

### CHAPTER 3

## Planning Units For Library Functions

#### 3-1 GENERAL

This chapter presents requirements and design criteria for the various planning units which are used in library activities. These are discussed in terms of storage units, reading and study units, and staff and service units.

#### 3-2 COLLECTION STORAGE UNITS

The storage of a library collection will include a wide variety of units necessary to respond to the varying requisites of the materials stored. The designer must first determine how many of each type of material must be stored. This information will be available from the librarian. The total number of each type of unit and the total NASF required can then be determined following the procedure contained in paragraph 2-4b. Storage capacities for units given in this chapter are summarized in Table 3-2.

#### a. BOOKS AND BOUND PERIODICALS.

(1) *Capacity.* Table 3-1, which follows, summarizes the capacity of 82 inch high single shelving units for various kinds of bound volumes. Unless otherwise indicated, standard shelving units used in this chapter are single-faced units. A single-faced unit is constructed to afford access to books from one side only. Double-faced units afford access from either side. Both single and double-faced units are available with closed or open backs. Double-faced shelving should be a constant depth from floor to ceiling. Each may be 8 inch nominal which accommodates 94 percent of all books, or 9 inch nominal, which accommodates 97 percent of all books, provided there is no back or separation, between the shelves and no diagonal bracing. When two 9 inch nominal (8 inch actual) shelves are arranged back to back (Fig. 3-1) each

TABLE 3-1 SHELVING DATA FOR BOOKS

Type of item	Vols. per foot of shelf	Vols. per foot of single-faced range 82" ht.	Vols. per shelf	Shelves per section	shelf depth in.	Vols. per single-faced section allowing 40% growth	Max. vols. per single-faced section
Circulating (Nonfiction)	8	56	24	7	8	100	168
Fiction	8	56	24	7	8	100	168
Economics	8	56	24	7	8	100	168
General Literature	7	49	21	7	8	88	147
Reference	7	49	21	6-7	8 & 10	88	147
History	7	49	21	7	8	88	147
Technical & Scientific	6	42	18	7	10 & 12	76	126
Medical	5	35	15	6-7	8 & 10	63	105
Law	4	28	12	7	8	50	84
Public Documents	5	35	15	7	8	63	105
Bound Periodicals	5	35	15	5-7	10 & 12	63	105
U.S. Patent Specifications	2	14	6	7	8	25	42
Art Books	7	42	21	5-6	10 & 12	76	126
Braille	4	24	12	5-6	15	43	72

shelf is 8 inches deep and there are 2 inches between shelves. This is the equivalent of an 18 inch deep double-faced section unit. Under normal circumstances, books up to 10 inches deep can be placed upright on these shelves, with 2 inches extended into the space between the shelves. If 8 inch nominal shelving is used, books up to 9 inches deep can be accommodated. A standard shelf height should be chosen which will accommodate most of the books, and allow shifting from one shelf to another. The standard book stack shown in Figure 3-2 has 7 shelves, 12 inches apart, and accommodates over 90 percent of all books. Oversized books can be accommodated in similar sections with 6 shelves, each one 14 inches

apart. Books and bond periodicals are usually housed in standard shelving which is 82 inches high, 36 inches wide, and 8, 10, or 12 inches deep, located in stack areas with a double faced shelving configuration. The range width of stack areas should be 5 feet in order to allow for a minimum of a 42-inch aisle space required for access by the handicapped. (See Figure 3-3). For children's collections, and for hospital libraries used by patients, 42-inch high or 60 1/2 inch high standard units should be installed having 3 and 5 shelves, respectively. Unit capacities must be adjusted to reflect the number of shelves used, but space requirements will be the same for units of all heights.

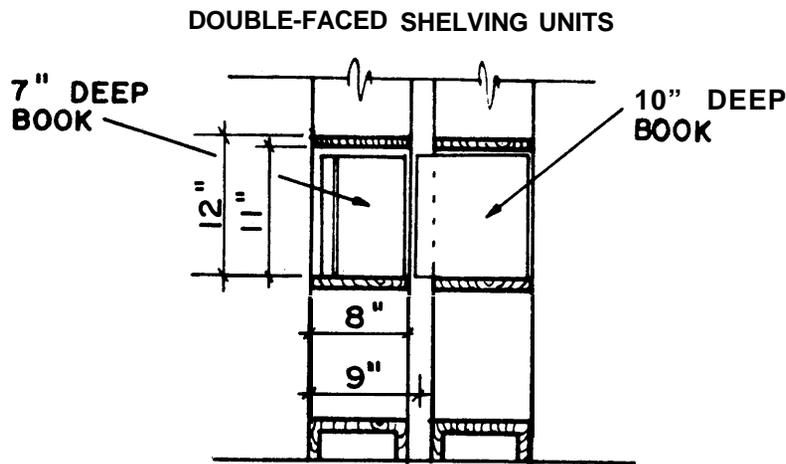


FIGURE 3-1

**SHELVING UNIT HEIGHT AND ACCESSIBILITY**

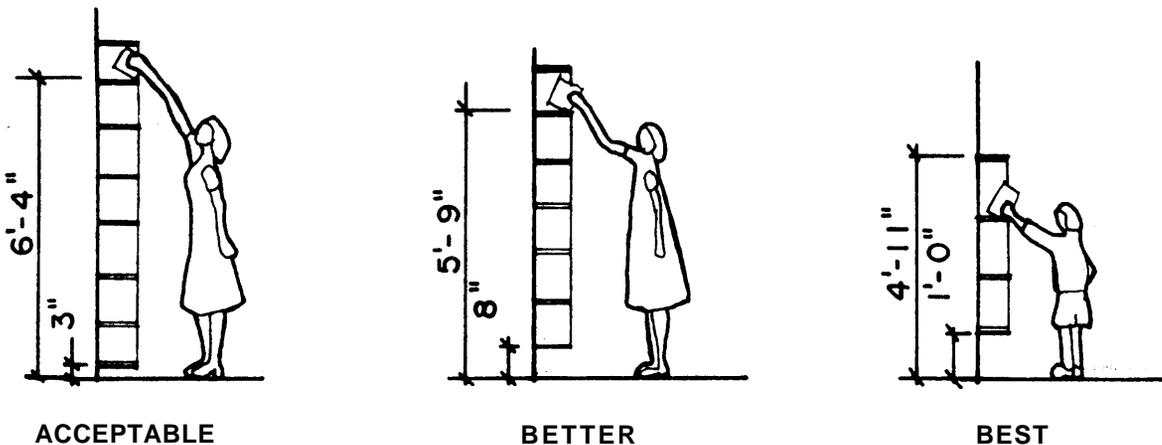


FIGURE 3-2

BOOKS AND BOUND PERIODICALS

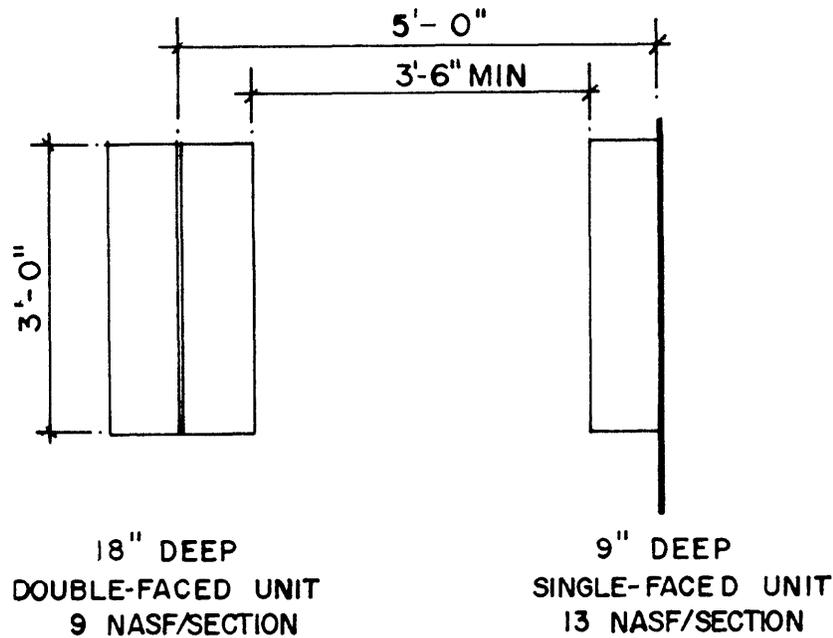


FIGURE 3-3

b. CURRENT PERIODICALS.

(1) *Capacity.* Current periodicals are usually stored in racks or display shelves. Standard racks are available in 5-shelf units, 48 inches high with a planning capacity of 15 titles, or 8-shelf units 60 inches high with a capacity of 32 titles. Display shelving is available in the three standard heights (42, 60, and 84 inches) with 2, 3, and 5 shelves, respectively. Shelves over 60 inches in height should not be used for periodical display because of its inaccessibility to wheelchair users.

(2) *Space Requirements.* Short rack units are approximately 36 inches wide by 16 inches deep and require 14.5 square feet each if used in single-faced sections. Tall rack units are 48 inches wide by 22 inches deep and require 19.5 square feet each. Standard display shelving units measure 3 feet by 12 inches and require 13.5 square feet. (See Fig. 3-4.)

## PERIODICAL DISPLAY UNITS

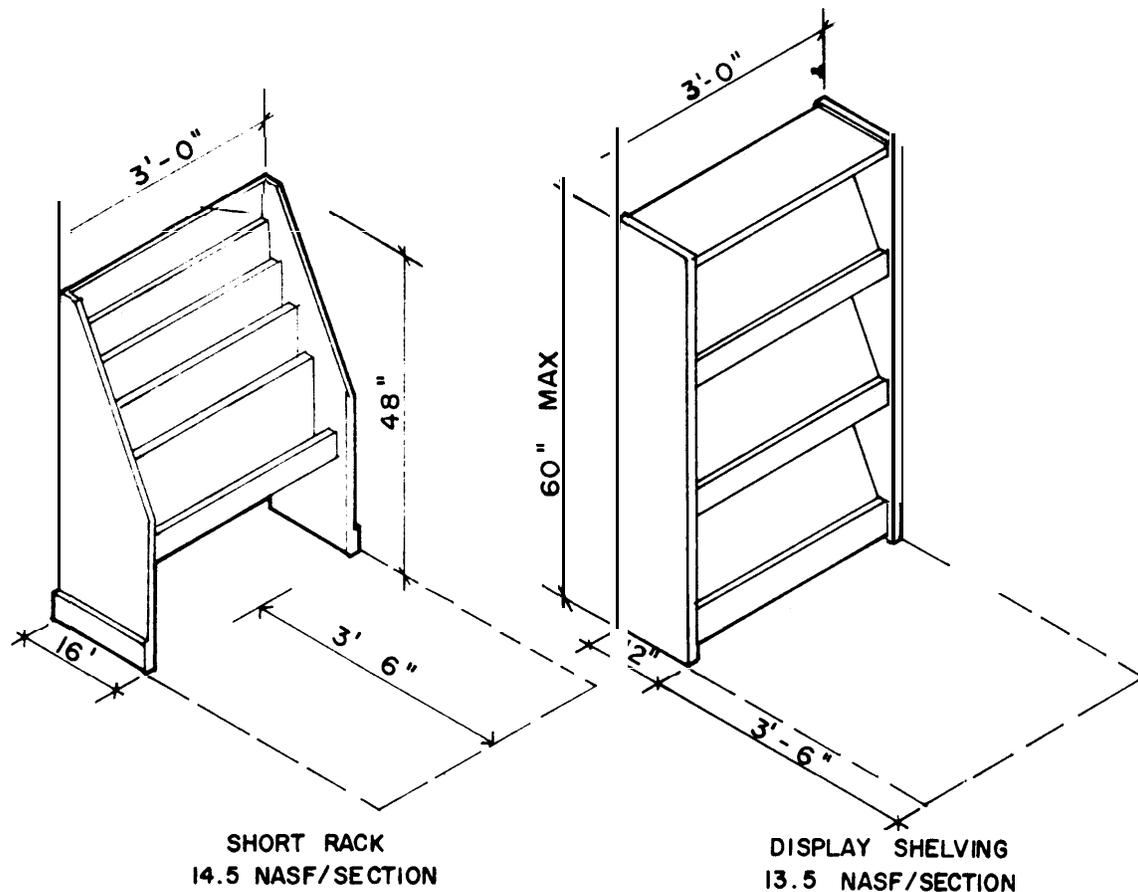


FIGURE 3-4

## c. UNBOUND PERIODICALS, MANUSCRIPTS, ARCHIVES, AND PAMPHLETS.

(1) *Capacity.* After being displayed, unbound periodicals are usually boxed in princeton files or pamphlet cases, and stored on standard 82 inch high shelving units. Thirty 12 inch high by 12 inch deep by 4 inch wide cases of material can be accommodated per unit, or approximately 500 issues of average sized magazines. Manuscripts, archives, and pamphlets may be handled in the same way or may be stored as follows:

(a) Material to be kept for a limited period of time, then discarded, should be stored in lateral or vertical filing cabinets in the reference area. The 5-drawer file cabinets allow 7.5 linear feet of storage; 5-drawer lateral files allow 9.0 linear feet.

(b) Placed in 1/2 inch wide pamphlet binders and placed on standard shelving in the stack area. Use a planning capacity of 420 binders per shelving unit.

(c) Bound in 2 inch wide pamphlet volumes by subject and placed on 12 inch deep standard shelving in the stack area. Use a planning capacity of 100 volumes per shelving unit.

(d) Placed in cardboard records storage containers 10 inches high by 12 inches wide by 15 inches deep and stored on 16 inch deep standard shelving having a maximum capacity of 21 containers per unit. When storing documents in filing cabinets, lateral files, and storage containers, the total length of storage space required is usually the critical factor. If this figure is not available, it can be computed by estimating the number of documents which can be filed in a standard unit thickness of materials (1 inch for correspondence and other material with less than a dozen pages, 1 foot for material 1/4 inch thick or more) and then dividing the total number of documents on hand by the estimated number per unit to obtain the total length of storage space required. This storage requirement can then be used to determine the number of containers required.

(2) *Space Requirements.* Filing cabinets measure 60 inches high by 18 inches wide by 28 inches deep and require 10 NASF per unit. Lateral files measure 65 inches high by 36 inches wide by 18 inches deep and require 12 NASF/unit. (See Fig. 3-5.)

**STORAGE UNITS FOR MANUSCRIPTS,  
ARCHIVES, AND PAMPHLETS**

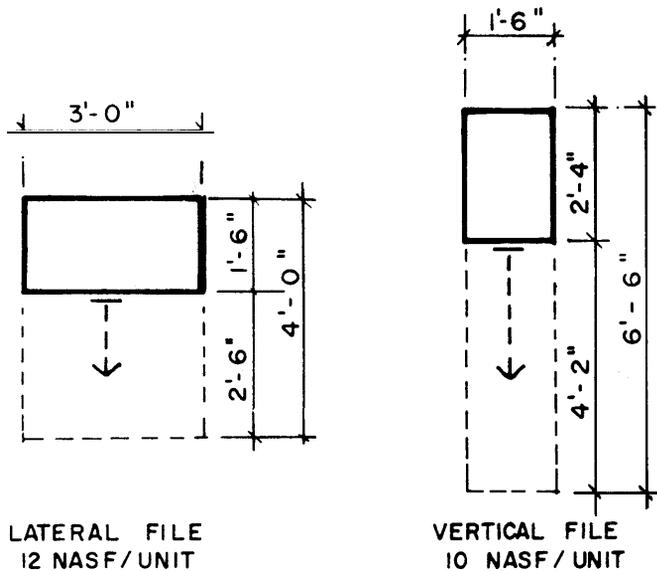


FIGURE 3-5

**STORAGE UNITS FOR SHEET MAPS  
AND BROADSIDES**

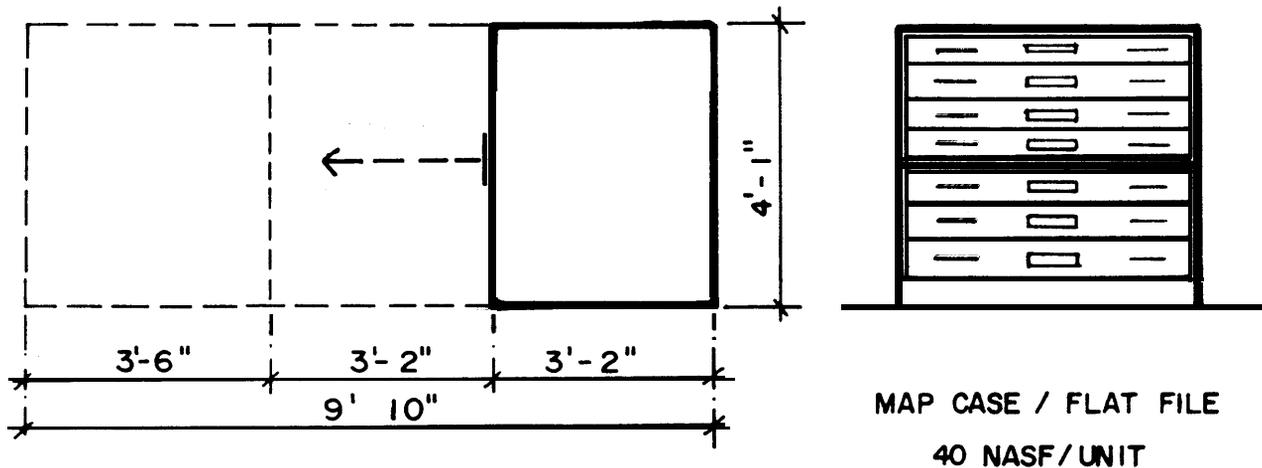


FIGURE 3-6

**e. ART PRINTS.**

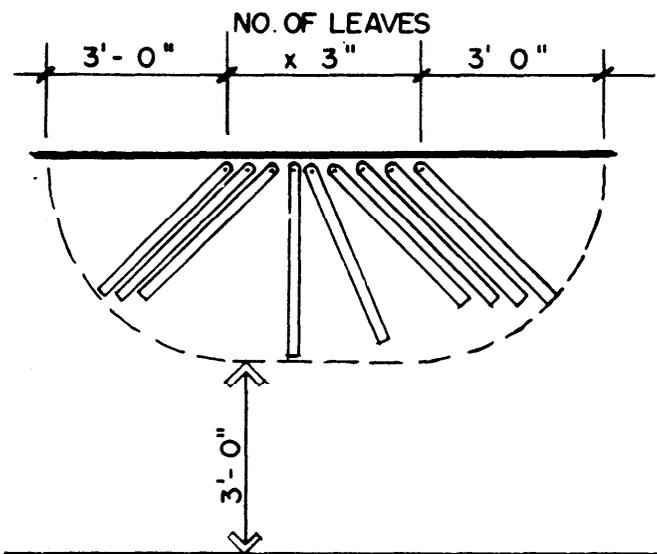
(1) *Capacity.* Wall-mounted pivoting art display boards are available in sizes 20 inches wide by 30 inches high, 24 inches wide by 36 inches high, and 36 inches wide by 72 inches high. Standard wall-mounting rails can accommodate up to 25 double-faced board leaves. Free-standing units of up to 12 leaves are also available. In addition, walls of corridors more than 5 feet width may also be used for art display.

**d. MAPS AND BROADSIDES.**

(1) *Capacity.* These should be placed for protection into folders and stored flat in map cases. A standard map case 47 inches high by 49 inches wide by 38 inches deep will store approximately 1000 large maps and posters.

(2) *Space Requirements.* The standard map case requires 40 square feet per unit. (See Fig. 3-6.)

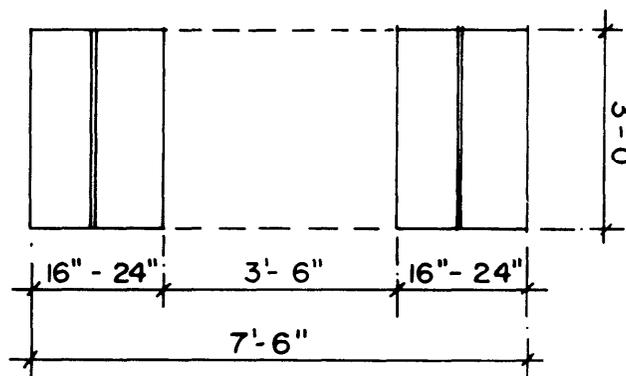
**ART PRINTS, PIVOTING LEAF DISPLAY**



**44 NASF FOR 6 LEAVES**  
**1.5 NASF FOR EACH ADDITIONAL LEAF**

**FIGURE 3-7**

**STORAGE UNITS FOR LARGE BOOKS, BOUND NEWSPAPERS, ATLAS, AND ELEPHANT FOLIOS**



**FIGURE 3-8**

**f. LARGE BOOKS, BOUND NEWSPAPERS, AND ELEPHANT FOLIOS.**

(1) *Capacity.* Extra large items are shelved flat, preferably one per shelf, in 16 inch deep standard shelving units. (See Fig. 3-8.) Because of the weight of these stored items, shelving should be limited to a maximum height of 60½ inches. A 60½ inch high unit can accommodate 13 volumes. A 42 inch high unit can accommodate 8 volumes. Shelving is available at 18 inches and 28 inches deep, but only in metal utility shelving. Where less austere shelving of a depth greater than 16 inches is required, double-faced units without backs can be used effectively. The capacity of all depths of shelving is the same for these items.

(2) *Space Requirements.*

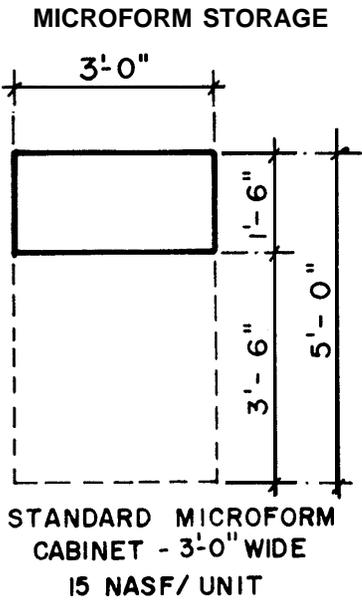
Shelving Depth (In.)	NASF	
	Single-Faced Units	Double-Faced Units
16	14.5	9
18	15	10
24	16.5	11

**g. MICROFORM AND AV MATERIALS**

(1) *Capacity.* Microform cabinets come in a variety of sizes. For most facilities, a multi-use cabinet is recommended containing separate drawers for each type of microform. Drawer units may be stacked to a maximum height of 52 inches, including an 8-10 inch base. A 36 inch wide by 18 inch deep drawer unit will hold any of the following:

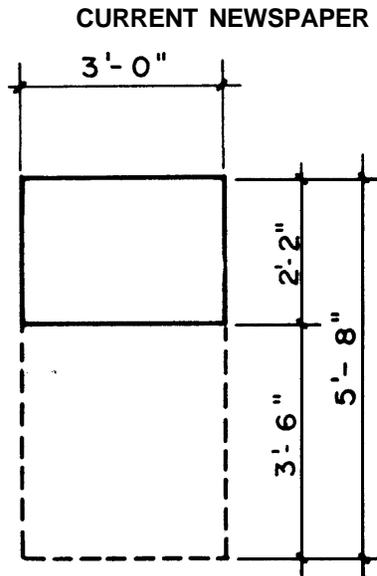
Material	Drawer Height (In.)	Capacity	
Film Strips	9½	540	
	12	720	
Cassettes	12	512	
Film Loops	12	144	
35mm Slides	9½	11,970	
	12	13,960	
Microfilm 16mm	12	272	
	35mm	12	160
Microfiche	12	15,200	
Audio Tapes	5 in.	9½	132
	7 in.	9½	91

(2) *Space Requirements.* A 36 inch wide by 56 inch high by 18 inch deep cabinet with a 4 drawer unit requires 15 square feet of floor space. (See Fig. 3-9.) Fewer than 4 drawers require the same space. Microform and AV materials storage drawers should be programmed in units of four.



**FIGURE 3-9**

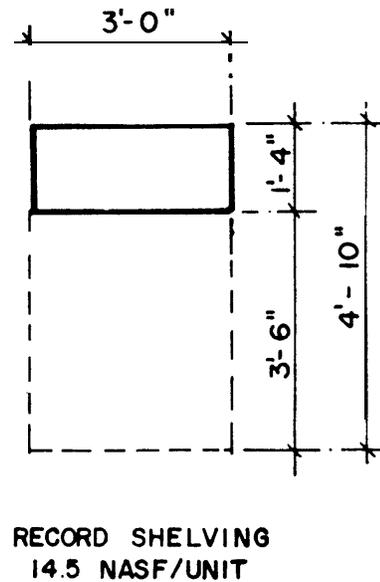
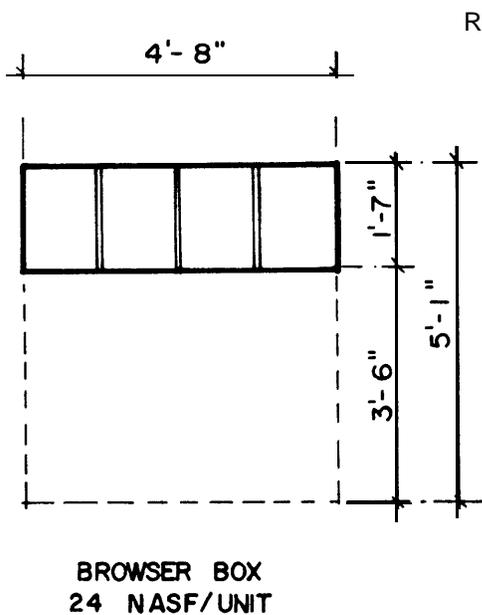
h. **CURRENT NEWSPAPERS.** Ten current newspapers (unbound) can be stored in a table-type newspaper rack which is 31 inches high by 36 inches wide by 26 inches deep. (See Fig. 3-10.)



**TABLE TYPE NEWSPAPER RACK**  
**17 NASF/UNIT**  
**FIGURE 3-10**

i. **RECORDS.** Records can be stored in the following manner (See Fig. 3-11.):

- (1) Browser Box/Storage Unit-41 inches high by 56 inches wide by 19 inches deep for 500-12 inch LPs
- (2) Record Storage/Display Rack-46 inches high by 28 inches wide by 27 inches deep for 560-12 inch LPs
- (3) Record Shelving-82 inches high by 36 inches wide by 16 inches deep for 750-12 inch LPs
- (4) Record Display Carousel-24 inches wide by 60 inches high



**FIGURE 3-11**

TABLE 3-2 SPACE REQUIREMENTS-STORAGE UNITS

Type of Material	Type of Storage Unit	No. Items/ Storage Unit	Unit Dim. (In.)	NASF/ Unit	Comments
1. Bound volumes	Standard shelving	See Table 3-1	82H, 36W, 8, 10, or 12D	9*	Typical stacks
2. Bound volumes	Medium Ht. shelving	See Table 3-1	60½H, 36W, 8, 10, or 12D	9*	Heavy books
3. Bound volumes	Low shelving	See Table 3-1	42H, 36W, 8, 10, or 12D	9*	Children's stacks
4. Bound periodicals	Standard shelving	See Table 3-1	82H, 36W, 10 or 12D	9*	Stack area
5. Bound newspapers	Low or med. ht. shelving	9	42 or 60½H, 36W, 16-24D	11*	Heavy books
6. Current periodicals	Displaying shelving	15 serials	82H, 36W, 12D	13½	Periodical area
7. Boxed periodicals	Standard	36	82H, 36W, 12D	9*	Stack area
8. Documents, pamphlets	Standard shelving	1000	82H, 36W, 18D	11*	
9. Documents, pamphlets	Vertical file, 5 dwr	500	48H, 18W, 28D	10	
10. Documents, pamphlets	Lateral file	varies	64H, 36W, 18D	12	
11. Reference volumes	Standard shelving	145	82H, 36W, 12D	9*	Reference area
12. Reference volumes	Medium ht. shelving	105	60½H, 36W, 12D	9*	Heavy books
13. Reference volumes	Low shelving	63	42H, 36W, 12D	9*	Heavy books
14. Maps	Map case	1000	47H, 49W, 38D	40	
15. Microfilm reels 35 mm	Cabinet	160	12H, 36W, 18D	15	
16. Microfilm reels 16mm	Cabinet	272	12H, 36W, 18D	15	
17. 35mm slides	4 dwr cabinet	15,960	12H, 36W, 18D	15	
18. 35 mm slides	3 dwr cabinet	11,970	9½H, 36W, 18D	15	
19. Microfiche	2 dwr cabinet	15,200	12H, 36W, 18D	15	
20. Newspapers unbound	Table type newspaper rack	10	31H, 36W, 26D	17	

TABLE 3-2 SPACE REQUIREMENTS-STORAGE UNITS (Continued)

Type of Material	Type of Storage Unit	No. Items/ Storage Unit	Unit Dim. (In.)	NASF/ Unit	Comments
21. Records	Browser/ storage unit	500	41 H, 56W, 19D	24	
22. Records	Storage/ display rack	560	46H, 28W, 27D	13	
23. Records	Record shelving	750	82H, 36W, 16D	14½	Oversized books also
24. Large books, ele- phant folios	Shelving with dividers	85	42H, 36W, 12D	9*	
25. Atlases	Atlas case	6	44H, 30W, 30D	25	

\*Required NASF is based on standard shelving used in double-faced layout configuration. If used singly, standard shelving unit 82 inches high, 36 inches wide, and 8 inches-12 inches deep requires 13½ NASF and standard shelving 82 inches high, 36 inches wide, and 16-24 inches deep requires 16½ NASF. NASF includes access space.

### 3-3 READING AND STUDY UNITS

Determination of total space requirements and general characteristics for reader stations are discussed in paragraph 2-4b. This section discusses the different types of reading and study units which are used in library facilities, their area requirements and critical dimensions. Table 2-2 summarizes the types of stations appropriate for the various library activities.

a. **READER STATIONS.** Types of reader stations utilized in libraries include a variety of seating types which are appropriate to various areas, library functions, and work tasks. Following is a list of the basic reader stations and the area requirements for each.

(1) *Table Seating.* Table seating is appropriate for activities that do not require more than 2 hours duration and can accommodate minor distractions. It provides opportunity for small group interaction on common projects but may also be used for individual activities. Area required for 25 SF/seat.

(2) *Index Table Seating.* Index table seating is appropriate for activities related to information and bibliographic search. These activities require a medium level of concentration but are usually shorter in term than other table uses. It is generally located in or adjacent to the reference area and/or the card catalog. The index table also functions as a storage unit for bibliographic reference volumes. Area required is 25 SF/seat. (See Fig. 3-12.)

TABLE SEATING

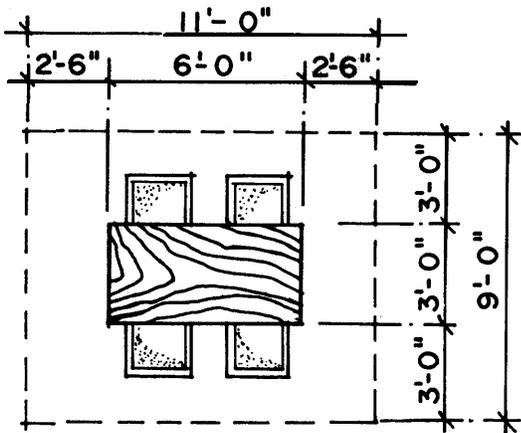
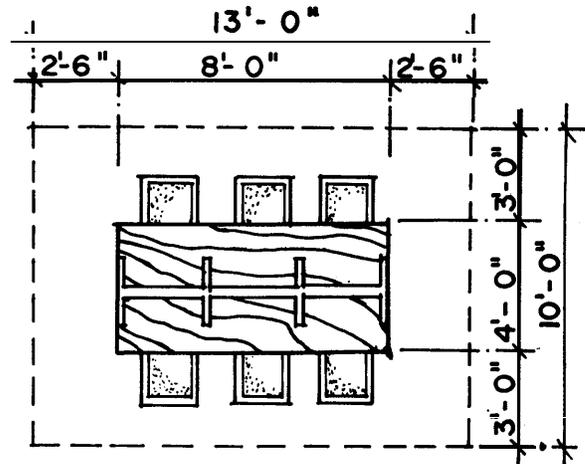


TABLE SEATING  
25 NASF/SEAT



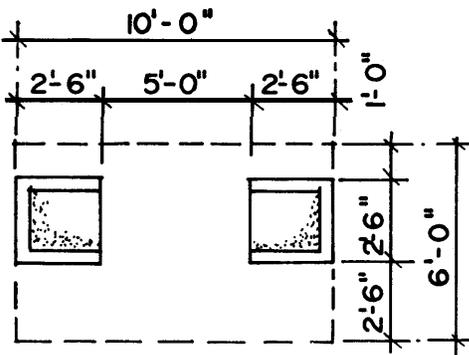
INDEX TABLE SEATING  
25 NASF/SEAT

FIGURE 3-12

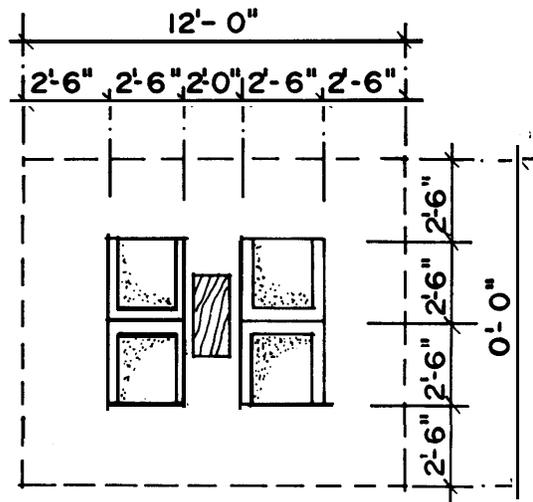
(3) *Lounge Seating.* Lounge seating is appropriate for activities similar to those afforded by tables but which do not require a writing surface or storage. It is appropriate to entrance/lobby areas, current periodical areas, and any other area where informal seating is considered desirable.

Lounge chairs can be grouped allowing for informal social interaction and minor conversation or placed back to back, to promote visual and social isolation. Lounge seating requires 30 SF/seat. (See Fig. 3-13.)

LOUNGE SEATING



LOUNGE SEATING  
30 NASF/SEAT



LOUNGE SEATING  
30 NASF/SEAT

FIGURE 3-13

(4) *Children's Seating.* Seating in children's area of libraries includes three primary types: table seating, lounge seating, and cushions which can be placed on the

floor in informal groupings throughout the area. Table seating and lounge seating require 20 SF/seat whereas cushions require 15 SF/seat. (See Fig. 3-14.)

CHILDREN'S SEATING

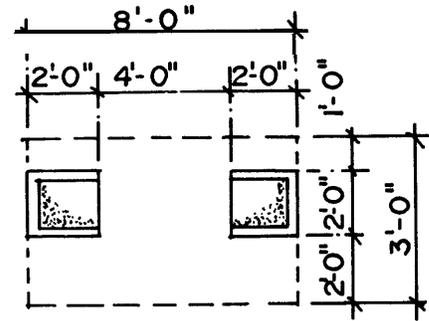
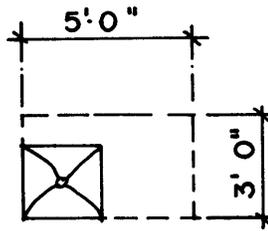
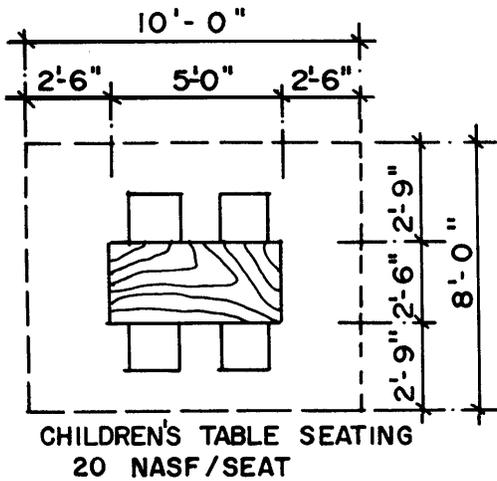


FIGURE 3-14

(5) *Carrel Seating*. Carrels are appropriate for individual activities requiring more isolation and longer usage (1 to 8 hours) than table seating. Carrels can be treated with varying degrees of visual and acoustic separation.

Research carrels should be enclosed on at least 3 sides and provide a large work surface and a bookshelf. Individual carrels require 30 SF/seat; research carrels require 40 SF/seat. (See Fig. 3-15.)

CARREL SEATING

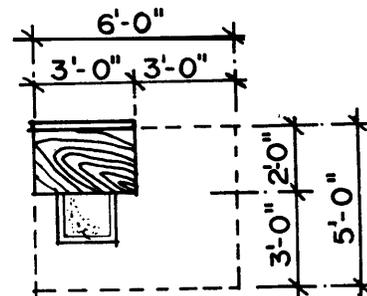
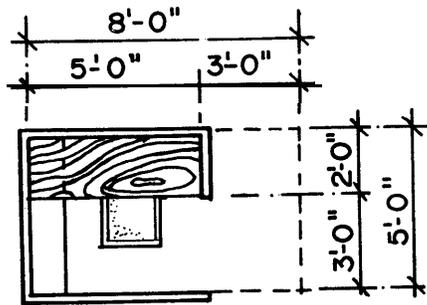
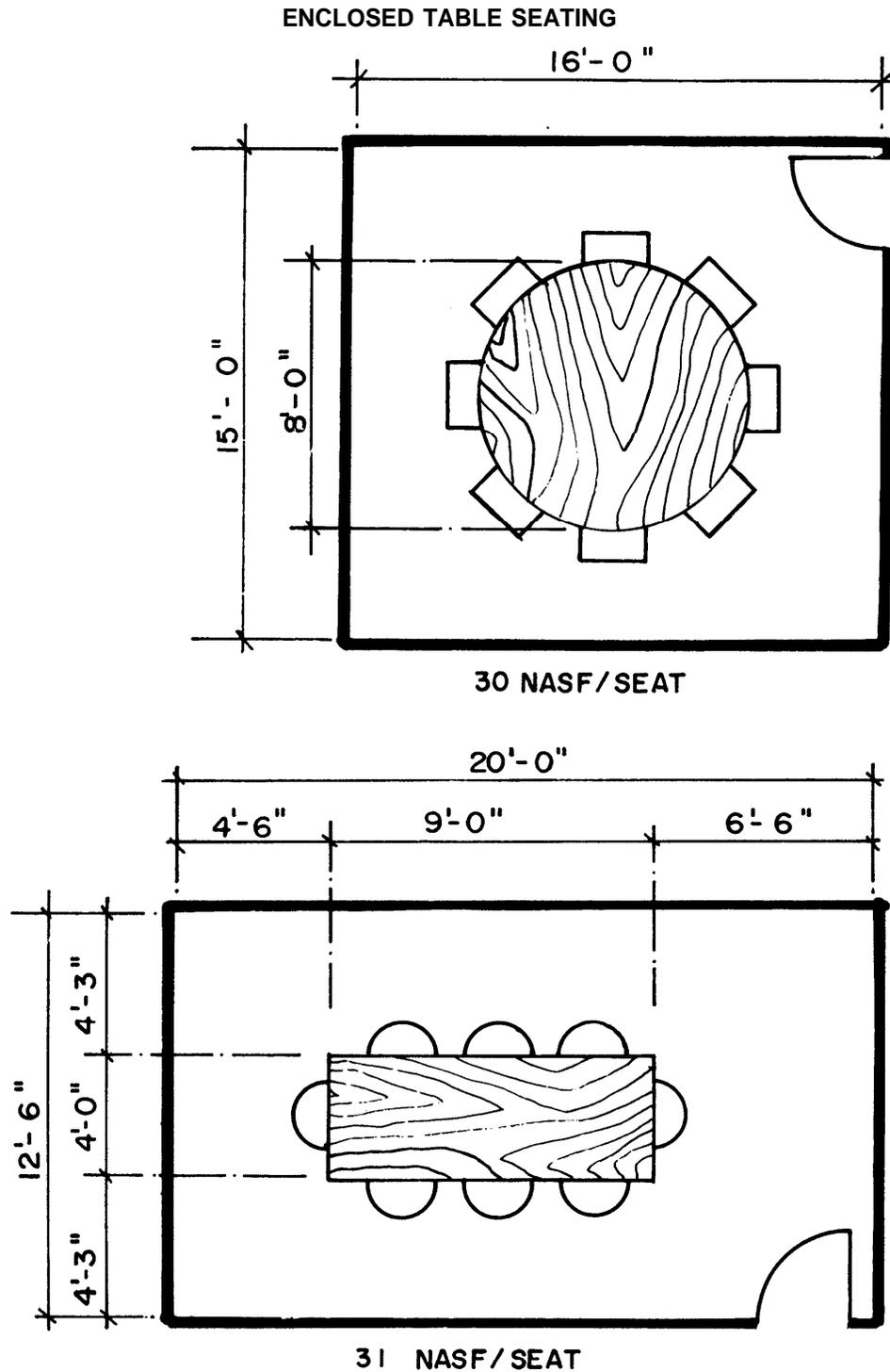


FIGURE 3-15

b. ENCLOSED READER STATIONS. Some activities require totally enclosed areas for acoustic and visual isolation. Such activities normally require more area than their unenclosed counterparts to afford a larger work space for each individual.

(1) *Table Seating*. Enclosed table seating (see Fig. 3-16) is appropriate for conferences, group study and research, seminars, and by other group activities requiring

acoustic isolation. A 2 foot by 3 foot table space should be provided for each person. Activities function best when all members of the group are able to talk casually without raising their voices, see each other's facial expressions, and pass written materials back and forth across the table. For small groups, this is best accomplished by a circular or nearly circular table in a square or nearly square room. Allow 30 SF/seat. If a rectangular room is used, allow 31 SF/seat.



**FIGURE 3-16**

(2) *Carrel Seating.* Enclosed carrel seating and study rooms are appropriate for library activities which require complete acoustic isolation such as typing, audio-visual equipment, and group research. They are also use-

ful for individuals who are doing research over an extended period of time. Space requirements should generally be figured at 36 SF/individual study carrel and 30 SF/seat for study rooms which accommodate two or more people. (See Fig. 3-17.)

STUDY ROOMS

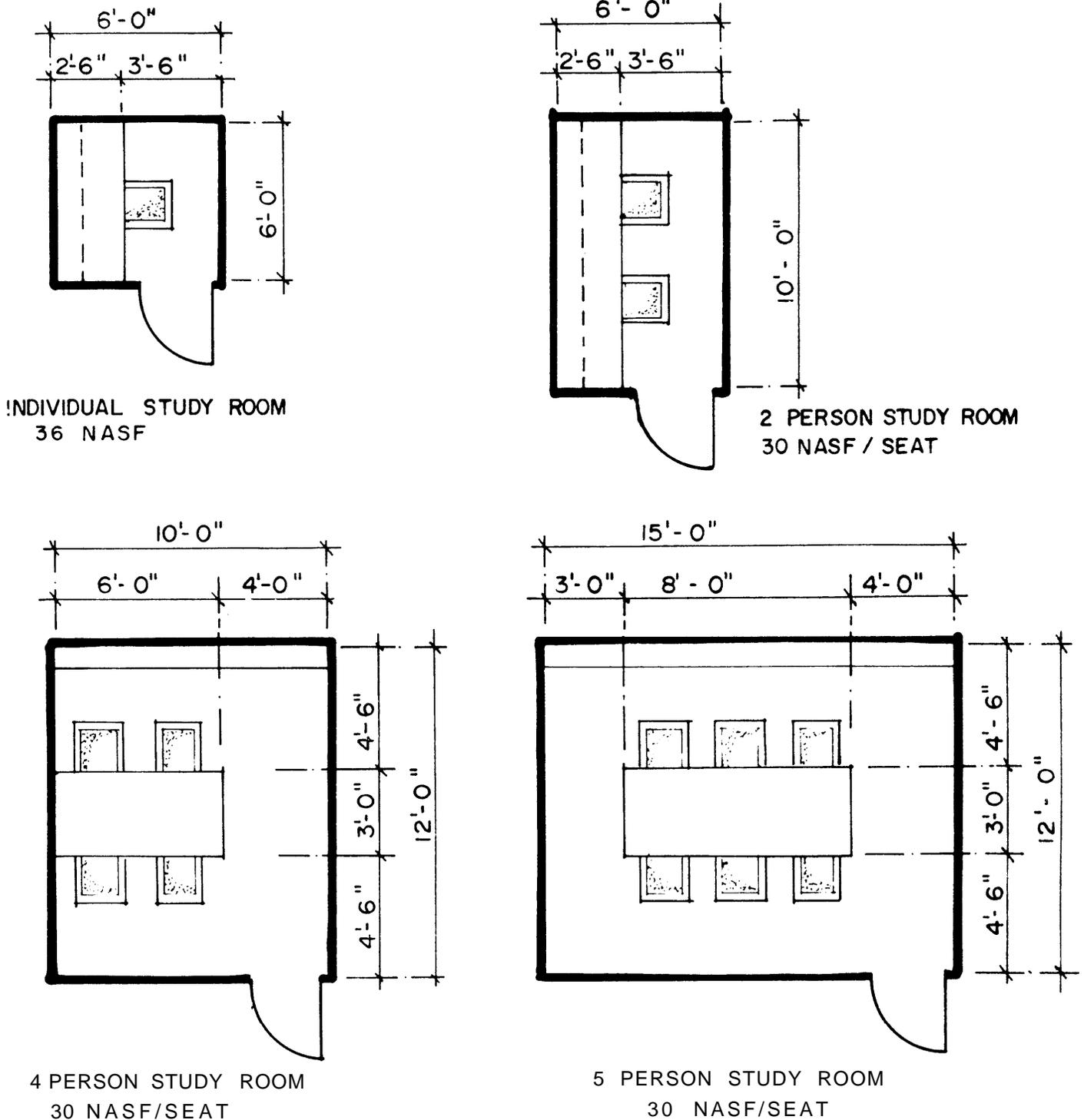
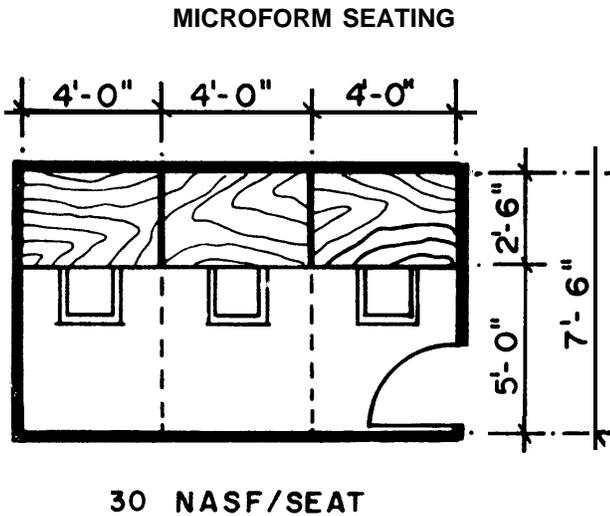


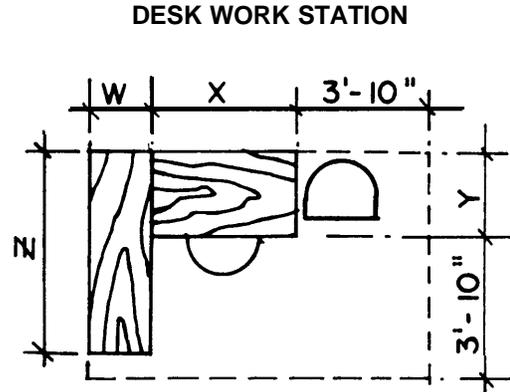
FIGURE 3-17

(3) *Microform Seating.* Seating must be provided for reader printer stations in libraries with microform collections. These should be similar in nature to carrel seating with the exceptions that reader/printer equipment

requires more space and microform seating should be isolated for either reading or study areas due to the noise generated by the reader/printer equipment. Microform seating requires 30 SF/seat. (See Fig. 3-18.)



**FIGURE 3-18**



**FIGURE 3-19**

**3-4 STAFF WORK STATION EQUIPMENT**

**a. DESKS**

(1) *Office.* Desks are appropriate work stations for most administrative and service activities. They come in a variety of sizes and, when functionally required, can be furnished with side credenzas for typing or writing. (See Fig. 3-19 and Table 3-3.)

(2) *Control Desk.* The size and type of the control desk will vary depending on size and type of library. The control desk is usually composed of modular units which have nearby storage facilities for recordings, tapes, etc., and provide for a typing facility, files, and some locked storage space. The control desk modular units are normally 36 inches wide, 27 1/2 inches deep and 39 inches high for standing and 32 inches high for sitting. If standing height units are used, drafting-type stools should be provided and secretarial chairs should be utilized for sitting height control desks. The number of modular units required will depend on the functions, size, and type of library facility. Each unit requires 30 square feet except for corner units which require 10 square feet. The types of modular units normally available, each of which is 36 inches wide, 27 1/2 inches deep and 32 inches or 39 inches high, are shown in Figure 3-20. Requirements for control desks for smaller facilities are shown in Figure 3-21.

**TABLE 3-3 SPACE REQUIREMENTS-  
STAFF WORK STATIONS**

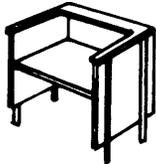
Type	Ht.	W	X	Y	Z	NASF
Executive	30		72	36		67
Large Double Pedestal	30		72	30		62
Standard Double Pedestal	30		60	30		56
Single Pedestal	30		40	30		45
Typing	26		40	30		45
Computer	30/33	36	45	30	36	67
Credenza, if required	26/30	18			66	87

See Figure 3-19 for Area W, X, Y, and Z.

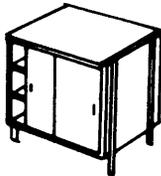
MODULAR CONTROL DESK UNITS



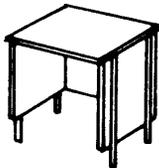
Station/Charge Unit: Same as station unit with open well for 3" wide cards.



Typewriter Unit: Same as desk unit (c) but with 26" high top.



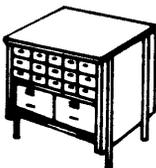
Cabinet Unit: Has side-sliding panel door.



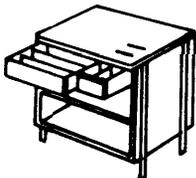
Truck Port: Accommodates book truck under unit.



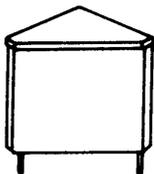
Card File Unit: Has five or ten or fifteen standard card trays for 5" wide cards and shelves below.



Card/Legal File Unit: Has card trays and legal file drawers.



Charge Unit (Drawer Type): Has trays for 3" or 5" wide cards and four card drop slots.



Corner Units.

FIGURE 3-20



Desk Unit: Provides 29" desk surrounded by 39" high assembly for continuity with other control desk units.



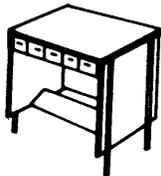
Charge Unit: "Well-type" with removable cover and trays for 3" cards.



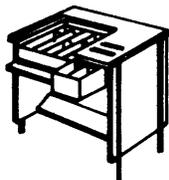
Open shelving Unit: Has adjustable full-depth shelves.



Book Return Unit: Used with depressable book truck.



Station/Card File Unit: Same as card file but with no shelf below.



Station/Charge Unit (Well Type): Has removable cover, trays for 3" wide cards and may have drop slots.



Station/Charge Machine Unit: Has 4 card drop slots and electric receptacle.

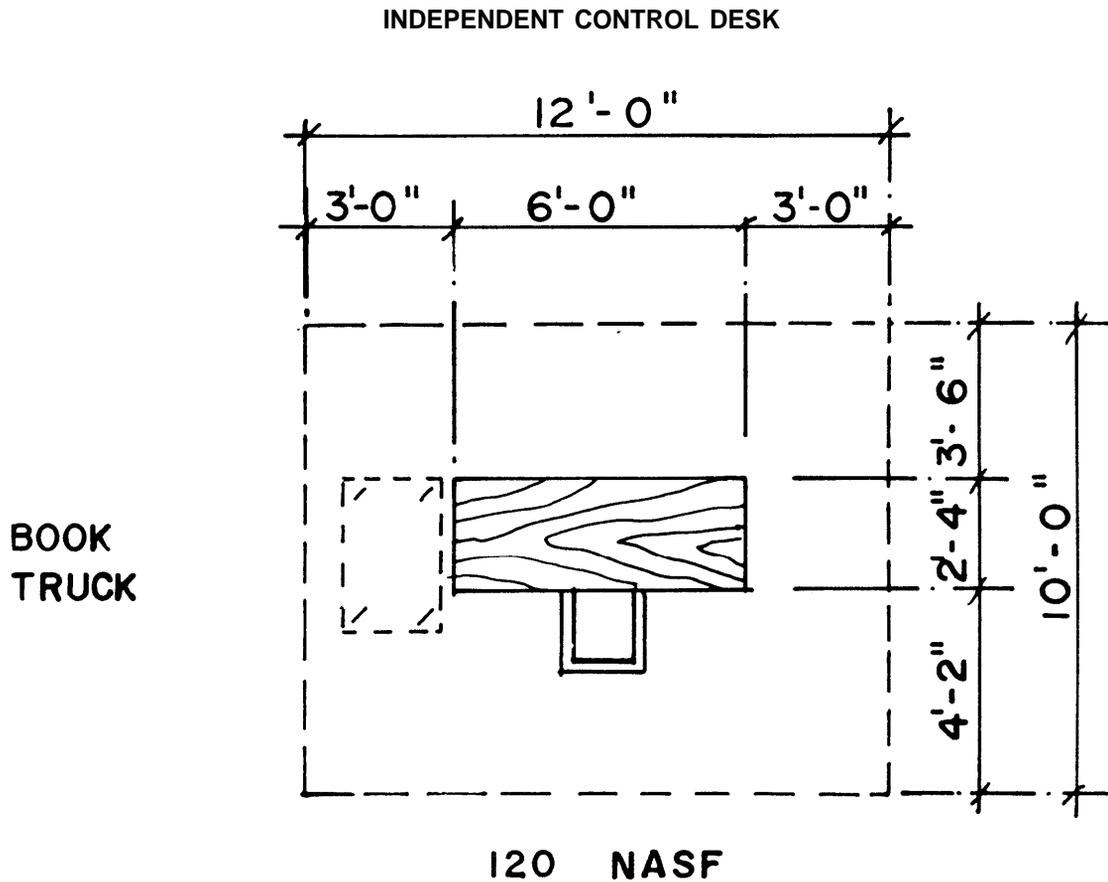


FIGURE 3-21

**b. FILE CONTAINERS**

(1) *Correspondence.* Correspondence files come in two basic sizes: standard and legal; and in two types: vertical and lateral. Space requirements are discussed in paragraph 3-2.c.

(2) *AV Materials.* See paragraph 3-2g.

(3) *Card Catalog.* Table 3-4 illustrates the card capacity for standard card cabinets. One inch of filing space generally accommodates 100 cards. The cabinets are 5 or 6 trays wide and 7 to 8 trays high. A 5-tray wide cabinet will fit into a standard 3-foot wide stack unit, but may be more expensive than a 6-tray wide cabinet. Trays should be 15 inches to 19 inches deep. Shorter trays are uneconomical; longer trays are too heavy. Critical dimensions for card

catalogs are shown in Figure 3-22. Catalogs are limited to 48 inches in height to allow use by physically handicapped personnel. Allow 17 NASF per unit.

**TABLE 3-4 CARD CAPACITY  
 FOR STANDARD CARD CABINETS**

Trays	Tray length 17 inches	Height
15	19,500	30 inches
30	39,000	45 inches
42	42,000	48 inches

CARD CATALOG FILES

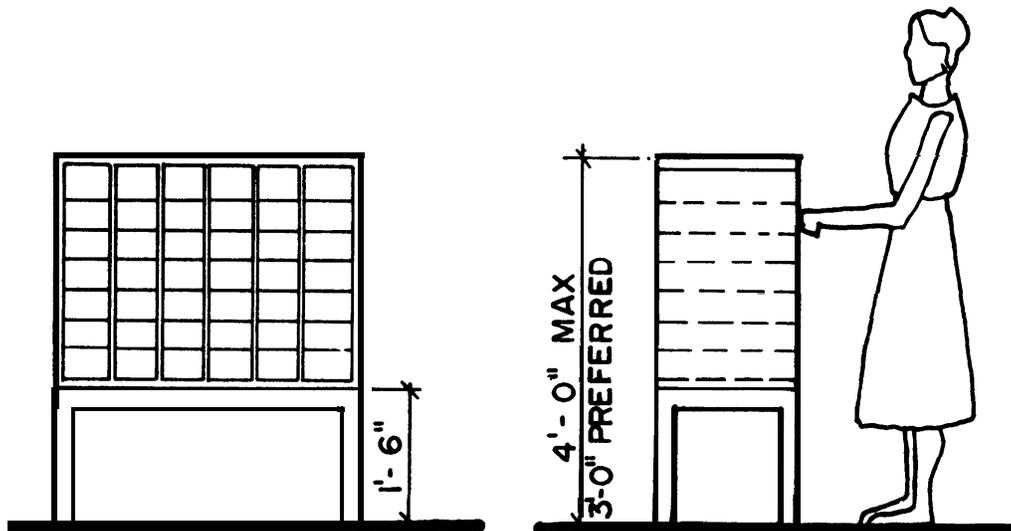
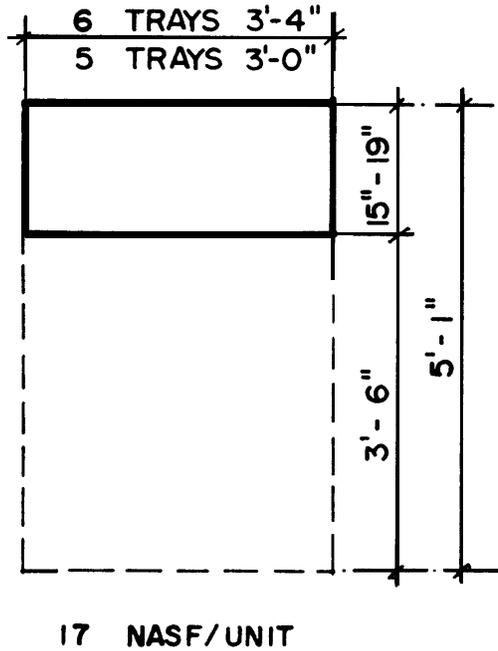


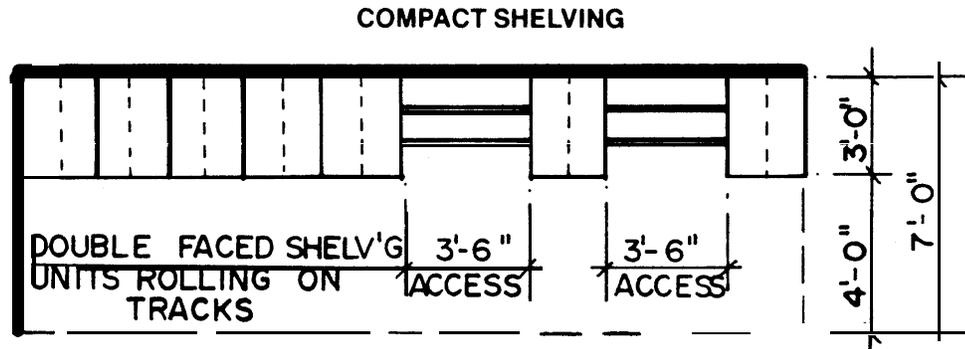
FIGURE 3-22

c. SHELVING

(1) *Stationary Shelving.* See paragraph 3-2a.

(2) *Mobile Shelving.* Mobile utility shelving is used in workrooms for moving large quantities of library materials between work stations. Units are 71 inches high by 48 inches wide by 19 inches deep and require 11 SF/unit for storage.

(3) *Compact Shelving.* Movable track-mounted compact shelving is used to store large amounts of library materials in small areas of work rooms. Each double-faced unit is 84 inches high by 37 inches wide by 26 inches deep and will hold 250 books or 100 boxes of paperback kits. Each unit requires 15 NASF for storage. Add an additional 25 NASF for each access space required. (See Fig. 3-23.)



**FIGURE 3-23**

(4) *Book Trucks*. Book trucks come in two or three shelf models approximately 26 inches long by 18 inches wide by 42 inches high including casters. Depressible models are available for use with book drops, measuring 30 inches long by 22 inches wide by 29 inches high. Provide 9 NASF for storage of each truck.

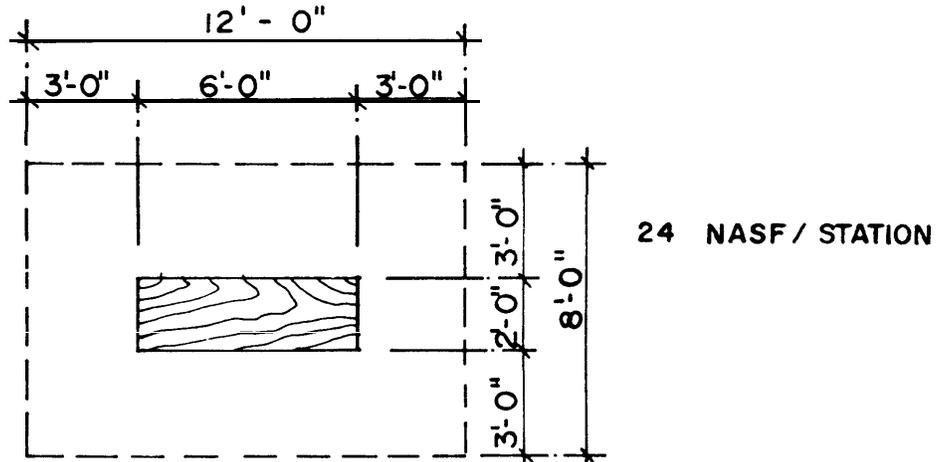
high and are available in 24, 30, 36, and 48 inch widths and lengths of 48, 60, 72, 84, 90, and 96 inches. Table requirements may be estimated by considering the size of work surface required and the number of sides requiring access. For access on one side, multiply the area of the table by 2; for access on two sides, multiply by 3; for three sides, multiply by 4; and for 4 sides use a factor of 5.

**d. TABLES**

(1) *General Purpose*. See paragraph 3-3.a.(1). Tables provide a functional work station for a variety of activities. In the work station context tables should be programmed on the basis of whole work surfaces devoted to a set of specific activities rather than on the basis of seats available. They normally form a part of a larger work station for a single individual. Tables are usually 29 inches

(2) *Catalog Reference*. Tables for use with card catalogs are generally 42 inches high and have racks mounted on the bottom for call slips. Catalog reference tables are 24 inches wide and 72 inches or 102 inches long, requiring 96 or 116 NASF, respectively. They should be estimated on the basis of 24 NASF per user. (See Fig. 3-24.)

**CATALOG REFERENCE TABLE;  
4-STATION**



**FIGURE 3-24**

(3) *Work Counters*. Work counters are usually 42 inches high and are provided with either bins or shelves beneath. The size of work counter depends on the activity served and the area requirement should be multiplied by the appropriate factor for access listed in paragraph 3-4.d.(1)

(4) *Drafting*. Drafting tables are required for preparation of posters and audio-visual materials. A 40-inch by 60-inch table is adequate for most library requirements. Provide 60 NASF per drafting table. Space for a 30-inch by 60-inch reference table should also be provided. (See Fig. 3-25.)

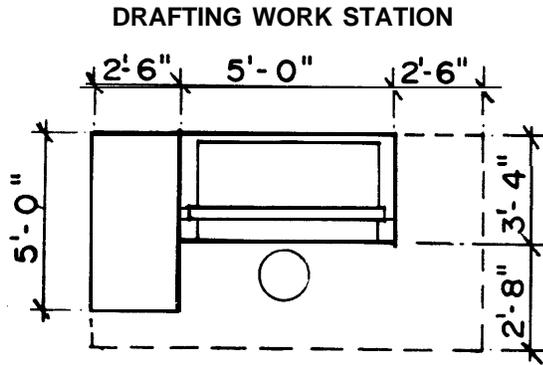
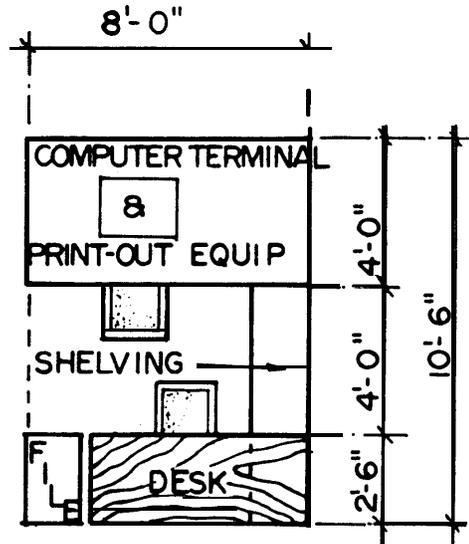


FIGURE 3-25

(2) *Computer Terminals.* Work stations for computer terminals for bibliographic and cataloging searches require an area of 84 NASF which includes a work table (4 feet by 8 feet) for computer terminal print-out-equipment and chair, a secretarial desk with typing facility and chair, file cabinet, and low shelving. (See Fig. 3-27.)

WORK STATION  
COMPUTER TERMINAL



84 NASF

FIGURE 3-27

e. MISCELLANEOUS EQUIPMENT

(1) *Copy Machine.* Copy machines are required in most libraries to allow distribution and documentation of information while keeping the original document on hand. Copy machines should be separated acoustically from the remainder of the library but should be located near the control desk and the reference librarian. A separate copy machine should be located in the service area. Allow 60 NASF per unit. (See Fig. 3-26.)

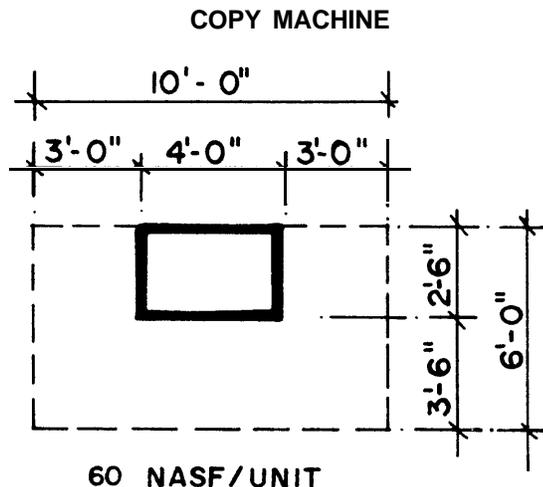


FIGURE 3-26

(3) *Teleconference*. This activity requires space for two facsimile machines, two telephones, a TV camera, a TV monitor, and a TV print-out copier. This equipment can be accommodated on a 36 inch by 60 inch table with an 18 inch by 66 inch credenza. Allow 55 NASF. (See Fig. 3-28.)

(5) *Kitchen*. Compact kitchen units are often required for lunch rooms, lounges or conferences. Units should contain a two-burner range, under-counter refrigerator, microwave oven, counter, sink, and cabinets. Units are 60 inches wide by 26 inches deep by 87 inches high and require 40 NASF each. (See Fig. 3-30.)

TELECONFERENCE STATION

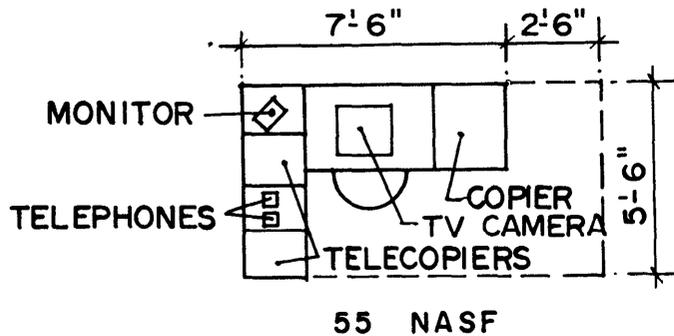
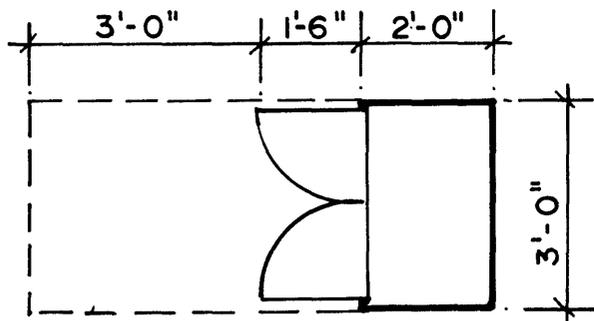


FIGURE 3-28

(4) *Supply Cabinets*. Supply cabinets are 36 inches wide by 24 inches deep and 78 inches or 42 inches high. Allow 20 NASF. (See Fig. 3-29.)

SUPPLY CABINETS



20 NASF

FIGURE 3-29

COMPACT KITCHEN UNIT

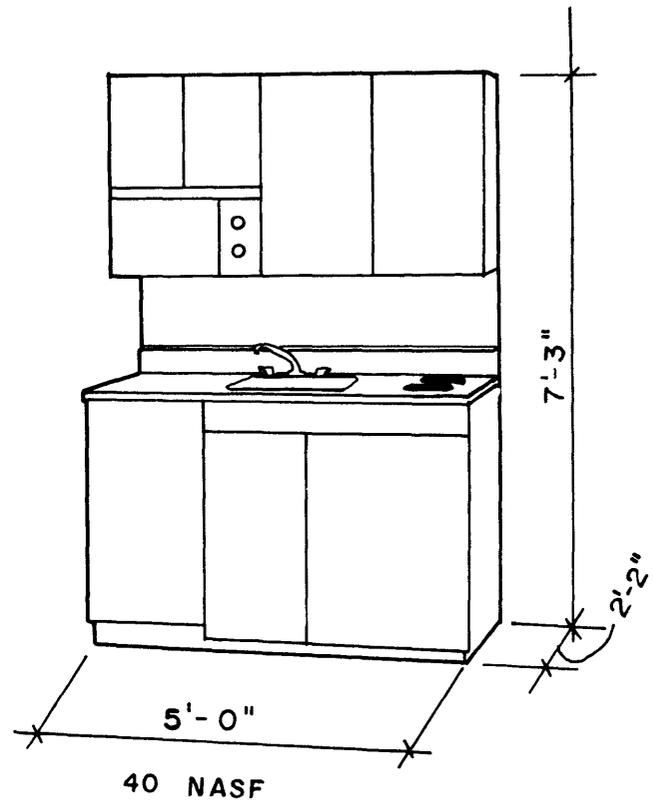


FIGURE 3-30