

CHAPTER 4

Individual Space Criteria

This chapter presents requirements and design criteria for individual spaces. Each space is described in terms of activities, participants, adjacencies, and special considerations, as appropriate. The NASF requirement allocated to each space is indicated wherever possible.

- 4-1 Entrance and Lobby
- 4-2 Multi-Purpose Room
- 4-3 Public Toilets
- 4-4 User Card Catalog
- 4-5 Control Area
- 4-6 Reference Area
- 4-7 Current Periodicals Area
- 4-8 Microform Area
- 4-9 Stack Area
- 4-10 Reading and Study Areas
- 4-11 Conference Rooms
- 4-12 Study Rooms
- 4-13 Typing and Listening Rooms
- 4-14 Children's Area
- 4-15 Administrative Staff Offices
- 4-16 Technical Services Work Station
- 4-17 Shipping and Receiving
- 4-18 Staff Lounge
- 4-19 Staff Toilets and Lockers
- 4-20 Janitor's Closet
- 4-21 Environmental Criteria

Spaces which are unique to a special library type are listed in the Individual Space Criteria sections of the specific facility types in Chapters 6 through 12.

4-1 ENTRANCE AND LOBBY

A lobby is normally provided in libraries which are independent buildings and in larger libraries which are part of other facilities. The lobby serves as a transitional space between the outside and the library. It functions as a waiting lounge, an acoustical barrier, a circulation hallway, and a display area. General information concerning the library is provided there and frequently an after-hours bookdrop.

a. **ADJACENCIES.** If the library is an independent building, the entrance and lobby should be convenient to the parking area as well as the street, because most patrons will arrive by automobile. If there are two entrances to the lobby, one should be from the parking lot and the other from the street or sidewalk. The lobby should be adjacent to the library control entrance and it is desirable to have the staff entrance and toilets located adjacent to the lobby. If the library is part of a larger facility, the lobby would become a vestibule to increase acoustic isolation of the library from busy corridors.

b. SPECIAL CONSIDERATIONS

(1) *If Main Entrance Opens to Outdoors.* In most climates a vestibule is required to prevent heat gain in summer and/or heat loss in winter. Lobby lighting should be adjustable to permit an intermediate light level between outdoors and the interior of the library during day and nighttime operation.

(2) *Doors.* Any door between heavily trafficked areas should be at least one-third glass for safety. Glass doors with locks are suggested for the main entrance and between lobby and user areas except toilets. (Ref E-1a) Floor panels that automatically open entrance and exit doors should be considered for libraries whose users frequently enter and exit with armloads of books and materials and whose (Ref E-1a) users will include the physically handicapped.

c. FINISHES

Floor: mats, quarry tile, terrazzo, vinyl tile

Walls: brick, wallboard, plaster, concrete block, acoustic treatment, exposed tackboard, paint, vinyl covering

Ceiling: acoustical tile, exposed

d. **SPACE REQUIREMENTS.** Space requirements depend on a variety of factors. A lobby may not be needed in a small facility, especially if the library is part of another building. The required area will depend on the number and kind of spaces which open onto the lobby, and the anticipated traffic flow. For planning purposes, consider 5 percent of the NASF to be devoted to the lobby. Lounge seating: 30 NASF/seat.

4-2 MULTI-PURPOSE ROOM

The multi-purpose room serves as a conference and meeting room for classes, movies, and special interest groups. It is normally part of a main post library, but also may be included in branch libraries. It contains some of the general reading seats. It may also serve as a music-listening lounge and as an extension of the general reading area.

a. **ADJACENCIES.** Refer to discussions in Individual Space Criteria in Chapters 6 and 7.

b. **SPECIAL CONSIDERATIONS.** Provide projection screen for slides and movies, and provide locked cabinets for audio-visual equipment storage. Provide space for portable chairs for classes.

c. FINISHES

Floor: carpet
 Walls: brick, architectural materials, painted wall-board or plaster or concrete block, vinyl wallcovering, tackboard, acoustic treatment as required
 Ceiling: acoustical tile

d. SPACE REQUIREMENTS

Item	Unit Area Allowance/NASF
Lounge Seating	30 per seat
Table and Chairs	25 per seat
Portable Seating	20 per seat
	(0.4 NASF/seat stacked)

4-3 PUBLIC TOILETS

These facilities are intended for library users in the larger facilities and for users and staff in smaller facilities.

a. ADJACENCIES. Public toilets should be located within 25 feet of entrance to the library and adjacent to the lobby, if a lobby is provided.

b. FINISHES

Floor: ceramic tile, quarry tile, terrazzo
 Walls: brick, architectural materials, ceramic tile wainscot, wallboard, plaster, concrete block, paint, vinyl covering
 Ceiling: acoustical tile, wallboard, plaster

c. SPACE REQUIREMENTS. Space requirements for public toilet areas are based on (a) occupancy as determined by the number of library reader stations provided, not including portable seating or lobby seating; and (b) fixture allowances given in Table 10-7 of DOD 4270.1-M. These space requirements apply when the number of adult male users equals the number of adult female users, and when the number of user seats for each library size is in accordance with the number suggested in this guide. If the anticipated user population is significantly different from 50 percent male and 50 percent female, the fixture allocation should be adjusted in accordance with Table 10-7 of DOD 4270.1-M.

Table 4-1 indicates number of fixtures by type and area per fixture unit for both men and women based on various magnitudes of occupancy.

PUBLIC TOILET FIXTURE REQUIREMENTS BASED ON USER POPULATIONS

TABLE 4-1. PUBLIC TOILET FIXTURE REQUIREMENTS BASED ON USER POPULATION

Items	Typical Occupancy	30 Men		51 Men		90 Men		103 Men		121 Men		150 Men	
		30 Women	51 Women	51 Men	90 Women	103 Women	121 Women	150 Women					
	Unit Area Allowance	QTY	NASF	QTY	NASF	QTY	NASF	QTY	NASF	QTY	NASF	QTY	NASF
Men													
WC	25	2	50	3	75	5	125	5	125	5	125	6	150
Urinals	25	1	25	2	50	3	75	3	75	3	75	3	75
Lavatories	15	2	30	3	45	5	75	5	75	5	75	6	90
Women													
WC	25	2	50	4	100	6	150	6	150	6	150	6	150
Lavatories	15	2	50	4	60	6	90	6	90	6	90	6	90

TABLE 4-1

d. SPECIAL CONSIDERATIONS. Provide for the physically handicapped in accordance with EM-1110-1-103. The toilet room layout plans shown below graphically indicate the governing critical dimensions which must be provided

in order to provide accessibility to the physically handicapped. An additional unit area allowance of 17 SF/WC for use by handicapped should be provided. (See Fig. 4-1.)

TOILET AREA CRITICAL DIMENSIONS

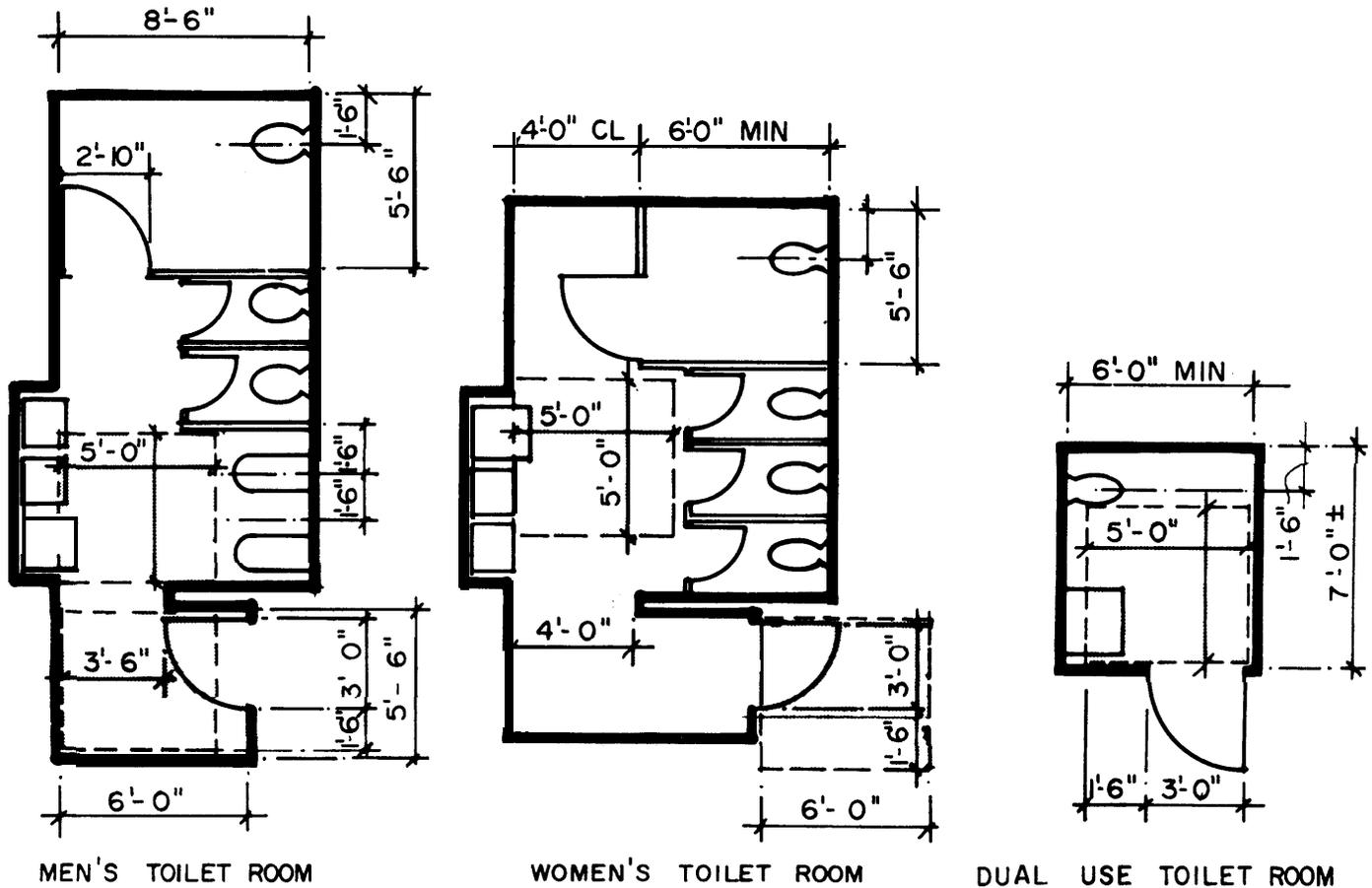


FIGURE 4-1

4-4 USER CARD CATALOG

This card catalog is used by patrons and staff to locate materials and is maintained by Technical Services personnel.

a. ADJACENCIES. If possible, the card catalog should be adjacent and visible from control and reference areas, centrally located, and easily accessible from technical services, general reading area, book stacks, and periodical area.

b. SPECIAL CONSIDERATIONS. Refer to the discussion of card catalog capacity in paragraph 3-4b(3). The unit should be no more than 48 inches high to allow use by

handicapped in wheelchairs. If a computer terminal is used to replace the standard catalog, provide a telephone outlet, table, and chair for each terminal.

c. FINISHES

- Floor: replaceable carpet, vinyl tile
- Walls: brick, architectural materials, wallboard, plaster, concrete block, acoustic treatment, paint, vinyl covering
- Ceiling: acoustic tile

d. SPACE REQUIREMENTS. Allow 17 NASF per unit. (See Fig. 4-2)

CARD CATALOG EXAMPLE LAYOUTS

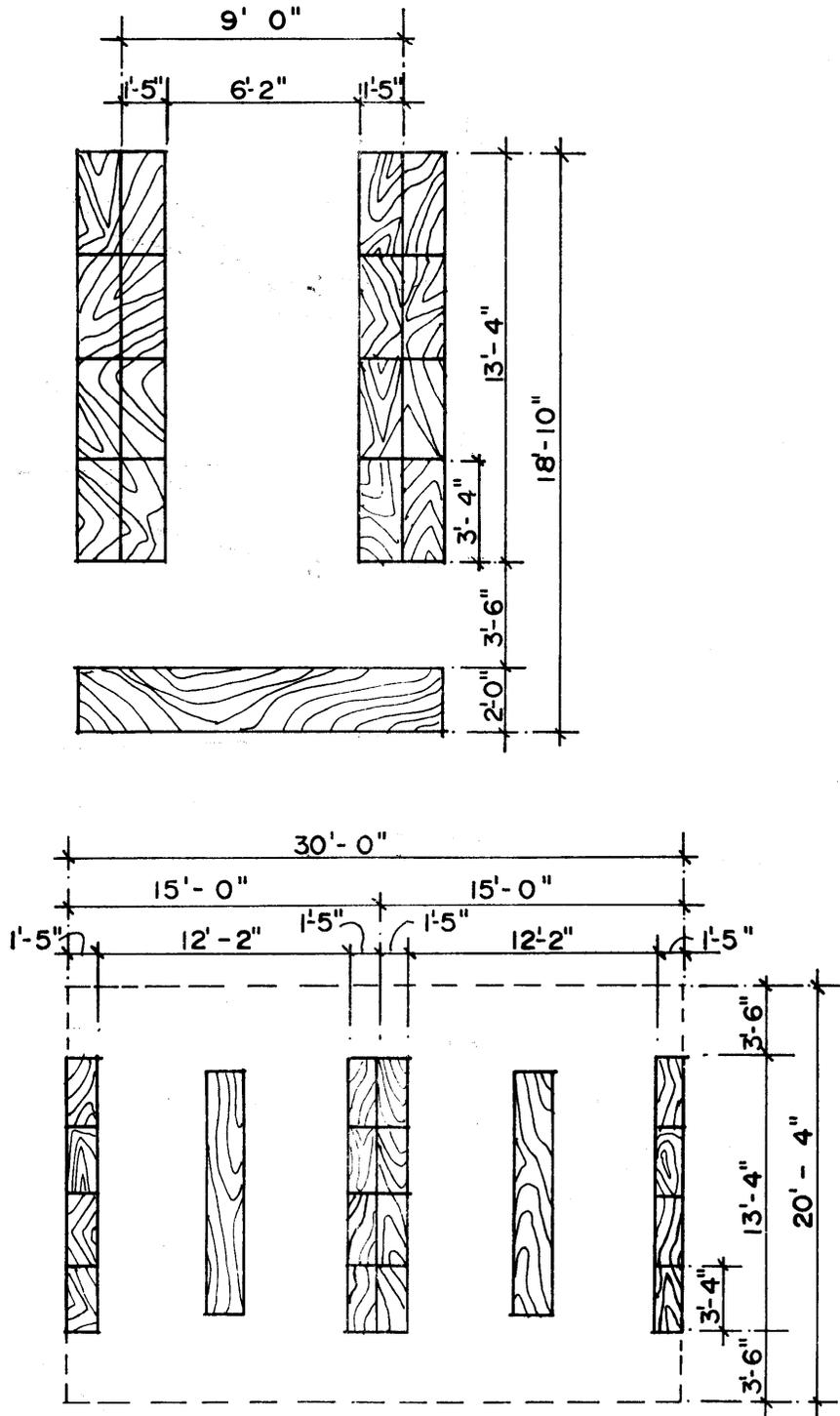


FIGURE 4-2

4-5 CONTROL AREA

All patrons using or borrowing library materials must pass through this area. Personnel at the control (circulation) desk check materials in and out, monitor circulation and provide general library information. In small libraries, with one or two staff members, the control desk may also serve as the librarian's work area and any necessary technical services will be performed here. In large libraries, several staff members may work behind the control desk.

a. **ADJACENCIES.** Control desk personnel should have visual control of as much of the user area as possible. The control area must be adjacent to the entrance and lobby. The technical services area should be located in close proximity to the control desk so that technical services personnel can operate the control desk, if necessary. The public card catalog should be visible from the control area, if possible.

b. **SPECIAL CONSIDERATIONS.** In large libraries, provide a replaceable carpet to a distance of 12 feet around the control desk. A lowered ceiling or other acoustic provisions should be provided to control noise generated by the electric charging equipment if user seating areas are nearby. Allowance should be made for provision of computer terminal and printer in the control area. This will include such requirements as dedicated telephone line(s) and additional electrical service as well as additional floor area to house the computer hardware.

In addition to the control desk, the control area usually makes some provisions for shelving for reserve books, recordings and other materials. In addition, the control area may provide for a small work area behind the desk for maintenance files used at the control desk, processing of overdue materials, and for making minor repairs to materials. A copy machine may also be located in the control desk area. Work area and copy machine allowances will be dependent on type and size of the library facility.

c. **FINISHES**

- Floor: carpet
- Walls: painted wallboard, plaster or concrete block, special finish materials
- Ceiling: acoustical tile, lowered ceiling optional

d. **SPACE REQUIREMENTS**

<u>Item</u>	<u>Unit Area Allowance/NASF</u>
Control Desk	30/module
Work Counter	5 NASF/linear foot of counter
Files	10
Book Trucks	9
Copy Machine	60
Single-Faced Shelving	13
Computer Terminal	84

4-6 REFERENCE AREA

Reference materials are non-circulating and are normally used in the immediate area. A reference librarian may be located in the area to answer questions and research information.

a. **ADJACENCIES.** The reference area should be as close to the control area as possible so that control desk personnel can assist patrons in the absence of a reference librarian. The public card catalog should be adjacent to this area if possible. User seating should be in close proximity to reference shelving. The microform area should be adjacent for access to archives and technical data systems.

b. **SPECIAL CONSIDERATIONS.** Reference books tend to be large, and often many are used at a time. Therefore, tables should be 4 feet wide and provide 3 linear feet per person. In some larger libraries and special libraries, allowance should be made for provision of a computer/computer terminal and printer in the reference area. This will include such requirements as dedicated telephone line(s), additional electrical service, and temperature controls for computer equipment as well as additional floor area to house the computer hardware.

c. **FINISHES**

- Floor: carpet
- Walls: vinyl covering or printed wallboard, plaster or concrete block
- Ceiling: acoustical tile

d. **SPACE REQUIREMENTS**

<u>Item</u>	<u>Unit Area Allowance/NASF</u>
Shelving	9
Reference Librarian	125
Index Table	25/seat
Lounge Seating	30
Computer Terminal	84
Map Case	40
Atlas Case	25
Dictionary Stand	25
Globe Stand	25
Table Seating	25/seat
Research Carrel	40

4-7 CURRENT PERIODICALS AREA

Provides shelving for periodicals up to about one year. Older issues are boxed or bound and shelved in the stack area or are held on microfilm. Includes lounge and table seating.

a. **ADJACENCIES.** May be separated from adult user areas, if necessary, in a multi-story scheme. Should be close to reference area.

- b. FINISHES
 - Floor: carpet
 - Walls: painted wallboard, plaster or concrete block, or vinyl covering
 - Ceiling: acoustical tile
- c. SPACE REQUIREMENTS

Microfiche Storage Unit, to accommodate 40,000 cards 10

4-9 STACK AREA

Stack areas are for storage of the general library collection. In non-classified collection, browsing may be allowed.

a. SPECIAL CONSIDERATIONS

(1) Stacks should be oriented so that personnel can see down the aisles from their work stations, if possible.

(2) Ceiling lighting fixtures parallel to the stacks provide better lighting than fixtures perpendicular to the stacks, but cause problems if stack spacing is subsequently changed. If future change in stack spacing or location is a reasonable possibility, lighting fixtures should be oriented perpendicular to the shelving or modular light fixtures should be used that can be relocated with the stack.

(3) Passage lanes between fixed stacks shall be a minimum width of 3 feet 6 inches as shown in Figure 3-3.

(4) Major circulation paths between and around stack area should be 60 inches wide to permit passage of two wheelchairs.

b. FINISHES

- Floor: carpet/resilient tile
- Walls: painted wallboard, plaster or concrete block, or vinyl covering
- Ceiling: acoustical tile

c. SPACE REQUIREMENTS

Single-Faced Sections: 13 NASF/section for sections 8-12 inches deep
 Double-Faced Sections: 9 NASF/section for sections 16-24 inches deep

4-10 READING AND STUDY AREAS

These areas include seating for study, browsing, and research.

a. ADJACENCIES. Reading study area should be adjacent to or dispersed within the stack area. They should be within 50 feet of the card catalog and reference collection.

b. SPECIAL CONSIDERATIONS. Provision should be made in selected study carrels for a computer terminal. This will require provision of 220V electrical service to the area and temperature control as well as provision of the requirements for dedicated telephone lines and space for location of computer hardware.

c. FINISHES

- Floor: carpet
- Walls: painted wallboard, plaster or concrete block, or vinyl covering
- Ceiling: acoustical tile

<u>Item</u>	<u>Capacity</u>	<u>Unit Area Allowance/NASF</u>
Display Shelving, back issues behind current	15 titles	9-13½*
Display Shelving, back issues under current	15 titles	9-13½*
Shelving, no display	75 titles	9-12½*
Display Rack—4 ft W, 5 ft H, 20 in. D	28 titles	35
Newspaper Rack, table type		17
Lounge Seating		30
Table Seating		25/seat

*Use lower figure for configuration similar to stack area with units double faced 5 feet. Use higher figure for wall shelving or widely spaced double faced sections suitable for browsing.

4-8 MICROFORM AREA

This area is for the use and storage of microfilm and microfiche, and includes readers, reader-printers, and storage.

a. ADJACENCIES. In libraries with small microform collections, the microform area may be included as part of the current periodicals area or at the control desk. For libraries with a large microform collection, the microform area may be a separate room, or at least physically separate from the current periodicals area, and should have adjacency to the reference area. If the microform collection consists mainly of back periodical issues, it should be near the portion of the book stacks which contain bound or boxed periodicals. If it contains classified documents, it is considered part of the classified collection for which criteria is presented in Chapter 12.

b. FINISHES

- Floor: carpet
- Walls: vinyl covering or painted wallboard, plaster or concrete block
- Ceiling: acoustical tile

c. SPACE REQUIREMENTS

<u>Item</u>	<u>Unit Area Allowance/NASF</u>
Microform Reader/Printer	28-38
Microfiche Reader/Printer	28-38
Microfilm Storage Unit, to accommodate 400 reels	15

d. SPACE REQUIREMENTS

<u>Item</u>	<u>Unit Area Allowance/NASF</u>
Table Seating	25/seat
Carrel Seating	30
Research Carrel	40
Microform/AV Seating	28-38
Typing	36
Lounge Seating	30

4-11 CONFERENCE ROOMS

Conference room (s) may be required for staff and/or public meetings. It may be advantageous to provide a multi-purpose room which serves functions other than conferences. Refer to Multi-Purpose Room criteria in paragraph 6-3b.

a. ADJACENCIES. Conference rooms intended primarily for staff use should be within staff area, but located so that non-staff members can enter without passing through staff work areas. Conference rooms intended primarily for users should permit users to enter and leave with minimal disturbance of reading and study areas. The access to the conference room should not permit users to exit with library materials.

b. SPECIAL CONSIDERATIONS. Provide chalkboard and tackboard. A projection screen should be considered, especially in larger conference rooms.

c. FINISHES

Floor: carpet or vinyl tile
 Walls: vinyl wall covering; or painted wallboard, plaster or concrete block, tackboard, chalkboard, one wall glass curtain, daylight optional.

d. SPACE REQUIREMENTS. Allow 30 NASF/person

4-12 STUDY ROOMS

To provide acoustic isolation for typing, group discussions, or individual study and/or research.

a. ADJACENCIES. If the user group is primarily professional (scientific and technical libraries, medical libraries, law libraries, school libraries), study rooms may be anywhere within user areas. For other user groups (main post libraries, branch libraries), the entrance to study rooms should be visible from a staff work station. For classified collections, the study room must be provided for the user within the vault but with a distinct barrier between material and user.

b. FINISHES

Floor: carpet or vinyl tile
 Walls: Painted wallboard or plaster or concrete block, or vinyl wall covering, tackboard, chalk-

board, one wall glass
 Ceiling: acoustical tile

c. SPACE REQUIREMENTS. Allow 30 NASF/person

4-13 TYPING AND LISTENING ROOMS

These rooms provide acoustic isolation for individual use of typewriters, tape recorders, and other noisy equipment. They may be furnished with the equipment or the equipment may be borrowed from the control desk.

a. ADJACENCIES. These rooms should be visible from the control desk to preclude abuse of space. These rooms should generally be grouped together so that if some are occupied, the user need not search for an unoccupied room.

b. SPECIAL CONSIDERATIONS. Entrance doors should have windows. Additional windows to the interior or to the exterior are desirable to alleviate the possible claustrophobic feeling that small rooms cause some users. Keyed door locks should be provided.

c. FINISHES

Floor: carpet
 Walls: painted wallboard, plaster or concrete block or vinyl wall covering, acoustical treatment, if necessary
 Ceiling: acoustical tile

d. SPACE REQUIREMENTS. Allow 36 NASF/person

4-14 CHILDREN'S AREA

A children's area is normally provided in main and branch libraries. Larger libraries normally include a children's librarian on the staff.

a. ADJACENCIES. The children's area should normally be on the ground floor, convenient to the main entrance. The children's area should be monitored by and visible from the control area if there is no children's librarian. Children's toilets should be provided for children's areas which exceed 2000 square feet. An active area (generally 150-300 square feet) with space for floor cushions may be provided, but should be as remote as practicable from table seating.

b. SPECIAL CONSIDERATIONS. Table and lounge seating should occupy 20-25 percent of the NASF required for shelving. Provide at least one sloped-top reading table with chairs for small children. Storage should be generally about 2 percent of the total NASF. Children's shelves accommodate 85 volumes per unit at working capacity.

c. FINISHES

Floor: carpet
 Walls: painted wallboard, plaster or concrete block or vinyl wall covering, tackboard
 Ceiling: acoustical tile

d. SPACE REQUIREMENTS

Item	Unit Area Allowance/NASF
Shelving	9
Card Catalog	17
Children's Librarian	125
Lounge Seating	20
Table Seating	20/seat
Cushions	15
Boy's Toilet	50
Girl's Toilet	50
Storage: 2 percent	varies

Walls: painted wallboard, plaster or concrete block
 Ceiling: acoustical tile

c. SPACE REQUIREMENTS. Table 4-2 outlines space requirements for staff offices and work stations based on military rank or civil service classification only. This method establishes a general guideline for determining staff space requirements but must be adjusted according to functions performed on an individual basis. See AR 405-70. A closet or locker should be provided, if possible, in private offices for storage of personal items.

TABLE 4-2 STAFF OFFICE

Military Rank	Civil Service Classification	Office Area NASF
**General	GS-18	400
*General	GS-16 and GS-17	300
Colonel	GS-14 and GS-15	200
Lt. Colonel	GS-13	150
Major	GS-12	100
Captain	GS-11	90
1st Lt.	GS-9	80

4-15 ADMINISTRATIVE STAFF OFFICES

a. ADJACENCIES. The administrative staff area is generally located adjacent to the control area and technical processing area. If possible, visitors should have direct access to this area without passing through staff, reading or stack areas. Staff offices and work stations should generally be located off a staff circulation corridor, dependent upon size of staff and library and/or unless frequent public access is required. Work stations may be required adjacent to the stack area for users engaged in special projects, in reference areas, children's areas, or classified areas dependent upon the type of library, size, and/or level of service offered by a particular library facility.

b. FINISHES

Floor: carpet

Figure 4-3 shows suggested layouts for the various office sizes delineated in Table 4-2.

STAFF OFFICES AND WORK STATIONS

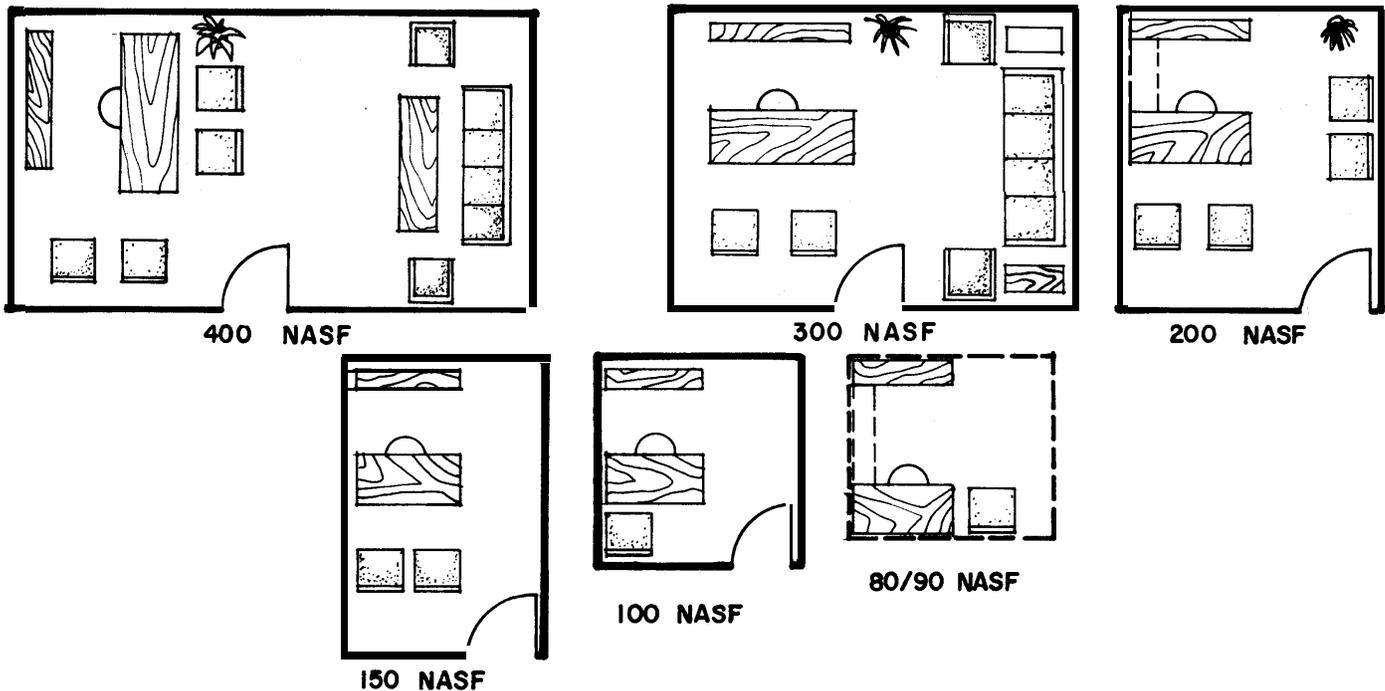


FIGURE 4-3

4-16 TECHNICAL SERVICES WORK STATIONS

Staff areas used for any of the following: order and acquisitions; descriptive and subject cataloging; classification; work with serials; physical processing; typing and clerical work.

a. ACTIVITIES. A layout based on work flow should be considered to maximize efficiency and communication of technical services. Following is a list of technical service activities.

(1) *Order and Acquisitions Area.* The order and acquisitions section is responsible for purchase requisitioning, ordering of books and periodicals, and supervision of shipping and receiving activities. This work is carried out by a librarian in a small technical services operation, but may be divided in large institutions into as many as five groups; selecting, ordering, checking in acquisitions, billing, and gift and exchange work. The order and acquisition area should be adjacent to shipping and receiving, if practicable.

(2) *Cataloging Area.* The cataloging process, whether automated or manual, consists of several operations. First, incoming materials must be checked to determine whether catalog cards are necessary. Where cataloging is necessary, materials will be checked against titles listed in the computer bank, if automation is available, and catalog cards will be ordered for these materials. Where automation is not available and/or titles are not listed in the computer bank, manual cataloging must be performed. Both operations require the use of book indexes and standard classification materials and the typing of catalog cards. Dependent upon the size and/or type of library facility, a professional librarian will usually be required for subject-heading work, classification, and description cataloging.

(3) *Physical Processing and Bindery Area.* The physical processing and bindery section prepares labels, book cards, and packets for library materials, and affixes plastic jackets. Materials which are to be sent for binding are prepared for shipment in this area. In larger libraries this may be a separate department. Since the amount of material in process varies at different times of the year, adjacent storage space is essential for this activity.

b. ADJACENCIES. The technical services area should be adjacent to the administrative offices and shipping and receiving and should be in as close proximity to the stack as practicable.

c. FINISHES

- Floor: generally vinyl tile, carpet in administrative areas
- Walls: Vinyl wall covering, painted wallboard, plaster or concrete block, tackboard
- Ceiling: acoustical tile

d. SPACE REQUIREMENTS. Space requirements for each member of the staff should be developed based on the equipment their duties require. Use NASF requirements shown in paragraph 3-4 for developing these work stations. In addition to individual work stations, the following joint-use equipment may be required:

<u>Item</u>	<u>Unit Area Allowance/NASF</u>
Files	10
Shelving	13
Mobile Shelving	11
Book Trucks	9
Card Catalog	17
Supply Cabinet	20
Index Table	150
Drafting Table	48
Work Counter (including sink)	5 per LF
Copy Machine	60
Computer Terminal	84

4-17 SHIPPING AND RECEIVING

A shipping and receiving area should be provided in all libraries for delivery and dispatch of books and other library materials. A majority of libraries will require loading dock capability somewhere in the building.

a. ADJACENCIES. The shipping and receiving area should be near the acquisition area (technical services), if practicable. The exit to the loading dock should be located to discourage unauthorized use by library patrons. Provide a buzzer or telephone at service entrance to alert technical services staff of delivery. Libraries which are part of large buildings need access to a service corridor and/or service elevator for delivery of materials to a receiving area.

b. FINISHES

- Floor: concrete or vinyl tile
- Walls: painted concrete block or vinyl wall covering
- Ceiling: acoustical tile

c. SPACE REQUIREMENTS

<u>Item</u>	<u>Unit Area Allowance/NASF</u>
Desk and Chair	50
Work counter	50 per full-time staff member
Storage bins	25 per bin
Loading dock	2.5 per linear foot outdoor, uncovered loading dock 5 per linear foot covered loading dock

4-18 STAFF LOUNGE

A staff lounge area should be provided for all libraries. In smaller libraries with a small staff, the staff lounge may be only an alcove in the technical services areas; in larger libraries, the staff lounge should be provided in a separate space. The size of the lounge area should be a function of staff size based on full-time equivalent (FTE) staff members. The staff lounge is used by staff members for eating, relaxation, and staff meetings. The staff lounge may also have limited use by the public for refreshments. Staff schedules frequently permit only short breaks for lunch, so that a kitchenette in the staff lounge for limited preparation/heating of food is desirable.

a. **ADJACENCIES.** The staff lounge should be located as close as practicable to staff work stations. It should be in close proximity to the technical service, administrative, and control desk areas.

b. **FINISHES**

Floor: carpet

Walls: brick, architectural materials, painted wallboard or plaster or vinyl wall covering, tackboard

Ceiling: acoustical tile

c. **SPACE REQUIREMENTS**

<u>Staff Members (FTE)</u>	<u>Lounge Area/NASF</u>
1-4	40 SF/staff member
5-9	300
10-14	400
15-20	500
above 20	(500 +20 SF/staff member over 20)

<u>Item</u>	<u>Unit Area Allowance/NASF</u>
Sofa	75
Lounge Chair	30
Chairs and Table	25/seat
Unit Kitchens	80

4-19 STAFF TOILETS AND LOCKERS

Staff toilets should be provided only if (1) public toilets are located more than 100 feet away from staff areas or (2), if the staff is large enough to warrant a separate toilet facility, or (3) if public toilets are restricted from use as in a classified collection. Lockers should be provided for all

staff members who do not have private offices for storage of coats and other personal belongings.

a. **ADJACENCIES.** Locate near the area of greatest staff concentration. Entrances should be remote from public toilet entrances. For economy, consider proximity to other areas that require plumbing. Lockers should be located in the staff lounge or the technical services area if a separate staff lounge is not provided.

b. **FINISHES**

Floor: ceramic tile, concrete, quarry tile, or terrazzo

Walls: ceramic tile wainscot with painted wallboard or plaster or concrete block above

Ceiling: acoustical tile

c. **SPACE REQUIREMENTS.** See paragraph 4-3 for development of space requirements for toilets. Allow 4 NASF per person for lockers.

d. **SPECIAL CONSIDERATIONS.** Handicapped persons shouldn't be required to travel more than 150 feet on any floor to reach an accessible toilet. Even though staff toilets may be provided, they do not necessarily have to be accessible if accessible public facilities are available within the travel limit. However, if single toilet rooms are provided in the staff area, they should be made accessible as prescribed in EM 1110-1-103.

4-20 JANITOR'S CLOSET

The janitor's closet is used by maintenance personnel for storage of cleaning gear and as a work area. This area should be centrally located to minimize walking distances. For economy of plumbing, it is recommended that janitor's closet(s) be near other areas with plumbing, and that they be provided on each floor of a multi-story facility.

a. **FINISHES**

Floor: concrete or vinyl tile

Walls: ceramic tile wainscot, wallboard, plaster, concrete block, exposed

Ceiling: exposed

b. **SPACE REQUIREMENTS.** The space required for the janitor's closet is 50 to 100 square feet.

4-21 ENVIRONMENTAL CRITERIA.

Environmental criteria for the above areas will be as shown in Table 4-3.

TABLE 4-3 ENVIRONMENTAL CRITERIA FOR AREAS

SPACE	ACOUSTICS					
	Ambient (db)	Estimated Peak (db)	Sound Quality			
Entrance and Lobby	30	85	AVG			
Multi-Purpose Room	30	80	AVG			
Public Toilets	45	80	ML			
User Card Catalog	30	75	MD			
Control Area	35	80	MD			
Reference Area	30	75	MD			
Current Periodical Area	35	75	D			
Microform Area	30	85	D			
Stack Area	35	70	MD			
Reading and Study Area	35	70	MD			
Conference Rooms	30	85	AVG			
Study Rooms	30	85	AVG			
Typing and Listening Booths	30	85	D			
Children's Area	35	85	MD			
Administrative Staff Offices	30	80	AVG			
Technical Services	40	80	AVG			
Shipping and Receiving	40	80	AVG			
Staff Lounge	35	75	MD			
Staff Toilets and Lockers	45	80	AVG			
Janitor's Closet	45	90	L			
SPACE	MECH/PLUMBING					
	Maximum Occupant Load	Thermostat	Air Chg/Hr	CW/I:W	Floor Drain	Exhaust
Entrance and Lobby		X	6			
Multi-Purpose Room		X	10	X	X	X
Public Toilets						
User Card Catalog			6-8			
Control Area			6-8			
Reference Area			6-8			
Current Periodical Area			6-8			
Microform Area			6-8			
Stack Area			6-8			
Reading and Study Area			6-8			
Conference Rooms			15			
Study Rooms			15			
Typing and Listening Booths			10			
Children's Area		X		X	X	X
Administrative Staff Offices		X	6-8			
Technical Services			6-8	X		
Shipping and Receiving			6-8			
Staff Lounge		X	6-8			
Staff Toilets and Lockers			10		X	X
Janitor's Closet			6	X	X	X

TABLE 4-3 ENVIRONMENTAL CRITERIA FOR AREAS (CONTINUED)

SPACE	ELECTRICAL					
	Intercom	Electrical Outlets	PA Speaker	Telephone	Clock	TV/Cable
Entrance and Lobby		110V	X	X		
Multi-Purpose Room		110V	X			X
Public Toilets		110V	X			
User Card Catalog	X	110V				
Control Area		110-220V	X	X		X
Reference Area	X	110-220V				
Current Periodical Area		110V	X			
Microform Area		110V	X			
Stack Area		110V				
Reading and Study Area		110-220V				
Conference Rooms		110V	X			X
Study Rooms		110V	X			X
Typing and Listening Booths		110V	X			
Children's Area	X	110V	X	X		X
Administrative Staff Offices		110V		X		
Technical Services		110-220V	X	X		
Shipping and Receiving		110V		X		
Staff Lounge		110-220V	X	X		
Staff Toilets and Lockers		110V	X			
Janitor's Closet		110V				
SPACE	LIGHTING					
	Daylight	Blackout Capability	Light Intensity (fc)	Dimming Capability	Task Light Supplement	
Entrance and Lobby	X		10		X	
Multi-Purpose Room			50	X		
Public Toilets			30			
User Card Catalog			60			
Control Area	X		60			
Reference Area			60			
Current Periodical Area			60-75			
Microform Area			60			
Stack Area			60			
Reading and Study Area	X		75		X	
Conference Rooms			75	X		
Study Rooms			75			
Typing and Listening Booths			75			
Children's Area	X		60			
Administrative Staff Offices	X		60			
Technical Services	X		60			
Shipping and Receiving			60			
Staff Lounge	X		60			
Staff Toilets			30			
Janitor's Closet			30			