm) deep file drawers should be provided to accommodate both letter- and legal-size files. Lockable storage drawers should be provided to accommodate writing implements and legal pads.

Attorney and Litigant Lectern. A fixed and/or movable, height-adjustable lectern must be provided for attorneys. Lectern controls must be located within the range of motion of persons with disabilities and should incorporate task lighting.

In appellate courtrooms, the lectern may be fixed and must incorporate a clock/timer to notify attorneys of the time remaining for argument.

Spectator Seating. Benches or fixed chairs must be provided. A millwork rail divides the wall and spectator area. The rail can have an accessible gate, at least 32 inches (815 mm) wide, to admit attorneys, witnesses, U.S. Marshals Service (USMS) personnel, and other authorized persons into the well. This rail is optional in bankruptcy courtrooms. Some courts have opted not to have the gate.

Displays. If needed by the court, ceiling-mounted audiovisual screens are a part of a separate audiovisual budget. A wall-mounted writing/display/projection surface should be provided and should be built into a wall (preferred), or it can be portable. Each display shall be 72 inches (183 mm) high, 60 inches (152 mm) wide, and 48 inches (122 mm) above the courtroom well level. The boards can be integrated into the courtroom design by a flush swivel-mount display system including doors that are finished in the same material as the surrounding wall. White magnetic dry-marker boards shall be provided for charting, drawing, and holding paper exhibits, together with tackboard for holding exhibits. Storage shall be provided for an adequate supply of magnetic strips, markers, and cleaning cloths. Monitors and other means of electronic display can be substituted in consultation with the court.

► Associated Spaces

Public Waiting Areas. Public waiting areas serve as extensions of public lobby and circulation areas adjacent to courtrooms; therefore, the millwork utilized for these spaces must be consistent with that of the spaces they adjoin.

► Judges' Chambers Suites

Millwork, such as fixed bookcases with adjustable shelving, within a judge's chambers should have a similar design quality to that of the courtroom interiors.

▶ Central Court Libraries

Circulation/Reference Areas. The circulation/reference desk must be designed to accommodate new technologies, including computers, modems, and printers; online computerized library catalog (OCLC) terminals; public access CD-ROM stations; printers; and a fax machine.

▶ Clerk's Office

Counter. A glass security window that complies with the requirements of USMS Publication 64 shall be installed above the transaction counter. Refer to Chapter 8, "Clerk's Office," for details on the size of the transaction counter and related spaces.

► Probation and Pretrial Services Offices

Counter/Screening. A glass security window that complies with the requirements of USMS Publication 64 shall be installed above the counter.

Millwork Table

Table 12.2 provides the design team with the requirements for millwork in courtrooms, service units, and toilet facilities and other areas of the courthouse.

Table 12.2 Millwork

SPACE AND MILLWORK	CAPACITY	NOTES
COURTROOMS AND ASSOCIAT	ED SPACES	
APPELLATE EN BANC COURTROOM		
Judges' Bench	Multiple	
Deputy Clerk Station	1–2	
Recording Equipment Cabinet	N/A	
Law Clerk Station	3	
Bailiff Station (optional)	1	
Lectern (fixed or movable)	N/A	Accommodate a clock/timer, a microphone, and task lighting
Spectator Seating	144 & 4 wheelchair spaces	
APPELLATE PANEL COURTROOM		
Judges' Bench	3	
Courtroom Deputy Clerk Station	1–2	
Recording Equipment Cabinet	N/A	
Law Clerk Station	3	
Bailiff Station (optional)	1	
Lectern (fixed or movable)	N/A	Accommodate a clock/timer, a microphone, and task lighting
Spectator Seating	74 & 4 wheelchair spaces	
DISTRICT JUDGE COURTROOM		
Judge's Bench	1	
Courtroom Deputy Clerk Station	1–2	
Evidence Cabinet	N/A	
Court Reporter/Recorder Station	1	
Recording Equipment Cabinet	N/A	
Law Clerk Station	1	
Witness Box	1–2	
Jury Box	16	
Lectern (movable)	N/A	Accommodate a microphone and task lighting
Spectator Seating	65 & 4 wheelchair spaces	
DISTRICT SPECIAL PROCEEDINGS COU	IRTROOM	
Judges' Bench	1–3	
Deputy Clerk Station	1–2	
Evidence Cabinet	N/A	
Court Reporter/Recorder Station	1	
Recording Equipment Cabinet	N/A	
Law Clerk Station	1	

Table 12.2 Millwork (cont'd)

SPACE AND MILLWORK	CAPACITY	NOTES
Witness Box	1–2	
Jury Box	18	
Lectern (movable)	N/A	Accommodate a microphone and task lighting
Spectator Seating	100 & 4 wheelchair spaces	
MAGISTRATE JUDGE COURTROOM		
Judge's Bench	1	
Deputy Clerk Station	1–2	
Evidence Cabinet	N/A	
Court Reporter/Recorder Station	1	
Recording Equipment Cabinet	N/A	
Law Clerk Station	1	
Witness Box	1–2	
Jury Box	12	
Lectern (movable)	N/A	Accommodate a microphone and task lighting
Spectator Seating	55 & 4 wheelchair spaces	
BANKRUPTCY JUDGE COURTROOM		
Judge's Bench	1	
Deputy Clerk Station	1–2	
Court Reporter/Recorder Station	1	
Recording Equipment Cabinet	N/A	
Law Clerk Station	1	
Witness Box	1–2	
Lectern (movable)	N/A	Accommodate a microphone and task lighting
Spectator Seating	73 & 4 wheelchair spaces	
APPELLATE COURTROOM ASSOCIATED	SPACES	
Service Unit, Judges' Conference Room	N/A	Accommodate a sink, microwave oven, and a refrigerator
Judges' Robing Room	N/A	Lockers (to accommodate a robe)
Lavatory Cabinet Toilet	N/A	Sink
Public Waiting Area Benches	N/A	
DISTRICT/MAGISTRATE/BANKRUPTCY J	IUDGE COURTROOM ASSOCIAT	ED SPACES
Judges' Conference/Robing Room	N/A	Lockers: Individual full-sized lockers, each locker 12 inches (300 mm) wide by 12 inches (300 mm) deep by 72 inches (1,825 mm) high, with one shelf and coat rod
Public Waiting Area Benches	N/A	

Table 12.2 Millwork (cont'd)

Accommodate sinks Accommodate a sink, a microwave oven, and a coffeemaker 30 inches (775 mm) deep by 35 inches (925 mm) wide, with task lighting and a standard power outlet Accommodate a sink in each room Accommodate a sink, a microwave oven, and a coffeemaker
Accommodate sinks Accommodate a sink, a microwave oven, and a coffeemaker 30 inches (775 mm) deep by 35 inches (925 mm) wide, with task lighting and a standard power outlet Accommodate a sink in each room
Accommodate sinks Accommodate a sink, a microwave oven, and a coffeemaker 30 inches (775 mm) deep by 35 inches (925 mm) wide, with task lighting and a standard power outlet Accommodate a sink in each room
Accommodate a sink, a microwave oven, and a coffeemaker 30 inches (775 mm) deep by 35 inches (925 mm) wide, with task lighting and a standard power outlet Accommodate a sink in each room
30 inches (775 mm) deep by 35 inches (925 mm) wide, with task lighting and a standard power outlet Accommodate a sink in each room
standard power outlet Accommodate a sink in each room
Accommodate a sink, a microwave oven, and a coffeemaker
Accommodate a sink in each room
Accommodate a sink, a microwave oven, a coffeemaker, and potentially vending machines
Work surface 30 inches (775 mm) deep min. by 60 inches (1,525 mm) wide min. Must be as high as or higher than the witness box.
Work surface 30 inches (775 mm) deep min. by 60 inches (1,525 mm) wide min. The station must be as high as the witness box.
Work surface 30 inches (775 mm) deep min. by 60 inches (1,525 mm) wide min. The station must be as high as the witness box.
May be three tiers of 8 or two tiers of 12 with an aisle to create two sections.
Must be partially enclosed and include a modesty panel. Box must have space for an interpreter seated next to or slightly behind the witness.
Accommodate a sink and a drawer with storage below
Location is at the discretion of the judge. Shelving shall be affixed to the wall. Wood shall match or complement the architectural trim. Provide fixed bookcases with adjustable shelving in the following quantities: circuit judge – 25 ranges; district judge – 20 ranges; magistrate judge – 10 ranges ¹ ; and bankruptcy judge – 10 ranges. Shelves must be a minimum of 10 inches deep and 7 shelves high.
Plastic-laminate counter and base cabinet with built-in drawers for small office supplies and open shelves for paper and other large supplies. Accommodate fax machine with additional working area.
Accommodate a sink, microwave oven, and refrigerator

Table 12.2 Millwork (cont'd)

SPACE AND MILLWORK	CAPACITY	NOTES
CENTRAL COURT LIBRARIES		
LIBRARY SPACES		
Circulation/Reference Desk	N/A	20 feet (6,100 mm) long min. for headquarters. 12 feet (3,700 mm) long min. for satellite library. Provide a book drop with a space for a book cart and compressible shelf. Counter must accommodate a computer, printers, online computerized library catalog (OCLC) terminals, public access CD-ROM printers, and a fax machine.
OTHER LIBRARY SPACES		
Technical Services Area Counter	N/A	Accommodate a sink
CLERK'S OFFICE		
CLERK'S OFFICE PUBLIC AREAS		
Counter (including cashier station)	N/A	Durable work surface 26–30 inches (660–920 mm) deep at stand-up height with a divider to the floor below. Accommodate a computer monitor, a keyboard, and a mouse on the staff side of the counter. In cases where ballistic, break-resistant glass is provided, the counter shall accommodate a document-sized deal tray transaction opening for each station provided.
PROBATION AND PRETRIAL SERVIO	CES OFFICES	
GENERAL OFFICE SPACES		
Counter/Screening	N/A	Durable work surface 26–30 inches (660–920 mm) deep at stand-up height with a divider to the floor below. Accommodate a computer monitor, a keyboard, and a mouse on the staff side of the counter. In cases where ballistic and break-resistant glass is provided, the counter shall accommodate a document-sized deal tray transaction opening for each station provided.
Service Unit	N/A	Accommodate a microwave oven and a sink
Enzyme Multiplied Immunoassay Technique (EMIT) Machine Counter	N/A	Chemical-resistant plastic-laminate counter 44 inches (1,125 mm) above finished floor sized to support 2 EMIT machines and allow adjacent work surface
Work Counter	N/A	Chemical-resistant plastic-laminate counter 44 inches (1,125 mm) above finished floor with upper and lower plastic-laminate storage cabinets. Accommodate a double stainless steel sink with disposal.
COMMON BUILDING SUPPORT SPA	CES	
CENTRAL MAIL ROOM FACILITY		
Counter	N/A	Accommodate a sink and eyewash and upper and lower storage for personal protection supplies and equipment, such as gloves, gowns, etc. Reference GSA P-100.

¹ A fixed bookcase range is 3 linear feet wide x 10 inches deep x 7 shelves high.

Furnishings

This section of the chapter addresses the furniture, accessories, and equipment requirements for special-function areas in the courthouse. Acquisition of furniture is typically accomplished under a separate contract.

The design team shall consult with the Administrative Office of the U.S. Courts (AOUSC) on furniture policies and procedures for judges and other court staff. The *Guide to Judiciary Policies and Procedures*, Chapter 5, "Personal Property and Furniture," sets the Juridical Conference policies for furniture acquisition and level of furniture for all court employees.

Furniture, equipment, and accessories in the courthouse may be procured as part of the construction contract or by the courts directly. Table 12.3 indicates the funding responsibility for furniture items. The balance of the furniture, equipment, and accessories listed is provided for the purpose of designing electrical infrastructure and laying out functional spaces.

► Furniture Acquisition Plan (FAP)

The *Guide to Judiciary Policies and Procedures*, Chapter 5, Part C, details the policies and procedures for FAPs.

The FAP is a formal documentation and analysis of a court's furniture requirements. All FAPs must be approved and signed by the chief judge and must include the following:

- Furniture inventory database
- Floor plans
- Budget request
- Specification for purchase
- List and cost of new furniture
- Room-by-room summary itemizing new and refurbished furniture costs
- Plan for the disposition of excess furniture
- Furniture procurement schedule

General Requirements. The design team shall consult with the court and AOUSC to ensure that the spaces can accommodate existing furniture that will be used in the new facility. However, spaces shall not exceed the size standards set forth in the *Design Guide* or exceed the space envelope for the court unit.

The requirements address overall goals for courthouse projects and therefore apply to the entire courthouse. A limited variety of furniture, accessories, and equipment that respond to construction-cost limitations and optimize life-cycle costs should be selected for each project. Consideration shall be given to using furniture within the same series to respond to variances in applications. Selections should also consider the operational flexibility of the court to move furnishings to support varying needs while maintaining aesthetically consistent environments.

Materials and products used must be durable, stain resistant, and low maintenance. Extra care should be taken in selecting materials and products for points where routine use would damage, discolor, or soil materials, such as on headrests on jury and spectator chairs. The selection of furniture materials must be appropriate for the specific space uses and compatible with the project budget.

The use of exotic hardwoods is prohibited in courthouse projects.

Furniture finishes selected must consider light reflectance.

Acoustic treatment or material should be provided as required to meet the noise criteria specified in Chapter 14, "Acoustics."

All furniture shall be selected to allow accessibility for all court activities. This includes ensuring that access routes are the same for persons with disabilities.

System furniture policies and guidance are provided in the *Guide to Judiciary Policies and Procedures*, Chapter 5, Part D.

Equipment for Service Units. Sinks are provided in service units are a part of the construction contract, and the location is provided in the respective space

requirements. Specific equipment to be provided is listed on the millwork schedule with the service units. Refer to the *Guide to Judiciary Policies and Procedures*, Chapter 5, Part C, for equipment selection and procurement requirements.

Toilet Room Accessories. Toilet rooms listed on the space lists shall receive the following accessories:

- Single-Person Toilet Room. All single-person toilet rooms listed on space lists shall receive a toilet paper holder, a paper towel dispenser/disposal unit, a soap dispenser, and a mirror.
- Multi-Person Toilet Room. All multi-person toilet rooms shall receive toilet paper holders, towel dispenser/disposal units, soap dispensers, and mirrors as appropriate for the size and capacity of the room.

► Courtrooms and Associated Spaces

In spaces with millwork, wainscot, or wood trim, where wood furniture or accessories will be utilized, furniture and accessories shall be selected with standard finishes as close as possible to the built-in woodwork of the space.

Courtrooms. Furniture, accessories, and equipment are an integral part of courtroom design. Their durability, functionality, and sustainability must reflect the aesthetics and dignity of the courtroom.

Furniture in courtrooms must be selected to support the need for all participants to see and hear one another clearly.

Judges' seating in multi-seat benches shall be the same. In courtrooms with single-judge benches, the judge shall select a chair to accommodate his or her stature and comfort. In all cases, the design team should consider the color scheme and finishes.

Court seals are purchased in accordance with the *Guide to Judiciary Policies and Procedures* through the GSA Great Seal Program. The seals are available in metal or polystyrene foam and come in a variety of finishes. When the design team opts to provide custom architectural seals in millwork, glass, marble, or metal, these design elements will be funded as part of the building construction budget.

Court Reporter/Recorder. Office furnishings, workstations, and work room furnishings provided for court reporters/recorders must be designed to meet GSA standards. Storage areas for court reporters/recorders must be furnished to accommodate typed transcripts and both loose and boxed stenotapes.

Attorney/Witness Room. Each room is provided with a lounge or conference furnishings.

Attorney Work Room: Appropriated court funds shall not be used to furnish the space.

Public Waiting Areas. Public waiting areas serve as extensions of public lobby and circulation areas adjacent to courtrooms; therefore, the furnishings utilized for these spaces must be consistent with those of the spaces they adjoin. Furnishings should be comfortable but durable, and should be fixed to the floor or walls in small groups.

Jury Facilities

Grand Jury Suite. The visual display board provided in the suite must be visible to all jurors.

► Judges' Chambers Suites

In spaces with millwork, wainscot, or wood trim, where wood furniture or accessories will be utilized, furniture and accessories should be selected with standard finishes as close as possible to the built-in woodwork of the space.

Furniture in the offices of a judge's support staff, including the secretary and law clerk, should be coordinated to complement the finishes used throughout the judge's chambers suite. Refer to the *Guide to Judiciary Policy and Procedures*, Chapter 5, Exhibit C-3, for furniture requirements for judges, law clerks, and chambers support staff.

► Court Unit Standards for Private and Open Workstations

Court Unit Executive, Supervisory Staff and Professional Staff Private Offices. Refer to the *Guide to Judiciary Policies and Procedures*, Chapter 5, Exhibit C-3, for furniture requirements for courtroom personnel and for private offices.

System Furniture Standards. The following standards apply to court staff work spaces throughout the courthouse, except the judges' chambers staff.

- Team Leaders. Systems furniture configuration, 96 square feet (8.9 m²)
- Court Unit Secretaries and Support Positions. Systems furniture, 64 square feet (5.9 m²)

The design team must plan and design the electrical, telephone, and data connections for systems furniture workstations to be provided through the access-floor cabling and electrical distribution systems.

► Central Court Libraries

Bookstacks. The majority of a library's collection must be shelved on double-faced units. A unit of shelving is 3 feet (914.4 mm) wide by 7 shelves high. Each row of shelves must be no more than seven or eight units long, with adjustable shelves and a reference pull-out shelf every other section. All shelving must be consistent with seismic-zone design requirements. See also Chapter 7, "Central Court Libraries," for additional design requirements.

In libraries with severe space constraints, the collection may be shelved in movable compact shelving.

Lockable book shelving provided by the court may be required if a room is accessible to the public or used for conferences.

Microform Area (Patrons and Staff). Because allowable live load requirements for microform storage cabinets can reach 500 pounds per square foot (23,950 Pa), equipment selection and location must be coordinated early in the planning process.

Furniture and Accessories

Table 12.3 provides information on furniture and accessories typically provided in courtrooms, courtroom associated spaces, central court libraries, and other special-use spaces within the courthouse. The equipment and accessories are listed to ensure that electrical requirements are considered during design development.

Table 12.3 Furniture, Accessories and Equipment

SPACE			FURNITURE, ACCESSORIES, AND EQUIPMENT		NDING DNSIBILITY
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary
COURTS A	ND ASSOCIATE	D SPAC	ES CONTRACTOR OF THE CONTRACTO		
APPELLAT	E EN BANC CO	URTRO	OM		
	Furniture	TBD	Judge's Bench Chair: Swivel tilt.		•
	Furniture	6	Task Chair: Swivel. Provide chairs for 2 deputy clerks, 3 law clerks, and 1 bailiff.		•
	Furniture	TBD	Chair (Attorney): Up to 4 chairs per attorney table maximum. Extra chairs of same type to be available, quantity determined by court. Storage out of courtroom.		•
	Furniture	4	Tables: "SMART" tables for attorneys and litigants.	•	
	Accessories	1	Clock: Electric.		•
APPELLAT	E PANEL COUR	RTROOM	1		
	Furniture	3	Judges' Chair: Swivel tilt.		•
	Furniture	6	Task Chair: Swivel. Provide chairs for 2 deputy clerks, 3 law clerks, and 1 bailiff.		•
	Furniture	TBD	Chair (Attorney): Up to 4 chairs per table maximum. Extra chairs of same type to be available, quantity determined by court. Storage out of courtroom.		•
	Furniture	3–8	Tables: "SMART" tables for attorneys and litigants.	•	
	Accessories	1	Clock: Electric.		•
DISTRICT J	UDGE COURTE	ROOM			
	Furniture	TBD	Judge's Chair: Swivel tilt.		
	Furniture	4	Task Chair (Deputy Clerk): Swivel. Provide chairs for 2 deputy clerks, 1 court reporter/recorder, and 1 law clerk.		•
	Furniture	1	Chair (Interpreter): Swivel, movable.		•
	Furniture	1	Chair (Witness): Swivel, movable.		
	Furniture	16	Chair (Jury): Swivel, fixed; 2 to be removable.		
	Furniture	TBD	Chairs (Attorneys and Litigants): Up to 8 seats per table.		•

FUNDING

Table 12.3 Furniture, Accessories and Equipment (cont'd)

SPACE			FURNITURE, ACCESSORIES, AND EQUIPMENT		NDING DNSIBILITY
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary
	Furniture	TBD	Chair (USMS Personnel): Movable.		
	Furniture	3–8	Tables: "SMART" tables for attorneys and litigants.	•	
	Accessories	1	Clock: Electric.		
DISTRICT S	SPECIAL PROCI	EEDINGS	S COURTROOM		
	Furniture	TBD	Judge's Chair: Swivel tilt.		
	Furniture	4	Task Chair: Swivel. Provide chairs for 2 deputy clerks, 1 court reporter/recorder, and 1 law clerk.		-
	Furniture	1	Chair (Interpreter): Swivel, movable.		•
	Furniture	1	Chair (Witness): Swivel, movable.		•
	Furniture	18	Chair (Jury): Swivel, fixed; 2 to be removable.	•	
	Furniture	TBD	Chairs (Attorney and Litigant): Up to 8 seats per table.		•
	Furniture	TBD	Chairs (USMS Personnel): Movable, as needed.		
	Furniture	3–8	Tables: "SMART" tables for attorneys and litigants.	•	
	Accessories	1	Clock: Electric.		•
//AGISTRA	TE JUDGE COL	JRTROO	M		
	Furniture	1	Judge's Chair: Swivel tilt.		•
	Furniture	4	Task Chair: Swivel. Provide chairs for 2 deputy clerks, 1 reporter/recorder, and 1 law clerk.		-
	Furniture	1	Chair (Interpreter): Swivel, movable.		•
	Furniture	1	Chair (Witness): Swivel, movable.		
	Furniture	12	Chair (Jury): Swivel, fixed; 2 to be removable.	•	
	Furniture	3–4	Tables: "SMART" tables for attorneys and litigants.		
	Furniture	TBD	Chair (Attorney and Litigant): Up to 4 chairs per table maximum. Extra chairs of same type to be available, quantity determined by court. Storage out of courtroom.		•

Table 12.3 Furniture, Accessories and Equipment (cont'd)

SPACE			FURNITURE, ACCESSORIES, AND EQUIPMENT		NDING NSIBILITY
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary
	Furniture	TBD	Chairs (USMS Personnel): Movable.		•
	Accessories	1	Clock: Electric		
BANKRUP'	TCY JUDGE CO	URTRO	DM		
	Furniture	1	Judge's Chair: Swivel, tilt.		
	Furniture	4	Task Chair: Swivel. Provide chairs for 2 deputy clerks, 1 court reporter/recorder, and 1 law clerk.		•
	Furniture	1	Chair (Interpreter): Swivel, movable.		
	Furniture	1	Chair (Witness): Swivel, movable.		
	Furniture	3–4	Tables: "SMART" tables for attorneys and litigants.		
	Furniture	TBD	Chair (Attorney and Litigants): Up to 4 chairs per table maximum. Extra chairs of same type to be available, quantity determined by court. Storage out of courtroom.		•
	Accessories	1	Clock: Electric		
ATTORNEY	//WITNESS RO	ОМ			
	Furniture	1	Small Conference Table		
	Furniture	1	Four Armchairs		
JURY ASSI	EMBLY SUITE				
JURY LOU	NGE				
	Furniture	TBD	Lounge Seating: Comfortable armchairs and/or modular, sectional sofas		
	Furniture	TBD	Chairs: A movable chair must be provided at each carrel.		
	Accessories	TBD	Magazine racks: A wall-mounted magazine and book rack should be provided near lounge areas.		•
	Furniture	1	TV Rack		
	Equipment	1	TV Monitors		

Table 12.3 Furniture, Accessories and Equipment (cont'd)

SPACE			FURNITURE, ACCESSORIES, AND EQUIPMENT		FUNDING RESPONSIBILITY	
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary	
JUROR AS	SEMBLY					
	Furniture	TBD	Chairs: Comfortable armchairs with fold-up tablet arms may be provided for prospective jurors filling out forms or taking notes during orientation; tables, lectern, screens, TV monitors. Movable.		•	
	Furniture	TBD	Tables: Movable tables, at least 36 inches (925 mm) by 36 inches (925 mm), must be provided. At least one table must be accessible by a wheelchair.		•	
		1	Lectern		•	
		TBD	TV Stands		•	
		TBD	TV Monitors		•	
		TBD	Screens		•	
EQUIPMEN	T STORAGE					
Furniture	Furniture	TBD	Shelves: Open shelves 18 inches (450 mm) deep on 2–3 walls, movable.		•	
SUPPLIES:	STORAGE					
Equipment	Furniture	TBD	Shelves: Open shelves 12 inches (300 mm) deep on 2–3 walls, movable.			
TRIAL JUR	Y SUITE					
Trial Jury Room	Furniture	1	Conference Table		•	
		7–18	Conference Chairs: Swivel base, with arms, movable.			
	Accessories	1	Visual Display Board: Wall-mounted screen, tackboard, whiteboard (magnetic), 18 inches (450 mm) by 24 inches (600 mm).		•	
VIDEO EQU	JIPMENT ROOM					
Furniture		TBD	Visual Display Board: Screen, tackboard, whiteboard (magnetic).		•	
		TBD	Video Monitor Station: Provision for VCR, movable.		•	

Table 12.3 Furniture, Accessories and Equipment (cont'd)

SPACE			FURNITURE, ACCESSORIES, AND EQUIPMENT	FUNDING RESPONSIBILITY	
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary
GRAND JUI	RY SUITE				
SWORN-JU	RY CUSTODIA	N STATIO	ON		
	Furniture	TBD	Desk: With drawer, movable.		
	Furniture	TBD	Task Chair: Armchair, movable.		
GRAND JUI	RY HEARING R	OOM			
	Furniture	16–23	Chairs: Comfortable, fixed-base swivel armchairs. A writing surface must be provided, either as tablet arms on the chairs or separate tables or counters. The writing surface must not exceed 18 inches (450 mm) in depth.	•	
	Furniture	TBD	Chairs: With arms, swivel base, movable, for the attorney, the grand jury foreperson, the grand jury secretary, a witness, an interpreter, and the court reporter/recorder		•
	Accessories	TBD	Visual Display Board: A wall-mounted screen, tackboard, whiteboard (magnetic), 18 inches (450 mm) by 24 inches (600 mm)		•
VIDEO EQU	IPMENT ROOM				
			Video Monitor Station: Movable		
			DVD		
STORAGE					
	Furniture	TBD	Shelving: 12-inch (300-mm) deep open shelves on 2–3 walls		•
CIRCUIT HE	EADQUARTERS	LIBRAF	RY		
PUBLIC EN	TRY LOBBY				
	Furniture	TBD	Seating: Lounge, movable		•
	Furniture	TBD	Library Shelves: 3 feet (925 mm) wide by 10 inches (250 mm) deep nominal min. metal shelving system. End panels shall be provided by the shelving manufacturer with a wood veneer finish to complement the wood trim and doors used in the library. Cantilever-type shelving is preferable wherever seismic anchoring is needed. Reference materials.	•	
	Furniture	TBD	Card Catalog		
			-		

Table 12.3
Furniture, Accessories and Equipment (cont'd)

SPACE		FURNITURE, ACCESSORIES, AND EQUIPMENT		FUNDING RESPONSIBILITY	
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary
	Furniture	TBD	Computer Workstation: To support computerized catalog, movable		
			Chair: For use at card catalog workstation, movable		
	Furniture	TBD	Book Carts		•
	Accessories	TBD	Clock: Wall mounted		•
PERIODICA	AL AREA				
	Furniture	TBD	Shelves: Periodical shelving, movable		•
	Furniture	TBD	Newspaper Racks		•
	Furniture	TBD	Magazine Displays		•
	Furniture	TBD	Lounge Chairs		
	Furniture	TBD	Side Tables		•
PUBLIC CO	MPUTER AIDE	D LEGAL	L RESEARCH (CALR)		
	Furniture	TBD	Workstation: L- or U-shaped work surface enclosed by acoustic panels with enough space to accommodate shelving		•
	Furniture	TBD	Task Chair: Swivel base with short arms		•
	Furniture	TBD	Bookshelf: For use in workstation		•
	Furniture	TBD	Bookshelf: For manuals and aids in the CALR area		•
	Accessories		Clock: Wall mounted		•
STAFF CAI	LR				
	Furniture	TBD	Task Chair: Swivel base with recessed arms		•
	Furniture	TBD	Bookshelf: For use in workstation		•
	Furniture	TBD	Bookshelf: For manuals and aids in the CALR area		•
	Accessories	1	Clock: Wall mounted		•
STUDY RO	ОМ				
<u> </u>	Furniture	TBD	Table: 4 feet by 8 feet (1,225 mm by 2,425 mm)		•
	Furniture	4	Chairs: 4 chairs table		•
	Accessories	TBD	Clock: Wall mounted		

Table 12.3 Furniture, Accessories and Equipment (cont'd)

SPACE		FURNITURE, ACCESSORIES, AND EQUIPMENT		FUNDING RESPONSIBILITY	
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary
COURT PE	ERSONNEL WOR	RK AREA	1		
	Furniture	TBD	Conference Table (option 1): With room to accommodate computer, printer, typewriter		
	Furniture	TBD	Carrel (option 2): With room to accommodate computer, printer, typewriter		•
	Furniture	TBD	Chair		•
	Accessories	1	Clock: Wall mounted		•
PUBLIC C	OPIER AREA				
	Furniture	1	Work Surface: Copier, work surface, supplies storage		•
	Furniture	1	Storage: To accommodate supplies, with 12-inch (300-mm) deep shelves		•
STAFF CO	PIER				
	Furniture	1	Work Surface: Copier, work surface, supplies storage		•
	Furniture	1	Storage Cabinet: To accommodate supplies, with 12-inch (300-mm) deep shelves		•
MICROFO	RM AREA: PUBL	IC AND	STAFF		
	Furniture	TBD	Carrel: To support microform reader/printer, chair, microform storage cabinets		•
	Furniture	TBD	Chair		
	Furniture	1	Storage Cabinet: To store microforms		•
TECHNICA	AL SERVICES AF	REA			
	Accessories	1	Book Cart		
	Furniture	1	Storage Cabinet: To accommodate supplies, with 12-inch (300-mm) deep shelves		•
	Furniture	TBD	File Cabinet		
Storage Area	Furniture	TBD	18-inch (450-mm) deep shelves		•
FREIGHT/I	MAILROOM				
	Furniture	TBD	Sorting tables, mail slots		

Table 12.3
Furniture, Accessories and Equipment (cont'd)

SPACE			FURNITURE, ACCESSORIES, AND EQUIPMENT	FUNDING RESPONSIBILITY	
	Туре	Qty.	Movable furniture is noted here for illustrative purposes in determining dimensions of spaces and electrical requirements.	GSA	Judiciary
PROBATIO	N URINALYSIS	LABOR	ATORY		
			See Design Requirements for U.S. Probation and Pretrial Services Offices		
	Furniture	2	Stools: Height appropriate for 44-inch (1,125-mm) counters, design appropriate for duration of use. Coordinate with electrical requirements in Chapter 9.		•
	Accessories	1	Biological Waste Trash Disposal: Size and quantity appropriate for use and requirements		•
	Equipment	2	Refrigerators: 2 full-size refrigerators with freezers		•
ELECTRO	NIC MONITORIN	G EQUIF	PMENT STORAGE/REPAIR ROOM		
	Furniture		Shelves: Steel shelving sized to support min. of twenty-five 3-foot (925-mm) long by 1-foot (300-mm) wide by 1-foot (300-mm) deep boxes. Verify that increase in capacity is not required.		•
	Furniture	1	Work Table: Suitable for equipment repair		•
CENTRAL	MAILROOM FAC	CILITY			
		TBD	Sorting Tables		•
	Furniture	TBD	Task Chairs		•
	Furniture	TBD	Mail Slots		•
Furniture	Furniture	TBD	Storage Unit: For supplies and equipment		•
rumiture	Accessories	TBD	Isolation Tubs: With "tight seal" lid		•
JUDGE'S I	DINING ROOM				
			Conference table		
		TBD	Chairs		

13

This chapter applies to interior signage throughout U.S. federal court facilities.

INTERIOR SIGNAGE

Introduction

Signs significantly impact the functional and aesthetic quality of a court facility. Many federal courthouses are large, complex structures requiring clear and coordinated systems of signage and way-finding that allow first-time users to locate their place of involvement in the judicial process as quickly and directly as possible. Signs and signing systems should provide a coordinated and efficient system of recognition, direction, and information throughout a courthouse. The specific strategy for a building's signs must be determined early in the facility design process and developed along with other details of the design. Signage should emphasize the natural flow of the spaces in the courthouse, which should be the principle means for directing the public to elevators, clerks' offices, jury assembly areas, courtrooms, and other destinations.

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The references listed below relate specifically to this chapter.

 Architectural Barriers Act Accessibility Standards (ABAAS)

- California Trial Court Facilities Standards, Judicial Council of California
- Guide to Judiciary Policies and Procedures, Chapter 5, "Property Management and Furniture," Part F

Scope and Budget

The General Services Administration (GSA) provides limited signage in federally owned and leased buildings in accordance with the terms and conditions of applicable lease agreements, occupancy agreements, and construction contracts. This scope typically includes exterior signage and the main lobby building directory in new construction projects. The design team should refer to *Facilities Standards for the Public Buildings Service* (GSA P-100)/GSA signage standards will be included in the architectural/engineering scope of services.

The judiciary must fund any additional signage beyond the GSA scope. Typically all interior signage in court spaces, including floor directories, is to be paid for by the judiciary. Refer to the *Guide to Judiciary Policies and Procedures*, Chapter 5, "Property Management and Furniture," Part F, for a detailed explanation of the design and procurement process for interior signage.

Design Requirements

The three basic categories of signs are (1) informational, (2) direction, and (3) labels. Labels describe the function or occupant of a space. Informational signs advise of court facility activities and schedules. Computer-based systems may be used to integrate and automate the signs.

All signage must meet the requirements of the Architectural Barriers Act (ABA). The U.S. Access Board are specific about parameters of design such as the location, size, color, and tactile qualities of signage.

Factors to be considered in the design of signs and public information systems include the following:

- Materials, colors, and graphics
- Placement of signs and kiosks
- Handicapped accessibility
- Placement of conduit for computer-based information systems
- Cost
- Flexibility for future modifications

A standardized, integrated, complementary, and comprehensive signage program shall address both code-required signage (such as exit signs, exiting plans, and room numbers) and non-code-required signage (building directories, notices, etc.). The graphics and signage programs shall be developed during early design stages to integrate signage with the design concept, functional program, and building circulation zones. Attractive, legible signs showing directions and information shall be incorporated into the design of all public areas. The signage program shall be adaptable for future change without damaging the public corridor wall finishes.

Rooms should be numbered logically and consecutively to enable visually impaired persons to make assumptions about where their destination is located. Public room numbers shall be sequential and predictable. Courtroom labels should be based on a predictable sequence. For example, a second-floor courtroom shall be labeled Courtroom 200.

Room label signage should be positioned at doorways, where sight-impaired persons expect to find information. Signage for building-management rooms, which are not accessible to the public, should be located in different areas than accessible signage. The following guidelines shall apply to signage and graphics in various locations within the building:

▶ Building Entry – GSA Scope

Signage at the entry shall be restricted to preserve a unified and attractive facade.

▶ Building Directory – GSA Scope

A building directory shall be located near the main public entrance. The directory shall contain a diagram listing all the major building components. This directory, which may be integrated into an information booth or kiosk, shall be located in an area seen by members of the public after they have been screened.

► Floor Directory – Judiciary Scope

Smaller directories shall be provided in each elevator lobby with information about the various occupants of that floor. Arrows shall be grouped in similar directions to facilitate communication.



► Courtroom Entry Signage – Judiciary Scope

All signs outside courtroom doors shall be of uniform appearance. The courtroom numbering system shall be displayed at the top and in the largest font size.

► Other Signage – Judiciary Scope

A consistent, controlled system of other signs, such as restricted access warnings, directional signs, signs designating special handicapped services, and procedural

guides, shall be provided. If high-traffic areas such as the jury assembly room and the public counter are not immediately visible from the entry lobby, clear graphics shall be prominently displayed to guide users to these areas.

Sign Type Samples

Figures 13.1-13.3¹ represent a comprehensive interior signage design package that complies with the *Guide to Judiciary Policies and Procedures*, GSA P-100, and accessibility requirements. The package includes examples of GSA and court-provided signs. The figures illustrate examples of the following:

- Floor directory
- Courtroom plaques
- Tenant plaque

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¹ Signage program is from the Howard M. Metzenbaum U.S. Courthouse in Cleveland, Ohio.

Figure 13.1 Floor Directory

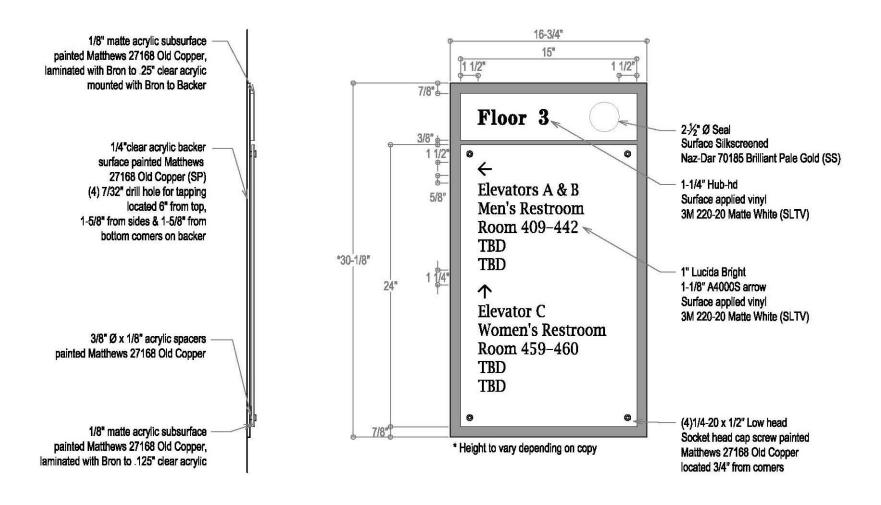


Figure 13.2 Courtroom Plaques

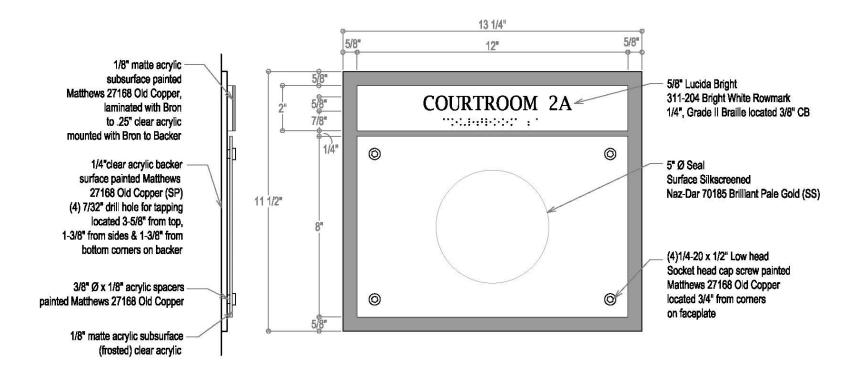
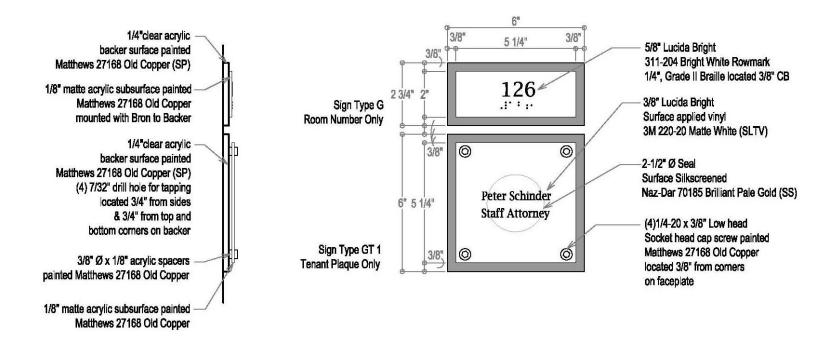


Figure 13.3
Private Office Plaque



14

This chapter discusses acoustic design concepts and outlines specific acoustic criteria for courthouses. Criteria in this chapter focus on the court-occupied spaces. Where detailed criteria are not provided for program areas, the requirements set forth in GSA P-100 shall govern.

ACOUSTICS

Introduction

The two key factors that determine the acoustic performance of spaces in a courthouse are speech intelligibility and acoustic privacy.

Speech intelligibility is a measure of the ability of a listener to understand what is being said. A high standard of speech intelligibility is critical to ensure that all questions, testimony, and discussion can be clearly understood by all the participants and observers of the event.

Speech privacy is a measure of speech audibility between adjacent spaces and is a function of the acoustic separation provided by the separating partition(s) and of the background noise levels in the two spaces.

The acoustic performance of a space can be specified by a synthesis of acoustic parameters, which can be predicted and measured during design.

► Speech Intelligibility

For unamplified speech, the two key parameters that determine the level of speech intelligibility are the level of background noise and room reverberance. For amplified speech, the third key parameter that needs to be taken into account is the performance of the sound-reinforcement system.

Installation of a sound-reinforcement system can help increase the level of speech intelligibility; however, poor room acoustic design cannot be compensated for with good sound system design. Both should be considered together from the outset.

Background noise is a product of several sources. The dominant component is typically noise associated with the heating or cooling system. This may include fan noise and regenerated flow noise associated with dampers, diffusers, and other mechanical system elements. Another component is noise ingress, either from external sources such as road traffic or from internal sources such as the activity of people in adjacent spaces. Noise criteria describe the desired level of background noise.

Achieving a high level of speech intelligibility requires that the signal-to-noise ratio, that is, the speech level over the background noise level, be optimized. This should be achieved by controlling the background noise level within the courtroom and optimizing the speech level through the room's acoustic design and the design of the sound-reinforcement system.

Room reverberance is generally defined by the reverberation time, which is the time it takes for sound to decay within a room, expressed in seconds. Too much reverberance will result in late sound reflections (echoes), which will compromise speech intelligibility. Reverberation time is directly proportional to the volume of the room and inversely proportional to the amount of sound absorption within the room. Therefore, the reverberation time can be reduced by reducing the room volume and/or increasing the amount of sound absorption.

► Acoustic Privacy

For any given courthouse space, it is important that speech from the activity within not be audible in adjacent spaces, and vice versa. Special attention should be paid at the earliest stages of planning to ensure that noise-producing spaces (building-systems equipment rooms, restrooms, circulation space, public lobbies, etc.) are not located directly adjacent (vertically or horizontally) to noise-sensitive spaces.

Internal partitions should be of a construction determined to achieve an appropriate level of airborne sound isolation, as measured per the ASTM E-90-99 standard. Buffer spaces and vestibules should be included where appropriate. Impact isolation, to control footfall noise from adjacent spaces, should also be considered.

Noise-sensitive spaces must be protected from external noise ingress, such as road traffic noise, airplanes passing overhead, and pedestrian activity. All facade elements (walls, glazing, roofs, etc.) should be designed to provide appropriate sound isolation.

Another fundamental consideration when the building is located above or close to significant sources of vibration, specifically subways, below-grade or tunnel roads or railways, at-grade railways, trams, and metro systems, is the need to take into account groundborne noise and vibration in the building. In these areas, vibration isolation may be required to isolate the building structure from the vibration source. Advice should be sought at the earliest available opportunity.

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The reference listed below relates specifically to this chapter.

 American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Handbook of Fundamentals

Design Requirements

This section of the *Design Guide* presents a definition of the acoustic criteria applicable to courthouse buildings as well as design guidance to ensure that the necessary criteria are met.

The design team should seek the advice of an acoustic consultant in order to ensure that the design recommendations are successfully implemented. It should be noted that minor changes in room shape, form, and finishes can have a significant effect on the room acoustics. The same is true for variations in the building systems, equipment, facade, and other construction design. Therefore, it should not be assumed, regardless of the prior experience of the design team, that targets can be met based on previous projects if changes are considered in subsequent designs.

► Speech Intelligibility

Speech intelligibility is commonly measured using the Speech Transmission Index (STI). The STI uses a rating system from 0 to 1 to subjectively rate intelligibility, broken down as follows:

- < 0.40 = Poor
- 0.41-0.50 = Fair
- 0.51-0.60 = Good
- 0.61-0.75 = Very good
- 0.76-1.0 = Excellent

The design target for all critical spaces is to achieve an STI rating of > 0.6 for both unamplified and amplified speech. A sound-reinforcement system should be used to achieve an STI rating of very good to excellent. The STI should be measured when the audio system is completely installed, in accordance with the method laid out in IEC 60268-16 or ANSI S3.2-1995.

► Room Reverberation Times

Critical spaces should be designed to achieve the reverberation times provided in Table 14.1.

It should be noted that guidance elsewhere in this document regarding courtroom dimensions will result in a room reverberation time that, in the absence of sound-absorbing treatment, will exceed the targets indicated. Therefore, specific guidance should be followed to ensure that room reverberance is appropriately controlled. The relevant guidance is provided in Table 14.2. In all cases, the introduction of sound-absorbing finishes should be an essential component of the room design.

▶ Room Background Noise Levels

Room background noise levels are comprised of the noise from building systems (HVAC, electrical, lighting, audiovisual systems, etc.) and noise ingress from external sources (road, rail, and air traffic; pedestrian activity; etc.) and internal sources (such as the activity of people or the operation of equipment in adjacent spaces). All sources of noise must be controlled to appropriate levels.

Acceptable levels of noise from building services systems depend on the sensitivity of the room function. In addition, constant noise such as that from HVAC systems also masks the ingress of external noise or activity noise in other areas of the building.

In accordance with the ASHRAE *Handbook of Fundamentals*, all spaces should be rated using the room criterion (RC) curves, that is, background noise.

If variable HVAC systems are used, the implications for the building design approach must be examined. This will also have ramifications for the design of the building facade (if used to control noise ingress from external sources) and internal room-to-room space privacy.

To maintain constant RC background noise levels, it may be necessary to introduce a sound-masking system using distributed loudspeakers. The spectral shape of the sound-masking system must be carefully designed and specified such that it does not exceed the target criteria provided in Table 14.2 and does not contain any tonal elements.

The increasing use of videoconferencing technology in the courtroom means that low-frequency noise needs to be adequately controlled to ensure that suitable levels of sound quality can be achieved in reproduction and recording.

► External Noise Ingress

Noise from external sources may consist of road, rail, air, or pedestrian traffic or noise from the external mechanical equipment of the building or surrounding buildings. In all cases, the noise from these sources should be limited in order not to disturb court functioning.

In order to limit external noise ingress, an assessment must be made of future noise levels on the site. Step one will require that a site noise survey be conducted. An acoustic consultant should measure and record external noise at appropriate intervals during the operating hours of the court and document these as a baseline.

In the case of a new courthouse, any known future conditions, such as new or rerouted roads, new railways, airport flight paths, and so on should be reviewed and the noise impact determined. Future land use of surrounding areas may also contribute to external noise and should be reviewed with the local planning commission.

The acoustic consultant will then use this information to provide design guidance and improve the sound isolation performance of the proposed building facade using the Sound Transmission Class (STC) criteria.

► Internal Airborne Sound Insulation

In order to achieve the required privacy between spaces, it is important to ensure that all internal partitions, walls, floors, and ceilings, as well as doors and windows, achieve an adequate level of sound insulation.

The guidelines presented here are expressed in terms of the Noise Isolation Class (NIC), a single-number rating describing the combined performance of all building elements in isolating one room from another. The in-field sound-level difference between adjacent spaces should be measured in accordance with ASTM E336-05 Standard Test Method for Measurement of Airborne Sound Insulation in Buildings, and the NIC value should be determined in accordance with ASTM E413-04 Classification for Rating Sound Insulation.

The higher the NIC rating, the better the privacy between spaces.

The level of privacy also depends on the background noise levels in the spaces. For example, a room in which the partitions have a rating of NIC 50 and a background noise level of RC 35 will have the same level of privacy as a room in which the partitions have a rating of NIC 45 and a background noise level of RC 40.

The required sound insulation performance (NIC) should be defined by the background noise criteria (RC) and the required level of privacy, as shown in Table 14.1. The levels circled in the table demonstrate a required privacy level of confidential.

Table 14.1 Room Partitioning Requirements

PRIVACY LEVELS		BACKGROUND NOISE (RC)				
		25	30	35	40	
Inaudible	CL	75	70	65	60	
Confidential	ISE ISC	60	55	50	45	
Normal	OLATI S (NIC)	50	45	40	35	
Minimal	NO	40	35	30	25	

It is the responsibility of the architect and acoustic consultant to minimize the use of heavy internal partition construction and full-height (slab-to-slab) partitions with the exception of areas where it is a requirement. Attention should be paid to the use of acoustically neutral spaces as buffer zones between sensitive areas. Where buffer zones or neutral spaces are used, the design team can use discretion in reducing the performance of partitions while ensuring that the subjective intent of the privacy standard is achieved.

► Impact Sound Isolation

The Impact Isolation Class (IIC) identifies the requirement for control of impact noise (footfall, etc.) from adjacent spaces (horizontal or vertical). IIC values for the floor-ceiling assembly above key critical spaces (courtrooms, conference rooms, study areas, jury deliberation rooms, and attorney/witness rooms) should be a minimum of 50.

IIC 50 can be achieved by using carpet as the floor finish or by using a resilient interlayer within the floor construction, such as Regupol QT, Sylomer, Enkasonic, or Kinetics Soundmatt.

► Raised Access Floor Systems

Given that raised access floor systems are required throughout the courthouse, the design team must balance this against sound isolation performance very early in the design process. At the outset, building planning should try to separate sensitive spaces from each other by the use of acoustically neutral spaces (storerooms, risers, shafts, etc.).

Methods for improving the sound isolation of partitions at the head and base (e.g., "pan"-type floor tiles filled with lightweight concrete, packing with dense compressed mineral fiber, duct lagging or similar, use of cross-talk attenuators or similar) can also be considered. The use of access floors does not absolve the design team from achieving the required sound isolation performance, but places onus on the design team to consider these requirements from the earliest design stages.

Vibration

Vibration limits for key sensitive areas are specified in accordance with ANSI S3.29-1983 Guide to the Evaluation of Human Exposure to Vibration in Buildings. Limits should be set on the basis of multiples of the relevant base curve. Appropriate multiples are as follows:

Courtrooms: 1.4Other areas: 4.0

Table 14.2 Acoustic Performance Requirements¹

SPACES	PRI VACY LEVEL	REVERBERATION TIME (RT) in seconds	BACKGROUND NOISE ROOM CRITERION (RC) curve	NOISE ISOLATIONS CLASS (NIC) in decibels	SPEECH INTELLIGIBILITY INDEX (STI) without sound system enhancement
COURTROOM					
Courtroom	Confidential	0.6–0.7	25–30	55–60	0.6 (Good)
JUDGES' CHAMBERS SUITE					
Judge's Chambers Private Office	Confidential	0.4-0.6	35	50	0.6 (Good)
Law Clerks' Offices	Normal	0.5-0.6	30	55	0.6 (Good)
Judge's Chambers Conference/Reference Room	Confidential	0.5–0.6	35	50	0.6 (Good)
COURTROOM ASSOCIATED SPACES					
Circuit Judge's Robing Room	Normal	0.5-0.6	35	40	0.6 (Good)
District, Magistrate, and Bankruptcy Judge's Conference/Robing Room	Normal	0.5–0.6	35	40	0.6 (Good)
Attorney Work Room	Normal	0.5-0.6	35	40	0.6 (Good)
District, Magistrate, and Bankruptcy Attorney/Witness Room	Confidential	0.5–0.7	30	55	0.6 (Good)
Public Waiting Areas	Normal	0.5–0.6	40	25	0.6 (Good)

Table 14.2
Acoustic Performance Requirements (cont'd)

	RI VACY	REVERBERATION TIME (RT) in seconds	BACKGROUND NOISE ROOM CRITERION (RC) curve	NOISE ISOLATIONS CLASS (NIC) in decibels	SPEECH INTELLIGIBILITY INDEX (STI) without sound system enhancement
JURY FACILITIES					
Jury Assembly Suite N	lormal	0.6–0.8	40	35	0.6 (Good)
Trial Jury Suite In	naudible	0.4–0.6	30	70	0.6 (Good)
Grand Jury Hearing Room Ir	naudible	0.4–0.6	30	70	0.6 (Good)
OTHER COURT UNITS					
Library Lobby M	/linimal	0.6–1.0	40	45	N/A
Library Study Room N	lormal	0.4–0.6	30	55	N/A
Probation and Pretrial Services Private Offices and/or Interview Rooms	Confidential	0.5–0.7	30	55	N/A
Federal Defender's Trial Preparation Suite	Confidential	0.5–0.7	30	55	N/A
Office of the Bankruptcy Administrator C	Confidential	0.5–0.7	30	55	N/A
Office of the Pre-Argument Conference Attorney	Confidential	0.5-0.7	30	55	N/A
COMMON BUILDING SPACES					
	Confidential	0.5–0.7	30	55	N/A
		0.5–0.7	30	55	N/A

¹ All other courthouse spaces not listed reference GSA P-100.

Courtrooms

The primary requirement is for high intelligibility and natural-sounding speech in the courtroom. To ensure that this is achieved, the courtroom must have the following characteristics:

- Controlled background noise from building services systems and audiovisual and other building equipment
- Appropriate room shape, form, and volume to ensure a suitable sound-reflection sequence and natural control of reverberance
- Appropriate control of room reverberance through the use of acoustic treatments
- Suitable sound isolation from all adjacent spaces

Background Noise Control. Specific NIC/RC targets are provided in Table 14.2. The design team should ensure that these limits are not exceeded through the use of any equipment or system within the space.

Room Shaping and Materials. Room shape and form have a fundamental effect on room acoustics and should be considered from the outset. General recommendations are as follows:

- The courtroom must not be a long or narrow rectangle finished totally with sound-reflective materials. Such conditions can cause excessive acoustic fluttering. Reducing the room length, avoiding the use of long parallel walls, and using appropriately selected absorptive finish materials can alleviate the problems.
- At the front of the room, from the judge's bench to just behind the location of the attorney teams, walls should be rectilinear and parallel to promote good distribution of lateral sound energy in the entire well area between the judge, jury, defendant, and attorney teams. Surface treatments should promote sound reflection. Some sound diffusion (through the use of surface texture or convex)

curvature) may be acceptable, as determined by a case-by-case evaluation. Concave curvature should be avoided in this area as it can often lead to sound-focusing issues.

- It is recommended that the ceiling at the front of the room be flat and sound reflecting to maximize speech intelligibility in the well. Significant down stands, coffers, or similar elements should generally be avoided as they will reduce the effective sound-reflecting treatment area.
- At the rear of the room (between the rear of the attorney area and the main public entrance to the courtroom), room shaping may vary, being rectilinear or curved, either convex or concave. This wall area should be the primary location for sound-absorbing treatment. It should be noted that the extent to which treatment is required will depend on the shape of the walls as well as on the volume of the room. A concave curvature is likely to require the most significant area of sound-absorbing treatment, to control not only reverberance but also sound focusing.
- The ceiling at the rear of the room may require some limited area of soundabsorbing treatment to prevent late reflected sounds returning to the front of the room. This should be determined on a case-by-case basis.
- In all cases, carpet or carpet tiles shall be used for the floor finish.

Sound Isolation. Soundlock lobbies or vestibules should be provided at all entrances to the courtroom. This provides an acoustic buffer zone between the courtroom and other public or nonpublic circulation spaces. Sound isolation from external noise sources, where the courtroom adjoins an external facade, should achieve the requirements of Table 14.1. Internal sound isolation should be achieved by meeting the STC performance requirements. Space planning should minimize, as far as is practical, locating noise-producing spaces (mechanical-systems rooms, toilets, public circulation areas, etc.) directly adjacent to the courtroom.

Speech Privacy. In order to allow sidebar conversations at the judge's bench to occur in privacy, the jury box should be located a minimum of 20 feet (6096 mm) away from the judge's location. This will still require such conversations to be held in low voices.

If greater privacy or shorter distances are necessary, it is recommended that a sound-masking system be provided. Such systems require careful design but allow for the broadcast of a shaped noise spectrum through loudspeakers in the room. The judge should have the ability to turn such a system on from the bench. A mute function should also be provided for the microphone to ensure the privacy of sidebar and bench discussions.

Loudspeaker Type, Location, and Orientation. It is important, in order to maximize speech intelligibility in the room, that the type, location, orientation, and distribution of loudspeakers be very carefully considered. The acoustic consultant should specify the minimum loudspeaker requirements for incorporation into the audiovisual consultant's or contractor's design.

In some cases, it may be most efficient to locate loudspeakers on or at the bench locations (judge, attorneys, jury box, and defendant) to achieve maximum speech intelligibility. The need for a time delay and/or local volume control should be determined on a case-by-case basis. Additionally, audiovisual equipment should be specified and selected for low noise output, so as not to impair listening in the courtroom.

▶ Courtroom Associated Spaces

Attorney Work Room. The primary requirement is for quiet and private working areas. Appropriate control of mechanical-systems background noise, sound isolation from adjacent spaces, and acoustic control are the key issues. Specific requirements are provided in Table 14.2.

The attorney work room should be acoustically and visually separate from other areas of the building. However, the standard of sound insulation is reduced in comparison to the judges' suites, such that a "good" standard of sound insulation is adequate.

The required reverberation time determines the degree to which acoustically absorptive finishes should be used in the attorney work room. See Table 14.2 for specific reverberation times.

District, Bankruptcy, and Magistrate Judge's Attorney/Witness Room. The primary requirement is for quiet and private working areas with appropriate sound insulation from the courtroom. Appropriate control of mechanical-systems background noise, sound isolation from adjacent spaces, and acoustic control are the key issues.

Privacy is of paramount importance. All walls to these areas must achieve a high degree of sound insulation. They need not be slab-to-slab, providing that the construction meets the required performance set out in Table 14.1 and an appropriate sound-isolating ceiling is provided. Doors should be appropriately acoustically rated, with all necessary sound-isolating seals and hardware.

Internal sound isolation should be achieved by meeting the performance requirements outlined in Table 14.1. All penetrations in walls to these areas should be appropriately sealed to maintain acoustic criteria set forth in this chapter. Recessed light fittings should be avoided, but where they are included they should be appropriately boxed in.

To ensure complete privacy of conversations, ducted systems should be provided with cross-talk attenuators at each wall penetration.

The required reverberation time determines the degree to which acoustically absorptive finishes should be used in the room. See Table 14.2 for specific reverberation times.

Public Waiting Areas. Public waiting areas must be separated acoustically from adjoining enclosed spaces. The same acoustic standards should be applied to public waiting areas as to attorney witness rooms.

▶ Judges' Chambers Suites

The primary requirement in judges' chambers suites is for quiet and private working areas. Appropriate control of mechanical-systems background noise, sound isolation from adjacent spaces, and acoustic control are the key issues. Specific requirements are provided in Table 14.1.

Privacy in the suites is of paramount importance. All walls to the judges' suites, private offices, and the reference/conference room must be slab-to-slab construction.

Sound isolation from external noise sources, where the courtroom adjoins an external facade, should achieve the requirements of Table 14.1. Internal sound isolation should be achieved by meeting the performance requirements in Table 14.1.

Space planning should minimize, as far as is practical, locating noise-producing spaces (mechanical-systems rooms, toilets, public circulation areas, etc.) directly adjacent to the suites. All penetrations in walls to these areas should be appropriately sealed in accordance with the requirements of Table 14.1.

All equipment serving these areas should incorporate appropriate noise- and vibration-control mountings to a distance of 10 feet (3 meters) from the perimeter of the suites to ensure complete privacy within.

To ensure complete privacy of conversations, ducted systems should be provided with cross-talk attenuators at each wall penetration.

See Table 14.2 for additional detail on acoustics for judges' chambers suites.

Plumbing runs must be isolated from judges' chambers and conference/reference rooms.

Jury Facilities

► Trial Jury Assembly Suite

Proper acoustics are important in the jury assembly suite because potential jurors receive instructions regarding their obligation. To enhance acoustics in the jury assembly area, a sound system should be provided. The system must be designed so that the loudspeakers distribute the majority of energy into the direct sound field, with minimum distribution into the reverberant field. This can be accomplished by providing a highly sound-absorbent environment, with a maximum reverberation time of 0.8 seconds. The acoustic privacy requirement for the jury assembly area is "normal."

► Trial Jury Suite

Trial jury suites must be acoustically enclosed. Trial jury suites adjoining other functional spaces must have soundproofed common walls. The acoustic privacy requirement is "inaudible" for the entire jury suite. To ensure intelligibility and privacy of speech within the trial jury suite, the soundlock entry doors must be fully gasketed.

Grand Jury Hearing Room

The acoustic privacy requirement for the hearing room in the grand jury suite is "inaudible."

Central Court Libraries

The entire library must be acoustically isolated from other court functions, including noise-generating functions within the library or adjacent spaces such as copier rooms or restrooms.

Probation and Pretrial Services Offices

All interview rooms and offices of probation and pretrial services supervision officers must be acoustically separate from adjacent areas (acoustic privacy requirement: "confidential"), with 55-decibel (dB) NIC partitions, gasketed doors, and background noise levels of 30 RC. Special consideration must be given to the design and fabrication of ducts to minimize acoustic problems. Refer to GSA P-100.

Other Court Units

► Office of the Pre-argument/Conference Attorney

Both executive offices and conference rooms must provide acoustic confidentiality.

► Office of the Bankruptcy Administrator

The executive office and conference rooms for the Office of the Bankruptcy Administrator must be designed for acoustic confidentiality.

► Trial Preparation Suite for the Federal Defender

The trial preparation suite for the federal defender's office must be designed to provide acoustic confidentiality.

▶ Design Requirements for All Other Court Spaces

Refer to GSA P-100.

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This chapter contains requirements for courthouse mechanical, electrical, lighting, communications, and raised access flooring systems. This chapter is intended to highlight specific system requirements within court-occupied spaces that are not addressed by GSA P-100 or other applicable codes and standards.

BUILDING SYSTEMS

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The references listed below relate specifically to this chapter.

Infrastructure requirements are critical to the success of courthouse low-voltage systems (e.g., audiovisual and data and telephone communications systems). Infrastructure requirements are defined in the *Courtroom Technology Manual* as well as in Telecommunications Industrial Association (TIA) publications and Electrical Industry Alliance (EIA) publications.

The following supporting documents provide the design team with the details to organize and guide the design and installation process of the courthouse low-voltage systems from design development to system inspection.

- ANSI/CSA/TIA/EIA-942 Telecommunications Infrastructure Standard for Data Centers
- Courtroom Technology Manual
- Facilities Standards for the Public Buildings Service (GSA P-100), Chapters 5, 6, and 9
- Illuminating Engineering Society of North America (IESNA) Lighting Handbook, 9th Edition, Chapter 10, "Lighting Design Guide"

- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume One, Courthouse Management Group Engineering and Architectural, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Two, Electronic Security and Hardware, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Three, Judicial Security Systems Requirements and Specifications, most current edition

Telecommunications Cabling Standards

 Telecommunications Industry Association (TIA) and Electronics Industries Alliance (EIA), TIA/EIA-568-B Series, Commercial Building

Telephone/Data Procurement Policy

 TIA/EIA-569-A, Commercial Building Standards for Telecommunications Pathways

Governing Codes and Criteria

The General Services Administration (GSA) has established *Facilities Standards for the Public Buildings Service*, commonly referred to as GSA P-100, as the basis of design criteria for building systems in new courthouses. The U.S. Marshals Service (USMS) has also developed courthouse building systems criteria pertaining to prisoner holding areas

and its own tenant space within the courthouse. Building codes are also used to establish baseline design criteria in U.S. court facilities. Refer to GSA P-100 for a comprehensive discussion of applicable codes and industry quality standards for various building systems.

Design, Procurement, and Construction Responsibilities

The GSA, as the developer and lessee of buildings that house the U.S. courts, has primary responsibility to design, procure, construct, test, start up, and maintain building systems for courthouses. Chapter 2, "Courthouse Programming and Budgetary Considerations," provides a summary of the funding responsibilities of the judiciary, the GSA, and other executive-branch agencies.

Primary building systems such as mechanical, plumbing, electrical, raised access flooring and lighting services are provided by the GSA as core and shell improvements. The requirements that follow for these primary services focus on criteria that are specific to spaces and functions found in federal courthouses.

Courthouse low-voltage systems for data, telecommunications, audiovisual, and other court technologies are designed, procured, installed, and tested by consultants engaged by the GSA and funded by the judiciary under a reimbursable work authorization or other funding document. The GSA, as the developer of court-occupied spaces, provides the infrastructure to support these systems as core and shell improvements. Information provided here is intended to facilitate the design of the infrastructure for these systems.

Mechanical Systems

General Design Concerns

When selecting mechanical systems and equipment for courthouses, the following factors must be considered:

- Workplace performance
- Reliability
- Maintainability
- Initial costs
- Operating costs
- Flexibility of control
- Sustainability

The selection of central plant equipment has a major impact on all factors, particularly initial cost and operating cost, predominately in the cooling cycle. The selection of space-conditioning equipment has the greatest impact on flexibility of control.

The number of air-handling units (AHUs) directly influences the flexibility of the building's heating, ventilating, and air-conditioning (HVAC) system, but it is also the greatest cost consideration. The zoning of air-handling systems must be in direct proportion to the occupancy of the spaces. The system design shall meet the occupancy requirements during standard hours of operation and provide a means of conditioning occupied spaces used during off-hours without conditioning unoccupied adjoining spaces. Proper zoning of building air-handling systems is important to efficient and reliable operation. AHUs should be limited in size to minimize the effect of mechanical failures and maintenance. The size of the system must also consider the provision of backup capacity for boilers, chillers, heat exchangers, pumps, and other critical components to enable continuous service during repairs and maintenance.

If there will be rapid, considerable changes in occupancy, the system design team should consider providing a standard HVAC system for average expected use and a supplementary booster AHU with 100 percent air circulation and cooling for higher occupancy loads. This simplifies control and saves energy. All air-distribution systems with a capacity greater than 3,000 cubic feet per minute (CFM) should have an air-side or water-side economizer.

The design of the mechanical systems must be well integrated into the architecture and respect the aesthetics of the spaces. The design must also address security concerns by locating air intakes well above the ground level to minimize the possibility of introducing hazardous or objectionable substances. All visible parts of

the system should be consistent with the finishes of the area in which they are located. Close coordination with all disciplines, particularly with the architects, is essential.

The building's systems must be properly tested and balanced to ensure optimum performance. During balancing, conditions are often uncovered that can significantly impact overall performance, the quality of installation, and the accuracy of design limits. It may be advantageous for the GSA to employ a contractor, independent of the construction and design team, to thoroughly test and balance all mechanical systems in accordance with national standards. All projects should incorporate a total building commissioning process as required in GSA P-100.

▶ Off-Hours

An independent or independently controlled HVAC plant to serve the reduced loads associated with off-hours operation must be provided. Courtrooms may be used during extended hours. However, judges' chambers are routinely in use during evenings and weekends. Audiovisual rooms and server rooms require 24-hour climate control. Clerks' offices operate on flextime and probation offices can have early morning and late evening hours. Other areas that routinely require off-hours operation are the trial jury suite and grand jury suite.

For areas with high heat gain and 24-hour operation, such as file server rooms and the USMS Command and Control Center, a supplementary chilled-water cooling system should be provided for cooling while the main systems are shut down. The supplemental system may be a split unit or water-cooled, rejecting heat to the building's chilled-water system or condenser water. For chilled-water cooling, a small air-cooled chiller may be provided.

Humidity

Along with temperature, the humidity level of a space impacts the occupants' comfort and the ability of mold and mildew to grow. Humidity control is crucial in the care and preservation of furnishings, finishes, books, computer equipment, and other court property. Additional care must be taken in areas where large groups of people assemble and in climates of extreme natural humidity. Humidity can easily be reduced or increased as needed through properly sized and placed humidification equipment. In humid climates, HVAC controls shall be provided to maintain

appropriate humidity in the building 24 hours per day, seven days per week, to prevent damage to finishes and to mitigate the growth of mold. Except for courtrooms and other large meeting areas, humidification should be provided as specified in GSA P-100. Humidity sensors shall be provided in courtrooms and similar areas to control HVAC systems and maintain required humidity levels. Humidifiers shall be provided to control humidity levels in building areas having extensive custom millwork and artwork.

► Air Distribution

The use of variable air volume (VAV) and variable air volume with reheat (VAVR) systems provides off-hours flexibility, individual room temperature control, humidity control, good indoor air quality, and acoustic advantages.

▶ Controls

All court and court-related offices must have individual HVAC controls, monitored from a central location. Direct digital controls (DDCs) must be provided to control the individual mechanical systems. The DDCs must be interconnected so that they can be monitored and controlled from a central location.

► Acoustic Requirements

The design team should refer to Chapter 14, "Acoustics," for performance requirements. The implications of the mechanical system's design on acoustic performance should be considered from the outset. In some cases, in order to maintain privacy from one space to another, it may be necessary for the system to produce a constant background noise level.

To control noise during all modes of operation and for all loading conditions, the system must be provided with one or more of the following: sound traps; low-velocity, low-static-pressure fan systems; and/or special low-noise diffusers. An acoustic consultant should review the system to determine which techniques are necessary.

Where ducts penetrate acoustically rated walls, duct and wall systems must be designed to maintain acoustic integrity. All penetrations in partitions, walls, floors, or ceilings (suspended or structural) should be appropriately sealed to maintain the

sound-insulation performance of the partition. Mechanical systems designers are to use the required sound transmission class (STC) rating¹ to prevent noise and vibration transmission to floors and ceilings of mechanical rooms.

Background noise in all spaces should be rated in accordance with the criteria stated in the ASHRAE handbook.² Appropriate noise control must be achieved during all modes of operation. For mechanical systems this will require the use of one or more of the following:

- Primary attenuators for the AHUs
- Acoustic plenums
- Sound attenuators
- Low-velocity, low-static-pressure fan systems
- Low-noise diffusers
- Noise- and vibration-isolating hangers or mounts where required

Large noise-generating equipment shall be located away from acoustically sensitive areas to control noise and vibration. All major rotating equipment shall be mounted to spring isolators. Flexible connections shall be provided to pumps, fans, chillers, cooling towers, compressors, and other vibrating equipment. Ducts shall be supported from the building structure in order to prevent vibration. All ductwork within the mechanical room and serving courtrooms should be supported with spring isolators. Reference GSA P-100 for future guidance.

The ductwork shall be designed to control airborne equipment noise, duct breakout noise, airflow-generated noise, and duct-borne cross-talk noise. Double wall ducts, acoustic duct wrap, and silencers shall be provided to minimize noise. Efficient low-loss duct fittings shall be used, and airflow velocity shall be minimized. The design team should consider increasing the wall thickness of large ducts above the minimum

STC is the rating of airborne sound transmission. The STC of a floor/ceiling (or wall) structure is the measure of the decibel difference between the airborne sound energy striking one side of the structure and the sound energy radiated into a receiving room on the other side.

Sheet Metal and Air Conditioning Contractors National Association standards. Lownoise toilets should be used, and acoustic wrapping should be considered on large drain lines. Noise transmission shall be attenuated in noise-sensitive areas such as courtrooms, jury deliberation rooms, attorney/conference rooms, and judges' chambers.

Courtrooms

System Design

Courtroom HVAC systems should also serve the following areas:

- Judges' chambers suites (when located adjacent to courtrooms)
- Trial jury suite (when located adjacent to a courtroom)
- Attorney witness rooms

Each of these areas must be provided with individual temperature control. Humidity should be controlled at the main air-supply unit. The HVAC system serving the courtroom and associated areas must function economically after hours.

► Air Distribution

Within the courtroom, three HVAC zones shall be provided: one for the judge and attorney area in the front of the courtroom, a second for the jury area, and a third for the spectator area in the back of the courtroom.

The well of the courtroom requires a number of diffusers. The spectator area is served by a separate group of diffusers, which must be sized to serve the maximum allowable seating capacity, plus 25 percent to allow for extra seating. The diffusers must meet minimum ventilation requirements at no loads, with no appreciable increase in system noise during load changes.

Judges' Chambers Suites

▶ System Design

The system serving the judge's chambers suite must be sized to include the reference/conference room, law clerk offices, secretarial space, and reception area.

² ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) HVAC Applications Handbook (1999), Chapter 46, "Sound and Vibration Control," p. 22, Noise Criteria Method.

In a collocated chambers plan, HVAC in the judge's chambers suite, if adjacent to a courtroom, shall be fed from the same AHU as the associated courtroom to facilitate off-hours use (e.g., evenings and weekends).

► Air Distribution

Air distribution systems in the chambers must provide a high degree of individual control and acoustic privacy. Ductwork must be treated to meet acoustic design criteria.

Jury Facilities

System Design

Trial jury suites must be served by the same system as the associated courtrooms when located on the same floor. A separate thermostat for each trial jury suite is required.

► Air Distribution

Air distribution systems in jury facilities must provide separate temperature control and a high degree of acoustic isolation, particularly in the grand jury and trial jury rooms. Return air must be ducted directly back to the exhaust air riser.

Judges' Conference Rooms

▶ System Design

Shared judges' conference rooms may be served by the same HVAC system that serves the judges' chambers suites and associated courtrooms when located on the same floor. The system must facilitate off-hours use.

► Air Distribution

Air distribution systems to judges' conference rooms must provide a high degree of individual control and acoustic privacy. Return air must be ducted directly toward the return-air shaft for a minimum distance of 15 feet (4,570 mm). The system must facilitate off-hours use.

Central Court Libraries

► System Design

HVAC controls must accommodate the library's hours of operation and environmental requirements to protect the library's collection from temperature and humidity fluctuations. In extreme climates, such as those found in Florida or Alaska, separate humidity and temperature controls may be required.

Central Mail Facilities

System Design

The design team shall provide a dedicated AHU for supply air and a dedicated exhaust fan to maintain negative pressure in the room with a 3-foot by 7-foot (21 SF, 2 m²) open door. The exhaust should be discharged from the highest point of the building, as far as possible from any air intakes, including the air intakes of surrounding buildings. The exhaust fan should be located near the ductwork to ensure that all exhaust ductwork remains under negative pressure. The exhaust fan should be equipped with a variable-speed drive. The variable-speed drive should be controlled by a differential static-pressure sensor to maintain the affixed negative pressure friction loss coefficient of a 0.05 inch water column (IWC), adjustable, between the mail room and the corridor. The exhaust system should have a dual filtration system: a prefilter, highly efficient particulate air (HEPA) filter, and a carbon absorption filter as part of the exhaust stream filtration to capture particulate matter and chemicals in the mail room exhaust. The exhaust system should be equipped with a bypass duct around the filters for normal operation during hours when no mail is handled, to save maintenance and filter changes. The exhaust air stream should always pass through the filter whenever the duress alarm is activated and during the time periods when mail is opened in the room.

Supply and exhaust systems shall be designed to conveniently seal off supply and exhaust grilles in the room for decontamination.

▶ Controls

A manual switch shall be provided to deactivate the bypass mode when mail is being sorted in the mail room. A switch should be provided to shut down the supply-air fan to the mail room and disable the exhaust bypass around the filters so that all exhaust air passes through the filter bank. Controls shall be provided in the room to shut down the mail room exhaust when decontamination is required.

▶ Plumbing

A handicapped-accessible emergency shower should be provided with a temperature-control valve for a maximum water-supply temperature of 80 degrees Fahrenheit and a stay-open valve that is operated by a pull rod. Activation of the shower will send a "MAIL ROOM EMERGENCY" signal to the USMS Command and Control Center. Posted signs next to the shower should warn the mail room occupants that use of this shower will activate emergency controls and alarms.

In the shower area, a floor drain (with trap) shall be provided and the floor shall be sloped to the drain. The drain shall be connected to one or more freestanding polyethylene holding tanks that can be easily removed and replaced by a hazmat team. The holding tank size should be based on the water required for each occupant in the mail room to take a shower and the water required for decontamination of the room. The tank shall be marked "Hazardous Material."

A handicapped-accessible wash sink with hot and cold water supply should be provided (with a gooseneck faucet with a built-in eye wash) along with a stainless steel countertop and a storage cabinet (with finishes that can be easily decontaminated).

For additional guidelines, refer to GSA P-100.

Server Rooms

Court information technology personnel, plus staff from the Administrative Office of the U.S. Courts (AOUSC) Office of Information Technology, and SFD Telecommunications specialists must be involved in all phases of design. This involvement ensures that adequate space, adequate building infrastructure, and proper adjacencies are incorporated into the design.

Mechanical and electrical systems must meet current and future needs, including space and power for the additional computer room air-conditioning (CRAC) units required for equipment expansion.

A power density of 100 watts (W) for every net square foot (NSF) and air-conditioning should be planned for 60 percent of the power density of 60 W per NSF heat gain to space. The cooling system infrastructure should be planned to allow the future expansion of cooling systems to 100 W per.

Design for the high-temperature alarms, leak detection, smoke detection, and AHU and CRAC unit trouble alarms shall be monitored on a 24-hour/7-day-a-week basis from the building management system (BMS). The smoke and heat sensor activation shall be integrated into the building's fire and life safety system.

Server rooms of all sizes shall be provided with a minimum of 12 to 18 inches raised access floor and sized to maintain the temperature between 64 and 75 degrees Fahrenheit and relative humidity between 30 and 35 percent.

Telecommunications Switch Rooms and Closets

Server, telecommunications, and audiovisual closets contain equipment with high heat gain and 24/7 operation. These rooms must be provided with a supplementary cooling system to provide proper air-conditioning while the main building mechanical systems are shut down. Telecommunications floor closets may be shared as joint-use space with other building tenants at the discretion of the court and other tenants. The design team is advised to confirm the project-specific requirements during the conceptual design phase.

Refer to GSA P-100 for further guidance unless otherwise specified.

Mechanical Design Criteria

All court-occupied areas share the following mechanical design criteria unless otherwise specified:

▶ Temperature

- Summer indoor design temperature shall be maintained at 75 degrees Fahrenheit (24 degrees Celsius). Refer to GSA P-100.
- Winter indoor design temperature shall be at 72 degrees Fahrenheit (22 Celsius).
 Refer to GSA P-100.

▶ Humidity

- Summer design humidity shall be between 45 percent. Outdoor air at design temperature.
- Winter design humidity shall be between 30³ percent. Outdoor air is ASHRAE 97.5%.

▶ Ventilation

■ The minimum outdoor air volume to be provided per person is 20 cubic feet per minute (CFM, 9 L/s [liters per second]).

▶ Recirculated Air

• The maximum allowable percentage for recirculated air is 80–85 percent.

► Air Changes per Hour

• In courtrooms and other court-occupied areas, a minimum expectation for air changes per hour is required:

Appellate En Banc Courtroom	6–8
Appellate Panel Courtroom	6–8
Special Proceedings Courtroom	6–8
District Judges' Courtroom	8-10

³ Minimum relative humidity may be omitted in moderate southern climate zones.

Magistrate Judge's Courtroom	8-10
Bankruptcy Judges' Courtroom	6–8
Judges' Robing/Conference Room	8
Jury Assembly Suite	8
Trial Jury Suite	8
Grand Jury Suite	8
Library Spaces	8

Electrical Distribution Systems

General Design Concerns

Sufficient electrical capacity, supply quality, and raceway flexibility must accommodate communications equipment such as personal computers, printers, scanners, video and audio systems, electronic security systems, and other office equipment. In addition, the electrical capacity provided for the court facility must meet the total connected load requirements, plus capacity for future load growth.

The electrical system must provide clean power for personal computers, network servers, related data and communications hardware, and security systems. Computer and security equipment must be connected to systems with dedicated grounding systems and panelboards. Security equipment must be connected to emergency power systems (refer to *Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications* [USMS Publication 64]).

▶ Battery Backup

Areas where emergency lighting requires local battery backup to maintain camera and direct visual surveillance in the event of power failure include the following:

- Courtrooms
- Judges' chambers
- Controlled circulation areas
- Prisoner/attorney and witness/attorney interview rooms

▶ Grounding Systems

In addition to the building grounding system prescribed by the National Electrical Code (NEC), separately derived grounding systems must be dedicated to the outlets, devices, and equipment of the security systems. Another separately derived grounding system must be dedicated to the computer systems, including networks.

▶ Power Outlets

Adequate power outlets must be provided throughout the judges' chambers suites and other court-related offices to accommodate a wide variety of automated and regular office equipment.

▶ Electrical Distribution

A raised access floor system shall be incorporated into the design as a building system to allow for electrical and low-voltage distribution. See the discussion in this chapter for additional guidance on and criteria for raised access floor systems.

For additional guidelines, refer to GSA P-100.

Courtrooms

Table 15.1 summarizes the electrical requirements for courtrooms.

▶ Electrical Distribution

An adequate number of electrical, data, and phone outlets must be placed near anticipated locations of equipment (sound recording equipment, amplifiers, video monitors, cameras, computers, projectors, X-ray viewers, court reporter steno machines, etc.). Power capacity and distribution must accommodate future requirements and take into account center, off-center, and corner bench locations.

▶ Normal Convenience Outlets

A three-phase, four-wire panelboard must be provided for each courtroom. The panelboard must be sized to serve the courtroom, trial jury suite, miscellaneous areas, and circulation spaces. The panelboard must serve all normal lighting and general power requirements. If service is obtained by a three-phase, 480-volt supply, the general 120-volt power requirements must be served from a 480-120/208 volt transformer and associated panelboard. The local system ground must be tied into the main building ground. The feeder serving the area must accommodate 25 percent load growth.

Dedicated Outlets

An electrical distribution system with dedicated grounding and independent breakers should serve computer and security-related equipment.

Reference GSA P-100 for electrical power requirements and outlets.

Designated Outlets

Minimum outlet requirements for the various components of the courtroom are as follows and as shown in Table 15.1:

Attorney Tables

- Multiple quadriplex receptacles for general purposes
- Multiple dedicated computer power receptacles

Miscellaneous Requirements

- Duplex outlets located at approximately 20-foot (6,100 mm) intervals along the walls of the courtroom
- Additional outlets at appropriate locations to accommodate the use of projectors, video monitors, video recorders, and X-ray viewers
- Floor boxes for the lectern, with built-in task lighting and a microphone outlet (include a timing system for Appellate courtrooms only)
- Outlets to accommodate the future location of video cameras
- An outlet for a wall-mounted clock

Table 15.1 Electrical Requirements in Courtrooms

	NORMAL		DEDICATED	SPECIAL
	Duplex	Quad		
COURTROOM				
Judge's Bench		1	1	
Courtroom Deputy Clerk Station	1	1	1	1
Witness Box	1		1	
Jury Box		3		
Law Clerk Station		1	1	
Bailiff Station	1		1	
Court Reporter/ Recorder Station	1	1	1	
Attorney Tables	GSA P-100	As Needed	As Needed	

Judges' Chambers Suites

▶ Electrical Distribution

Electrical service serving the judge's chambers suite must be obtained from a local panelboard (three-phase, four-wire) sized to serve all areas associated with the suite. The panelboard must serve all normal lighting and general power requirements of the suite areas. The capacity of the feeder serving the area must accommodate future load growth. An electrical distribution system with dedicated grounding and independent breakers should serve computer equipment connected to courthouse computer networks and security equipment.

► Emergency Power Distribution

Security equipment must be connected to the emergency power supply system.

Designated Outlets

Minimum outlet requirements for the judge's private chambers are as follows:

 Three quadriplex receptacles for general and miscellaneous purposes (e.g., a table lamp)

- One dedicated computer power receptacle
- One normal duplex receptacle for the judge's printer

Minimum requirements for the reference/conference room are established by the judge.

Minimum requirements for the law clerk and secretarial workstations (per station) are as follows:

- One quadriplex receptacle for general purposes
- One dedicated computer power receptacle
- One normal duplex receptacle for a printer

Outlets serving the following equipment should be located as established by the judge:

- Copy machines
- Fax machines
- Scanners and shredders
- Printers
- Computer power receptacles
- Coffee machine
- Service unit equipment: microwave, refrigerator, etc.
- Miscellaneous (TV, projector, etc.)

Distributed convenience outlets should also be located as established by the judge.

Note: Devices provided with dedicated power (typically computers and security equipment) must be on separate circuits.

Jury Facilities

▶ Electrical Distribution

In general, normal electrical power distribution is required for jury facilities. A separate electrical system must provide dedicated power to computer workstations.

Convenience outlets for 120-volt power must be located throughout the jury facilities. Outlets on separate circuits must be provided for the service unit. In the jury assembly, grand jury hearing, and trial jury rooms, outlets on separate circuits must be provided for projection units; a television monitor and digital video disc (DVD) player; and an audiotape recorder/player. In addition, an outlet for a wall-mounted clock must be provided in each room.

Outlets for multiple monitors or projectors or audiovisual equipment must be provided in the jury assembly area.

Special outlets for computers must be provided in each grand jury suite, the jury clerk's office, and stations for court security, U.S. attorneys, and the court reporter/recorder.

All Judges' Conference Rooms

▶ Electrical Distribution

Electrical outlets must be provided to support audiovisual equipment, personal computers, and other equipment. If the conference room is used often for training, "clean power" outlets should also be provided to accommodate the use of laptop computers and audiovisual equipment.

Public Waiting Areas

▶ Electrical Distribution

Duplex convenience outlets and power outlets for wall-mounted clocks must be provided.

Central Court Libraries

▶ Electrical Distribution

Normal duplex convenience outlets must be provided throughout the library. Dedicated power outlets must be provided wherever computers and other sensitive electronic equipment are used. All study spaces must have access to outlets.

News Media Room Electrical Distribution

The room must have normal convenience power outlets. Dedicated outlets to accommodate the use of personal computers and sensitive electronic equipment should also be considered.

Lighting Systems

General Design Concerns

A lighting design engineer should participate in the early phases of design to ensure that the lighting standards required by the *Design Guide* are met in an effective and efficient manner.

The lighting design for a courthouse should take a layered approach. Each type of layer accomplishes a critical task.

- A direct lighting component is required for appropriate horizontal illuminance and facial modeling.
- An indirect layer of interreflection light (or bounce light) is required to avoid shadows on faces and evidence and to allow for general illumination in the courtroom. The indirect layer can be provided through the use of cove lighting, suspended bowl or architectural light fixtures, or wall- or cove-mounted sconces, or it can be combined with the direct layer through the use of direct/indirect light fixtures.

- The use of dark wood paneling should be avoided as it typically requires a third layer of wall washing may be necessary to increase wall surface brightness.
 Typically, wall washing is accomplished through the use of linear fluorescent coves and linear wall-wash fixtures.
- A fourth layer of task or accent lighting can be used at the judge's bench, witness station, jury box, and attorneys' tables. The addition of task lighting improves the energy efficiency and the overall aesthetic design of a courtroom or other spaces within a courthouse by allowing a more directed approach to lighting and providing illumination at higher levels where it is needed, with lower levels provided elsewhere.

The interplay and relationship between lighting perception (brightness) and the choice of wall, floor, and ceiling finishes must be addressed by the design team. For example, the majority of lighting problems arise from human perception of room brightness, which is based on the reflection of the light from horizontal and vertical surfaces. Courtrooms with wood panels at lower levels generally allow for higher wall surface reflectance and greater perceived brightness. Darker wall and floor finishes can create problems because they are less efficient at reflecting light within the courtroom, which leads to more installed light fixtures and task lighting. The design team should carefully consider the use of dark wall and floor surfaces during the design phase to ensure that the proposed design does not adversely affect the energy efficiency or brightness perception of the space.

In general, daylighting improves the quality of a courthouse and the experience of staff and visitors. The lighting engineer must take into consideration daylighting factors such as glare and heat generation when designing a facility.

The lighting engineer should follow the design priorities identified in the Illumination Engineering Society of North America (IESNA) *Lighting Handbook*, 9th edition, Chapter 10, "Lighting Design Guide." The highest design priorities (not listed in order of importance) are (1) appearance of space and light fixtures, (2) color appearance and contrast, (3) daylighting integration and control, (4) direct glare, (5) light distribution on work surfaces, (6) modeling of faces or objects, (7) source/task/eye geometry, (8) lighting system control and flexibility, (9) horizontal illuminance, and (10) vertical illuminance.

The lighting design should be evaluated and validated by the design and engineering team throughout the design phase to ensure that the proposed design meets the standards set forth in this chapter and achieves an effective and efficient result. The team should evaluate lighting schemes and horizontal and vertical surface reflections and brightness.

Courtrooms

► Lighting Criteria

The lighting of the courtroom should not only satisfy recommended lighting levels but also accommodate the future introduction of video recording, evidence display, and personal computer equipment. This requires adjustable lighting units to provide vertical foot-candles (FC) toward the front of the courtroom (judge, witness, and jury) and for highlighting (flag, U.S. seal).

Caution must be exercised when using excessively bright sources due to the potential noise problem and temporary lamp failure caused by voltage drops.

The lighting system should have good color rendition and avoid bright spots on the ceiling plane. Modulation of lighting levels should be used to distinguish the courtroom well and spectator areas.

► Lighting Levels

Lighting levels in the courtroom vary. The system must be capable of dimming to accommodate the projection of exhibits. The dimming level is determined by the video recording system's lowest operable light level; however, to meet the safety code the level must not be lower than 1 FC. See Table 15.2 for specific information regarding lighting levels in the courtroom.

▶ Lighting Controls

Lighting controls for the courtroom should accommodate the following conditions:

- In use, fully occupied
- In use, no spectators
- Not in use

Use of a projector or other device requiring a dimmed or darkened courtroom

In addition, the lighting control system should allow the intensity and type of lighting to vary at the discretion of the presiding judge. This is particularly applicable when adjustable incandescent lighting units are provided. A remote means of dimming or extinguishing the lights should be provided.

Panelboards and conductors should be located in a service area outside the courtroom. Circuit-breaker panels must not be the only means to control lighting. Access to the lighting controls is limited to court personnel. The controls must not be accessible to witnesses, jurors, attorneys, litigants, or the public. Where this is unavoidable, key-controlled light switches must be installed.

An override switch must be located at the judge's bench and at the courtroom deputy clerk station to allow the instantaneous overriding of all dimming controls in an emergency.

The following lighting controls can be specified, depending upon the size of the courtroom, specific lighting arrangement, and lamp types:

- A more complex lighting installation consisting of local, wall, box-type, electronic, and silicon-controlled rectifier (SCR) dimmers
- Remote electronic dimmers with preset lighting arrangements, for large courtrooms with high ceilings

▶ Emergency Lighting

Selected lighting fixtures within the courtroom must provide an uninterrupted source of lighting in the event of a power outage. Standby power for emergency lighting to the courtrooms must be provided by local battery-backup units connected to an emergency generator. The judge's bench must not be spotlighted by emergency lighting.

To permit orderly evacuation, emergency lighting facilities must maintain a specified degree of illumination throughout the means of egress for one and a half hours.

During that time, the lighting level must not be less than 1 FC. At the end of that period, the illumination may decrease to 0.6 FC. The judge's bench must not have an emergency spotlight.

Judges' Chambers Suites

Lighting Criteria

Lighting systems for the judge's chambers suite are determined in consultation with an architect, engineer, or lighting designer. The installation must be designed to meet federal energy-consumption criteria.

Special considerations in lighting design include veiling reflections on reading materials, color rendition, and the effect of lighting on occupants' emotions. Task lighting must be variable to 100 FC.

▶ Emergency Lighting

Standby power for emergency lighting must be provided by a local battery-backup system for selected lighting units in the judge's chambers, reference/conference room, and circulation spaces.

Jury Facilities

► Jury Assembly Suite

The jury assembly suite must be illuminated by direct fluorescent units, with additional direct incandescent units in the lounge areas. Natural light in the assembly area, especially in the lounge, is desirable. The jury orientation room and all areas opening to it require lighting control for audiovisual presentations.

► Trial Jury Suite

Lighting in the trial jury room may be a combination of direct/indirect lighting and dimmer-controlled direct (incandescent) units. Jurors need the direct component when reviewing written material. When exhibits are viewed on a projection screen or TV monitor, the indirect (fluorescent) units can be switched off and the direct units dimmed. Sufficient residual lighting must be provided for taking notes.

► Grand Jury Suite

The grand jury suite must be illuminated by dimmer-controlled direct fluorescent units.

All Judges' Conference Rooms

▶ Lighting Criteria

If excessive brightness can be avoided and privacy/security maintained, natural lighting is recommended. When natural light is used, a means of darkening the room for audiovisual presentations should be provided.

Electrical lighting of the judge's conference room should be switch-controlled direct fluorescent and incandescent units.

Emergency lighting powered by a battery-backup system must be provided.

Central Court Libraries

▶ Natural Lighting

Computer-Assisted Legal Research (CALR). CALR stations should not be located where there is a glare from natural light.

Bookstacks. Natural light is not desirable for bookstacks due to the damaging effects of sunlight.

Study Spaces. Windows allowing an exterior view and natural light are highly desirable. For enclosed study rooms, interior windows are preferable, since users may need to darken the rooms to view video. Interior windows also allow others to determine whether the rooms are occupied.

Staff Offices. Natural light is desirable for all offices. Interior windows are necessary so staff can monitor library activity.

Technical Services Area. Natural light is desirable, assuming excessive light is controlled. Interior windows must be provided for viewing adjoining staff areas.

Microform Area. Natural light is not desirable in the microform area, since readers require a controlled-light environment. Interior windows with a view of library areas must be provided if the area is enclosed.

Electrical Lighting

The lighting in the library must be switch-controlled direct fluorescent units. Indirect fluorescent units are allowed in areas with computer screens and microform readers. A master switch must be provided at the library staff entrance.

Study spaces must be provided with task lighting. Lights must be placed over aisles in stack areas. The rare book/court archives room must have special lighting, depending upon room use and the sensitivity of the stored materials. In all areas where reading occurs, care must be taken to avoid glare from lighting sources.

Lighting Standards

Table 15.2 provides the IESNA lighting standards required for courtroom spaces and other courthouse spaces that are beyond the public facilities standards outlined in GSA P-100. Horizontal illumination describes the amount of light landing on a horizontal surface such as a desk, and vertical illumination describes the amount of light landing on a vertical surface such a wall or face.

Table 15.2 Lighting Requirements¹

	Horizontal Illumination Foot-Candles ²	Vertical Illumination Foot-Candles
COURTROOM AND ASSOCIATED SP	PACES	
Judge's Bench ³		20
Bailiff	50	20
Interpreter	50	20
Court Reporter	50	20
Jury Box	50	20
Attorney Witness Table and Lectern ³	30	15
Witness Box	30	15
News Media Room	30	15
Attorney Work Room	30	15
Attorney/Witness Room	30	15
Public Seating	10	5
JUDGES' CHAMBERS SUITES		
Judge's Chambers Private Office ³	30–50	10
Chambers Support Areas: Closet, Service Unit, Vestibule, and Private Toilet	20	5
Judicial Assistant, , File Storage, Conference Room, and Law Clerks ³	30–50	10
JURY ASSEMBLY SUITE		
Check-In, Coat Closet, Jurors' Toilets, Service Unit, Vending Area, Juror Lounge, and Jury Assembly Area	30	5
Supplies and Storage	20	5

	Horizontal Illumination Foot-Candles	Vertical Illumination Foot-Candles
TRIAL JURY SUITE		
Soundlock, Jurors' Toilets, Coat Closet, Trial Jury Room, Service Unit, Exhibits Display, Video Equipment, and Sworn-Jury Custodian Station	30	5
GRAND JURY SUITE		
Entry Area, Jurors' Toilets, and Service Unit	30	5
Security Workstation and Hearing Room	50	10
Witness Room Exhibits Display and Video Equipment	30	5
Closet	30	5
CENTRAL COURT LIBRARIES ⁴		
Public Entry/Lobby	30	5
Circulation Control Area, Periodicals Stacks, and Seating Area	50	10
Reference Desk Area	50	10
Staff Access and CALR	30	5

- All other spaces not identified shall be provided the lighting standards in GSA P-100.

 A foot-candle (FC) is a unit of illuminance; it measures the amount of light in a space supplemental task lighting may be necessary to raise the ambient light to a horizontal
- illumination of 100 FC.

 The lighting in the library must be switch controlled. Indirect or direct/indirect fluorescent fixtures should be installed in all areas that have adequate ceiling height. A master switch must be provided at the library staff entrance.

Communications Systems

Voice, Data, Courtroom Audio/Video, and Low-Voltage Cabling Design

Most of the equipment found in the courts, such as telephones, copiers, scanners, shredders, and fax machines, is similar to that used in other government and business organizations. The federal courts also use several technologies specifically modified and adopted for judicial purposes, such as courtroom technology and court reporting technology.

Since automation technology is constantly evolving, any installation should be adaptable to change. Efficient architectural planning, programming, and design of infrastructure must facilitate the installation and modification of these technologies and substantially reduce the costs of equipment installation and maintenance.

General Design Concerns

▶ Registered Communications Distribution Designer

A registered communications distribution designer (RCDD) shall be a part of the design team and should be acquired under the GSA construction contract. The RCDD must participate in the early phase of design development of a courthouse to ensure that the required infrastructure is provided for communications and audiovisual systems. The RCDD shall work with the AOUSC (both information technology and communications staff) design team and the court managers, information technology operations staff, and staff responsible for IT management and deployment to develop the most efficient distribution systems for all low-voltage requirements.

▶ Voice and Data Communications Systems

Courthouse voice and data systems require extensive low-voltage cabling. The associated cable systems require a well-designed and well-installed building infrastructure to support the routing and connecting of cabling and housing of equipment. The design team must refer to the following:

- Courtroom Technology Manual (most recent version)
- GSA P-100, Chapters 5, 6, and 9
- Illumination Engineers of North America Lighting Handbook, 9th Edition, Chapter 10, "Lighting Design Guide"
- Telecommunications Cabling Standards. Telecommunications Industry Association (TIA) and Electronics Industries Alliance (EIA), TIA/EIA-568-B Series, Commercial Building
- Telephone/Data Procurement Policy. *TIA/EIA-569-A*, Commercial Building Standards for Telecommunications Pathways
- ANSI/CSA/TIA/EIA-942 Telecommunications Infrastructure Standard for Data Centers
- Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64), most current edition

Personal computers, network and communications servers, peripheral computer equipment, and new technologies require substantial flexibility in power supply, data connections, and lighting. Requirements for connecting data and communications equipment throughout the courthouse include extensive pathways (e.g., conduits, cable trays, raceways, and chases).

In multistory buildings, several vertical raceways and conduits totally dedicated to electronic networking for communications must be installed. An efficiently designed distribution system ideally stacks the secured floor distribution closets on each floor directly above the main distribution frame for both data and telecommunications. These raceways and conduits need to be sized appropriately to handle the court's immediate and future telecommunications requirements.

A secured communications distribution room is required to house equipment from both telecommunications and data service providers' demarcation points. A separate main data communications distribution room and voice communications switch room (or area if in the main data distribution room) shall be centrally located to maintain recommended cabling distances and may include a cross-connect for an adjacent equipment distribution area.

Telecommunications requirements are based on the size of the switch. The switch room or area within the main communication distribution room must be secured with controlled access. Space requirements must provide flexibility for future improvements to the telecommunications system.

Within the communications distribution room, a horizontal distribution area is required for horizontal cross-connects from the distribution point for cabling to the equipment distribution area. In addition, a zone floor distribution area is required for structured cabling for the floor-standing equipment, and an equipment distribution area is required to place equipment cabinets and racks arranged to effectively dissipate heat from electronics.

The data communications space requirements should be based on the known number of planned and future work areas. A work area is any location where a person would work at a computer or other computing or network-connected device such as a printer, scanner, network-attached camera, network-based building automation system, or security device. The main distribution frame room must be sized to house equipment plus the mechanical and electrical systems to support the computing equipment. If the room serves other functions, the size must be increased to accommodate the added functions. Some of the added functions could include the following:

- IT staff control console space or offices
- Equipment assembly or repair functions
- Printer and printing facilities
- Data backup system storage

The additional space can be provided within the main distribution room or in an adjacent room.

The floor distribution closets and audiovisual closets shall be located to efficiently serve the judges' chambers, courtrooms, and court offices.

Servers require an uninterrupted power supply (UPS) system that can compensate for a low-voltage condition or electrical spike and that can execute a soft shutdown of the server, which logs off users, saves data, and closes files.

► Satellite Downlink Systems

Satellite downlink systems broadcast educational and training programs and administrative information to courts. Satellite dishes, downlink equipment, and related cabling must be provided for all courthouses. The design team should consult with the AOUSC information technology staff and refer to the *Courtroom Technology Manual* and GSA P-100.

▶ Public Telephones

Magistrate and bankruptcy judge courtrooms may experience high demand for public telephones. A sufficient number of public telephones should be provided within the facility to accommodate this need conveniently.

Courtrooms

► Audio and Video

Courtrooms generally require sound-reinforcement and video systems, which must be integrated with the architectural and engineering design. The design team with the certified RCDD shall ensure the proper design of the required infrastructure and ensure that finishes and lighting do not interfere with the performance of the audio and video systems. The design team should refer to the *Courtroom Technology Manual* for specific details on the design of courtroom systems; Chapter 14, "Acoustics," of this *Design Guide*; and the lighting section of this chapter.

► Court Reporter/Recorder Technology

Law, rule, or order of the court requires the production of an official record of a court's proceedings. With the exception of video recording, all known court reporting technologies—shorthand, machine stenography, computer-aided transcription, single- and multitrack audio recording, and voice writing (also known as stenomask)—are regularly used throughout the federal judiciary. Because all the judges in large metropolitan federal courthouses will not agree to employ a single reporting method, the installation of a centralized audio or video recording facility in such a courthouse is not recommended.

The rapidly growing reliance on electronic recording of proceedings, and, in particular, multitrack audio recording, video evidence presentation, and computer-

aided transcription, means that careful attention to electrical and audio facilities in the courtroom is required. Proper design considers the placement and type of microphones, the quality and location of the microphone connectors, audio wiring, integration of the audio recording system with the public audio amplification system, and the acoustic conditions of the courtroom. Microphones and speakers may be part of courtroom millwork, and planning must consider the space and personnel required for efficient operation. Some reporting technologies require networks and the installation of monitors and projection equipment in the courtroom.

Two current technological innovations in courtroom reporting are real-time stenographic transcription and voice-recognition transcription for the preparation of electronic or printed transcripts. A third advance is instantaneous transcription of trial proceedings. None of these technologies requires substantial changes in courtroom design.

For information regarding courtroom technology, refer to the *Courtroom Technology Manual*.

Judges' Chambers Suites

▶ Video

One or more outlets connected to the building downlink system and cable television system shall be provided in the judge's chambers and conference/reference room.

▶ Communications

Telephone/intercom outlets must be provided where required.

Jury Facilities

► Audio

Jury Assembly Suite. A sound system must be provided in the jury assembly area. The system must allow audio inputs from video or other projection equipment.

Assisted-listening system (ALS) controls and emitters must be permanently installed and integrated with the jury assembly area sound system. ALS controls are generally located adjacent to sound system controls.

Trial Jury Suite. A self-contained, portable ALS must be available for use in trial jury suites and other places where sound systems are not present.

Grand Jury Suite. A sound system must be provided in the grand jury hearing room. The system must allow audio inputs from video or other projection equipment.

ALS controls and emitters must be permanently installed and integrated with the grand jury hearing room sound system. A wireless, infrared ALS provides the flexibility and privacy needed in the grand jury hearing room. If windows are provided in the room, caution must be exercised to avoid interference with infrared signals. An infrared ALS requires emitters to provide line-of-sight transmission to the entire room.

Multitrack systems in the grand jury hearing room can be used for assisted listening, simultaneous translation, and confidential tape recordings.

The grand jury foreperson/secretary station and witness box must be equipped with microphones connected to an amplification/audio recording system. The microphones must be controlled by the court reporter/recorder.

When an interpreter is used, the interpreter must be provided a microphone connected to the room's amplification/audio recording system.

In addition, a microphone connected to a sound system must be provided at the U.S. attorney station and/or lectern.

▶ Video

In the juror lounge and assembly suite, one or more video outlets connected to the satellite downlink system and cable television system must be provided.

▶ Communications

In the trial jury suite, a push-button and buzzer system must be provided between the sworn-jury custodian and foreperson stations.

In the grand jury hearing room, telephone/intercom instruments must be provided at the jury clerk's office, security desk, and U.S. attorney station.

Central Court Libraries

► Audio

A paging system is desirable in larger libraries. The system's microphone and controls must be located at the circulation/reference desk; speakers must be located throughout the public areas of the library.

▶ Communications

All staff offices and work areas must be provided with a telephone and data outlet. In addition, all enclosed private study areas and CALR stations must be equipped with telephone outlets. Outlets used only by staff and court personnel must have intercom capability. Refer to the *Courtroom Technology Manual*.

Clerk's Office

▶ Video

Consult with the AOUSC's communications team and refer to the *Courthouse Technology Manual*.

▶ Communications

Consult with the AOUSC's communications and information technology staff and refer to GSA P-100.

Office of the Chief Pre-argument/Conference Attorney

▶ Video

Accommodation for videoconferencing must be provided. Consult with the AOUSC's communications staff and refer to the *Courthouse Technology Manual*.

Office of the Bankruptcy Administrator

▶ Video

Conference rooms must accommodate recording equipment.

Raised Access Flooring

Access flooring is incorporated in the building's design as one of the building systems provided throughout the building. In judiciary-occupied spaces, access flooring is provided throughout the assigned space, not on a room-by-room basis.

The flooring should be a minimum of 6 inches (150 mm) above the concrete deck to allow adequate space for wire-management systems and the crossing of large conduits. The design team should consider "pan"-type floor tiles with lightweight concrete as the access floor type.

If a court decides to delete access flooring from a project, the budgeted amount for the flooring will be removed from the construction budget and all future alterations to the building's judiciary-occupied spaces will be funded by the court.

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This chapter discusses the planning and design of courthouse security, including agency responsibilities, security planning and design concepts, and security systems and equipment.

BUILDING SECURITY

Introduction

Security is essential to the basic design of courthouses. Courthouse security is complex in that different court components and circulation patterns require varying degrees of security. In addition, federal courthouse security is the responsibility of the judiciary, the Department of Homeland Security's Federal Protective Service (DHS/FPS), the General Services Administration (GSA), and the U.S. Marshals (USMS). It is critical that Service the architectural/engineering (A/E) team consider the security implications of every aspect of design. No amount of security equipment and personnel can effectively secure a building that has been designed without taking physical security into account.

Security concerns, including demonstrations, weapons, witness and jury intimidation, bombs, and so on, are inherent to courthouses. Optimal courthouse security is a fine balance between architectural solutions, allocation of security personnel, and installation of security systems and equipment. Since security planning is a basic and critical part of courthouse design, it must be factored in at the beginning of site selection and the design process. Failure to do so can result in costly and time-consuming reconfigurations.

Courthouse security systems are categorized as exterior and interior security systems. Exterior security includes considerations of site location, parking, access control, site lighting, perimeter surveillance, building access control, and intrusion-detection/alarm systems. Interior security includes personnel security, security of property and documents,

access control to interior spaces, personnel movement and circulation controls, security aspects of spatial arrangements, and coordination between security and fire and life safety requirements.

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information on many facets of the design and construction of federal courthouses. The references listed below relate specifically to this chapter.

- Design Notebook for Federal Building Lobby Security, GSA and USMS. The goal of this publication is to illustrate how effective security screening and the related equipment and personnel can be integrated into the design of lobby spaces in new courthouses. The guide includes prototype designs as well as typical details.
- Facilities Standards for the Public Buildings Service (GSA P-100)
- Interagency Security Committee (ISC) Security Design Criteria for New Federal Office Buildings and Major Modernization Projects, Medium-High-Level Construction, GSA, most current edition

- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume One, Courthouse Management Group Engineering and Architectural, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Two, Electronic Security and Hardware, most current edition
- Requirements and Specifications for Special Purpose and Support Space Manual (also referenced as USMS Publication 64), Volume Three, Judicial Security Systems Requirements and Specifications, most current edition
- Site Security Design Guide, GSA, (June 2007 or most current edition)
- USMS Office of Security Systems Required Elements
- Vulnerability Assessment of Federal Facilities, Level IV Buildings, Department of Justice

Agency Responsibilities

Courthouse security is the joint responsibility of the judiciary, USMS, and DHS/FPS. Decisions regarding security planning and design are made by the judiciary, the USMS, and the GSA.

► Court Security Committee (CSC)

Each of the 94 federal court districts has a CSC chaired by the appropriate district chief judge. The U.S. Marshal for the district serves as principal coordinator of the committee. The responsibilities of the CSC are to develop and implement a district-wide security plan, and to meet periodically to identify security problems and develop solutions. The local CSC is responsible for addressing the security concerns of the entire judicial family, including judges, chambers staffs, clerks, probation and pretrial services officers, librarians, federal defenders, and other members of the court family. This responsibility includes the security for all judicial areas within federal buildings as well as any leased space that has court staff on-site. The CSC

also reviews facility and security system designs and coordinates the various agencies responsible for the design, construction, and operation of court security systems.

▶ Building Security Committee (BSC)

In multi-tenant court buildings where court-related activities occupy less than 75 percent of the rentable space, a BSC develops the physical security plan. The BSC includes representatives of all tenant agencies and is chaired by the chief district judge, his or her designee, or the highest-ranking official of the agency occupying the most space in the building.

Establishment of BSCs for each federal facility under the GSA's control was one of the recommendations contained in the Department of Justice's (DOJ's) *Vulnerability Assessment of Federal Facilities*, which was issued in June 1995 following the April 1995 bombing of the Alfred P. Murrah Building in Oklahoma City. Unlike CSCs, which consist solely of representatives of the court family and address security issues involving the courts on a judicial district-wide basis, BSCs address the security requirements of federal agencies that occupy multi-tenant buildings. The BSC is tasked with evaluating the building's physical security requirements based on the standards outlined in the above-mentioned DOJ report.

All security systems and equipment must be consistent with the requirements set out in the GSA's ISC Security Design Criteria for New Federal Office Buildings and Major Modernization Projects, Medium-High-Level Construction; the DOJ's Vulnerability Assessment of Federal Facilities, Level IV Buildings; Requirements and Specifications for Special Purpose and Support Space Manual, Volume One through Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64); USMS Office of Security Systems – Required Elements; and GSA P-100.

The DHS/FPS is responsible for the security of all federal buildings, including some court facilities. The FPS provides security for the building perimeter, service access, and non-court-related agency space. The FPS or an authorized local government law-enforcement agency responds to calls or duress alarms when the USMS is not on duty in the building. The FPS installs intrusion-detection systems in federal buildings that are monitored from a remote regional communications center. Building access

systems (i.e., locks, keys, and the integrity of door hardware) and parking protection/lighting are typically the responsibility of the GSA building manager.

While the FPS is responsible for the protection of most federal buildings, the USMS has assumed this role for "court-only occupied" buildings where 75 percent or more of the building's occupancy is court-related activity. The USMS is also responsible for the personal security of judges, court staff, and the public. This includes the protection of judges, witnesses, jurors, and prisoners.

The USMS physical security planning responsibilities for court space are handled by the Office of Security Systems (OSS). OSS is responsible for the planning, design, and installation of security systems in spaces occupied by the judiciary, including judges and their staffs, clerks of court, probation and pretrial services officers, librarians, staff attorneys, circuit and district court executives, and other members of the court family. The USMS does not specify security systems for the U.S. attorney or U.S. Trustee, as they are part of the executive branch and do not fall under the courts' jurisdiction.

In addition, OSS is the security consultant for court buildings, designing and integrating security systems for the building perimeters in conjunction with the GSA and FPS. OSS retains a nationwide security systems contractor for security systems installation and service in all courthouses and space leased for court activities. The OSS security specialist must participate during Phase I of the design process. The specialist's participation will prevent expensive retrofits and ensure that the infrastructure to support the security systems and equipment is incorporated into construction documents. This will also ensure that sufficient funding is requested and allocated. Further, the USMS nationwide security systems contractor shall participate in the design and construction to allow for timely installation and accessibility to conduit and junction boxes.

OSS is a part of the USMS, but it is responsible only for court-occupied space and is separate and distinct from the USMS Office of Courthouse Management (OCM).

The OCM is responsible for design considerations involving secure prisoner movement, holding-cell and interview facility requirements, and USMS-occupied office and support space.

Security Concepts

Courthouse security requires coordination of architectural design, allocation of security personnel, and security systems and equipment. Basic architectural solutions to security problems are an integral part of planning and design for the courthouse. Separation of public, restricted, and secure circulation patterns and provision of secure prisoner holding and interview facilities are essential security design elements. Courthouse design must consider expansion and security needs to meet short- and long-term housing requirements.

Security systems and equipment can reduce the number of security personnel required; however, systems and equipment are not intended to replace personnel. The cost of architectural solutions incorporated during planning and design—as well as the initial installation, operation, and maintenance costs of security systems and equipment—is often small compared with security personnel costs over the anticipated life of the facility.

Since the USMS may be responsible for on-site monitoring systems protecting the site, building perimeter, and nonjudiciary or court-related tenants, all security systems are integrated into the USMS Command and Control Center. Security systems monitored by the USMS typically include intrusion alarms, duress alarm devices, electronic access controls, and closed-circuit television (CCTV) and audio/video switching and recording systems. See *Requirements and Specifications* for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64) for additional details on the USMS Command and Control Center.

Security Systems and Equipment

This discussion of courthouse security systems and equipment design is divided into exterior and interior security. Exterior security includes considerations of site,

parking, lighting, access control at building entrances, and intrusion-detection/alarm systems. Interior security includes personnel security, security of property and documents, access control to interior spaces, personnel movement and circulation controls, security aspects of spatial arrangements, and the coordination and integration of security and fire and life safety requirements.

All security systems and equipment must be consistent with the GSA's ISC Security Design Criteria for New Federal Office Buildings and Major Modernization Projects, Medium-High-Level Construction; Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64); the DOJ's Vulnerability Assessment of Federal Facilities, Level IV Buildings; and OSS required elements.

Exterior Security

▶ Site

Building Setback. The building setback defined in the ISC Security Design Criteria for New Federal Office Buildings and Major Modernization Projects, Medium-High-Level Construction must be maintained using passive barriers such as bollards, berms, and planters and/or active barriers such as hydraulic barriers, fencing, and gates.

Landscaping. Special attention must be paid to the location and configuration of plants outside the building, particularly at parking and building entrances. Plants must be small and low so they cannot be used as hiding places or obstruct sight lines. Landscaping can also be used to enhance security by preventing encroachment on the building setback. Loose rocks that could break glass, if thrown, should be avoided.

Site Lighting. Sufficient lighting is critical to the safety of the public and employees outside the courthouse. Illumination must be provided for areas between cars and around bushes and shrubs. Higher levels of illumination are required at vehicle and pedestrian entrances. All perimeter lighting must support the operation of CCTV cameras.

Separation of Vehicle Circulation. Four vehicle circulation systems are required, for (1) judges, (2) designated court employees, (3) USMS prisoner transport, and (4) service. As needed, judges and court employees may share an entrance if parking areas are physically separated with automated controls. Vehicle access to the site should be controlled at a single point with a guard station, electronic access control, and active vehicle barriers.

Closed Circuit Television (CCTV). CCTV cameras must be installed to provide complete perimeter coverage and should be connected to the USMS Command and Control Center. Cameras might also be connected to an FPS regional communications center for after-hours surveillance.

Parking

Restricted Judges' Parking. Restricted parking, with electronic access control, must be provided for all judges. Judges' parking should be located in a totally enclosed area under the building, or, if this is not possible, in a fenced area with no public view of the parking area or the judge's path to the building. A separate restricted entrance to the building from the parking area must be provided. The design team should refer to the judiciary's parking policy approved by the Judicial Conference of the United States (JCUS) on March 16, 1999, for further details. A copy of the policy can be obtained from the Space and Facilities Division of the Administrative Office of the U.S. Courts (AOUSC).

Employee and Visitor Parking. Court-employee, juror, visitor, and non-court-employee parking areas, if provided, should be located adjacent to or outside the courthouse. These parking areas must be fenced and provided with electronic access controls. The design team should refer to the judiciary's parking policy approved by the JCUS on March 16, 1999, for further details.

CCTV. A CCTV system must be provided to monitor access to restricted and secure parking areas, parking spaces, and associated building entrances. Cameras are to be monitored by the USMS Command and Control Center.

▶ Building Perimeter

Intrusion Detection. An intrusion-detection system covering all perimeter doors, including roof access, must be installed in the courthouse. Ground-floor or accessible windows must be protected with glass-break detectors or other sensor technology. Intrusion-detection systems are to be monitored by the DHS-FPS and/or USMS (onor off-site) on a 24-hour basis.

Windows. All chamber and courtroom windows must be sealed and glazed with ballistic-resistant (UL Standard 752, Level IV) materials unless the USMS determines that ballistic glazing is not needed.

Emergency Exits. Emergency doors must be self-locking and equipped with a remote alarm and interior CCTV camera, both monitored by the USMS Command and Control Center. Where permissible and as per code, emergency exits should be equipped with magnetic locks or electric strikes connected to an alarm/time-delay mechanism or the fire alarm/sprinkler system. Electric locking systems on fire doors should be connected to battery-backup power and emergency generators. The systems must remain locked from the outside during a power failure. Emergency egress doors should not have any exterior hardware, and exposed hinges should be "peened" to ensure the security of the doors. A peened hinge is a hinge that has a pin that cannot be removed by pulling the pin out.

CCTV. A CCTV camera, also monitored by the USMS Command and Control Center, must be installed inside the building at each remote exit.

▶ Building Entrances

Elevators or stairs from the staff or public parking area should empty in front of the lobby screening station to allow weapons and contraband screening.

Public Entrance. Only one public entrance, with a lobby large enough to hold visitors during peak periods, must be provided, configured and sized to allow security systems to be part of the architectural design and circulation path from the entrance. The security station should be placed directly inside the building entrance, with sufficient space for queuing during peak periods, and wheelchair access must be provided. Refer to Chapter 3, "Planning for U.S. Courthouses," for public lobbies

and atriums; Design Notebook for Federal Building Lobby Security; Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64); and OSS required elements.

Employee Entry. All employees must enter the courthouse through the public entry screening point. If the CSC or BSC determine that a separate employee entry is required, the entrance should be equipped with a metal detector, X-ray machine, and CCTV, with the appropriate space for security personnel.

Judges' Entry. Entrance from the judges' parking area to the restricted elevator via a restricted lobby must have electronic access control, a CCTV camera, an intercom, and a duress alarm. The entrance must have the necessary travel cables to support security equipment. The entrance must be monitored by the USMS Command and Control Center.

Loading Dock. A single building entry point for supplies and services must be provided by the loading dock and service area. Parking for service vehicles must be located outside the court building. Where service and delivery vehicles are parked adjacent to the court building, the area must be designed to reflect and withstand explosions.

Where a parking-lot guard is provided, vehicular deliveries can be channeled past the guard post for screening, or a separate guard station may be required. The loading-dock entry must have electrically controlled doors, with remote control and monitoring by the USMS Command and Control Center. A metal detector and X-ray machine must be provided to screen personnel, mail, and packages entering the building. Intercom and CCTV systems must be installed to alert security personnel to the arrival of delivery trucks and allow surveillance of the loading-dock area. This equipment should be monitored by the USMS security station in the public lobby or by the USMS Command and Control Center.

Interior Security

▶ Circulation Controls

An essential element of courthouse security design is the physical separation of public, restricted, and secure circulation systems. Trial participants should not meet until they are in the courtroom during formal court proceedings. The integrity of each circulation system must be maintained for all functions within the court facility, including service access points.

The circulation system must provide judges a means to move from restricted parking to chambers and to move between chambers, courtrooms, and other spaces through restricted corridors. Generally, access is controlled by electronic access-control systems such as card readers.

Jurors must be provided with a means to move between floors on restricted-access elevators without crossing public spaces or secure prisoner corridors. Freight elevators must accommodate movement of up to 25 jurors at one time. The elevators must provide access to jury dining facilities (if provided) from trial jury suites. The elevators may need cab doors on opposite sides to serve both public and restricted corridor systems and should be provided with an electronic access-control system and appropriate-sized travel cables for support.

The building design must provide a means for the USMS to move prisoners from the vehicle sally port into central holding facilities and to holding cells adjacent to trial courtrooms without passing or entering public or restricted spaces.

► Life Safety Systems

Life safety protection systems and emergency egress requirements are prescribed by standards found in GSA P-100 and local and international building, fire, and electrical codes. A fire and life safety system should be equipped with an emergency evacuation system (EVAC) regardless of the number of occupants or floors. The EVAC alerts building occupants to an emergency and instructs them as to what action to take. The components of an EVAC that are designed and tested for this are listed by Underwriters Laboratories (UL). The EVAC installed must have components that can survive an emergency situation. Life safety and security

systems must be examined closely to ensure that the systems do not conflict. To coordinate security and fire-prevention measures, the design team should consult with the USMS, DHS/FPS, and GSA.

Emergency exit doors should open into the public entrance area under surveillance by court security personnel. The public entrance area must also be designed as an exit corridor. Emergency exit doors into the lobby must not be used for normal public circulation. Emergency doors must be self-locking and equipped with either a local or remote alarm at the USMS Command and Control Center. An interior CCTV camera, monitored by the USMS Command and Control Center, must be provided. Where permissible and as per code, emergency exits should be equipped with magnetic locks or electric strikes connected to an alarm/time-delay mechanism or the fire alarm/sprinkler system. Electric locking systems on all doors should be connected to battery-backup power and connected to emergency generators, preferably in a security closet on each floor. The systems must remain locked during a power failure.

► Security Alarms

Intrusion Detection. Normally, the first line of protection is the responsibility of the FPS and is accomplished through the installation of building intrusion-detection and locking systems. The USMS installs security systems on any vault or secure room in the clerk's office, USMS, and other court-related offices. Interior intrusion alarms must be incorporated into the USMS security system and/or FPS perimeter intrusion-detection system. In some cases, these two systems can be combined and linked off-site to more than one location.

Duress Alarm Devices. Duress alarm devices are installed as specified in Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications (USMS Publication 64) for courtrooms, libraries, judicial and court-related offices, judges' parking areas, and other site and building locations.

▶ Courtrooms

Entry. All public entrances must be provided with key locks. Each courtroom must be keyed separately with a submaster. Doors from restricted circulation, excluding fire

exits, must have free access from restricted circulation and have access control on the courtroom side. In some limited cases, access control hardware will be installed on both sides of the courtroom doors.

Windows. Windows must not permit visual surveillance from exterior locations. Ballistic-resistant glazing (UL Standard 752, Level IV) is required for exterior windows in all courtrooms unless the USMS determines that ballistic glazing is not needed.

Emergency Lighting. Emergency lighting in courtrooms must be provided to permit orderly evacuation in the event of an emergency. Selected lighting fixtures within the courtroom must provide an uninterrupted source of lighting in the event of a power outage. Standby power for emergency lighting to the courtrooms must be provided by local battery-backup units connected to an emergency generator. The judge's bench must not be spotlighted by emergency lighting. Key switches should be provided in restricted corridors for testing on a regular basis.

CCTV. Courtroom security cameras must be connected to the USMS video surveillance system and may be activated by a duress alarm device as detailed in *Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications* (USMS Publication 64). The security camera and courtroom audio can be connected to the central cell block for monitoring by defendants who are removed from the courtroom and placed in an isolation cell. Bankruptcy judge, district judge, and magistrate judge courtrooms must have one camera, typically mounted on the back wall, with a view of the entire well area. Large special proceedings and en banc courtrooms should have an additional camera mounted on the front wall. Conduits for CCTV must be installed in all four corners of all courtrooms to accommodate current and future camera installation. Where cameras are installed, recessed housings must be provided for cameras in the wall or ceiling. Cameras must be positioned to prevent room lighting from interfering with the view or picture quality.

Ballistic-Resistant Material. The judge's bench must be lined with ballistic-resistant material (UL Standard 752, Level III) on all vertical surfaces (refer to Chapter 12, "Tenant Improvements and Furnishings," millwork section).

Duress Alarm Devices. Duress alarm devices must be located at the judge's bench, courtroom deputy clerk station, and bailiff station, if present, per *Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications* (USMS Publication 64). In appellate panel courtrooms, the center position of the panel should be equipped with the alarm button. Additional bench locations for alarms must be provided in en banc courtrooms. Alarms are to be connected to the USMS Command and Control Center. All duress alarm devices in a courtroom should report as a single zone.

Weapons Screening. For trials requiring a high level of security, spectators entering the courtroom are subject to additional weapons screening. Two 20-amp, 120-volt alternating current outlets connected to the emergency generator should be located outside each courtroom. Therefore, equipment must be provided to detect firearms, bombs, and other weapons at the entrance to the spectator area from the public lobby, as described in *Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and Specifications* (USMS Publication 64).

Emergency Egress Doors. Public egress paths from the courtroom should be through public circulation. If egress is through restricted circulation, doors must be equipped with a fail-safe electric lock interfaced with the fire alarm system. Emergency egress doors, used by judges, must have free access from restricted circulation and a key lock or electronic access control on the courtroom side.

► Associated Courtroom Spaces

Entry. The judges' conference room, robing room, and conference/robing room must have key locks or an electronic access-control device. Electronic locks should be fail-secure.

Duress Alarm Devices. The judges' conference room, robing room, and conference/robing room must each have at least one duress alarm device. The duress alarm devices must be connected to the USMS Command and Control Center.

CCTV. A CCTV camera must be provided for the public lobby areas outside each courtroom and connected to the USMS Command and Control Center.

▶ Judges' Chambers Suites

Entry. A CCTV camera, intercom, and electric door strike must be provided at the visitor entry door to restricted circulation and at the chambers suite entrance. The system must be monitored and controlled from the judicial assistant's workstation and from one of the law clerk offices in the suite. Electronically controlled entry doors must be fail-secure and connected to emergency backup power at designated locations.

Duress Alarm Devices. Duress alarm devices must be installed in the chambers suite under the judicial assistant's desk, judge's desk, and one law clerk's desk, with all three reporting as a single zone to the USMS Command and Control Center.

Windows. Ballistic-resistant glazing (UL Standard 752, Level IV) is required for the exterior windows of all judges' chambers suites unless the USMS determines that ballistic glazing is not needed.

▶ Jury Facilities

Duress Alarm Devices. A duress alarm device must be provided at the jury check-in counter, located in the jury assembly area, and at the trial jury and grand jury suite security workstations. To enhance security and privacy in the trial jury and grand jury suites, a court security officer, deputy marshal or sworn-jury custodian is often stationed at the entrance. A duress alarm must be provided at each security station.

▶ Central Court Libraries

Entry. The public entrance to the library must be provided with a key lock. A key lock or electronic access control from the library to restricted circulation must also be provided.

Duress Alarm Devices. The circulation desk, library staff offices, and study areas in unstaffed libraries must be provided with duress alarm devices.

► Clerk's Office (U.S. Court of Appeals, U.S. District Court, and U.S. Bankruptcy Court)

Entry. Public entrances to clerks' offices must be provided with key locks. Public access to restricted office areas is controlled with an electric lock operated at the

public counter workstation. Employee access from public circulation should be controlled by key lock or electronic access control. Access from the clerk's office to restricted circulation, if provided, should be controlled by key lock or electronic access control.

Vaults. Evidence and financial vaults in the clerk's office must have keypad shunts, vault door contacts, motion detectors, and duress alarm devices monitored by the USMS Command and Control Center.

Duress Alarm Devices. The clerk's private office, as well as the staff side of the public counter, secure storage, vaults, and other selected office areas, must be equipped with duress alarm devices. The alarms must be logically zoned and connected to the USMS Command and Control Center.

Break-Resistant and Ballistic-Resistant Shielding. Clerks' offices located in facilities where weapons are screened at the entry must have break-resistant (UL Standard 972) transaction windows. Clerks' offices located in leased facilities where weapons screening is not conducted at the entrance must have a public counter with a ballistic-resistant (UL Standard 752, Level III) transaction window. Access doors and hardware between the public area and the restricted office area should be ballistic-resistant (UL Standard 752, Level III). In addition, surfaces within 4 feet (1,220 mm) of the counter must have ballistic-resistant surfaces from floor to ceiling and may also include the door into the suite.

► Court-Related Offices

Building security requirements are identical for all court-related offices. The criteria below apply to the following:

- Office of the Circuit Executive
- Office of the District Court Executive
- Office of the Bankruptcy Appellate Panel Clerk
- Office of the Senior Staff Attorney
- Office of the Pre-Argument/Conference Attorney

Reference Chapter 9, Probation and Pretrial Services Offices for additional security requirements.

- Office of the Bankruptcy Administrator
- Office of the Federal Defender's trial preparation suite

Entry. The public entrance to court-related offices must be provided with a key lock. If public access to the office areas is restricted, access should be controlled with an electric lock operated at the public counter or reception workstation. Employee access from public circulation should be controlled by key lock or electronic access control. Access from the court-related offices to restricted circulation, if provided, should be controlled by key lock or electronic access control. Doors to executive offices, managers' offices, and enclosed storage rooms must have key locks, except as otherwise noted.

Vaults. GSA Class 5 vaults must have keypad shunts, vault door contacts, heat sensors, motion detectors, and duress alarm devices monitored by the USMS Command and Control Center.

Duress Alarm Devices. Duress alarm devices must be placed on the staff side of transaction windows, near the receptionist at the main entrance door, near secure storage, and in other selected areas. Duress alarm devices should also be placed in interview rooms, supervisors' offices, and offices of probation and pretrial services supervision officers. The duress alarm devices must be logically zoned and be monitored by the USMS Command and Control Center.

Break-Resistant and Ballistic-Resistant Shielding. Court-related offices located in a facility where weapons are screened at the entry must have break-resistant (UL Standard 972) transaction windows. Court-related offices located in a leased facility where weapons screening is not conducted at the entry must have a public counter with counter-to-ceiling ballistic-resistant (UL Standard 752, Level III) transaction windows, where required. Access doors and hardware between the public area and the restricted office area should be ballistic-resistant (UL Standard 752, Level III). In addition, surfaces within 4 feet (1,220 mm) of the counter must be ballistic-resistant from floor to ceiling. Where appropriate in the probation and pretrial services offices, a CCTV camera, monitor, and intercom can be used to screen visitors before they enter lobby areas.

► Central Mail Facilities

Design. The USMS requires a minimum of 800 square feet (74.3 Nm²⁾ for loading-dock package screening and personnel. Refer to Chapter 11, "Common Building Spaces."

Entry/Egress. The entrance must be provided with an electronic keycard access system, an intercom, and an electric strike—controlled door. This will allow control of door traffic during the mail handling/opening process. The back door should remain closed and should be opened only for emergency access by the decontamination team. The card access control system should allow all controls to be overridden in an emergency. The door should have a sign that notifies personnel and the public that the door is for emergency access by the decontamination team only.

Duress Alarm. A duress alarm must be easily accessible and visible to all occupants.

CCTV. The activation of the duress alarm must send a signal to the USMS Command and Control Center. In a multi-tenant building, this control center may be referred to as the FPS Control Room. The duress alarm will activate cameras to monitor the activity in the entire mail room.

Audible Alarm. An audible alarm and a visual signal shall be provided to the USMS Command and Control Center when the decontamination tank reaches three-fourths capacity.

Table 16.1, Access Control and Security, is provided to identify the locations of security-related devices and equipment. Though the detailed design, specification, procurement, and installation of security systems is by the USMS, the GSA funds the design and construction of the infrastructure for security systems. The information provided here will allow for the design of conduit and emergency power systems.

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Table 16.1 Access Control and Security¹

				RELATIONSHIPS			SE	CURI	TY &	ALAI	RM SY	/STE	MS			
SPACES	Public	Restr icted	Secure	numbers, see Number Key) REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk -Through Metal Detecto F	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
APPELLATE COURTROOM	/ 1															
En Banc Courtroom	3	3			•		•			•	•			•	•	
Panel Courtroom	3	3			•		•			•	•			•	•	
DISTRICT JUDGES' C	OUR	TROC	OM ¹													
Special Proceedings Courtroom	3	3	2		•		•			•	•			•	•	USDC courtrooms may provide an audio/video (A/V) link to the cell area for remote viewing of proceedings by the defendant. A typical system may include one courtroom camera (two cameras for a special proceedings courtroom) and a link from the courtroom A/V system. Also, in high-threat situations, video may be continuously monitored by the USMS or may be activated by the duress alarm system.
Standard Courtroom	3	3	2		•					•	•			•	•	
Magistrate Judge's Courtroom	3	3	2		•		•				•			•	•	

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS numbers, see Number Key)			SE	CURI	TY &	ALAI	RM SY	/STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detector	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
BANKRUPTCY JUDGI	E'S C	OUR	TRO	OM ¹												
Courtroom	3	3			•		-								•	
COURTROOM USER	STAT	IONS	;													
Judge(s) Bench								•								Provide bench armor.
Courtroom Deputy Clerk								•								
Jurors																
Attorney Tables				In well, near rail												This area may also be used by security personnel escorting in-custody defendants.
Law Clerk(s)								•								
Bailiff (Appellate Courtroom Only)								•								
Equipment Storage Room				Accessed from well												
Short-Term Exhibits Storage	3		1	Accessed from well												
OTHER SPACES																
Exhibit Display (District and Bankruptcy)																
Soundlock	3			Courtroom entrance												

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS numbers, see Number Key)			SE	CURI	TY &	ALA	RM SY	/STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detector	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
JUDGES' CHAMBERS	SUI	TES														
Circuit Judge's Chambers Suite Entry		3														
District Judge's Chambers Suite Entry		3														
Magistrate Judge's Chambers Suite Entry																
Bankruptcy/Magistrate Judge's Chambers Suite Entry	3															
Non-resident Judge's Chambers Suites Entry	3															
JUDGES' CHAMBERS	;															
Circuit Judge Private Office	3							•						•	•	Ballistic-resistant exterior windows per USMS.
District Judge Private Office	3							•						•		Ballistic-resistant exterior windows per USMS.
Bankruptcy/Magistrate Judge Private Office	3							•						•		Ballistic-resistant exterior windows per USMS.
JUDGES' CHAMBERS	SUF	PPOR	T AR	EAS												
Vestibule		3		Off chambers												Provide second egress from chambers to restricted circulation. Judge's private entry receives a card reader.

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Table 16.1 Access Control and Security (cont'd)

				RELATIONSHIPS numbers, see Number Key)			SE	CURI	TY &	ALAI	RM SY	STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detecto ^r	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
Private Toilet		Р		Off vestibule												
SUPPORT AREAS																
Reception Area	2			Off private circulation												Provide a CCTV camera and security intercom outside the entry to the reception area.
Coat Closet		1														
Judicial Assistant's Workstation	1			Adjacent to reception		-			-							Multiple locations may be identified for infrastructure but only a limited number of entry-control packages are used (2 per chambers and 3 for a chief judge's chambers). Emergency power must be provided at each entry-control-package desk location to support the judicial assistant's equipment during a power failure.

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS numbers, see Number Key)			SE	CUR	TY &	ALAI	RM SY	STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detector	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
File Storage Area				Near judicial assistant												
Fax Machine Area	3	1														
Copier Area		1														
Storage		1														
Service Unit		1														
CONFERENCE/REFE	REN	CE R	OOM													
Circuit Judge Conference/ Reference	3			Accessed from chambers and staff circulation												
District Judge Conference/ Reference	3			Accessed from chambers and staff circulation												
Bankruptcy/ Magistrate Judge Conference/ Reference	3			Accessed from chambers and staff circulation												
OTHER SUPPORT O	FFIC	ES														
Law Clerk's Office		3														Provide a second set of duress alarm devices at only one law clerk's office.
Courtroom Deputy Clerk's Office		3														

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Secure 2: Security staff and prisoners

Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS numbers, see Number Key)			SE	CURI	TY &	ALAF	RM SY	STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detecto r	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
APPELLATE COURT	ROOI	M ASS	SOCI	ATED SPACES												
Judges' Conference Room		3		Adjacent to robing room											•	Provide two duress alarm devices in the room.
Service Unit				Adjacent to conference room												
Panel Courtroom Service Unit	3			Adjacent to conference room												
Judges' Robing Room	3			Adjacent to courtroom												
Toilet		Р		Adjacent to robing room												
Work Area				Off attorney work room												
Attorney Work Room	2															
Public Waiting Area	2			Outside courtroom	-											
DISTRICT/BANKRUP	TCY	COUR	TRO	OM ASSOCIATED S	SPAC	ES										
Conference/Robing Room (when chambers are located on a remote floor)		3		Adjacent to courtroom				•							•	Provide one duress alarm device in the room.
Service Unit				Adjacent to conference room												

3

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Secure 2: Security staff and prisoners

Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS numbers, see Number Key)			SE	CURI	TY &	ALAF	RM SY	STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detector	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
Attorney/Witness Room	2	2	S	Adjacent to courtroom		0		S		0	> 2		KK	Ш	ш	REWARNS
Public Waiting Area	2			Outside courtroom												
COURT REPORTER	REC	ORDE	R													_
Shared Work Room		1		Near court reporter/recorder office												_
Transcriber/Typist Workstation	1			Near court reporter/recorder office												
JURY ASSEMBLY S	UITE															
Check-In	3			Adjacent to reception												
Jury Clerk's Office	3	3		Adjacent to reception												
Coat Closet		1		In reception area												
Jurors' Toilets		1P		Adjacent to assembly area												
Service Unit		1														
Vending Area				Adjacent to service unit												
Juror Lounge	1			Adjacent to assembly area												

16-16 | Building Security

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS numbers, see Number Key)			SE	ECURI	ITY &	ALAR	RM SY	STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detector	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
Assembly Area		1														
Equipment Storage		3		Adjacent to jury assembly area												
Supplies Storage		3		Adjacent to jury clerk's office												
TRIAL JURY SUITE																
Soundlock Entry		3														
Jurors' Toilets		Р		Off soundlock												
Coat Closet		1		In soundlock												
Trial Jury Deliberation Room		1														
Service Unit		1		In jury room												
Exhibits Display				In jury room												
Video Equipment				In jury room												
Sworn-Jury Custodian Station		1		Off entry area			•									
GRAND JURY SUIT																
Entry Area	3	3														
Jurors' Toilets		Р		Off entry area												
Service Unit																
Security Workstation		1		Off entry area			•									
Witness Room		1														
Hearing Room		3	1													
Exhibits Display				In hearing room												
Video Equipment				In hearing room												
Closet		1														

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

Restricted 2: Remote access control (as in CCTV and electric door strikes)

Restricted 3: Direct access control

Restricted 4: Counter window service

P: Privacy lock

Secure 1: Authorized staff only

Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS umbers, see Number Key)			SE	ECURI	TY &	ALAF	RM SY	STE	MS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detector	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
CENTRAL COURT L								07			> 2					KEWAKKS
Public Entry/Lobby	3															
Circulation/Control Area	2	1		Adjacent to public entry			-									
Periodical Area	2			Near circ./control and casual reading areas												
Reference/Card Catalog Area	2	1		Adjacent to circ./control area			•									
Study Area	2			Adjacent to reference area												
CALR: Public Access																
CALR: Staff Access	3	1														
Stack Area: General	2															
Court Personnel Work Area																
OFFICES	1															
Circuit Librarian		3					-									
Deputy Circuit Librarian							•									
Professional Staff	3	1														
Technical Staff		1		Located in technical services area												
Fax Machine Area		1														

Public 1: Unscreened access (uncontrolled entrance to the building and spaces)

Public 2: Screened access (public passes through a security checkpoint)

Public 3: Screened access (locked under certain conditions)

Restricted 1: Uncontrolled access

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Table 16.1
Access Control and Security (cont'd)

				RELATIONSHIPS umbers, see Number Key)			SE	CURI	TY &	ALAF	RM SY	STEI	WS			
SPACES	Public	Restricted	Secure	REMARKS	CCTV Camera	CCTV Monitor	Duress Alarm	Security Intercom	Door Contact	Card Reader	Walk-Through Metal Detector	X-Ray Machine	Remote Door- Release Mech.	Emergency Power	Emergency Lighting	REMARKS
OTHER SPACES																
Public Copier	2															_
Copier: Staff		1														
Supplies Storage		3														1
Technical Services Area																
Coat Storage: Public	2			Near entry/lobby												
Coat Storage: Staff		1		Near staff entry												
Storage Area		3														ı
Freight/Mail Receiving		1		Next to technical services area and mail room												
Storage/Shelving Area	1			Adjacent to technical services area												
BUILDING SHARED	SPA	CES														
News Media Room (optional)	3	3		May be remote												
Shared Judges' Conference Room		3													•	
Central Mail Facility		2		Adjacent to loading dock and screening station.										•		

¹ For all other spaces not identified in this table, reference USMS Vol. III Publication 64 and consult with the USMS.

Provide a duplex receptacle outside the public entrance to each courtroom to be used for a relocatable walk-through metal detector used during high-threat proceedings.

This chapter applies to the following court units:

- Court of Appeals Clerk's Office
- · District Clerk's Office
- Bankruptcy Clerk's Office
- · Probation and Pretrial Services Office
- Circuit Executive's Office
- Bankruptcy Appellate Panel Clerk's Office
- Senior Staff Attorney's Office
- Pre-Argument/Conference Attorney's Office
- Bankruptcy Administrator's Office

It describes alternative workplace strategies that result in more efficient use of space than traditional office/cubicle layouts and complement a mobile work force, collaborative work environments, and modern information technologies.

Use of alternative workplace strategies for court projects is not mandatory.

ALTERNATIVE WORKPLACE STRATEGIES

Introduction

Space programming and design of alternative workplace strategies differ significantly from the prescriptive approach described in other chapters of the Design Guide. Alternative workplace strategies tailor work settings to work modes of staff instead of providing a dedicated office or workstation for each staff member. Alternative workplace strategies create quality office environments that are flexible and efficient, important characteristics for courts to consider given the limited resources the judiciary has for rent and related operational costs.

Although space and rent reduction are major drivers for the judiciary's inclusion of alternative workplace strategies in its Design Guide, an equally important reason is the need to update facilities to support a technically adept and mobile workforce. New technologies, such as videoconferencing, cloud computing, WLAN (Wireless Areal Local Network), smart phones, touch-screen tablets, and electronic records management all have empowered and liberated employees. Technology also has created exciting opportunities to reimagine, and open up, the traditional workplace.

Background

Since the mid 1990's, the judiciary has implemented a series of initiatives to limit space and rent growth, cognizant of the impact an ever-increasing rent bill has on the ability to hire and retain staff. Those efforts have achieved significant gains, but more is needed given the realities of decreasing Congressional appropriations funding.

In September 2013, the Judicial Conference endorsed policy that caps space growth, sets goals for space reduction, and establishes a framework for space management. The policy continues the trend of standardizing space management that began with the Circuit Rent Budget (CRB) program in 2007.

The development of alternative workplace strategies is an outgrowth of the judiciary's Integrated Workplace Initiative (IWI), a program that began in 2011 with the goal of identifying innovative management, technology, and space planning to better support court operations. The IWI serves as a foundation for alternative workplace strategies, referencing data from surveys of over 3,000 court employees from 25 district/circuit courts and "proof of concept" studies for a variety of court projects.

Supporting Documents

A comprehensive guide to supporting documents can be found in Chapter 2, "Courthouse Programming and Budgetary Considerations." That listing includes program and design criteria, courthouse planning and related guidelines, policies, and information about many facets of the design and construction of federal courthouses.

Other references are listed below:

▶ 2007 U.S. Courts Design Guide

- Chapter 3: Planning for U.S. Courthouses
- Chapter 8: Clerk's Offices
- Chapter 9: Probation and Pretrial Services Offices
- Chapter 10: Other Court Units
- Chapter 12: Tenant Improvements and Furnishings
- Chapter 14: Acoustics
- Chapter 15: Building Systems

- No Net New, by circuit on an annual basis
- Three Percent Space (USF) Reduction, reduction target by the end of FY2018
- Circuit Space Management Plans
- Circuit Rent Budget (CRB)
- Guide to Judiciary Policy, Volume 12, Chapter 10: **Telework**

- Guide to Judiciary Policy, Volume 15, Chapter 3, § 330.70: Connecting Wireless Local Area Networks (WLANs) to Private Judiciary Networks
- Guide to Judiciary Policy, Volume 16, Chapter 4: Furniture, Appliances, and Related Services

► Tools

- Space Utilization Model (SUM) Tool
- Circuit Space Management Plan Template Package
- Alternative Workplace Strategies Quick Reference
- Work Mode Survey Forms

Resources

- Integrated Workplace Initiative (IWI) Case Studies
- Furniture Blanket Purchase Agreements (BPAs)
- GSA, Workplace Utilization and Allocation Benchmark
- GSA, Leveraging Mobility, Managing Place
- GSA, The New Federal Workplace
- GSA. Sound Matters
- GSA, Facility Standards for the Public Buildings Service (P100)
- U.S. Marshals Service, Judicial Security Systems Requirements and Specifications, Volume Three, Publication 64

Programming and Budgetary Notes

► Exceptions to the *Design Guide* Standards

Authority of the Circuit Judicial Councils

Circuit judicial councils play an important space-management role by reviewing district-wide facility plans, approving requests for new or modified space, and enforcing adherence to design guidelines. The circuit judicial councils have authority over and responsibility for a circuit's space-management program (28 USC (§332 and §462(b))) and for determining the need for space. As directed by the Judicial Conference of the United States, any significant exceptions to the standards in the *Design Guide* must be approved by the respective circuit judicial council.

Authority of the Committee on Space and Facilities and Judicial Conference

The authority to approve the following exceptions to the *Design Guide* standards rests with the Committee on Space and Facilities: (1) exceeding the total space envelope for either the court unit or the project as a whole, and (2) exceeding the plumbing standards. If the Committee on Space and Facilities disagrees with the circuit judicial council request for one of these exceptions, the Judicial Conference shall decide whether to grant the exception.

Approved Exceptions Are Reported to GSA and Congress

All approved exceptions are reported to the General Services Administration (GSA) and Congress. Contact the Administrative Office of the U.S. Courts (AOUSC) for more detailed information.

► General Programming Notes

Space Standards for Office Personnel

Space standards for office personnel must be allocated according to benchmark occupational groups described in the judiciary's Human Resources Manual and shall not exceed office space requirements described in Chapters 8, 9, and 10 of the Design Guide. Space standards for alternative workplace strategies are listed in Table 18.1.

Baseline Space Program

Space programs for alternative workplace strategies projects shall not exceed a baseline space program (Any Court) developed using standards described in Chapters 8, 9, and 10 of the *Design Guide*. Court units opting to use alternative workplace strategies can expect to use 20 to 30% less space than that currently occupied. Larger offices generally yield better space efficiencies due to economies of scale.

Dedicated Office Space

Dedicated office space includes enclosed offices and open workstations designed for one or more employees (a shared office) on a full time basis. The size of dedicated offices and workstations cannot exceed the space standards described in Chapters 8, 9, and 10 of the *Design Guide*. Courts are encouraged to consider reducing the standard size of dedicated offices and workstations when applying alternative workplace strategies. For example, offices may not need to include space for small group meetings if shared meeting rooms are easily accessible and available.

Mobile Office Space

Mobile office space includes enclosed offices or open workstations shared by multiple employees and used on an as-needed basis. The terms "free addressing" and "touchdown" are commonly used to describe this type of space. Mobile office space differs from dedicated office space in that ownership is not permanent. Mobile office space can be reserved through an electronic concierge system or used on an impromptu, drop-in basis. Mobile office space relies heavily on WLAN, plugand-play data connections, and electronic records management.

General Office Space - Collaborative

General office space for collaborative functions includes conference rooms, training rooms, and other spaces configured for small or large group activities. Typically, alternative workplace strategies include more and different types of collaborative space than traditional offices to promote general staff interaction, information sharing, and problem solving. Collaborative space can be reserved through an electronic concierge system and equipped with WLAN, plug-and-play data connections, speaker phones, presentation monitors, white boards, and other presentation materials.

General Office Space - Support

General office space standards for support functions are described in Chapters 8, 9, and 10 of the Design Guide. Support spaces include reception/waiting areas, records storage areas, copy rooms, staff toilet rooms, and special office space specific to probation and pretrial services functions. Although demountable walls are typically used with alternative workplace strategies (Page 18-5), security, acoustical, and plumbing requirements may necessitate standard gypsum board walls for reception/waiting areas, interview rooms, toilet rooms, and testing labs. Electronic files can significantly reduce the amount of support space needed for records storage.

Probation/Pretrial Services Interview Rooms

Interview rooms for probation and pretrial services offices shall be designed per standards described in Chapter 9, "Probation and Pretrial Services Offices" and the Probation and Pretrial Services Security" chapter in the U.S. Marshals Service Judicial Security Systems Requirements and Specifications, Volume Three, Publication 64. Demountable wall and door systems, if used, must conform to acoustical requirements in Chapters 14 of the Design Guide and be able to accommodate security wiring for duress alarms. Door options must include vision panels. Criteria for the number of interview rooms to provide are listed in Chapter 9 of the Design Guide.

Public Space

Public spaces for clerks' offices are described in Chapters 8 and 10 of the Design Guide. Public spaces include intake counter, queuing, pay copier, record exam, and public access computer areas. Although demountable walls are typically used with alternative workplace strategies, security and acoustical requirements may necessitate standard gypsum board walls and built-in counters to separate staff space from public space.

Shared Space

Courts and court units are encouraged to share facilities if operations or security are not compromised. Sharing should especially be considered when courts are colocated in the same building, on the same floor, and in adjacent space. Spaces often shared by court units include training rooms, conference rooms, break rooms, staff toilet rooms, and computer server rooms. Court units implementing alternative workplace strategies may also want to consider sharing space such as reception areas and mobile office space as described above, depending on security and operational conditions.

Functions and Activities

The judiciary's adoption of new technologies including videoconferencing, cloud computing, WLAN, smart phones, touch-screen tablets, and electronic records management has altered the functions or the way functions are completed of court units described in Chapters 8, 9, and 10 of the Design Guide. A collaborative business model is essential for offices using new technologies to better support operations. Office space designed to support collaboration will enhance productivity and generally improve court units' operations.

In addition, efforts by the judiciary to reduce its space footprint and related rent increasingly encourage court units to alter operations to accommodate telework and mobile work within the office. Many tasks that have traditionally been done in the office can be done remotely using new technology described above. Offices with staff that frequently travel or perform field work, such as probation supervision officers can readily incorporate alternative workplace strategies.

Alternative Workplace Strategies Concepts ▶ Work Modes

Alternative workplace strategies require analysis of employee work modes to determine the types and quantities of work settings that best support operations. This analysis is conducted through interactive means, such as staff surveys, interviews, focus groups, workshops, and technological means, such as chair or infrared sensors. Determining the amount of time spent in various work modes is important for implementing alternative workplace strategies because the number and types of offices, workstations, conference rooms, etc., depends on hours of occupancy as opposed to number of employees. Work modes can be described in different terms but generally include the following categories:

Focused

Focused work modes include "heads down" work such as reading, writing, data entry, and filing. Focused work can be accomplished in an enclosed office or open workstation depending on the level of concentration needed for a particular task. Employees primarily assigned focused work and who function independently without hands-on supervision are ideal candidates for mobile work. Employees that perform focused work but require periodic or frequent supervision may require dedicated offices or workstations.

Collaborative

Collaborative work modes include formal and informal meetings of all types, from gatherings of a few employees to large group conferences. Alternative workplace strategies support collaborative work by incorporating space programs with multiple, open and enclosed, small meeting areas as opposed to few, large conference rooms. Large conference and training rooms should be designed to be subdivided with multiple entrances, and reconfigurable tables and seating so they can be subdivided into multiple, small meeting rooms.

Learning

Learning work modes include individual and small group mentoring, formal classroom style training, study, and testing. Learning work modes are more prevalent in offices transitioning to and maintaining a mobile- and technology-based business model. Learning work modes can be accomplished in an enclosed office, open workstation, collaborative spaces and specially design training room.

▶ Mobility Scenarios

Mobility scenarios are a convenient way of categorizing and describing the potential for office/workstation sharing. Measuring existing telework and mobile work within the office is a good starting point for determining an appropriate mobility scenario. Changes to policy, management, technology, training, and facilities offer opportunities to implement a more advanced mobility scenario. More advanced mobility scenarios can be used to reduce space or accommodate staff growth within existing facilities.

Low Mobility

- Job requirements necessitate that 80% of staff report to the office daily.
- 20% of staff telework or mobile work within the office 1-2 days a week.

Moderate Mobility

- Job requirements necessitate that 60% of staff report to the office daily.
- 40% of staff telework or mobile work within the office 1-2 days a week.

High Mobility

- Job requirements necessitate that 40% of staff report to the office daily.
- 60% of staff telework or mobile work within the office 2-3 days a week.

Very High Mobility

- Job requirements necessitate that 30% of staff report to the office daily.
- 70% of staff telework or mobile work within the office 3-5 days a week.

► Workplace Settings (Refer to Table 18.1)

Workplace settings are spaces designed to accommodate the different work modes used by either mobile or non-mobile staff. They include offices, workstations, conference rooms, and training rooms. They also include spaces unique to alternative workplace strategies design, which are described below:

Huddle Areas

Huddle areas are meeting spaces for two to five individuals. They are used on an impromptu first-come, first-served basis, without reservation. Use is limited to periods of one or two hours. Huddle areas are typically outfitted with a "smart table," chairs, WLAN, plug-and-play data connections, presentation monitors, and other presentation materials as may be appropriate (whiteboards, etc.).

Getaway Booths

Getaway booths are small, enclosed alcoves for one or two individuals, providing space for tasks that require quiet, concentration, and/or confidentiality. They are used on an impromptu first-come, first-served basis, without reservation. Use is limited to short periods of one or two hours. Getaway booths are typically outfitted with a desk or table and chair or, as an alternative, with one or two chairs and an occasional table.

Touchdown Areas

Touchdown areas are clustered, open workstations for mobile workers who do not need workspace on a full-time basis. For example, mobile workers can use touchdown areas before or between meetings. Touchdown areas are used on an impromptu first-come, first-served basis, without reservation for a few hours or few days per week. They can be designed with visual privacy screens and storage.

Personal Storage Areas

Personal storage areas include lockers, cabinets, and/or drawer pedestals for mobile workers. Personal storage areas can be used for work materials or items such as purses, briefcases, coats, etc. Ideally, personal storage areas are located near mobile office space (enclosed offices, open workstations, and touchdown areas). Personal storage areas can be assigned or used on a first-come, first-served basis.

Work Lounges

Work lounges serve as a change of scenery for individuals or groups to stimulate ideas and foster collaboration and learning. Work lounges are ideally designed as iconic spaces with attractive features such as exterior views, comfortable furniture, counters with sinks, and break room type appliances to encourage use. Alternative workplace strategies design typically has a higher circulation factor than traditional office design to accommodate the inclusion of work lounges.

▶ Seat Count

The maximum number of employees that an office with an alternative workplace strategies design can accommodate is determined by a seat count. Dedicated and mobile offices and workstations typically have a seat count of one. A larger office can have a higher seat count if more than one employee can use it at the same time. Getaway booths, touchdown areas, collaborative space, and work lounges can also contribute to an office's seat count, for example, when all-hands activities are scheduled. An example follows:

Seat Count Protocol

 Enclosed Offices one seat each Open Workstations one seat each

 Touchdown Areas one seat for every six lineal feet of work surface Getaway Booths one seat if desk, work surface, or table is included

 Huddle Areas one seat for every table

 Training Rooms one seat for every workstation

 Conference rooms one seat for every six lineal feet of table

 Work Lounges one seat for every table or booth

► Neighborhoods (Refer to Figure 18.1)

A key concept in alternative workplace design is that of "neighborhoods:" the grouping together of workplace settings to support a variety of work modes, promote internal mobility within the office, and provide flexibility to employees. Although a neighborhood can be configured to support a department, similar to a traditional office, it is most effective when set up to encourage multidisciplinary teamwork and exchange of ideas. The following summarizes neighborhood categories often used in alternative workplace strategies design.

Public Neighborhood

A public neighborhood includes areas where clients and visitors have free or supervised access, such as lobbies, reception rooms, intake areas, record viewing rooms, interview rooms, urinalysis toilet rooms, etc. This neighborhood may be only partially constructed using alternative workplace strategies techniques (demountable walls) due to plumbing, acoustics, and security concerns.

Professional Neighborhood

A professional neighborhood includes dedicated and mobile offices and workstations, touchdown areas, huddle areas, and getaway booths, which support focused and collaborative work modes. It also includes personal storage areas for mobile workers. Professional neighborhoods are configured to encourage staff interaction.

Interactive Neighborhood

An interactive neighborhood includes training rooms, conference rooms, and huddle areas for group activities which support collaborative and learning work modes. It can also include getaway booths for self-paced learning, teleconferences, and video conferences. Informal seating areas should be provided for time before and after meetings. This neighborhood often has direct access to public areas to support sharing with other court units and programs with court clients.

Informal Neighborhood

An informal neighborhood includes a work lounge, touchdown areas, and getaway booths that provide change-of-scenery workspace which supports focused, collaborative, and learning work modes. The neighborhood also includes service areas with counters and sinks to accommodate coffee and other beverages. Informal neighborhoods are outfitted with café style tables and chairs, booths, and other types of informal furnishings.

Alternative Workplace Strategies Design ▶ General

Alternative workplace strategies design creates an open, spacious environment for

all staff by turning traditional office design inside out, placing offices in the central core of a floor plan and workstations adjacent to windows. This approach allows natural light to flow through an entire space rather than be blocked by office walls. Workstation partitions are lower than traditional office cubicles contributing to natural light and views through a space. Similarly, enclosed offices and collaboration rooms have glass walls to the extent possible.

▶ Demountable Walls

Although metal studs and gypsum board walls may be required in some areas for reasons of acoustics, security, and construction cost, most space in an alternative workplace strategies design is defined using demountable walls. Demountable walls are constructed using proprietary framing systems with options such as wallmounted storage tracks, sliding doors, acoustical insulation, and modular wiring harnesses. They can be clad with a variety of materials including glass, fabric, whiteboard, and wood. Demountable walls can reduce build-out times for new space and provide flexibility for changing operational needs.

<u>Note</u>: The potential impact of light transmission through glass walls and related glare on computer and presentation monitors must be considered when choosing demountable wall cladding materials. In cases where monitors cannot be positioned to avoid glare, cladding with opaque finishes or a combination of opaque finishes and glass should be used.

▶ Finishes

Chapter 12, "Tenant Improvements and Furnishings," sets quality standards for finishes that can be applied to alternative workplace strategies design. In general, finishes for flooring, ceilings, and gypsum board walls in alternative workplace strategies projects should complement material selections for demountable walls and systems furniture. Flooring must be compatible with the large, open areas in alternative workplace strategies design. Carpet tiles should be used for alternative workplace strategies projects. Broadloom carpeting is impractical for large open spaces and typically needs to be replaced when alterations are made.

▶ Furniture

Chapter 12, "Tenant Improvements and Furnishings," sets quality standards for furniture that can be applied to alternative workplace strategies design. Furniture for alternative workplace strategies projects should be selected to allow for easy configuration in a variety of spaces and for a variety of purposes. For example, conference and training tables should be movable and connectable to allow collaboration space to be rearranged when necessary. Consider options for integrating new technologies and related electrical needs in applicable desks and tables.

▶ Acoustics

Chapter 14, "Acoustics," sets quality standards for acoustical performance of courthouse space including public waiting areas and probation/pretrial services interview rooms. GSA's publication, Sound Matters, describes acoustical problems, remedies, and best practice standards for the "contemporary office" or alternative workplace strategies designed project. Acoustical properties of demountable walls vary by manufacturer. Most manufacturers offer products that can achieve "confidential" sound separation using absorptive materials, door gaskets, and cutout insulation. Field testing of installed wall/door systems is recommended. Sound masking systems should be used to augment acoustical properties of demountable walls, doors, and other materials used in an alternative workplace strategies design.

► Electrical Distribution Systems

Chapter 15, "Building Systems," sets quality standards for electrical distribution systems that can be applied to alternative workplace strategies. Alternative workplace strategies use proprietary, quick-connect power modules, wiring harnesses, and outlet devices. Project architects/engineers must confirm that these systems are allowed by local building codes. In some cases specially designed, code compliant, modules, harnesses, and devices are required.

► Lighting Systems

Chapter 15, "Building Systems," sets quality standards for lighting systems that can be applied to alternative workplace strategies design. More specific information can be found in Chapter 6, "Electrical Engineering," in the GSA's Facility Standards for the Public Buildings Service (P100). For lighting in office and collaborative space, the luminance at desk height (30 inches above the floor) from fixed luminaries must average a minimum of 30 foot-candles (FC). The luminance at desk height from a combination of fixed luminaries and task lighting must average 45 FC. Task lighting is recommended for systems furniture workstations and other work areas where practical. Lighting levels should be confirmed during design using simulation software.

► Voice and Data Communications Systems

Chapter 15, "Building Systems," sets quality standards for voice and data communications systems that can be applied to alternative workplace strategies design. Demountable walls, systems furniture workstations, and conference tables ("smart tables") can typically accommodate network wiring and outlet devices. Outlet device faceplates may be proprietary products of partition and furniture manufacturers. Compatibility of faceplates and network wiring must be confirmed by court information technology staff.

► Security Systems and Equipment

Chapter 17, "Building Security," sets quality standards for security systems and equipment that can be applied to alternative workplace strategies design. Demountable walls are not practical in reception and intake areas requiring ballisticresistant walls, doors, and transaction counters. Systems furniture for reception or intake counters that require break-resistant transaction windows may not be practical due to the weight of window assemblies. The ability to route low voltage security wiring in demountable walls must be confirmed with manufacturer's technical representatives.

▶ Ceiling Heights

Ceiling heights shall comply with standards described in Chapters 8, 9, and 10 of the Design Guide (Tables 8.2, 9.1, and 10.1). Ceilings can exceed those heights in cases where building standards differ and where raising a ceiling can be done at equivalent cost and/or when budgetary offsets are possible. Ceiling elements such as soffits, perimeter coves, recesses, and reveals shall be harmoniously integrated with HVAC ducts, light fixtures, sprinkler lines, and other building utilities. Ceiling designs shall complement energy efficient lighting

► Adjacency and Circulation

Chapter 3, "Planning for U.S. Courthouses," includes interior circulation requirements for traditionally designed (non-mobile) court space. programming for alternative workplace strategies includes more circulation space than traditional designs to create an open and spacious office environment that accommodates additional collaborative space, and to allow informal meeting space to be incorporated into designs.

While the amount of interior circulation varies with each facility's specific design, up to 60 percent of the net programmed space can be added to determine the total usable area of an alternative workplace strategies project (i.e., the estimated total usable area is equal to the sum of all the net programmed spaces plus 60 percent) provided the usable area calculated for a baseline space program is not exceeded.

Chapters 8, 9, and 10 of the *Design Guide* describe specific adjacency requirements for clerk's offices, probation and pretrial services offices, and other court units discussed in this chapter. Those requirements should be adjusted, to the extent possible given operational realities, to fit the neighborhood concept recommended for alternative workplace strategies. Refer to Figure 18.1.

Table 18.1 Alternative Workplace Strategies: Workplace Setting Space Standards

Note: Table 18.1 includes office space standards appropriate for alternative workplace strategies planning, based on space programs developed for alternative workplace strategies pilot projects, which may replace standards described in Chapters 8, 9, and 10 of the *Design Guide*. The number/types of office spaces needed must be determined by a work modes survey.

WORKPLACE SETTING	NISIF	ZE Nim²	USERS/WORK MODES	DESIGN FEATURES	REFERENCE FIGURES
DEDICATED OFFICE SPACE Executive Office	180	16.7	, ,	Use demountable walls and sliding door. Include desk, desk chair, desk return, credenza, wall mounted storage, task lighting, and table for group meetings of 2-4.	18.2
Enclosed Office	120	11.1	• • • • • •	Use demountable walls and sliding door. Include desk, desk chair, desk return, credenza, wall mounted storage, task lighting, and guest seating for 2-3.	18.3
Open Workstation	64	5.9		Include workstation with sealed privacy screens, desk chair, storage, task lighting, and optionally guest sealing for 1-2.	18.4
MOBILE OFFICE SPACE					
Enclosed Office	80	7.4	• • • • •	Use demountable walls and sliding door. Include desk, desk chair, desk return or credenza, task lighting, storage for personal and work materials brought in daily, and guest seating for 1-2.	18.5
Open Workstation	48	4.5	Workstation for mobile work general staff supporting focused work modes. Use electronic concierge system to reserve.	Include workstation with seated privacy screens, desk chair, task lighting, and storage for personal and work materials brought in daily.	18.6
Gelaway Booth	48	4.5	Small enclosed room for mobile work staff supporting focused work modes. Use limited to 1-2 hours.	Use demountable walls and sliding door. Include desk or table, task lighting, and 1-2 chairs.	18.7
Touchdown Area	36	3.3		Include worksurface, desk chair, lask lighling, and storage for personal and work materials brought in daily.	18.8
Personal Storage Area	2	02	Single or clustered storage unit for mobile work staff. Can be assigned to an individual staff member or used on a drop-in or ad hoc basis.	Use lockers, storage cabinets, and mobile pedestals with keyless locking hardware (push buttons, dial locks, etc.)	18.9
GENERAL OFFICE SPACE -	COLLABOR	RATIVE			
Training Room	35/Seat 200 Min.	3.3/Seat 18.6 Min.		Use demountable walls and sliding doors. Large rooms should have folding partitions to subdivide space. Include multimedia lectem, movable training tables with plug-and-play data connections, WLAN, wall-mounted presentation monitors, and tight dimming.	18.10
Conference Room	30/Seat 120 Min.	2.8/Seat 11.1 Min.	collaborative work modes. Use electronic concierge system to	Use demountable walls and sliding doors. Large rooms should have folding partitions to subdivide space. Include movable "smart tables" with plug-and-play data connections, WLAN, wall mounted presentation monitors, and light dimming.	18.11
Huddle Area	120	11.1		Use demountable walls and stiding doors for enclosed huddle areas. Include "smart table" with plug- and-play data connetctions, WLAN, wall mounted presentation monitors, and 2-5 chairs.	18.12
Work Lounge	30/Seat	2.8/Seat	Open, informal space supporting focused and collaborative work modes and lunch/work breaks.	Can include break room type appliances, sink, seated or standing counter space, café style tables, casual seating, and/or booth style seating.	18.13

Table 18.2

Alternative Workplace Strategies: Referenced Space Standards

Note: Table 18.2 includes space standards listed in Chapters 8, 9, and 10 that are applicable to alternative workplace strategies projects.

GENERAL OFFICE SPACE - SUPPORT

Refer to Chapters 8, 9, and 10

Table 8.1, Space and Ceiling Requirements for Court of Appeals Clerk's Offices

Table 8.2, Space and Ceiling Requirements for District and Bankruptcy Court Clerk's Offices

Table 9.1, Space and Ceiling Requirements for Probation and Pretrial Services Offices

Table 10.1, Space and Ceiling Requirements for Other Court Offices

- Circuit and District Executive's Offices
- Bankruptcy Appellete Panel Clerk's Offices
- Senior Staff Attorney Offices
- Pre-Argument/Conference Attorney Offices
- Bankruptcy Administrator Offices

PUBLIC SPACES

Refer to Chapters 8 and 10

Table 8.1, Space and Ceiling Requirements for Court of Appeals Clerk's Offices

Table 8.2, Space and Ceiling Requirements for District and Bankruptcy Court Clerk's Offices

Table 10.1, Space and Ceiling Requirements for Other Court Offices

- Circuit and District Executive's Offices
- Bankruptcy Appellete Panel Clerk's Offices
- Senior Staff Attorney Offices
- Pre-Argument/Conference Attorney Offices
- Bankruptcy Administrator Offices

PROBATION AND PRETRIAL SERVICES INTERVIEW ROOMS

Refer to Chapter 9

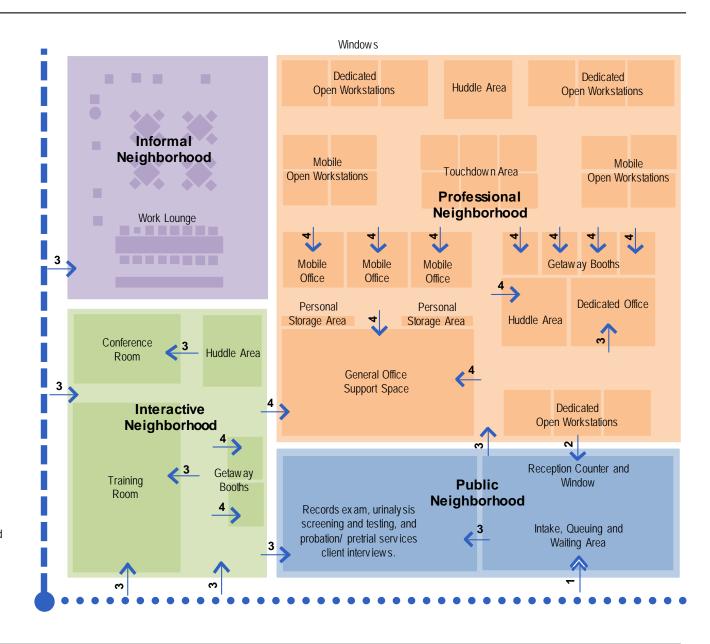
Table 9.1 (Private Offices and Footnote 2)

Figure 18.1 Neighborhood Diagram

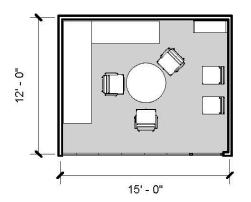
Key to Symbols

- Public Circulation
- Restricted Circulation
 - Circulation/Access Control Point
 - Screened Public Access, locked when not in use
 - Restricted Access,
 Counter/Window Service
 - Restricted Access,
 Direct Access Control/Key Lock
 - A Restricted Access, Uncontrolled
 - Public Neighborhood
 - Professional Neighborhood
 - Interactive Neighborhood
 - Informal Neighborhood

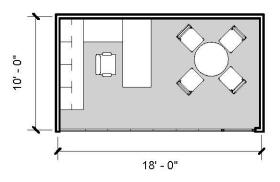
Note: The neighborhood diagram is intended only as an illustration.



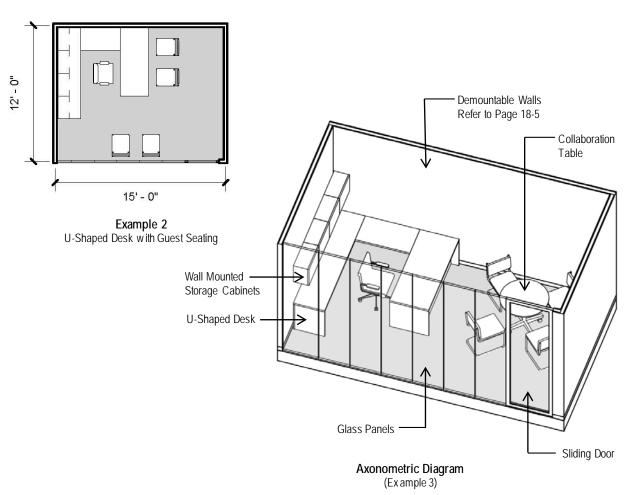
Workplace Settings: Dedicated Office Space Executive Office



Example 1Credenza and Return with Collaboration Table

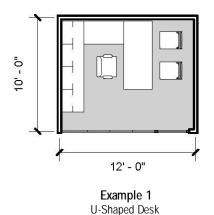


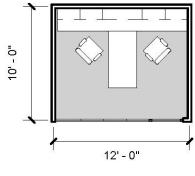
Example 3U-Shaped Desk with Collaboration Table



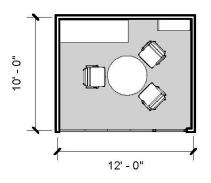
Workplace Settings: Dedicated Office Spaces

Enclosed Office

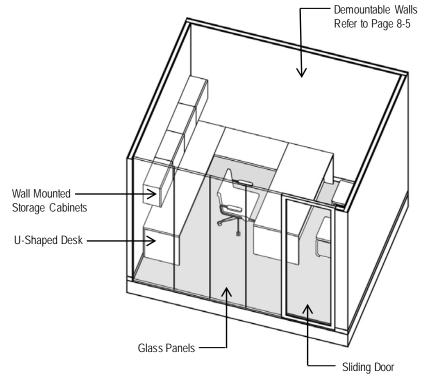




Example 2 Shared Desk

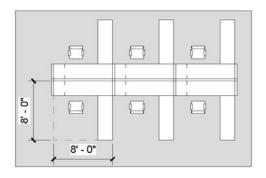


Example 3 Collaboration Table and Credenza

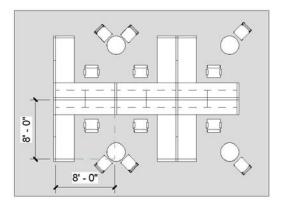


Axonometric Diagram (Example 1)

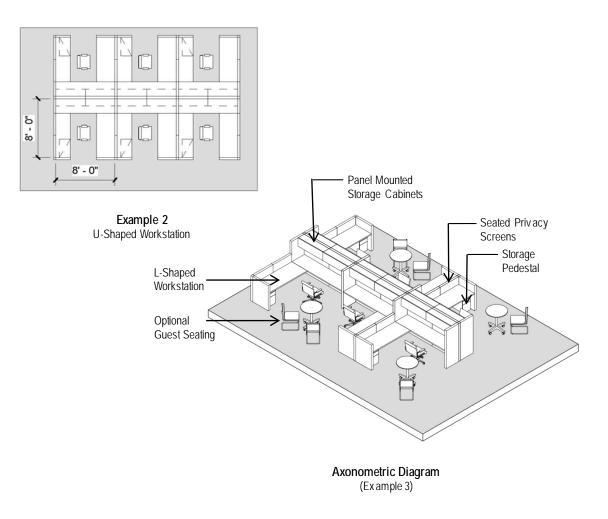
Workplace Settings: Dedicated Office Spaces Open Workstation



Example 1 Desk Workstation with Bench Seat

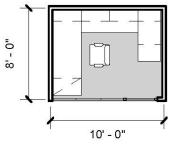


Example 3 L-Shaped Workstation with Table

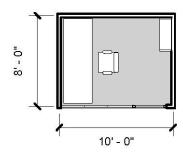


Workplace Settings: Mobile Office Spaces

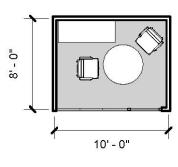
Enclosed Office



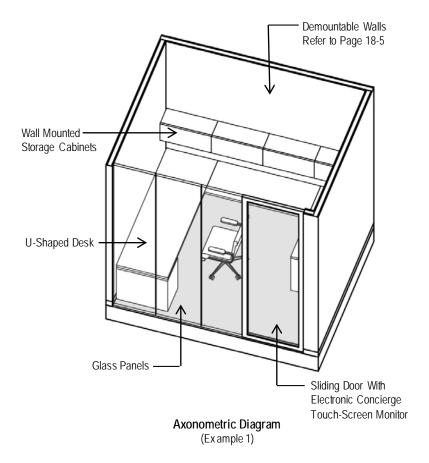
Example 1 U-Shaped Desk



Example 2
Desk with Storage Cabinet

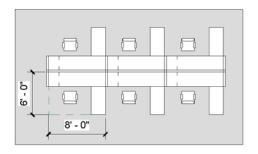


Example 3
Table and Credenza



Workplace Settings: Mobile Office Spaces

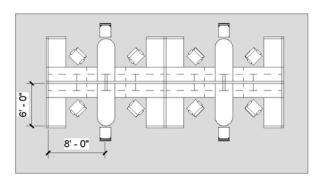
Open Workstation



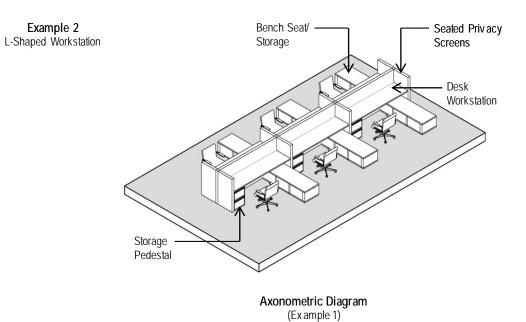
8' - 0"

Example 2

Example 1 Desk Workstation with Bench Seat

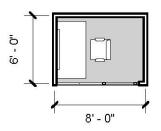


Example 3 U-Shaped Workstation

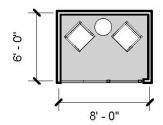


Workplace Settings: Mobile Office Spaces

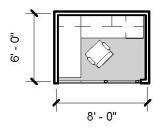
Getaway Booth



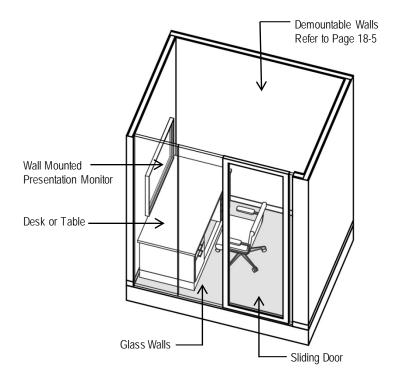
Example 1
Videoconferencing



Example 2
Informal Seating



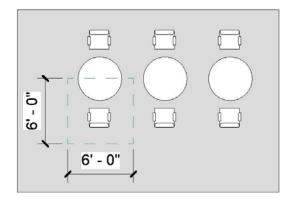
Example 3
L- Shaped Workstation



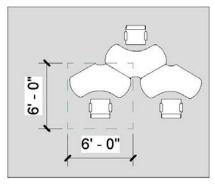
Axonometric Diagram (Ex ample 1)

Workplace Settings: Mobile Office Spaces

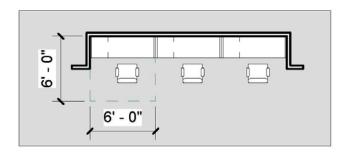
Touchdown Area



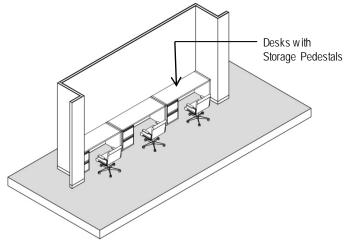
Example 1
Round Tables



Example 2
120 Degree Cluster

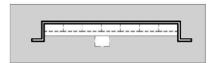


Example 3 Desk in Alcove



Axonometric Diagram (Example 3)

Workplace Settings: Mobile Office Spaces Personal Storage Area



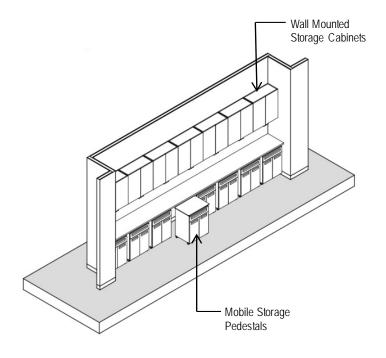
Example 1 Mobile Pedestal Garage



Example 3 4-High Lateral Files

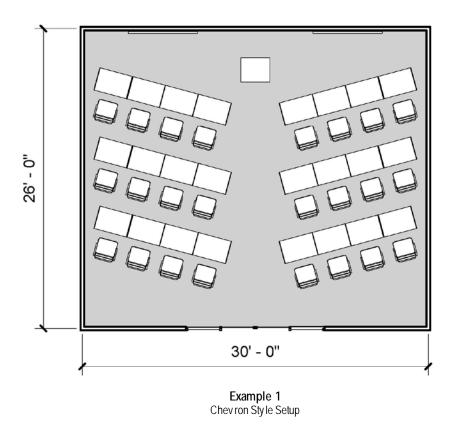


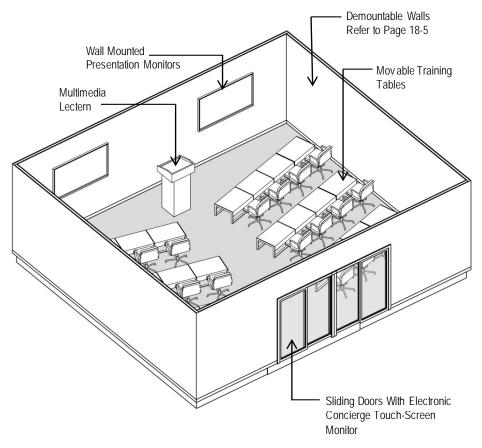
Example 2 Double-Stacked Lockers



Axonometric Diagram (Example 1)

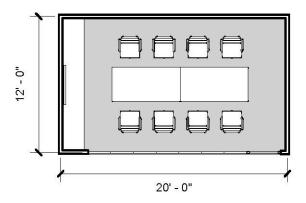
Workplace Settings: General Office Spaces - Collaborative Training Room



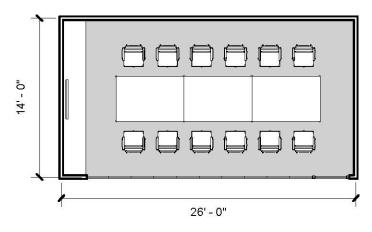


Axonometric Diagram
Ex ample 1)

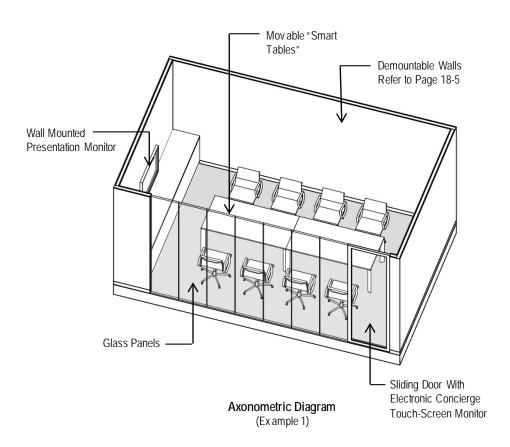
Workplace Settings: General Office Spaces - Collaborative Conference Room



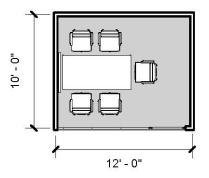
Example 1
Two, Six Foot Tables (240 NSF)



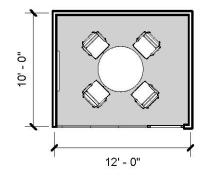
Example 2
Three, Six FootTables (364 SF)



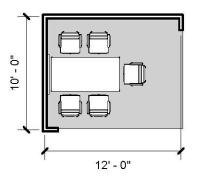
Workplace Settings: General Office Spaces - Collaborative Huddle Area



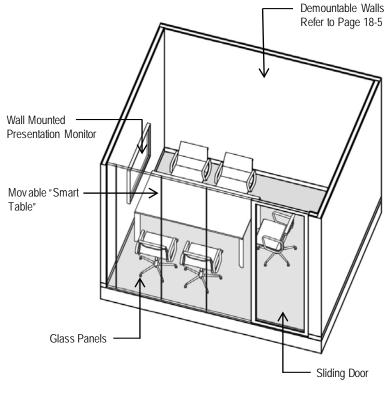
Example 1Enclosed Area with Rectangular Table



Example 2 Enclosed Area with Round Table



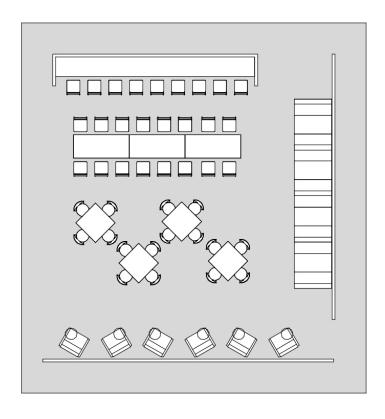
Example 3Open Area with Rectangular Table



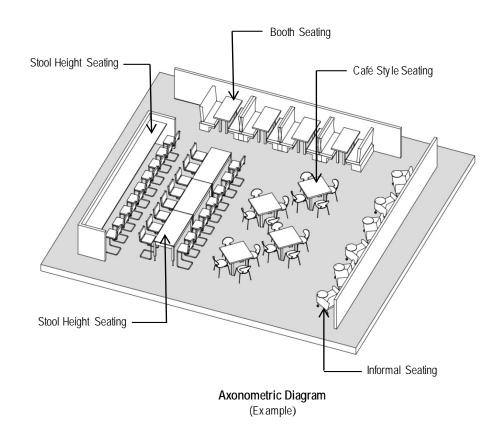
Axonometric Diagram (Ex ample 1)

Workplace Settings: General Office Spaces - Collaborative

Work Lounge



Example Stool Height, Booth, and Café Style Seating





GLOSSARY

341 conference room: conference room provided for a debtor to meet with the bankruptcy attorney and creditors

ABA: Architectural Barriers Act

ABAAS: Architectural Barriers Act Accessibility Standards

AC: alternating current

ACH: air changes per hour

ACT: acoustic ceiling tile

ADA: Americans with Disabilities Act

ADAAG: Americans with Disabilities Act Accessibility

Guidelines

ADR: alternative dispute resolution

A/E: architecture/engineering

AFF: above finished floor

AFWP: acoustic fabric wrapped panel

AHU: air-handling unit

AI: articulation index

ALS: assisted-listening system

AMP: asset management plan

amp: ampere, an electrical unit

ANSI: American National Standards Institute, the major standards organization in the United States and the publisher of the BOMA Standards, the NAHB Residential Standard, and ISO 9836 International Standard (www.ansi.org)

AnyCourt: US Courts questionnaire and software used to establish program of requirements for US Courts projects

AOUSC: Administrative Office of the U.S. Courts

AP: acoustic plaster

ASHRAE: American Society of Heating, Refrigerating, and Air-Conditioning Engineers

ASTM: American Society for Testing and Materials, a U.S. standards organization that publishes the IFMA Standard (www.astm.org)

AV: audiovisual (equipment)

A/V: audio/video

AWI: American Woodworking Institute

BAP: bankruptcy appellate panel

Berm: a mound or wall of earth, typically at the top or bottom of a slope

Bollard: a short vertical post, typically refers to permanent physical security elements which are established to control access to the site

BOMA: Building Owners and Managers Association

BOMA Standard: Either the <u>Standard Method for Measuring Floor Area in Office Buildings</u> or the <u>Standard Methods for Measuring Floor Area in Industrial Buildings</u>, depending on the occupancy of a property. It is clearer to refer to the BOMA Office Standard or the BOMA Industrial Standard, and clearer yet to specify the publication year. The Office Standard in particular has been modified and republished many times, and it is likely that the Industrial Standard will be also.

BOP: Bureau of Prisons

Brooks Act (40 USC Sections 541-544) legislation that establishes the requirement for a technical quality-based procurement of professional design services (rather than

low price)

BSC: Building Security Committee

C: Celsius

CAB: cabinet

CALR: computer-assisted legal research

CAT: computer-aided transcription

CCMG: Central Courthouse Management Group

CCP: GSA's Center for Courthouse Programs

CCTV: closed-circuit television

CD-ROM: compact disc read-only memory

CFM: cubic feet (of air) per minute

CIRC: circulation

CITES: Convention on International Trade in Endangered Species

CL or CLOS: closet

CM/ECF: case management/electronic case filing

CMU: concrete masonry unit

CONF: conference

CONT. CIR.: controlled circulation

CPT: carpet

CPTT: carpet tile

CRI: Carpet and Rug Institute

CSC: Court Security Committee

CSO: court security officer

CT: ceramic tile

CTB: ceramic tile base

CTRM: courtroom

CUST or CUSTOD: custodian

custom grade: millwork standard of quality

CWT: ceramic wall tile

D: deep; direct (lighting)

dB: decibel

DDC: direct digital control

DHS: Department of Homeland Security

DOJ: Department of Justice

Double-loaded corridors: corridors with offices or spaces on both sides

DUSM: deputy U.S. Marshal

DVD: digital video disc

ELEC: electrical

ELEV: elevator

EMIT: enzyme multiplied immunoassay technique (machine)

en banc courtroom: panel courtroom where judges hear cases together

EPA: Environmental Protection Agency

EQUIP: equipment

ERS: electronic recording system

EVAC: emergency evacuation system

EXEC: executive

EXHIB: exhibit

F: Fahrenheit

FAP: furniture acquisition plan

FINANC: financial

FIT: Fitness in Total (program)

FLUOR: fluorescent (lighting)

FPD: federal public defender

FPMR: Federal Property Management Regulations

FPS: Federal Protective Service

FT: feet

FC: foot-candles

FWC: fabric wall covering

ga: gauge

Gm²: gross square meters

GSA: General Services Administration

GSA P-100: GSA's Facilities Standards for the Public Buildings Service

GSF: Gross square feet represents the floor area within the inside perimeter of the exterior walls of the building under consideration, exclusive of vent shafts and courts, without deduction for corridors, stairways, closets, the thickness of interior walls, columns, or other features. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above. The gross floor area shall not include shafts with no openings or interior courts.

HC: handicapped

HI: high

HVAC: heating, ventilating, and air-conditioning

I: indirect (lighting)

ID: identification

IEC 60268-16 or ANSI S3.2-1995

IIC: Impact Isolation Class

IN: inches

INCAN: incandescent (lighting)

ISC: Interagency Security Committee

JCUS: Judicial Conference of the United States

JSS: Judicial Security Systems

kg: kilograms

L: liters

LAN: local area network

LF: linear feet

LG: large

LIN.FT.: linear feet

LIN.IN.: linear inches

Ln: linoleum

L/s: liters per second

lx: lux

m: meters

m²: square meters

MAG: magistrate judge

MATV: master antenna television (system)

max.: maximum

MDF: main distribution frame

MED: medium

Metric Conversion Act of 1975: The Metric Conversion Act of 1975 (later amended by the Omnibus Trade and Competitiveness Act of 1988, the Savings in Construction Act of 1996, and the Department of Energy High-End Computing Revitalization Act

of 2004) designated the metric system as the preferred system of weights and measures for U.S. trade and commerce, and directed federal agencies to convert to the metric system to the extent feasible, including in the construction of federal facilities.

min.: minimum

mm: millimeters

NC: noise criteria

NEC: National Electrical Code

NFPA: National Fire Protection Association

NIC: Noise Isolation Class

Nm²: net square meters

NRC: noise reduction coefficient

NSF: Net square feet represents the actual occupied area of a floor, not including accessory unoccupied areas (stairs, elevator and HVAC shafts, mechanical rooms, etc.) or the thickness of walls.

OCLC: online computerized library catalog

OCM: Office of Courthouse Management

OFC: office

Omnibus Trade Act of 1988

OP: operated

OSHA: Occupational Safety and Health Administration

OSS: Office of Security Systems

oz: ounces

Pa: pascals

PA: public address (system)

PBS: Public Buildings Service

PC: personal computer

PDS: Prospectus Development Study

peened: Hinge pin ends are peened, or flattened, in order to prevent pin removal.

Hinges may be peened as a security measure.

Pln: paneling

PNT: Paint 1: latex, eggshell finish

PNT: Paint 2: latex, semigloss finish

PO: probation office

PRIV: private

PROF: professional

PSF: pounds per square foot

PSO: pretrial services office

PT1: paint color 1

PTR: printer

RASTI: Rapid Speech Transmission Index

RC: Room criterion is an acoustic measurement of background noise.

RCDD: registered communications distribution designer

RDR: reader

REC or RECEPT: reception

REP/REC: reporter/recorder

REQ: requirement

REQ'D: required

REVERB: reverberation

RM: room

RSF: rentable square feet

S: standard ceiling height of 8–10 feet; summer

SCR: silicone-controlled rectifier

SEC: security

SECR: secretary

SF: square feet

SHRED: shredder

SI: Système international d'unités, or International System of Units (also known as

the metric system)

SL: soundlock

SRAC: spatial relationship, accessibility, and circulation (diagram)

ST or STOR: storage

STC: Sound Transmission Class

STI: Speech Transmission Index

SUP: supply

TDD: telecommunications device for the deaf

TEL: telephone

TEMP: temperature

TERM: terminal

TI: tenant improvement

TL: transmission loss

TLT: toilet

UA: urinalysis

UFAS: Uniform Federal Accessibility Standards

UL: Underwriters Laboratories

UPS: uninterrupted power supply

USBC: U.S. Bankruptcy Court

USCA: U.S. Court of Appeals

USDC: U.S. District Court

USF: Usable square feet represents the BOMA Office Standard connoting the sum of

office, store, and building common areas on a floor.

USMS: U.S. Marshals Service

USMS Publication 64: Requirements and Specifications for Special Purpose and Support Space Manual, Volume Three, Judicial Security Systems Requirements and

Specifications

V/RB: vinyl/rubber base

V: volt

VAV: variable air volume

VB: vinyl base

VCR: videocassette recorder

VCT: vinyl composition tile

VDT: video display terminal

VEST: vestibule

VIT: vinyl inset tile

VOL: volume

W: wide; winter; watts

WAN: wide area network

WB or WDB: wood base

WC: water closet

WD: wood

WD Pln: wood paneling

WD Wnst: wood wainscot

WK: work

WKRM: work room

WKSTA: workstation

Wnst: wainscot

x: time(s) or by