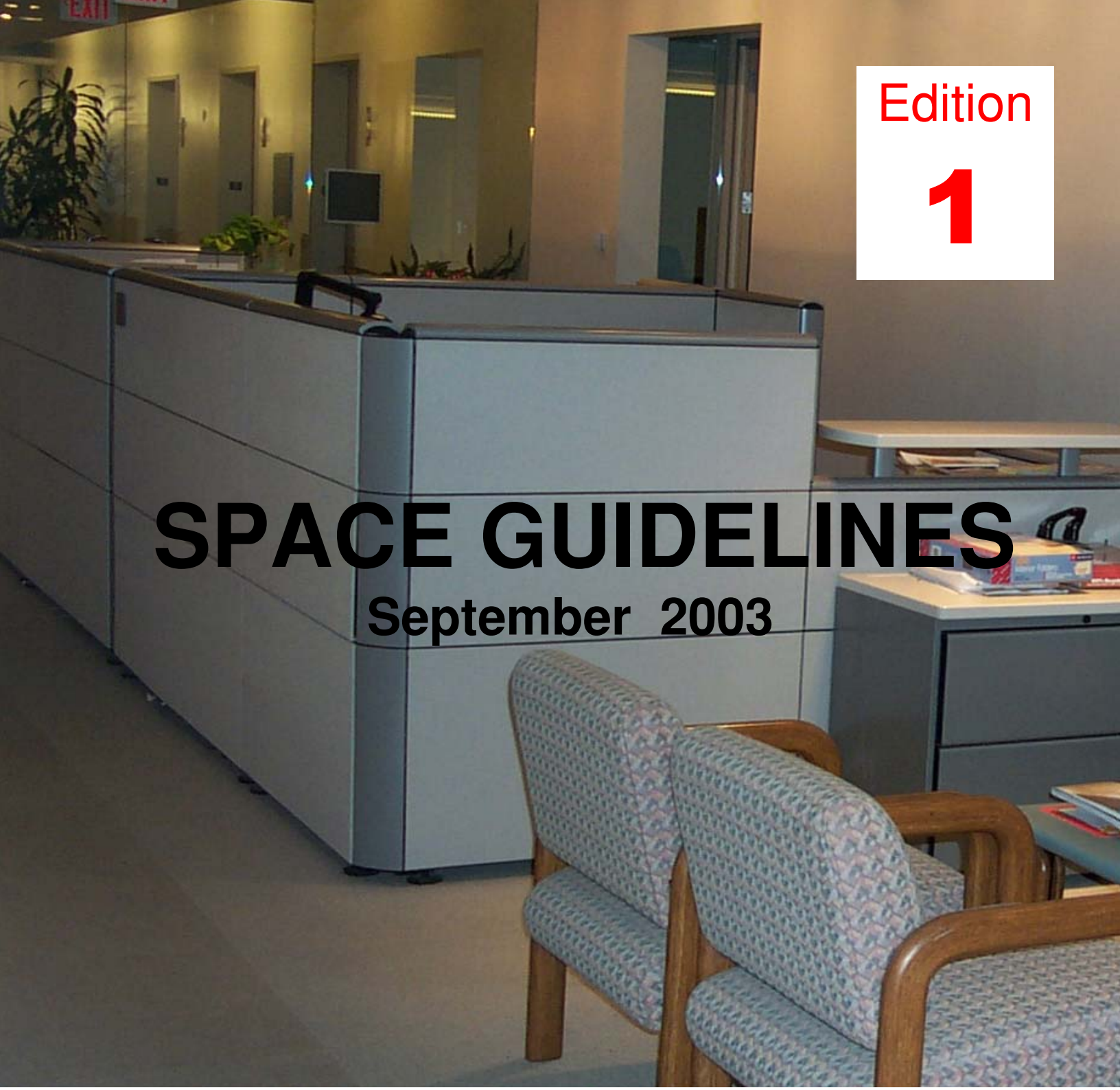


Edition

1

SPACE GUIDELINES

September 2003

for Smithsonian Institution Facilities

Preface

The workplace represents a tremendous influence over the worker and his or her productivity. Influences on the workplace include adequacy and quality of the individual and common work areas, environmental quality, amenities, and technology and other tools. Certainly, we could name others. In this first edition of the Smithsonian Institution Space Guidelines, we are limiting our focus to quantity of space, thereby assisting the planner and programmer in defining total space needs. The intent of this document is to provide the planner and programmer with a "broad-brush" view of space needs. In issuing this document, we do not intend to preclude detailed architectural programming that should be implemented by the designer in the pre-project planning or conceptual design phase.

In the first edition we've dealt with spaces that are common to almost all of us in the Institution, that is, office, administrative, and general storage spaces. Future editions will be more ambitious. As we explore more spaces, configurations and standards that are specific to the museum, research, educational, and support areas, we will add that information to the future editions of the Guide. We will also consult with internal and outside experts. Regarding functionality, efficiency, and the interrelationship of staff, tools, and workplace, we will rely heavily upon the exhaustive work already done by GSA's Real Property Division (www.policyworks.gov). Ultimately, we intend for this document to be part of helpful process in developing space needs, instead of being a just another manual on the shelf.

Finally, the "we" in this preface represents the cooperative effort of three groups within the Office of Facilities Engineering and Operations; the Engineering & Design, Facilities Master Planning, and Real Estate divisions. We have also gathered our information from many sources as is reflected in Part 2 of this guide. We intend to make this document dynamic, revising it as new information and innovations occur and will maintain the most up-to-date version on the OFEO intranet web site. If you have any question or updates on space, please contact me at rombah@si.edu or 202 275-0250, or contact Michelle Spofford at spoffordm@si.edu or 202 275-0223. We hope you will find our efforts here useful.

Harry Rombach
Associate Director for Facilities Master Planning
OFEO Office of Facilities Planning and Resources
September 1, 2003

Table of Contents

1. Space Guideline Objectives

The objectives of the Smithsonian-wide Space Guidelines document are as follows:

- **Provide a tool for taking the first step in developing space requirements.**
  The document puts in place a tool to assist planners and programmers whenever they need to plan for new space, or redesign existing space in any of the Smithsonian facilities. Having an SI-wide Space Guidelines document will ensure a consistency in space size for similar administrative, managerial, and utilitarian functions in different facilities. This will assist in simplifying real estate inventory and classification requirements, and provide fairness in the allocation of space within units and throughout the Institution.

- **Define space requirements for universal and specialty space.**
  The document also addresses "specialty space" needs such as scientific research space, curatorial art space, and other functions that cannot be accommodated in the more generic administrative and managerial categories. Users of the guidelines should understand that the document is just that, a guide. Users should expect to encounter some size variation within space categories, even with the more universal requirements like office space. As a result, more often that not, area is given in a range of square feet.

- **Provide definitions for each space type.**
  The document defines spaces by the types of functions that would typically be performed in each of the space standard categories. It avoids older systems that categorized space standards exclusively by job title and rank. We selected our approach for two main reasons. One is that by looking at what we intend to achieve in each space and developing the space accordingly, we can assist in nurturing a productive environment. Second is that in the Smithsonian, we have not standardized job titles. Titles vary in their meaning and responsibilities throughout the Institution. Therefore, categorizing space through job title is not practical. In this guide, we categorize space by function and offer some examples of what activity and what occupant the space is most suited for.

- **Provide sample space layouts to give clarity to how space can accommodate the users.**
  The document offers sample layouts or plans for each space type. These are only as tools to inform users of what can be included in each space type. Final design of specific spaces will ultimately be the responsibility of the designer. He or she will conduct a detailed architectural programming and design process for these spaces.

2. Background & Process

In developing the Guide, Smithsonian planners approached this daunting task in this way in a way that the rationale for assigning certain space sizes to certain functions is clearly understood and widely accepted.

Planners drew on many sources and considered the following factors during the information gathering part of this effort:

- **Guidelines and standards that have been developed by other agencies and organizations**
  Most notable are the guidelines produced by the General Services Administration and the American Society of Interior Designers. These guidelines and standards are included in the appendix of this document.

- **Guidelines and standards and developed for recent SI master planning efforts**
  These efforts include the guidelines and standards developed during the master planning and space planning efforts at NMNH HMSG, and AIB.

- **Information gathered from past programming efforts**
  Efforts included those that occurred during the master planning process at STRI, SERC, and the Smithsonian Marine Station at Ft. Pierce, FL.

Once data and information was gathered, planners assembled it into a format that would facilitate analysis and comparison. The following tasks preceded establishing a common set of guidelines for Smithsonian spaces:

- **Organizing the information into space categories**
  These categories are common to most Smithsonian units, for example, private office and open office areas, conferences rooms, general storage areas, and so on.

- **Displaying information side-by-side**
  Included in the task was showing the information in relationship to the space classification now used by the Smithsonian in its facilities management system, FacilityCenter®. These classifications are known as “space class” and the more specific “space class type.” A full listing of the space class and space class types can be found in Appendix A, issued as a separate document.

- **Looking for similarities**
  Planners looked for similarities between the different guidelines and standards, and found a mix of common space sizes that offered the Smithsonian a wide berth in accommodating space needs.

The following chart represents the proceeding process and shows the standards that resulted from it.

SPACE CLASS	SPACE CLASS TYPE	GSA STANDARDS		NMNH STANDARDS		ASID STANDARDS		AIB STANDARDS		**SI STANDARDS**	
		ID	SIZE (SF)	ID	SIZE (SF)	ID	SIZE (SF)	ID	SIZE (SF)	**ID**	**SIZE (SF)**
OFFICE:	**PRIVATE**										
		-	-	-	-	A1	500	-	-	-	-
		EXEC-400	400	-	-	A2	400	-	-	**PV-5**	**350-450**
		EXEC-360	360	-	-	A3	375	-	-	-	-
		EXEC-300	300	-	-	A4	300	-	-	**PV-4**	**275-325**
		EXEC-180	180	Sr. Exec.	230-250	A5	225	A	194	**PV-3**	**230-250**
		PROF-150	150	Director	170-190	A6	150	B	130	**PV-2**	**170-190**
		PROF-100	100	-	-	A7	100	C	89	**PV-1**	**100-120**
OFFICE:	**SHARED (WORKSTATION)**										
		TECH-144-O	144	-	-	C6a/C6b	150	-	-	-	-
		PROF-120-O	120	Professional	110-130	C5a/C5b	130	-	-	-	-
		PROF-99-O	99	-	-	C4a/C4b	100	-	-	-	-
		-	-	-	-	C3a/C3b	100	-	-	-	-
		TECH-81-O	81	Staff	80-100	C2a/C2b	80	D5	86	**WK-3**	**80**
		TECH-64-O	64	-	-	C1a/C1b	68	D4	64	**WK-2**	**64**
		ADMN-48-O	48	Intern	40-50	-	-	D1/D2/D3	59	**WK-1**	**48**
		ADMN-36-O	36	-	-	-	-	E1	39	-	-
OFFICE:	**RECEPTION**										
		RECP-180	180	-	-	I3	200	-	-	-	-
		RECP-130	130	-	-	I2	150	-	-	**RC-2**	**130-150**
		RECP-80-O	80	-	-	-	-	-	-	-	-
		RECP-35-O	35	-	-	I1	75	(2+ADMN+ STOR)	196	**RC-1**	**30-50**
ASSEMBLY:	**CONFERENCE ROOM**										
		CONF-480	480	Training Rm	770-790	J6a	1050	-	-	**MT-30**	**770-790**
		CONF-390	390	Large Conf.	375-395	J5	700	20-PERSON	452	**MT-18**	**375-395**
		CONF-200	200	Med. Conf.	220-240	-	-	14-PERSON	340	**MT-12**	**220-240**
		CONF-192	192	-	-	J4	400	10-PERSON	252	-	-
		CONF-140	140	Small Conf.	130-150	J3	225	8-PERSON	212	**MT-8**	**130-150**
		-	-	-	-	J2	150	6-PERSON	194	-	-
		CONF-100	100	Team Room	90-110	J1	100	-	-	**MT-4**	**90-110**

3. Space Categories & Definitions

A diverse group of Smithsonian staff developed “space class” and the more specific “space class type” space categories and definitions a few years ago. This effort was part of implementing a much broader SI-wide facilities management system. Those categories are still valid and are used in this document. A full list of the categories is included in Appendix A, issued as a separate document.

Planners have a tendency to work with minimum standards when calculating the size of space. However, not all cases fit the minimum standard. The size of a space is derived from the function or an activity being performed in it and sometimes more space is required. As a result, space quantities in this guide are often given in ranges. Also, existing building structure or historic fabric may dictate room sizes. Designers using this document must be flexible in their thinking when dealing with existing buildings.

The following chart summarized the space guideline for the space class types that planners have looked at so far.

SPACE CLASS	SPACE CLASS TYPE	SPACE GUIDELINES	FUNCTIONS	SUITABILITY
Office:	**Private**			
PV-5		350-450SF (32-42SM)	Strategic planning sessions, executive staff meetings, fund raising, and so on.	Top senior-level management overseeing a broad range of program and facilities management activities. For example: Under Secretary, broad organizational director, unit director
PV-4		275-325SF (25-30SM)	Strategic planning sessions, executive staff meeting, consultations, and so on.	Senior management overseeing many separate offices that have similar goals and objectives. For example: executive director, unit director
PV-3		230-250SF (21-23SM)	Second or third line supervision, staff meetings, consultations, and so on.	Management that oversees a single office or function that may have several divisions and branches or sub-functions. For example: office director, department chair, section head, lead curator, laboratory head
PV-2		170-190SF (16-18SM)	First or second line supervision, staff meetings, consultations, and so on.	Management that oversees one or more functions that are closely related. For example associate director, research director, program manager
PV-1		100-120SF (10-12SM)	First line supervision, confidential or sensitive information handling, meetings with one or two persons, consultations, professional research and study, and so on.	Management or research that is narrowly focused on one aspect of an office or division's function(s). For example: assistant directors, branch heads, HR officers, contracting officers, legal specialists, conservators, post-doctorate professionals

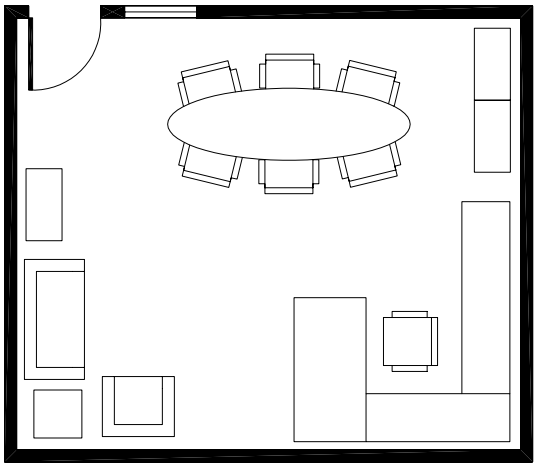
Office:	**Shared (Workstations)**			
WK-3		80SF (7.5SM)	Project management, financial management, design and engineering	Professional work that requires room for one-on-one meetings, layout out space, or other space intensive activities. For example: project managers, architects, engineers, designers, technicians
WK-2		64SF (6.0SM)	Administration, contracting, technical work	Administrative or technical work that require basic work space. For example: Administrative or management assistants, technicians, and similar staff
WK-1		48SF (4.5SM)	Occasional or periodic administrative or technical work, "hoteling," research carrel	Administrative or technical work that require minimal space and may not be for continuous occupancy. For example: Part-time staff, visiting staff, volunteers, interns, contractors
Office:	**Reception**			
RC-2		130-150SF (12-14SM)	3-6 Person Waiting Area	Medium to large office dealing with many visitors, both within and outside the organization.
RC-1		30-50SF (3-5SM)	1-2 Person Waiting Area	Small office with occasional visitors
Assembly:	**Conference Rooms**			
MT-30		770-790SF (71-73SM)	Meeting, conference, audio-visual presentation space for up to 30 persons	Training, large conferences and meeting, presentations requiring spaces with sophisticated presentation capabilities
MT-18		375-395SF (35-37SM)	Meeting, conference, presentation space for up to 18 persons	Smaller training, conferences and larger meeting, all requiring space with some presentation capabilities
MT-12		220-240SF (20-22SM)	Meeting and conference space for up to 12 persons	Medium-size meetings requiring space with minimal presentation capabilities
MT-8		130-150SF (12-14SM)	Meeting and conference space for up to 8 persons	Smaller meetings and teaming sessions
MT-4		90-110SF (8-10SM)	Meeting space for up to 4 persons	Small meetings, counseling sessions, small private discussions, and small teaming sessions

In the following section sample layouts for each space class type option are given. In most cases furniture layouts are also given. These depictions will give the user of this Guide some idea of what each space can accommodate. A wide variety of configuration can be developed and the layout in no way precludes a thoughtful programming and design process.

Private Office Diagrams

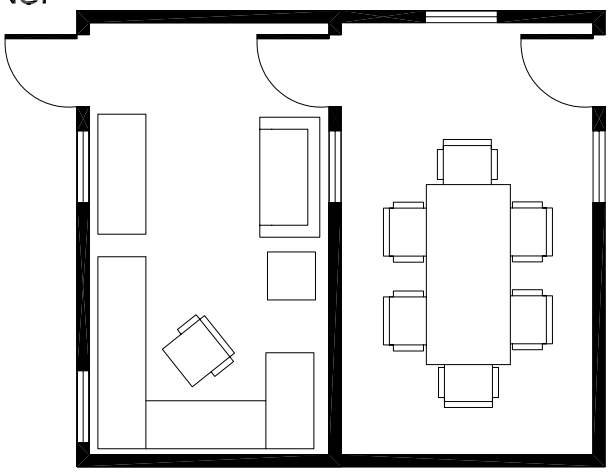
PV-5

350-450 NSF



PV-5.1 Alternate

350-450 NSF



Attributes May Include:

A. 170-190 NSF Office Suite with Adjacent Conference Room

B. Seating for 6-8 People

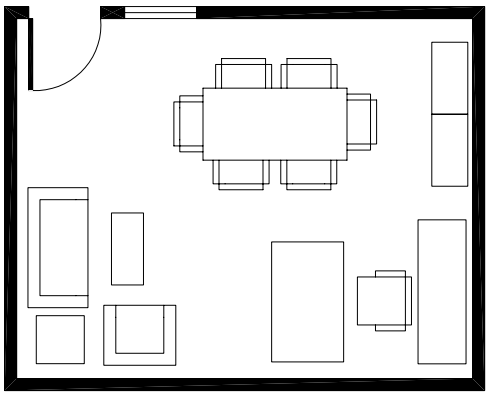
Executive Seating Shown

Modify Chair Style to Increase Seating Capacity

Private Office Diagrams

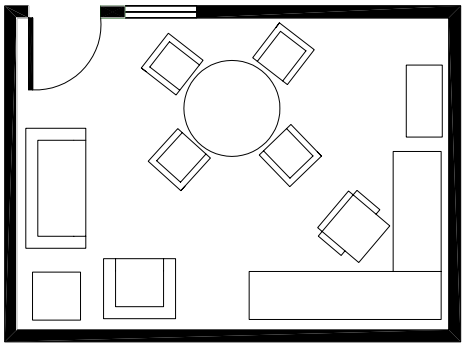
PV-4

275-325 NSF



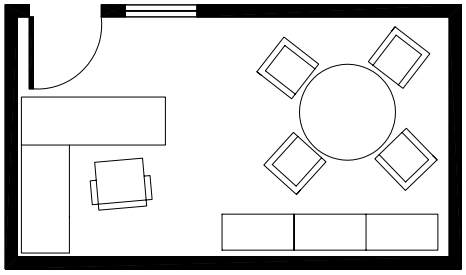
PV-3

230-250 NSF



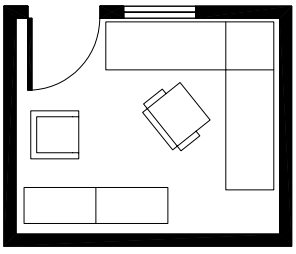
PV-2

170-190 NSF



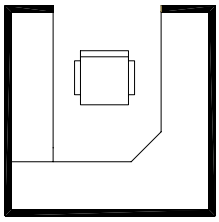
PV-1

100-120 NSF

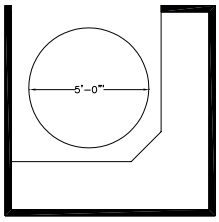


Shared (Workstation) & Reception

WK-3
80 NSF

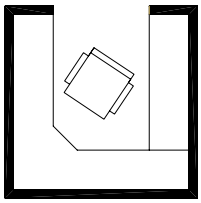


WK-3
Alternate
80 NSF

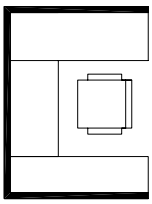


Wheelchair Turning Radius

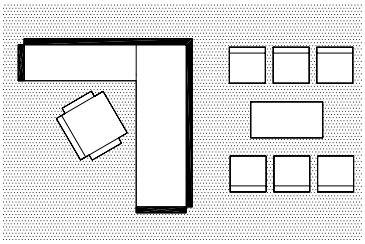
WK-2
64 NSF



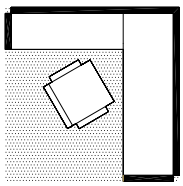
WK-1
48 NSF



RC-2
Reception
130-150 NSF
4'-0" Partition



RC-1
Reception
30-50 NSF

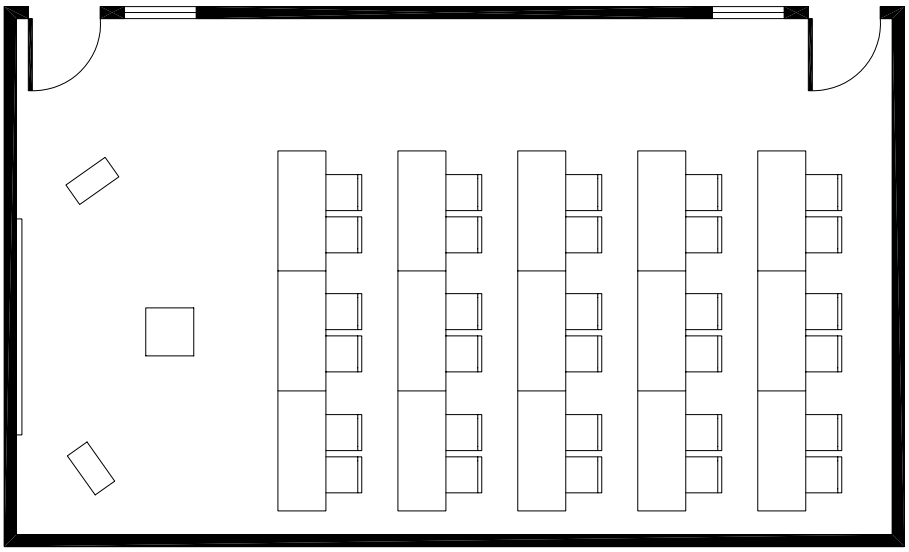


Assembly/Conference Diagrams

Large Training/Conference Room
Seating for 30 People
Side Chair Seating Shown

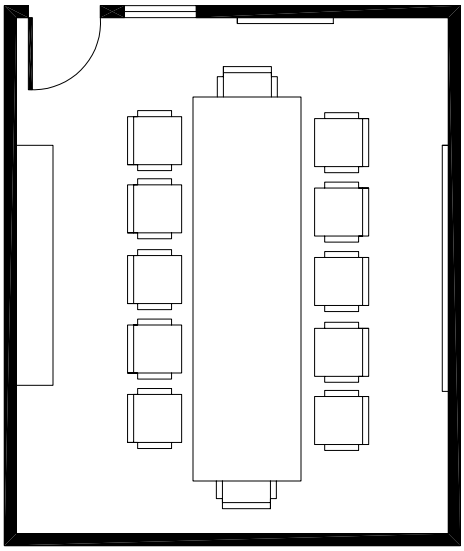
MT-30

770-790 NSF



MT-18

375-395 NSF



Large Training/Conference Room
Seating for 12-18 People

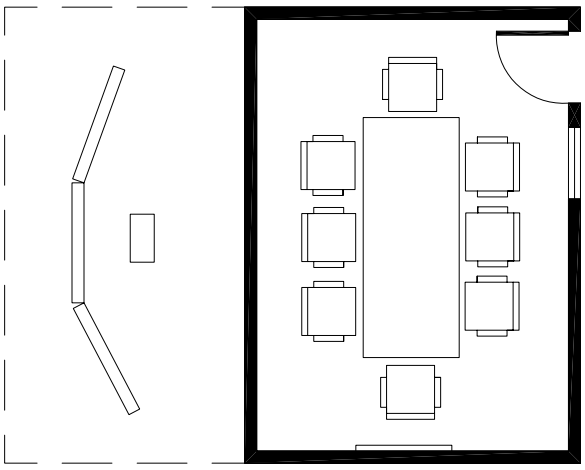
Executive Style Seating Shown
Modify Chair Style to
Increase Seating Capacity

Attributes May Include:
Pin-up Surfaces
A/V Screen
Lectern

Assembly/Conference Diagrams

MT-12

220-240 NSF



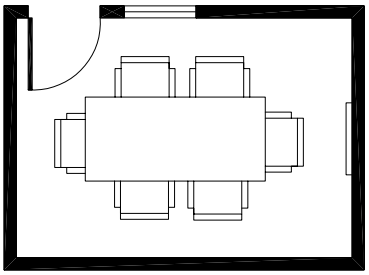
Medium/ Large Conference
Seating for 8-12 People

Executive Style Seating Shown
Modify Chair Style
to Increase Seating Capacity

*Dashed Lines indicate potential 120 NSF adjacent presentation area if needed in addition to 220-240 NSF conference space

MT-8

130-150 NSF

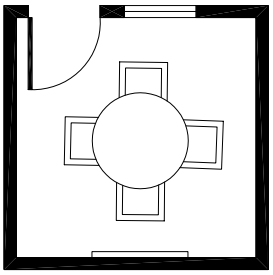


Assembly/Small Conference
Seating for 6-8 People

Executive Style Seating Shown
Modify Chair Style
to Increase Seating Capacity

MT-4

90-110 NSF



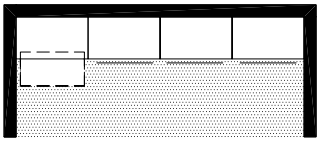
Assembly/ Teaming
Side Chair Seating Shown

File Diagrams

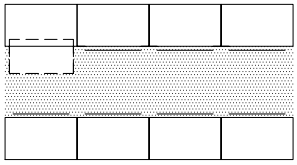
SPACE GUIDELINES

LATERAL FILES
3' x 1.75'
9 NSF

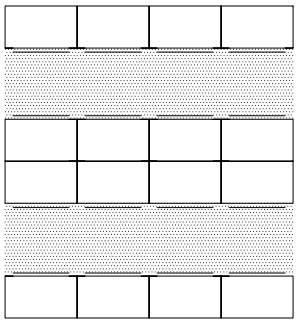
4 LATERAL FILES
60 NSF



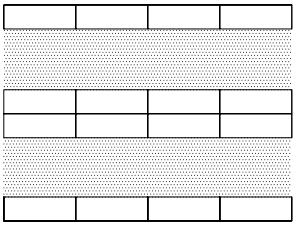
8 LATERAL FILES
78 NSF



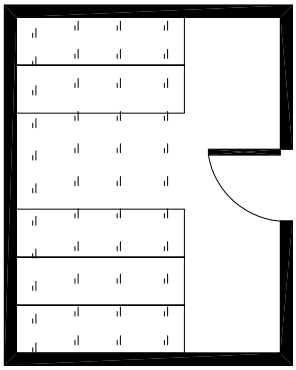
16 LATERAL FILES
156 NSF



16 BOOKCASES
108 NSF

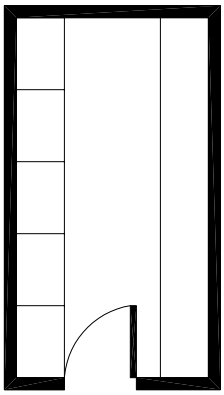


MOBILE FILES
120 NSF



Storage Room Diagrams

Small Storage
110-130 NSF



Large Storage
150-170 NSF

Copy/Fax Print room
130-150 NSF