

Equipment Specifications for Tenant Activities Buildings and Cafeterias for Dormitory Projects

728.1

1336.8

Pölbau

1018

m.m.c.

EQUIPMENT SPECIFICATIONS FOR TENANT ACTIVITIES
BUILDINGS AND CAFETERIAS FOR DORMITORY PROJECTS
(Building Nos. 75, 150, 250, 400, 650, 1000, 1500 and 2100)

GENERAL SCOPE

Under this section of the specification is included the furnishing and setting in place of all furniture and equipment for the Tenant Activities Buildings and Cafeterias as hereinafter specified and as indicated on the Equipment Layout Plans for these buildings.

Whenever, in any of the contract documents, including this specification, an article, material or equipment is defined by describing a proprietary product, or by using the name of a manufacturer or vendor, the term "or equal", if not inserted, shall be implied. The specific article, material or equipment mentioned shall be understood as indicating the type, function, minimum standard of design, efficiency and quality desired and shall not be construed in such a manner as to exclude manufacturers' products of comparable quality, design and efficiency. The decision of the contracting officer that an article, material or equipment is equal, or is not equal, to the item specified shall be final.

SPECIFICATIONS FOR FURNITURE FOR TENANT ACTIVITIES ROOMS

Designation of Equipment. The following is a list of the types of chairs and furniture on which these specifications are based. For design see Bulletin No. 22, "Interior Furnishings for Project Services Facilities".

Sofa	SH - solid wood with loose cushions and backs
Love Seat	LH - solid wood with loose cushions and backs
Arm Chairs	AG - all face wood throughout AH - solid wood with loose cushions and backs
Slide Chairs	XC - wood seat and slat back (see description below) FC - folding chairs ST - stools seats covered in imitation leather
Library table	TA - size 3'4" x 5'6"
Occasional table	TB - size 1'8" x 6'6"
Card Tables	TE - size 2'6" x 2'6"
Coffee Tables	TF - size 1'4" x 2'4"
Cafeteria Tables	TH - size 2'6" x 2'6" TL - size 2'6" x 4'0" TI - size 3'0" x 3'0" (see description below)
Desk	DA - size 1'10" x 3'0"
Pedestal Desk (Single)	DB - size 2'6" x 4'2"
Pedestal Desk (Double)	DC - size 2'6" x 5'0"
Bookcase	BA - size 3'0" x 7'0" units
Magazine Rack	BB - size 3'0" x 7'0" units

For quantities required, see schedule following this section of the specification.

General Note.

These specification details are based on good standard practice. When contemplating modifications or variations from the construction detailed below, the contractor shall submit his specifications. Unless this is done, the presumption will be that this specification will be followed.

Wood. All woods used in this furniture shall be the best of their respective kinds, free from mineral streaks, interior checks, splits and honeycombing, also interior stresses due to uneven drying. They shall be air dried for at least twelve months and then kiln dried in a modern vapor system curing

dry kiln to a moisture content of not more than 6 per cent based on the "oven dry" weight of the wood. Care must be taken throughout construction to prevent departure of more than 2 per cent from this figure. All woods used in construction under these specifications shall also be guaranteed against warping or collapse. Exposed woods shall be free from stains, knots and natural or manufacturing defects. All exposed surfaces such as table tops, panel, and drawer fronts, and exposed rails, shall be of "selected stock". By "selected stock" is meant a proper choice and matching of stock so as to take the best advantage of the natural beauty of the grain. Where glued up stock is necessary, it shall be composed of minimum width members of $1\frac{1}{4}$ inches and maximum widths of 4 inches. Glued up stock shall be stuck and dried for a period of four days before final dressing and polishing. All stock dimensions listed in specifications are finished dimensions. All dust proof framing shall be minimum $\frac{3}{4}$ inch by $1\frac{5}{8}$ inches with front, side and back grooved $\frac{1}{8}$ inch by $\frac{3}{8}$ inch to receive $\frac{3}{20}$ " 3-ply dust proofing panels of clear stock; both sides shall be of clear stock.

Case backs shall be 3-ply $\frac{3}{16}$ inch select plywood, clear on both faces. Tops, fronts, construction rails, ends, or aprons shall not finish less than $\frac{13}{16}$ inch thick. Interior woods of all cases shall be as follows: drawer sides and backs, clear beech or sycamore; drawer bottoms 3-ply clear beech or sycamore, both sides; dust panels, poplar or other approved wood, 3-ply clear face both sides; all corner blocks and bracings, one piece of clear hardwood. Frame wood in upholstered items where covered over shall be live ash, elm, or fruitwood. Exposed parts of upholstered furniture shall be solid hardwood.

Glue. For veneered panels, Perkins #183 vegetable glue or an approved equal shall be used. It shall contain 11 pounds of water to 5 pounds of glue and shall not be used after standing over 18 hours. For all joints animal glue approved by the National Association of Glue Manufacturers shall be used, of #16 grade or higher. Two parts of water to one part of glue by weight shall be soaked overnight and then cooked at a temperature of not over 140 degrees F. Glue joints shall be made at room temperature of not over 80 degrees F. Working temperature of glue shall be not over 140 degrees F.

Glides. Bassick or equal rust-proofed metal glides as large as base will permit shall be used.

Dowels. Dowels shall be threaded and a proper size for maximum strength in relation to stock joined. Wherever two or more dowels are possible, single doweling will not be acceptable.

Filling. Filling shall be staple cotton felt and 85 per cent long prime winter hog, 10 per cent horse mane, and 5 per cent horse tail hair, thoroughly curled and sanitized. If alternates are used, specifications must be submitted before signing of contract.

Cushions. Cushions shall be of 50 per cent equal quantities horse tail and mane and 50 per cent hog covered with ample layers of 18 ounce staple cotton felt. Weight of hair in each cushion shall be 3 pounds.

Fabrics. All fabrics for finished covers will be furnished by this contractor and selected by the Authority. Allow \$2 per yard wholesale price for fabric covers, and \$1.65 per yard for imitation leather.

Construction For Upholstered Items. Frames for upholstered furniture shall have all members where practical steam bent. All tack strips, arm rest and rail supports shall be dadoed into adjoining members of frame to prevent eventual twisting. All corner blocks shall be as large as portion to be braced will practically afford. Corner blocks shall be fitted to the individual angles concerned. Corner blocks shall be glued and double or quadruple screwed. Joints shall be double doweled with spiral grooved hickory dowels and supplemented with screws. Where support is enhanced by mortise and tenon over dowels, this method of joinery shall be employed. All posts shall be continuous, steam bent where practical, but if composed of more than a single unit, shall be joined at a point of matching grain. Base rails for lounge furniture shall be minimum thickness of 1-1/8 inches finished stock, and for lighter weight items such as desk chairs, minimum thickness of 7/8 inch finished stock.

Construction For Tables. All tables shall be of hardwood to size indicated and as specified below. There shall be one drawer in each table 36" wide and 22" deep. Tops shall be 1 1/4" thick and drawer fronts, frame rails, and end panels shall finish full 13/16 inch thick. Drawer sides and backs shall finish full 3/8 inch thick. Drawer bottoms shall finish 3/16 inch thick. Dust partitions shall finish 3/20 inch thick and outside back panel shall finish 3/16 inch. Drawer pulls shall be of wood and constructed to receive bolts inserted through drawer with rust proof steel washer behind the bolt head on inside of drawer face. Where pulls are not used, there shall be drawers to be opened by a finger groove shaped at bottom of drawer front, complemented by a cove in the drawer rail. Drawer bottoms shall be boxed in on four sides and shall be dovetailed front and back with no tolerance allowed for improper or loose dovetail fitting. Drawer interiors shall be thoroughly smooth sanded to receive finish stain.

Drawer bottoms shall have minimum of six shaped and fitted glue blocks. Drawer stock shall be glued up of members not over 4 inches wide and not less than 1 1/4 inches wide. All cases shall be fully dust proofed using minimum 3/4 inch by 1-5/8 inches front, back, and end rails grooved 1/8 inch by 3/8 inch to receive dust proofing panels. Drawer guides shall be center mounted in the dust proofing frame or on the drawer bottoms in case a runner is used in the dust proofing frame. That portion of the drawer guiding equipment attached to the dust proof frame shall be glued; and its entire length secured by metal sinkers at back and screwed at the front.

All end rails and drawer runners if built in the frame or superimposed, shall be tenoned $1/8$ inch by $3/8$ inch on both ends and the dust proofing partition shall be assembled by being thoroughly glued and further secured by metal sinkers at tenon joint in process of assembly. The dust partitions shall be dried 24 hours before assembly in the case. All ends shall be mortised to receive drawer rails, bearing a tenon $3/4$ inch by $3/4$ inch and all drawer rails, front and back, shall be tenoned $3/4$ inch thick by $5/8$ inch wide and shall be so tenoned that the $1/8$ inch difference shall be on the inside of the drawer rail to permit $1/4$ inch expansion of ends.

Backs shall be 3-ply $3/16$ inch both faces clear. Backs shall be sanded one face and recessed flush into ends and top. Backs shall be attached with screws or corrugated 4 penny 4 D cement coated sinkers 4 inches on center. Rails shall be attached to outside back with sinkers or screws to hold a true alignment of back drawer rails. Drawer stops shall be blocks inserted at the proper point on the back dust partition rail at rear of drawer fully glued. All drawers shall be as deep as the case will allow.

Finish. Color of finish will be decided upon and the contractor will be furnished with color panels. The finish shall be impervious to ordinary abuse. The process of finish is described below. The right is reserved to supply an inspector in the successful bidder's factory at the time of finishing.

Finish shall consist of sanding, water stain, silex filler, proper amount of toning, primer coat, and two finished coats of light clear lacquer, or clear four-hour varnish, sanded between coats. Stain and filler must not cloud the grain of wood intended to have natural finish. Full time must be allowed for drying between each coat, and the last coat shall be rubbed with pumice and oil, then cleaned and rubbed to a smooth finish. Finish shall be applied to all under edges. If finishes of equal quality other than the above are proposed, samples and description of methods used shall be furnished for approval.

Cafeteria Tables - TH, TI, TL. These shall be built with tapered legs of $2\frac{1}{2}$ " hardwood stock. Tops shall be solid hardwood finished as for other tables. No drawer.

Tables - TE. Card tables with padded top covered with leatherette shall be furnished as per requirements in the club room 30" x 30". These shall be of wood of the collapsible folding type with easily manipulated hardware enabling close stacking when folded. Legs shall be of solid hardwood. Finish shall be as directed and according to standard in the specification.

Cafeteria Chairs. This chair shall be made of beech or maple; all parts shall be made of clear kiln-dried lumber; back posts shall be steam-bent to shape out of not less than 1" stock. The total height of the chair shall be $33\frac{1}{2}$ ". The front legs of square stock shall be $1\frac{1}{2}$ ", properly shaped with a square stretcher $3/4$ " x $3/4$ ", 3" below the seat frame. These front legs should be doweled into the seat frame by 1" dowels securely glued and screwed into the corner blocks by means of one screw each on the inside of the seat

frame. There shall be a steam bent U-shaped stretcher securely fastened by counter sunk screws to each of the back legs and chucked into front posts securely glued. The seat frame shall consist of a steambent rail 1- $\frac{1}{4}$ " stock, tongue and grooved into a front rail. The back portion of the frame shall be fastened with a lag bolt into the back posts, the lag bolt not less than $\frac{3}{8}$ " x 1- $\frac{3}{4}$ ". These shall be suitably reinforced by two steel corner irons. The seat shall be a solid saddle of the same wood, shaped on top, and of one piece securely fitted into the framework. The size of the seat shall be 15 $\frac{1}{2}$ " wide by 15- $\frac{3}{4}$ " deep. The back shall consist of one top slat steam bent 2 $\frac{1}{2}$ " wide by $\frac{3}{4}$ " thick. All these cross slats shall be securely doveled and glued into the back posts. The chairs shall be equipped with steel glides attached to the bottom of the legs. The finish of these chairs only shall be as selected, built up as follows: one coat of stain, one coat of clear lacquer sealer and two coats of clear finishing lacquer. They shall be sandpapered with #5/0 finishing paper between coats.

Sofas SH, Love Seats LH, Arm Chairs AH. These shall be covered in fabrics as per approved samples of \$2.00 wholesale goods.

Counter Chairs and Stools - ST: These shall be Brower #624 or equal, with seats covered in imitation leather.

Chairs in Auditorium and Multi-use Room. These chairs shall be #675 American Seating Company manufacture, L 48 finish, or equal. They shall have 5 ply 7/16" backs and seats with legs of solid maple and steel capped.

Piano. The piano shall be Hardman-Peck Minipiano or equal, 7 octaves, in light wood. A piano bench with lifting top shall be furnished.

Radio. The radio shall be 12 tube Stromberg Carlson or equal in light wood with phonograph and record changer. It shall have long and short wave and be installed with antenna, aerial, ground and switch. Tubes shall be included in the equipment.

Library Book Cases - BA, BB: The book cases shall be of oak or other hardwood. The units shall be 3 ft. wide, and shall be composed of sectional shelving. One or more unit magazine racks 3 ft. wide, shall be fitted into the shelving as shown on plan.

Library File - CF. The file shall be composed of a Gaylord #3524 base, or equal; one two drawer file section, Gaylord #3502 or equal; one five drawer file section, Gaylord #3505 or equal; and one top Gaylord #3500 or equal.

Blackboard - BK. There shall be one blackboard of $\frac{3}{4}$ " smooth black slate for each unit - size 6' x 3' with frame and chalk rack.

Desk - DB. There shall be a single pedestal desk with lock, of size shown. Top shall be as specified for other tables.

HK U. S. Federal public housing authority
474 ... Equipment specifications for tenant
.A25 activities buildings and cafeterias for dormitory
no.18 projects Washington, D. C., Federal public
housing authority, National housing agency, 1943.
cover-title, 43p. 10 $\frac{1}{2}$ in. (Its Bulletin no.18)
Processed.

Doc

HK ----- In Document collection.

474

.A25
no.18

7-9-43 BB

Dormitories - Furniture, Equipment, etc

1. ~~Housing, Wartime - Dormitories - Equipment~~
2. ~~Housing, Wartime - Dormitories - Recreational facilities~~. I. Title II. Tenant activities buildings and

cafeterias for dormitories, Equipment specification for III. Cafeterias for dormitory projects, Equipment specifications for. IV. Series. U.S. Federal public housing authority. Bulletin no. 18. V. Doc. no.

4760 - C.1 - Doc.
4761 - C.2 - Reg.
4762 - C.3

2 Housing projects - Recreational facilities

~~4763 - C.4~~

0477 - C.5

Rel. 100.0000
5.15-43

Pocket Billiard Table. It shall be "Liberty" as made by Brunswick Balke Collender Company or equal, size 4'6" x 9'0". It shall be furnished complete with equipment called for in Pocket Style.

Tennis Table. The top shall be of 3/4" plywood. Size 5'0" x 9'0". It shall be furnished with four sets of Parker Brothers #NI81 equipment or equal, excepting nets, of which only two will be required for each table.

Costumers. Costumers shall be bentwood revolving top Beechwood, or equal, walnut finished, 68½" high with 21" square base spread.

Ash Trays. These shall be 4-3/8" diam. by 1" deep hexagonal table trays.

Smoke Stands. These shall be of maple, with 8" base and 2" shaft. The bowl shall be 6½" diameter, turned to receive a 4" diameter, glass ash tray, as per sample. Total height of smoke stand shall be 22".

ATHLETIC EQUIPMENT

Basketball. In each auditorium (Unit 1000, 1500 and 2100) two substantially built movable backstops with necessary floor fastening lugs, braces, bolts and screw plates, shall be furnished. On same, backboard of 5 ply, 7/8" plywood shall be applied.

WINDOW AND BLACKOUT CURTAINS

Window Curtains. For all the units curtains shall be made for the following rooms from the following materials:

For Lounge - Hexter #26676

For Cafeteria - Hexter #27261

For Club Room - #27259

For Lobby - #27260

For schedule see Plate 19 of Bulletin No. 22

Blackout Curtains - #AA Hexter Black Sateen or equal thereto. For specification of manufacture see plate 30 of Bulletin No. 22. If standard metal operating hardware is obtainable the same shall be used in preference to the wood tracks, etc., specified on plate 30, Bulletin No. 22. Contractor shall advise the authority before signing contract if metal hardware is obtainable.

PICTURE SPECIFICATIONS

Size of Pictures. These may vary from 14" to 18" to 20" to 20" x 26", approximately.

Types of Frames. Prints may be framed either with mat and glass - mounted on cardboard, lacquered, framed close without glass or border.

Width and Type of Moulding. They may vary from 3/4" to 1-1/2" or 2" depending on the requirements of each subject. Mouldings shall be finished shellacked or waxed, or rubbed with white or color. Frames shall all be joined with nails and glue.

Suggested Subjects. The following indicate the type of subjects suggested:

Thornton Flowers
Hudson River Scenes
Views of Rockport and Gloucester
Assorted Landscapes (16" x 20")
Prints - Homer, Manet, Metcalf, Kent
Immel Watercolors (Flowers)
Claghorn - American Inns
Old Gould Bird Prints (20" x 24")

Distribution. Two pictures shall be placed in each infirmary bedroom and elsewhere in the tenant activities building as desired.

STAGE EQUIPMENT

For details connected with this section, see plates 27-28-29 of Bulletin No. 22, "Interior Furnishings for Project Services Facilities."

Cyclorama In each auditorium for Nos. 1000, 1500 and 2100 units, a painted flameproofed muslin cyclorama shall be supplied the entire width and height of the stage at the backwall. This shall be carefully stretched over the entire surface and fastened in a workmanlike manner. The colors to represent a sky and distance effect may be applied with ~~spray~~ paints or ~~spray~~ or brush dyes.

Back Drop A back drop of unlined Dazian or equal repp, color as selected, properly flameproofed, shall be placed in front of the cyclorama. This shall be a traversed draw curtain, full height, 100 percent fullness with all the necessary hardware and Samson #8 sash cord or equal. It shall be hemmed at the top and bottom and chain-weighted on the bottom. Track shall be Allentown Silent Steel or equal thereto, with ballbearing carriers. Drawcord shall be of the endless type with necessary ballbearing control wheels.

Tormentors and Wings These shall be made as shown on plates 27-28-29. They shall be built up of 1" x 3" fireproofed pine frames glue-doweled with glue corner blocks and intermediate stiffeners also 1" x 3" and fireproofed. The flaps shall have a sufficient number of two way strap hinges to keep them perfectly straight. One side shall be covered with heavy flameproofed muslin, treated similarly to the cyclorama and the other side shall be draped with Dazian or equal flameproofed repp. This shall be pleated to 100 percent

fullness hemmed and tacked to frame top and bottom and taped in the middle and blind fastened to stiffening battens. The necessary braces and stage floor screws for fastening both to floor and sides shall be supplied.

Borders These shall be made of Dazian or equal flame proofed pre-dyed muslin as per sample. They shall be hemmed top and bottom; battened at the top and weighted on bottom. There shall be no fullness.

Curtain and Valance This shall be made of Wissahickon #666 velvet or equal, of special color and flameproofed. This curtain shall be faced with Hexter flameproofed AA sateen or equal. Curtain shall be pleated to 50 percent fullness, traversed, overlapping at center. Bottom hem shall be 8" high doubled and chain weighted. Valance shall be 4'-10" high, pleated and made as shown on drawings.

Hardware The track for all curtains over 36'0" long shall be Allentown Silent Steel Model 280 as made by Automatic Devices Company or equal thereto. Tracks for curtains 36'-0" or under shall be Allentown "Besteel" Model 170 or equal. All carriers shall be balanced ballbearing, with proper clamps, pulley blocks and Samson or equal heavy duty sash cord or proper weight and size to perform the work shown on the drawings. All operations of curtain traversing shall be by hand and of endless type. If the metal hardware specified above is not obtainable, with the written consent of the authority, wood tracks, pulleys, etc. may be substituted as shown on plate No. 29. All other hardware such as stage screws, clamps, braces, hinges, etc. shall be furnished for perfect operation of the stage.

Movable Stages Movable platform stages for units No. 150, 250, 400 and 650 will be built by the general contractor. No stage curtains will be furnished for these smaller units.

SCHEDULE OF FURNITURE FOR TENANT ACTIVITIES ROOMS

ITEM	ROOM	UNIT							
		75	150	250	400	650	1000	1500	2100
Sofa SH	Lounge	2	1	2	2	2	2	2	3
	Lobby	-	-	-	-	-	1	1	1
	Total	2	1	2	2	2	3	3	4
Love Seat LH	Lounge	2	2	2	4	8	12	20	23
	Lobby	-	-	2	2	2	1	1	1
	Total	2	2	4	6	10	13	21	24
Armchair AH	Lounge	2	4	4	8	8	9	20	25
	Lobby	-	-	2	4	4	4	4	4
	Total	2	4	6	12	12	13	24	29
Open Arm Chair AG	Lounge	8	8	10	4	10	14	30	31
	Library	-	-	12	12	12	12	18	18
	Total	8	8	22	16	22	26	48	49
Coffee Table TF	Lounge	6	6	5	6	10	14	25	29
	Lobby	-	-	2	2	2	4	3	3
	Total	6	6	7	8	12	18	28	32
Smoking Stand	Lounge	5	5	2	3	4	8	12	10
	Lobby	-	-	2	2	2	2	4	2
	Total	5	5	4	5	6	10	16	12
Piano	Lounge	1	1	1	1	1	1	1	1

ITEM	ROOM	UNIT							
		75	150	250	400	650	1000	1500	2100
Radio	Lounge	1	1	1	1	1	1	1	1
Table TB	Lobby	1	-	1	1	1	2	2	2
	Lounge	-	-	1	1	1	-	-	2
	Total	1	-	2	2	2	2	2	4
Stool ST	Lobby	-	-	6	10	11	10	16	17
	Game Rm.	-	-	-	8	8	11	10	18
	Total	-	-	6	18	19	21	26	35
Bookcase BA (in units)	Library	2	5	8	8	8	8	16	19
Mag. Rack BB (in units)	Library	1	1	1	1	1	1	3	3
File	Library	-	-	1	1	1	1	1	1
Table TA	Library	-	-	2	2	2	2	3	3
	Club Rm.	-	-	1	1	2	3	5	8
	Total	-	-	3	3	4	5	8	11
Desk DC	Library	-	-	1	1	1	1	1	1
Desk DA	Library	-	-	3	4	4	4	6	8
Table TE	Club Rm.	4	4	4	4	9	9	16	16
Desk DB	Club Rm.	-	-	1	1	1	1	1	1
Blackboard	Club Rm.	1	1	1	1	1	1	1	1

ITEM	ROOM	75	150	250	400	650	1000	1500	2100
Billiard Table	Game Rm.	-	-	-	2	2	2	2	4
Tennis Table	Game Rm.	-	1	2	1	1	1	1	2
Ash Trays (doz)	The Unit	6 $\frac{1}{2}$	10	14	18	24	30	42 $\frac{1}{2}$	56
Chair EC	Add. or Multi- Use Room	18	55	100	117	196	576	700	700
Chair XC	Library	-	-	4	5	5	5	7	9
	Club Room	16	16	23	25	59	64	103	123
	Total	16	16	27	30	64	69	110	132
Basketball Back Stops Auditorium		-	-	-	-	-	2	2	2

SCHEDULE OF STAGE EQUIPMENT REQUIRED

Cyclorama	Auditorium	-	-	-	-	-	1	1	1
Back Drop	"	-	-	-	-	-	1	1	1
Tormentor & Wings	"	-	-	-	-	-	4	4	4
Borders	"	-	-	-	-	-	3	3	3
Curtains & Valence	"	-	-	-	-	-	1	1	1
Hardware	"	-	-	-	-	-(See specification)			

SCHEDULE OF CAFETERIA FURNITURE REQUIRED

Cafeteria Chair		28	124*	100	150	200	250	400	500
Table									
2'0" x 2'6" TH	Cafeteria	6	26*	20	23	20	19	60	46
2'6" x 4'0" TL	"	4	18*	7	6	13	17	22	30
3'0" x 3'0" TI	"	-	-	8	20	27	36	48	72
Costumer	Cafeteria	1	5*	5	8	10	13	20	25
*Cafeteria Chair	Cafeteria 125	--	46						
	Cafeteria 175	--	78						
*Table									
2'0" x 2'6"	Cafeteria 125	--	9						
	Cafeteria 175	--	17						
	Cafeteria 125	--	7						
	Cafeteria 175	--	11						
*Costumer	Cafeteria 125	--	2						
	Cafeteria 175	--	3						

ELECTRICAL SPECIFICATION FOR STAGE AND MOTION PICTURE
EQUIPMENT IN TENANT ACTIVITIES BUILDINGS

(This specification is for regional information. Provision and installation of equipment is a matter of regional responsibility.)

The contractor shall provide, install and connect, completely ready for operation, all electrical equipment required by plans and specifications. The latest rules of National Electrical Code bearing on conduct of the work as drawn and specified shall be complied with. If the contractor observes that drawings and specifications are at variance therewith, he shall promptly notify the authority, in writing. If the contractor performs work contrary to above referred to rules and regulations and without such notice to the authority, he shall bear all costs arising therefrom. All wiring for these purposes shall be run from junction boxes on stage and in projection room to appropriate panels similar to those in the rest of the building.

Projection Booth (for Units No. 1500 & 2100 only). Under another contract, service entrance conductors will be provided in the boiler room. To these conductors, a suitable main line switch located adjacent to the existing main line switch shall be connected. From this point, extend exposed three No. 4 feeders run on ceiling to the projection room terminating in a surface mounted panel consisting of 60 ampere, 2 pole main disconnect and the following branches:

- (a) 60 ampere, 2 pole (for rectifier set).
- (b) 30 ampere, 1 pole (for drive motor).
- (c) 30 ampere, 1 pole (for changeover device).
- (d) 30 ampere, 2 pole (for spot lights).
- (e) 30 ampere, 1 pole (for sound amplifier).

Extension of branch circuits from this panel to equipment, including control and voice transmission wiring, is part of this contract. Receptacles shall be provided where required for "plug-in" type equipment.

Stage. Under another contract, for Units #1000, 1500 and 2100, the following provisions have been made - three No. 2 conductors terminating in a flush mounted junction box, arranged to receive a surface-mounted panel.

A suitable panel shall be furnished, installed, and connected over junction box in which separate circuits shall be provided for each color (no circuit to supply loads greater than permitted by NEC) in the following equipment:

- (a) Floodlights for stage.
- (b) Border lights for stage.
- (c) Spot lights in wings.
- (d) Spot lights in front of stage. (6 required)

- (f) Floor receptacle outlets on stage.
(See Bulletin No. 22, "Interior Furnishings for Project Facilities", plate #27, for quantities and location)

- (g) Sockets with attachment to receive guards for light and include guards for same.

Each circuit shall be provided with automatic overload protection and disconnecting means.

Panel shall be provided with suitable terminals so that portable standard dimmers may be readily connected to control each circuit and each group of circuits containing lights of the same color, without dismantling panel, removing panel cover or disturbing other circuits that may be in use. For further dimmer arrangements consult project manager or his duly qualified representative. An arrangement of bus bars with accessible, removable links may be used. Grounding connection for frame of dimmer bank shall be provided.

Extension of branch circuits from this panel to stage floor receptacles and equipment is part of this contract.

Wiring. All equipment shall be securely anchored in place unless otherwise indicated. Flexible connections shall be provided where required for adjustable equipment. Suitable flexible cable connections shall be provided for equipment designed to be raised or lowered. All non-current carrying parts of equipment shall be grounded. Receptacle outlets shall be provided where indicated or required for "plug-in" type equipment. Each receptacle shall be provided with grounding terminal and plug cap; each floor receptacle shall be installed in water tight box and provided with bell nozzle and flush blank cover.

All wiring shall be concealed from view as far as practicable. Exposed wiring shall be neatly run along a surface, parallel to or at right angles with the building lines and shall be securely fastened in place and protected against mechanical injury.

Border lights shall be hung from 1" pipe battens and battens shall be provided with a suitable arrangement of ropes and pulleys for raising and lowering. Sufficient slack cable shall be provided to permit lowering of border lights within 4'-6" of the floor.

Lighting. In connection with the above wiring, this contractor shall furnish the following equipment complete with necessary supports of metal and necessary wiring to connect lighting fixtures with the outlets whether movable or fixed. All work shall be done in accordance with local building and insurance regulations. Numbers of equipment are Century Lighting Inc., N. Y. Co. Catalog. Equal materials will be accepted.

For 1000 Unit.

1. Six# H-400 border light strips adjusted for raising and lowering.
2. For stage proper twelve# H-500 A. Fresnelites.
3. For first beam in auditorium, six# H-500 Fresnelites with cones.
4. Furnish all the necessary filters and an extra supply for 6 changes of approved filter colors as directed.
5. Indicate but not furnish all lamps necessary for proper operation of lighting equipment.

For 1500 and 2100 Units. The equipment shall be similar to the above except that in Item I, eight# H-400 border lights shall be furnished.

SPECIFICATION FOR MOTION PICTURE AND SOUND EQUIP-
MENT WHERE ONLY 16 M.M. FILMS ARE USED
(Units No. 250-400-650 and 1000)

Note: Motion picture equipment will be furnished upon special request from the region.

The following equipment shall be purchased according to General Schedule of Supplies, Procurement Division, U. S. Treasury Department, and supplied for each of the above units:

For Unit Nos. 250 and 400

1. A dual 16 mm. motion picture sound projector unit with change-over box shall be provided complete with all necessary connecting cables, current supply cables, projection lamps, tubes and extra exciter lamps, 1600' take-up reel, two sets of spare belts, aperture cleaning brushes, spare fuses, and supply of oil cans; in accordance with Procurement Division Specifications. #429-B. This complete dual unit is comprised of:

2 Utility Filmosound projectors, as per complete General Schedule of Supplies (Item 17-P-7736)^{1/}

1 Filmosound electric change-over box^{2/}

2. The following accessories for the above shall be provided per Procurement Schedule #17-P-7752-50:

1 Crystal microphone with floor stand
2 Exciter Lamps
4 750W, 115V lamps
2 Bottles of cement
6 Bottles of projector oil
1 Photo electric cell
2 400' 16mm. reels
1 Bell & Howell splicer, Model 136
1 6' x 8' Da-Lite beaded screen
1 Phonograph Turntable for 78 RPM

For Unit No. 650

1. A dual 16mm. motion picture sound projector unit with change-over box shall be provided complete with all necessary connecting cables, current

^{1/} See page 12, General Schedule of Supplies, Class 17, Contract TPS 43498 for graduation of price as per zone.

^{2/} Bell & Howell only source of supply.

supply cables, projection lamps, tubes and extra exciter lamps, 1600' take-up reel, two sets of spare belts, aperture cleaning brushes, spare fuses, and supply of oil cans; in accordance with Procurement Division Specifications #429-B. This complete dual unit is comprised of:

2 Utility Filmosound projectors as per complete General Schedule of Supplies (Item 17-P-7736)^{1/}

1 Filmosound electric change-over box^{2/}

2. The following accessories for the above shall be provided per Procurement Schedule #17-P-7752-50:

- 1 Crystal microphone with floor stand
- 2 Exciter lamps
- 4 750W, 115V lamps
- 2 Bottles of cement
- 6 Bottles of projector oil
- 1 Photo electric cell
- 2 400' 16mm reels
- 1 Bell & Howell splicer, Model 136
- 1 9' x 12' Da-Lite beaded screen
- 2 - 50 ft. Extension Cable
- 1 Phonograph Turntable for 78 RPM

For Unit No. 1000

1. A dual 16 mm. motion picture sound projector unit with change-over box shall be provided complete with all necessary connecting cables, current supply cables, projection lamps, tubes and extra exciter lamps, 1600' take-up reel, two sets of spare belts, aperture cleaning brushes, spare fuses, and supply of oil cans; in accordance with Procurement Division Specifications #429-B. This complete dual unit is comprised of:

2 Utility Filmosound projectors as per complete General ^{1/}
Schedule of Supplies (Item 17-P-7736)

^{1/} See Page 12, General Schedule of Supplies, Class 17, Contract TPS 43498 for graduation of prize as per zone.

^{2/} Bell & Howell only source of supply.

- 1 Filmosound electric change-over box 1/

Above projectors for No. 1000 Unit shall have $3\frac{1}{2}$ " lenses instead of regular 2" lenses. 2/

2. The following accessories for the above shall be provided per Procurement Schedule #17-P-7752-50:

- 1 Crystal microphone with floor stand
- 2 Exciter lamps
- 4 1000W, 115V lamps
- 2 Bottles of cement
- 6 Bottles of projector oil
- 1 Photo electric cell
- 2 400' 16mm. reels
- 1 9' x 12" Da-Lite beaded screen
- 1 Bell & Howell splicer, Model 136
- 2 50 ft. Extension Cable
- 1 Phonograph Turntable for 78 RPM.

1/ Bell & Howell only source of supply.

2/ See Page 15 General Schedule of Supplies, Class 17, Contract TPS 43498 for difference of Proj. lens price.

SPECIFICATION FOR MOTION PICTURE AND SOUND EQUIPMENT
For #1500 and #2100 Units

General Description of Equipment. This specification is to cover the furnishing of 35 mm and 16 mm motion picture projection equipment, a sound reproducing system and a non-synchronous turntable pick-up attachment for an auditorium about 90 feet long, 50 feet wide and about 20 feet high, to underside of truss with an approximate volume of 90,000 cubic feet, a projection throw of 90 feet, and having a total of 500 seats. This equipment shall be shipped as directed.

1. 35mm Motion Picture Projection Equipment. The 35 mm motion picture projection equipment shall consist essentially of two 35 mm projector mechanisms, projection lenses, projector pedestals, sound head supports, 18" upper and lower magazines, projection arc lamps, and arc motor-generator set or arc rectifier(s), and all necessary accessories for operation in synchronism with the sound reproducing system described below.
2. Sound Reproducing System. The sound reproducing system shall consist essentially of two sound mechanisms and drive motors for the reproduction of sound from 35 mm sound film by the Photo-electric cell method and all necessary amplifiers, loud speakers, rectifiers, switching devices and accessories for high quality reproduction. The sound mechanisms shall be for attachment to the pedestals, and for operation in synchronism with the projector mechanisms furnished as part of the motion picture projection equipment described in paragraph 1 above. The term "Sound Film" as used in this specification shall be interpreted as meaning a standard width (35mm) motion picture film, having a sound record of accepted standard width of either the "variable area" or "variable density" type, located on the same film with the picture and intended for reproduction at a uniform nominal film speed of 90-feet per minute.
3. The arc motor-generator set or arc rectifiers, sound mechanism drive motors, power amplifiers and sound system rectifiers shall operate from a power supply of the voltage and frequency specified in the following sections of this specification. The filaments of all vacuum tubes used in the sound system amplifiers and rectifiers shall be heated directly on AC. All equipment shall be readily accessible for servicing and testing, and all terminal blocks on the various parts of the sound equipment to which external wires are connected shall be provided with the soldered terminals. The electrical hum level of the sound reproducing system shall be - 35 db (.006 watts reference) or better, and any extraneous noise developed by the system shall not be perceptible in the seating area throughout the auditorium when the system is operating at 6 db above the maximum operating level. The frequency response characteristic of the complete electrical system, as measured at the output of the network

when properly terminated, shall conform to the standard electrical characteristics as specified by the Research Council of the Academy of Motion Picture Arts and Sciences. Suitable means shall be provided, however, for adjusting the characteristic over a wide range, said adjustment to be accomplished in an isolated circuit without introducing attenuation in the main sound circuit.

3. Non-Synchronous Turntable Attachment.

The non-synchronous turntable attachment shall consist of motor driven turntable pick-up and necessary switching devices for reproducing from lateral cut 10" or 12" diameter, 78 RPM disc records through the amplifiers and stage loud speakers of the sound reproducing systems.

Items of Equipment.

1. Projector Mechanism. The projector mechanism shall be Super-Simplex or equivalent. Each projector mechanism shall be designed for use with standard 35 mm motion picture film and for assembly to and operation with the sound mechanisms furnished in accordance with this specification. The projector mechanism shall be gear driven from the sound mechanism, shall be of the enclosed type and built around a main frame, said enclosure and main frame to be of rugged metallic construction. A door shall be provided on the operating side to permit easy access to the film handling parts, said door to have a glass window to permit the film during transit through the mechanism. A door and removable plate shall be provided on the non-operating side for access to the gears and driving mechanism. Fire valve roller holders shall be mounted on top of the mechanism. All gears, fire shutter governor, shutter shaft and synchronizing gears, shall be mounted on the non-operating side of the main frame, and all film handling parts such as sprockets, pad rollers, film trap and removable film gate, on the operating side of the main frame. The intermittent movement shall be mounted on the main frame as a complete unit, readily removable from the non-operating side.

The intermittent movement shall be of the double bearing type and shall be so designed that it may be rotated on its axis for framing purposes. No vertical, lateral or horizontal displacement of the intermittent sprocket shall be permitted when framing the picture. The star and cam of the intermittent movement shall be hardened and ground throughout and shall operate in a fluid bath.

A rear shutter shall be provided to which are attached air moving vanes, said shutter to be completely enclosed in a well ventilated housing accurately located on the mechanism. An external control shall be provided on the operating side of the mechanism for final accurate adjustment of the shutter timing while in motion. A pilot lamp shall be provided as part of the rear shutter assembly for the purpose of threading the film in frame for projection.

The lens mount shall satisfactorily accommodate all lenses having standard SMPE dimensions. This mount shall consist of at least two lens supports, both of which shall have an internal dimension of 2-25/32". The entire lens assembly shall be adjustable externally for focusing by a micrometer type control, and the mount shall be provided with means to definitely relocate the lens rotationally and horizontally after the lens has been removed for cleaning.

The film trap shall be of cast iron construction, accurately machined and provided with hardened and ground steel film tracks and slip-in type aperture plate. The film gate shall adequately support the film at the aperture to produce a steady picture, and means shall be provided to definitely latch the film gate in an open or closed position. Means shall be provided for readily removing the film gate assembly for cleaning purposes. The teeth of the intermittent sprocket shall be hardened and ground, and all sprockets used in the mechanism assembly shall be provided with strippers so designed as to prevent the possibility of film wrapping around the sprockets. The picture jump, as determined with standard steady test film, shall not exceed 1/4" vertically when projecting a 9' x 12' picture. Each projector mechanism shall be equipped with a projection lens for the projection of a clear, well defined picture 7' high and 10' wide, on the sound screen specified and at the projection throw specified.

2. Projector Pedestal. The projector pedestal shall be Simplex Model S. I. or equivalent. Each projector pedestal shall rigidly support the lamphouse, sound mechanism and projector mechanism furnished in accordance with this specification. The pedestal shall be constructed of metal throughout and in such a manner as to provide a rigid support for the equipment to be mounted thereon.

The pedestal base shall be symmetrical, rugged in construction, and provide vibrationless support. It shall have a spacious internal compartment into which all electrical connections may be brought when the conduit is concealed in the floor. Knockouts shall be provided at the front through which exposed conduit connections may be brought into the internal compartment. Two convenience outlets shall be provided on the non-operating side. Means for leveling shall be provided at each corner. The pedestal shall support the lamphouse, sound mechanism and projector mechanism in such a manner that these units may be quickly and easily adjusted for any vertical projection angle between 0° and 33° downward. A method of locking the adjustments shall be provided to make a rigid assembly.

A suitable heavy duty, double pole arc lamp switch in a metal switch box shall be located at the rear of the pedestal.

Projection arc lamp shall be Simplex High Intensity or equivalent for 32-40 amperes.

3. Lamphouse. Each lamphouse shall be of the enclosed type approved for use with standard 35 mm motion picture film, and shall mount on the projector pedestal furnished in accordance with this specification. The enclosure shall be of metal construction with a full length double door on each side, said door to have a dark glass window to permit viewing the arc. It shall provide adequate ventilation for the maximum current for which it is designed. A dowsers shall be located inside the lamphouse with an external control on either side. A trimming light controlled by a door switch shall be included. An elliptical reflector 11-3/8" in diameter, providing a wide pick-up angle of light for maximum efficiency, shall be suitably mounted in an adjustable holder. Externally operate controls for horizontal, vertical and focus adjustments shall be provided. The carbons shall be advanced continuously and automatically as they are consumed by means of dust proof, ball bearing arc control motor mounted in the rear of the lamphouse. A rheostat shall be provided for speed adjustment, said rheostat to be equipped with a pointer visible externally. An ammeter with a long illuminated translucent scale for easy reading of the arc current shall be located at the rear of the lamphouse.

Carbon carriages shall be provided for 7mm x 14" positive and 6mm x 9" negative carbons, shall be accurately located and provided with a fast resetting device and a quick acting arc stricker. Externally operated controls for horizontal and vertical adjustments of the negative carbons for alignment purposes shall be provided. The low intensity lamp shall include a device for the positioning of a new trim of carbons and the high intensity lamp shall have a floating positive, carbon clamp, a rigid carbon guide at the arc end of the carbon and a stabilizing magnet and ash receiver. Provision shall be made to reflect the arc image on a translucent screen on top of the lamphouse. This image should show the arc length as well as the position of the carbons in relation to the reflector. A removable ash tray shall be provided below the carbons to protect the lead screws and slide rods.

- a. 16mm Equipment. 16mm sound projector shall be ampro Victor or equal. It shall be provided with an arc lamphouse of sufficient capacity to permit satisfactory projection in the sound screen specified.

It shall include a suitable projection lens and projector pedestal. Provision shall be made so that the sound output of the 16mm projector shall be connected through a special switching device to the amplifier and loud speaker portion of the 35 mm sound reproducing system.

4. Projection Arc Power Supply. Equipment shall be Strong or equal tungar rectifiers which shall operate from a 220 volt, 1 phase, 60 cycle AC power supply, and shall be of adequate capacity to furnish

the required direct current for the projection arc lamps. All necessary accessories shall be supplied, and the equipment shall be compact, quiet and vibrationless in operation.

- a. Projector Magazines. Two 18 inch upper magazines and two 18" lower magazines with suitable takeup shall be furnished.
 - b. Projection Lenses. Two Bausch and Lomb, or equal, projection lenses of the series two type and of the proper focal length shall be furnished.
5. Sound Mechanism. Each sound mechanism shall be of the type provided for use with standard 35 mm motion picture film for operation in synchronism with the projector mechanism when mounted on the projector pedestal furnished in accordance with this specification. The mechanism shall have a film propulsion system (rotary stabilizer) to convert the intermittent motion of the film in the projector mechanism to a continuous uniform movement at the scanning point. The total flutter shall be less than .15 of 1% as measured with ERPI Flutter Measuring Instrument. The weave limits (lateral motion of the film at the rotary stabilizer) shall not be greater than .001". The rotary stabilizer shall stabilize in not more than 6 seconds. The scanning system, consisting of an exciter lamp, adjustable oil proof optical system, photo-electric cell, rotary stabilizer and pressure and guide roller, shall be attached to a single bracket resiliently mounted in the sound mechanism. The scanning system shall be adjustable so as to produce on the film a beam of light of the proper dimensions and brilliance. The location of the electrical and optical equipment in the mechanism shall be such as to minimize difficulties due to oil leakage from the sound and projector mechanisms. The mechanism shall be provided with a constant speed sound sprocket and a constant speed holdback sprocket so that variations in film take-up speed will not reflect back to the rotary stabilizer. The photo-electric cell shall be coupled direct to the volume control equipment by means of low capacity coaxial cable without the use of a coupling transformer. The sound mechanism shall reproduce from single track sound film of the "variable area" or "variable density" type or from double track sound film of either type, as specified. The frequency response characteristic and hum level shall be as specified in the first part of this specification. The sound mechanism shall be driven by a motor operating from a 105-125 volt, 50 or 60 cycle \pm 3%, single phase AC power supply at a nominal uniform film speed of 90 feet per minute, or 1.5 feet per second. The speed of the motor shall not vary more than .5 of 1% with voltages from 105-125 volts, and shall under normal load reach full speed in not more than three seconds. The motor shall have a resilient mounting, and shall drive the sound mechanism by means of a vibrationless, flexible coupling through a reduction gear box, which may be removed as a unit. A flywheel shall be provided on the motor assembly to limit starting

acceleration, and a brake included to stop mechanism in case of film breakage. The sound mechanism shall include a device for mounting projector mechanism so that the latter may be changed in less than 20 minutes or between the running of 2000 foot reels. The projector mechanism shall be rear driven from the sound mechanism, and means shall be provided for accurate meshing of the drive and driven gears without the use of shims.

- a. Volume Control Equipment. The volume control equipment shall consist of volume control amplifier in a metal cabinet and an extension volume control, both for mounting on the front wall of the projection room. The volume control amplifier shall be of the resistance coupled type without coupling transformers, and shall be capable of amplifying the sound mechanism output to a suitable value for transmission to the main or power amplifier. It shall contain an interstage volume control which shall be the main system volume control and a potentiometer to adjust the voltage applied to the sound mechanism photo-electric cells. The output shall be coupled direct to the main or power amplifier by means of low capacity cable without the use of a coupling transformer. An input jack for special inputs shall be provided. The extension volume control shall be designed for mechanical coupling to the interstage volume control so that volume adjustments may be made at both projectors.

6. Main Amplifier. This equipment shall consist of a main or power amplifier, monitor unit and monitor volume control in a wall mounting metal cabinet. The all AC operated amplifier shall have a total gain of at least 48 db and an output of 10 electrical watts. The AC power supply shall be 105-125 volts, 50-60 cycles. It shall be of the resistance coupled inverse feedback type with an output transformer to couple the amplifier output to the loud speaker network. It shall be capable of a frequency response varying not more than ± 1 db in the range from 40 to 10,000 cycles. In the inverse feedback circuit suitable, convenient and easily accessible means shall be provided for adjusting the low and high and response over a wide range, within which shall be included the frequency response characteristic specified by the Research Council of the Academy of Motion Picture Arts and Sciences. The harmonic content of the amplifier shall not exceed 1% of any fundamental over its rated 40 to 10,000 cycles per second frequency range, and the noise level shall be 35 db. or better when delivering its rated output. It shall provide the necessary voltages for energizing the photo-electric cell and vacuum tubes of the volume control amplifier. A single stage, transformer couple bridging type monitor amplifier shall be provided as part of said main amplifier to provide power for a permanent magnet monitor unit mounted in the cabinet with the power amplifier. A monitor volume control with adequate volume range shall also be provided in this same cabinet.

7. Loud Speaker Network. The network shall be a two-series type dividing network with a crossover frequency at 800 cycles, an input impedance of 12 ohms and high and low frequency output impedance each of 12 ohms. Adjustable attenuation shall be provided in the high frequency speaker circuit to obtain optimum balance between the high and low frequency speakers furnished in accordance with this specification.
8. Loud Speakers (Stage Speakers). The sound reproducing system shall include the necessary two-way loud speaker equipment of the Iconic type to conserve space, complete with loud speaker units and horns required for high quality reproduction, and shall be of such capacity as to fill an auditorium of the volume given above. It shall be mounted on movable truck. The equipment furnished hereinafter shall have been designed to function in conjunction with the main or power amplifier and the network furnished in accordance with Sections 6 and 7 respectively. The high frequency horn shall be of the true multicellular, exponential type, and the low frequency horn (s) shall be of the folded, exponential type. The high and low frequency speaker units shall be of the moving coil type, with energized or permanent magnet fields. Means shall be provided for tuning the complete loud speaker equipment to reproduce each range of frequencies in the proportion required for the specific auditorium in which it is installed and to obtain an overall response characteristic that insures high quality reproduction.
9. Power Equipment. An exciter lamp power unit shall be provided to furnish nominal AC voltage and current for energizing the exciter lamp in the sound mechanism and reduced AC voltage to preheat one exciter lamp while the other is in use. It shall operate from a 105-125 volt, AC 50-60 cycle, single phase power supply. Two four-way toggle switches for exciter lamp changeover shall be provided.
10. Non-Synchronous Turntable Attachment. This attachment shall consist essentially of an electrically driven disc record turntable for use with 10" or 12" lateral cut disc records. The turntable shall operate at a speed of 78 RPM, and be driven by a constant speed 105-125 volt, 50-60 cycle, AC motor. The turntable shall be enclosed in an approved metal finish cabinet. The unit shall be equipped with motor switch and volume control.
11. Vacuum Tubes and Lamps. The supplier shall furnish two complete sets of vacuum tubes, photo-electric cells, exciter lamps and similar glassware required for the operation of the equipment furnished. The following accessories shall be furnished:
 - a. Booth Shutter equipment shall be made in accordance with diagrammatic data sheet on drawings.
 - b. Service table T-15 National.

- c. One pair Simplex hand rewinders.
- d. One 12 section "Neutype" filing cabinet.
- e. One Griswald R 2 film splicer.
- f. Ten 2000 foot reels.
- g. One gal. Simplex projector oil.
- h. One pint film cement.
- i. One 26" operator's chair.
- j. 250 sets of positive and negative carbons.
- k. One spare set Tungar bulbs.
- l. One set "Presto" changeovers.

12. Sound Screen. Sound screen shall be Walker Sound Screen or equivalent fitted into a firm frame easily movable on proper castor base. The frame shall be so made that it is easily removed from the castor base. A non-inflammable sound screen 9 feet wide and 12 feet high, provided with grommets, shall be furnished by the supplier. The supplier shall also furnish the necessary lacing cord and provide a suitable frame to which the sound screen may be laced. The purchaser shall provide the necessary labor to install the screen and frame. The sound screen shall be suitable acoustically to permit the reproduction throughout the auditorium of high quality sound or speech over a frequency range of 40 to 8,000 cps, the attenuation of 8,000 cycles not to be greater than 4 db. The sound screen shall be such as to present a clear picture, with a good definition, without distortion in the auditorium specified in the first part of this specification.

Installation. Unless otherwise provided, the equipment furnished in accordance with this specification shall be shipped F.O.B. factories.

The purchaser shall provide all contract labor and material necessary for the complete installation of the system furnished. The services of an experienced sound inspector to supervise the installation of the system shall be included in the bid, said inspector to instruct the operating personnel in the proper operation, care and maintenance of the equipment. The contract labor and material provided by the purchaser shall include that required to mount all equipment furnished, install all necessary conduit and wiring between the equipment items and to the AC power supply, and make all connections to all of the equipment items furnished.

It shall be the duty of the purchase to determine that the installation is in accordance with local ordinance and/or the National Electrical Code.

Equipment Guarantee. The equipment furnished in accordance with this specification shall be guaranteed by the supplier against defect in parts and workmanship for a period of ninety (90) days after the sound inspector certifies that the installation has been completed and is ready for operation.

It is understood and agreed, however, that any replacements necessitated through fault or neglect on the part of the purchaser, or its agents, or its employees shall not be included in this guarantee. In all instances, defective parts shall be returned to the supplier, transportation charges prepaid, in exchange for the replacement parts.

Bidding Procedure.

1. Drawings and Instructions. The bidder shall submit with his bid or bids, descriptions of the equipment he proposes to furnish, including installation instructions and all necessary drawings, and shall give the power requirements and weights of the equipment.

The successful bidder shall furnish a complete set of wiring diagrams of the sound equipment items, a complete wiring diagram of the sound reproducing system and proper installation, operation and maintenance instructions.

2. Patents. The successful bidder shall upon demand defend at his own expense any and all actions and suits which may at any time be brought against the purchaser alleging infringement of any United States patent by reason of the use of the apparatus or of material furnished under this specification, as and for the places and purposes for which furnished by the successful bidder, and will pay and satisfy all judgments and decrees for profits, damages and costs which may be finally awarded against the purchaser by the court of last resort in any such action or suit on account of such infringement, provided the purchaser gives the successful bidder immediate notice of any claim of infringement of patents and of any suit against the purchaser alleging infringement of patents by reason of the use of the apparatus or material furnished under this specification. The obligations of the successful bidder, referred to in this section, shall not apply to the uses of said apparatus in combination with other apparatus or parts not furnished by the successful bidder, and the liability of the successful bidder, referred to in this section, shall in no event exceed the amount paid to him by the purchaser.

3. Acceptance of Bid. If the bidder fails to set the time in which the bid must be accepted, it is understood and agreed that the purchaser shall have sixty (60) days to accept.
4. Underwriters' Approval. All equipment to be provided in accordance with this specification shall have the approval of the Underwriters' Laboratories.
5. Error in Bids. Each bidder is cautioned to verify his bid before submission, as no relief can be secured on the plea of error after opening of the bid.
6. Rejection of Bids. The right is reserved to accept or reject any or all bids. The right is also reserved to reject the bid of a bidder who has previously failed to perform properly or complete on time, contracts of a similar nature, or the bid of a bidder who is not considered in a position to perform the contract. Bids will be considered only from individuals, firms or corporations possessing satisfactory financial or technical ability equipment and organization to insure completion of the contract.

SPECIFICATION FOR COUNTER EQUIPMENT IN LOBBY OF TENANT
ACTIVITIES BUILDING FOR NO. 250 UNIT

Counter. The counter shall be approximately 12'0" in perimeter with candy counter on return face. Top 3' 6" high shall be of 1 $\frac{1}{2}$ " hardwood mounted in a frame of dried 2" x 2". The front shall be sheathed with $\frac{1}{4}$ " plywood or $\frac{1}{4}$ " hard masonite panels, enameled 3 coats, color selected. The interior shall be supplied with a bottom and one intermediate hardwood shelf wherever it does not interfere with equipment. The candy counter shall have a plate glass sloping front and top to the height of the bar with 5 ply panel sliding doors in back mirror faced to the front. Two glass shelves on wood brackets shall be supplied the entire length, one shall be 8" wide, the other 12" wide. All shall be made to detail.

Back Counter. The back counter shall be approximately 16' 0" long by 3' 6" high by 2' 0" wide. It shall be built with a 1 $\frac{1}{2}$ " thick hardwood top mounted on a hardwood frame. The face shall be built with a series of drawers 6" high in a 7/8" solid frame; drawers shall be about 2'0" wide with wood pulls. The lower portion shall have sliding doors built in 4'0" units; 2 doors to each unit with 2 intermediate shelves in each compartment.

Soda Unit. There shall be one Bob-tail soda unit 5'6" long standard construction throughout, Bastian-Blessing or equal, containing the following:

One soda draft arm connected to standard, large capacity soda cooler in cabinet arranged for same.

One plain water draft arm connected to standard water cooler in cabinet arranged for same.

Six standard soda syrup pumps and jars.

Four standard crushed fruit jars with covers and ladles.

Two sinks each approximately 12" x 16" x 12".

One cold storage compartment with sliding or lift cover. This compartment also equipped with standard large capacity soda and water coils.

One 9" diameter running water dishervat.

One Standard automatic tumbler rinser.

One porcelain enamel waste chute with galvanized iron container 6" x 8" x 18" under.

One towel rail or ring.

Compressor. There shall be one electric automatic refrigerating compressor and coil for the above soda unit.

Ice Cream Cabinet. One ice cream cabinet six-hole double row type standard construction with self contained compressor and coil shall be furnished by local ice cream manufacturer.

Under Bar. Balance of under bar shall be filled in with 1-3/8" thick hardwood work board with 10" back flashing.

Carbonator: One United American Soda Fountain Co. or equal carbonator shall be furnished and installed in store room next to the counter and properly hooked up to dispensing apparatus in Bob-tail soda unit. Type of electric service available at project shall be determined and apparatus supplied of proper type for use of same. Used carbonators may be substituted if they are in perfect working condition and can be guaranteed for one year.

Display. Two display units shall be in two tiers of 7/16" glass 12" wide on wood standards and supports, properly spaced to prevent cracking of glass and as per details.

Mixers: Two mixers shall be Hamilton Beach or equal with motor to start when container is in position and stop when it is removed. There shall be an extra button on the agitator rod. The chromium plated or approved plastic cup shall be furnished.

Blender. One Waring Blender or equal with 7" drain at base and cord to connect with A. C. outlet shall be furnished.

Squeezer. One Hamilton Beach or equal juice extractor for hand operation and 1 cutting board and stainless steel knife for same shall be furnished.

SPECIFICATION FOR COUNTER EQUIPMENT IN LOBBY OF TENANT
ACTIVITIES BUILDING FOR NO. 400 UNIT

Counter. The counter shall be approximately 19' 0" in perimeter with candy counter on return face. Top 3' 6" high shall be of 1 $\frac{1}{2}$ " hardwood strips mounted in a frame of dried 2" x 2". The front shall be sheathed with 1/4" plywood or 1/4" hard masonite panels, enameled 3 coats, color selected. The interior shall be supplied with a bottom and one intermediate hardwood shelf wherever it does not interfere with equipment. The candy counter shall have a plate glass sloping front and top to the height of the bar with 5-ply panel sliding doors in back mirror faced to the front. Two glass shelves on wood brackets shall be supplied the entire length, one shall be 8" wide, the other 12" wide. All shall be made to detail.

Back Counter. The back counter shall be approximately 15' 0" long by 3' 6" high by 2' 0" wide. It shall be built with 1 $\frac{1}{2}$ " thick hardwood top mounted on a hardwood frame. The face shall be built with a series of drawers 6" high in a 7/8" solid frame; drawers shall be about 2' 0" wide with wood pulls. The lower portion shall have sliding doors built in 4' 0" units 2 doors to each unit with 2 intermediate shelves in each compartment.

Soda Unit: There shall be one Bob-tail soda unit 5' 6" long standard construction throughout, Bastian- Blessing or equal, containing the following:

One soda draft arm connected to standard, large capacity soda cooler in cabinet arranged for same.

One plain water draft arm connected to standard water cooler in cabinet arranged for same.

Six standard soda syrup pumps and jars.

Four standard crushed fruit jars with covers and ladles.

Two sinks each approximately 12" x 16" x 12".

One cold storage compartment with sliding or lift cover.

This compartment also equipped with standard large capacity soda and water coils.

One 9" diameter running water dishervat.

One standard automatic tumbler rinser.

One procelain enamel waste chute with galvanized iron container 6" x 8" x 18" under.

One towel rail or ring.

Compressor. There shall be one electric automatic refrigerating compressor and coil for the above soda unit.

Ice Cream Cabinet. There shall be one ice cream cabinet, six-hole double-row type standard construction with self contained compressor and coil to be furnished by local ice cream manufacturer.

Under Bar. Balance of under bar shall be filled in with 1-3/8" thick hardwood work board with 10" back flashing.

Carbonator. One United American Soda Fountain Co. or equal carbonator shall be furnished and installed in store room next to the counter and properly hooked up to dispensing apparatus in Bob-tail soda unit. Type of electric service available at project shall be determined and apparatus supplied of power type for use of same. Used carbonators may be substituted if they are in perfect working condition and can be guaranteed for one year.

Display. Two display units shall be in two tiers of 7/16" glass 12" wide on wood standards and supports, properly spaced to prevent cracking of glass and as per details.

Mixers. Two mixers shall be Hamilton Beach or equal with motor to start when container is in position and stop when it is removed. There shall be an extra button on the agitator rod. The chromium plated or approved plastic cup shall be furnished.

Blender. One Waring Blender or equal with 7" drain at base and cord to connect into A.C. outlet shall be furnished.

Squeezer. One Hamilton Beach or equal juice extractor for hand operation one cutting board and stainless steel knife for same shall be furnished.

SPECIFICATION FOR COUNTER EQUIPMENT IN LOBBY OF TENANT
ACTIVITIES BUILDING FOR NO. 650 UNIT

Counter. The counter shall be approximately 22'0" in perimeter with candy counter on return face. Top 3'6" high shall be of 1 $\frac{1}{2}$ " hardwood strips mounted in a frame of dried 2" x 2". The front shall be sheathed with $\frac{1}{4}$ " plywood or $\frac{1}{2}$ " hard masonite panels, enameled 3 coats, color selected. The interior shall be supplied with a bottom and one intermediate hardwood shelf wherever it does not interfere with equipment. The candy counter shall have a plate glass sloping front and top to the height of the bar with 5 ply panel sliding doors in back mirror faced to the front. Two glass shelves on wood brackets shall be supplied the entire length, one shall be 8" wide, the other 12" wide. All shall be made to detail.

Back Counter. The back counter shall be approximately 16'0" long by 3'6" high by 2'0" wide. It shall be built with a 1 $\frac{1}{2}$ " thick hardwood top mounted on a hardwood frame. The face shall be built with a series of drawers 6" high in a 7/8" solid frame; drawers shall be about 2'0" wide with wood pulls. The lower portion shall have sliding doors built in 4'0" units 2 doors to each unit with 2 intermediate shelves in each compartment.

Soda Unit. There shall be one Bob-tail soda unit 6'6" long standard construction throughout, Bastian-Blessing or equal, containing the following:

Two soda draft arms connected to standard, large capacity soda cooler in cabinet arranged for same.

Two plain water draft arms connected to standard water cooler in cabinet arrange for same.

Six standard soda syrup pumps and jars.

Four standard crushed fruit jars with covers and ladles.

Two sinks each approximately 12" x 16" x 12".

One cold storage compartment with sliding or lift cover and large capacity soda and water coils.

Two 9" diameter running water dishervat.

Two standard automatic tumbler rinsers.

Two procelain enamel waste chutes with galvanized iron containers 6" x 8" x 18" under.

Two towel rails and rings.

Compressor. There shall be one electric automatic refrigerating compressor and two coils for the Bob-tail or equal soda unit.

Ice Cream Cabinet. Two ice cream cabinets each six-hole double row type with self contained compressor and coil shall be furnished by local ice cream manufacturer.

Under Bar. Balance of under bar shall be 1-3/8" hardwood shelf.

Carbonator. One United American Soda Fountain Co. or equal carbonator shall be furnished and installed in store room next to the counter and properly hooked up to dispensing apparatus in Bob-tail soda unit. Type of electric service available at project shall be determined and apparatus supplied of proper type for use of same. Used carbonators may be substituted if they are in perfect working condition and can be guaranteed for one year.

Display. Two display units shall be in two tiers of 7/16" glass 12" wide on wood standards and supports, properly spaced to prevent cracking of glass and as per details.

Mixer. Two mixers shall be Hamilton Beach or equal with motor to start when container is in position and stop when it is removed. There shall be an extra button on the agitator rod. The chromium plated or approval plastic cup shall be furnished.

Blender. One Waring Blender or equal with 7" drain at base with cord to connect into A. C. outlet shall be furnished.

Squeezer. One Hamilton Beach or equal juice extractor for hand operation and 1 cutting board and stainless steel knife for same shall be furnished.

SPECIFICATION FOR COUNTER EQUIPMENT IN LOBBY OF TENANT
ACTIVITIES BUILDING FOR NO. 1000 UNIT

Counter. The counter shall be approximately 23' 0" in perimeter with candy counter on return face. Top 3' 6" high shall be of 1 $\frac{1}{2}$ " hardwood strips mounted in a frame of dried 2" x 2". The front shall be sheathed with 1/4" plywood or 1/4" hard masonite panels, enameled 3 coats, color selected. The interior shall be supplied with a bottom and one intermediate hardwood shelf wherever it does not interfere with equipment. The candy counter shall have a plate glass sloping front and top to the height of bar with 5 ply panel sliding doors in back mirror faced to the front. Two glass shelves on wood brackets shall be supplied the entire length, one shall be 8" wide, the other 12" wide. All shall be made to detail.

Back Counter. The back counter shall be approximately 18' 0" long by 3' 6" high by 2' 0" wide. It shall be built with a 1 $\frac{1}{2}$ " thick hardwood top mounted on a hardwood frame. The face shall be built with a series of drawers 6" high in a 7/8" solid frame; drawers shall be about 2' 0" wide with wood pulls. The lower portion shall have sliding doors built in 4' 0" units 2 doors to each unit with 2 intermediate shelves in each compartment.

Soda Unit. There shall be one Bob-tail soda unit 6' 6" long standard construction throughout, Bastian-Blessing or equal, containing the following:

Two soda draft arms connected to standard, large capacity soda cooler in cabinet arranged for same.

Two plain water draft arms connected to standard water cooler in cabinet arranged for same.

Six standard soda syrup pumps and jars.

Four standard crushed fruit jars with covers and ladles.

Two sinks each approximately 12" x 16" x 12".

One cold storage compartment with sliding or lift cover and large capacity soda and water coils.

Two 9" diameter running water dishervat.

Two standard automatic tumbler rinsers.

Two procelain enamel waste chutes with galvanized iron containers 6" x 8" x 18" under.

Two towel rails and rings.

Compressor. There shall be one electric automatic refrigerating compressor and two coils for the Bob-tail or equal soda unit.

Ice Cream Cabinet. Two ice cream cabinets each six-hole double row type with self contained compressor and coil shall be furnished by local ice cream manufacturer.

Under Bar. Balance of under bar shall be 1-3/8" hardwood shelf.

Carbonator. One United American Soda Fountain Co. or equal carbonator shall be furnished and installed in store room next to the counter and properly hooked up to dispensing apparatus in Bob-tail soda unit. Type of electric service available at project shall be determined and apparatus supplied of proper type for use of same. Used carbonators may be substituted if they are in perfect working condition and can be guaranteed for one year.

Display. Two display units shall be in two tiers of 7 /16" glass 12" wide on wood standards and supports, properly spaced to prevent cracking of glass and as per details.

Mixers. Four mixers shall be Hamilton Beach or equal with motor to start when container is in position and stop when it is removed. There shall be an extra button on the agitator rod. The chromium plated or approved plastic cup shall be furnished.

Blender. One Waring Blender or equal with 7" drain at base and cord to connect into A. C. outlet shall be furnished.

Squeezer. One Hamilton Beach or equal juice extractor for hand operation and 1 cutting board and stainless steel knife for same shall be furnished.

SPECIFICATION FOR COUNTER EQUIPMENT IN LOBBY OF TENANT
ACTIVITIES BUILDING FOR NO. 1500 UNIT

Counter. The counter shall be approximately 34'0" long, irregular in perimeter with candy counter on return face. Top 3'6" high shall be of 1½" hardwood strips mounted in a frame of dried 2" x 2". The front shall be sheathed with ½" plywood or ¼" hard masonite panels, enameled 3 coats, color selected. The interior shall be supplied with a bottom and one intermediate hardwood shelf wherever it does not interfere with equipment. The candy counter shall have a plate glass sloping front and top to the height of the bar with 5 ply panel sliding doors in back mirror faced to the front. Two glass shelves on wood brackets shall be supplied the entire length, one shall be 8" wide, the other 12" wide. All shall be made to detail.

Back Counters. There shall be two back counters, one 16'0" long and one 12'0" long; both 3'6" high by 2'0" wide. They shall be built with a 1½" thick hardwood top mounted on a hardwood frame. The face shall be built with a series of drawers 6" high in a 7/8" solid frame; drawers shall be about 2'0" wide with wood pulls. The lower portion shall have sliding doors built in 4'0" units, 2 doors to each unit with 2 intermediate shelves in each compartment.

Soda Unit. There shall be two Bob-tail soda units 5'6" long, standard construction throughout, Bastian-Blessing or equal, each containing the following:

One soda draft arm connected to standard, large capacity soda cooler in cabinet arranged for same.

One plain water draft arm connected to standard water cooler in cabinet arranged for same.

Six standard soda syrup pumps and jars.

Four standard crushed fruit jars with covers and ladles.

Two sinks each approximately 12" x 16" x 12".

One cold storage compartment with sliding or lift cover. This compartment also equipped with standard large capacity soda and water coils.

One 9" diameter running water dishervat.

One standard automatic tumbler rinser.

One procelain enamel waste chute with galvanized iron container 6" x 8" x 18" under.

One towel rail or ring.

Compressor. There shall be one electric automatic refrigerating compressor and coil for the above soda unit.

Ice Cream Cabinet. Two ice cream cabinet six-hole double row type standard construction with self contained compressor and coil shall be furnished by local ice cream manufacturer.

Under Bar. Balance of under bar shall be filled in with 1-3/8" thick hardwood work board with 10" back flashing.

Carbonator. One United American Soda Fountain Co. or equal carbonator shall be furnished and installed in store room next to the counter and properly hooked up to dispensing apparatus in Bob-tail soda units. Type of electric service available at the project shall be determined and apparatus supplied of proper type for use of same. Used carbonators may be substituted if they are in perfect working condition and can be guaranteed for one year.

Display. Two display units shall be in two tiers of 7/16" glass 12" wide on wood standards and supports, properly spaced to prevent cracking of glass and as per details.

Mixers. Four mixers shall be Hamilton Beach or equal with motor to start when container is in position and stop when it is removed. There shall be an extra button on the agitator rod. Chromium plated or approved plastic cup shall be furnished.

Blenders. Two Waring Blenders or equal 7" with drain at base and cord to connect into A. C. outlet shall be furnished.

Squeezers. Two Hamilton Beach or equal juice extractors for hand operation and one cutting board and stainless steel knife for each shall be furnished.

SPECIFICATION FOR COUNTER EQUIPMENT IN LOBBY FOR TENANT
ACTIVITIES BUILDING FOR NO. 2100 UNIT.

Counter. The counter shall be approximately 41'0" long, irregular in perimeter with candy counter on return face. Top 3'6" high shall be of 1 $\frac{1}{2}$ " hardwood strips mounted in a frame of dried 2" x 2"; The front shall be sheathed with 3/4" plywood or $\frac{1}{2}$ " hard masonite panels, enameled 3 coats, color selected. The interior shall be supplied with a bottom and one intermediate hardwood shelf wherever it does not interfere with equipment. The candy counter shall have a plate glass sloping front and top to the height of the bar with 5 ply panel sliding doors in back mirror faced to the front. Two glass shelves on wood brackets shall be supplied the entire length, one shall be 8" wide, the other 12" wide. All shall be made to detail.

Back Counter. There shall be two back counters, one 18'0" long; and one 20'0" long; both shall be 3'6" high by 2'0" wide; and shall be built with a 1 $\frac{1}{2}$ " thick hardwood top mounted on a hardwood frame. The face shall be built with a series of drawers 6" high in a 7/8" solid frame; drawers shall be about 2'0" wide with wood pulls. The lower portion shall have sliding doors built in 4'0" units, 2 doors to each unit with 2 intermediate shelves in each compartment.

Soda Units. There shall be two Bob-tail soda units 5'6" long, standard construction throughout, Bastian-Blessing or equal, each containing the following:

One soda draft arm connected to standard, large capacity soda cooler in cabinet arranged for same.

One plain water draft arm connected to standard water cooler in cabinet arranged for same.

Six standard soda syrup pumps and jars.

Four standard crushed fruit jars with covers and ladles.

Two sinks each approximately 12" x 16" x 12".

One cold storage compartment with sliding or lift cover. This compartment also equipped with standard large capacity soda and water coils.

One 9" diameter running water dishervat.

One standard automatic tumbler rinser.

Compressor. There shall be one electric automatic refrigerating compressor and two coils for the Bob-tail or equal soda unit.

Ice Cream Cabinet. Two ice cream cabinets each six-hole double row type with self contained compressor and coil shall be furnished by local ice cream manufacturer.

Under Bar. Balance of under bar shall be 1-3/8" hardwood shelf.

Carbonator. One United American Soda Fountain Co. or equal carbonator shall be furnished and installed in store room next to the counter and properly hooked up to dispensing apparatus in Bob-tail soda unit. Type of electric service available at project shall be determined and apparatus supplied of proper type for use of same. Used carbonators may be substituted if they are in perfect working condition and can be guaranteed for one year.

Display. Two display units shall be in two tiers of 7/16" glass 12" wide on wood standards and supports, properly spaced to prevent cracking of glass and as per details.

Mixers. Four mixers shall be Hamilton Beach or equal with motor to start when container is in position and stop when it is removed. There shall be an extra button on the agitator rod: Chromium plated or approved plastic cup shall be furnished.

Blenders. Two Waring Blenders or equal with 7" drain at base and cord to connect into A. C. outlet shall be furnished.

Squeezers. One Hamilton Beach or equal juice extractor for hand operation and one cutting board and stainless steel knife for each shall be furnished.

SODA FOUNTAIN UTENSILS AND FURNISHINGS

List A. The following list of utensils is for the soda fountain in the lobby of the tenant activities building in the Unit Nos. 250-400, 650-1000, 1500-2100. It is to be used only where cafeterias are not provided.

<u>GLASSWARE, CHINAWARE & FLATWARE</u>	Unit Nos.	250 400	650 1000	1500 2100
Banana Splits	2 doz.	2 doz.	2 doz.	
Cups, Coffee	4 "	6 "	8 "	
Forks, Dessert	12 "	12 "	18 "	
Glasses, Coca Cola	12 "	12 "	18 "	
Goblets, Soda	6 "	8 "	12 "	
Knives, Dinner	12 "	12 "	12 "	
Plates, Pastry - 7"	4 "	6 "	8 "	
Plates, Sandwich - 9"	4 "	6 "	8 "	
Saucers, Coffee	4 "	6 "	8 "	
Sherbets	2 "	4 "	5 "	
Spoons, Soda	6 "	12 "	12 "	
Spoons, Tea	12 "	12 "	18 "	
Sundaes, Fancy	3 "	3 "	4 "	
Tumblers, Malt	4 "	4 "	6 "	
Tumblers, Water	12 "	12 "	18 "	

FOUNTAIN SUPPLIES

Bain Marie, Hall or equal - 1/4 gal.	6 ea.	6 ea.	12 ea.
Bain Marie, Hall or equal - 1/2 gal.	4 "	4 "	8 "
Bain Marie, Hall or equal - 1 gal.	4 "	4 "	6 "
Board, Cutting	1 "	1 "	1 "
Bowls, Covered	3 "	3 "	6 "
Bowl, Hardwood - 15" diameter	1 "	1 "	1 "
Bowl, 15" - Yellow Mixing	1 "	1 "	1 "
Bowl, 10" - Yellow Mixing	2 "	2 "	2 "
Bowl, 8" - Yellow Mixing	4 "	4 "	4 "
Butter Cutter	1 "	1 "	1 "
Cake Covers, 12"	4 "	4 "	6 "
Can Opener, Edlund or equal, 14" x 6 1/4"	1 "	1 "	1 "
Coffee Bowls - Dorex or equal	6 "	6 "	12 "
Coffee Maker - Dorex or equal	1 "	1 "	2 "
Crocks, Stone - 1/2 gal.	12 "	12 "	12 "
Crocks, Stone - 1 gal.	8 "	8 "	10 "
Crocks, Stone - 2 gal.	3 "	3 "	5 "
Cups, Mixing - to fit mixer	6 "	6 "	6 "
Cutlery Boxes	1 "	1 "	2 "
Dishers, Ice Cream - 12's	3 "	5 "	8 "
Dishers, Ice Cream - 16's	3 "	5 "	8 "
Dishers, Ice Cream - 20's	3 "	5 "	8 "

FOUNTAIN SUPPLIES (cont'd)	Unit Nos.	250- 400	650 1000	1500 2100
Dispenser, Malted Milk - Straus U 1715 or equal	1 ea.	1 ea.	1 ea.	
Double Boiler - 4 qts.	1 "	1 "	1 "	
Extractor, Sunkist Juice or equal	1 "	1 "	1 "	
Funnel, Cream	1 "	1 "	1 "	
Ice Picks	1 "	1 "	2 "	
Ice Tongs	1 "	1 "	2 "	
Ice Chipper	1 "	1 "	2 "	
Kettle, Sponge - 12 qts.	1 "	1 "	1 "	
Knife, French	2 "	2 "	2 "	
Knife, Paring	2 "	2 "	3 "	
Knife, Sandwich	2 "	2 "	2 "	
Knife, Sandwich Spreading	4 "	4 "	6 "	
Ladles, Crushed Fruit	6 "	6 "	12 "	
Napkin Holder	3 "	5 "	6 "	
Napkins, Paper (10M) 13 $\frac{1}{2}$ " x 13 $\frac{1}{2}$ "	1 pkg.	1 pkg.	2 pkg.	
Pail, 12 qts. - galvanized	2 ea.	2 ea.	4 ea.	
Pail 10 gal. - garbage	2 "	2 "	4 "	
Pan, Dish	1 "	1 "	1 "	
Pan, Lettuce	1 "	1 "	2 "	
Pan, Sandwich Spread	6 "	6 "	8 "	
Pan, White Enamel	2 "	2 "	2 "	
Pan, White Enamel	2 "	2 "	2 "	
Pan, White Enamel	2 "	2 "	2 "	
Pitchers, Fudge	6 "	6 "	12 "	
Pitchers, Syrup	2 "	2 "	4 "	
Reamer, Sunkist or equal	2 "	2 "	4 "	
Scale, 25 lbs.	1 "	1 "	1 "	
Scoop, Ice	1 "	1 "	2 "	
Setups, Counter	5 "	5 "	12 "	
Shakers, Nutmeg	1 "	1 "	2 "	
Shakers, Pepper	4 doz.	6 doz.	6 doz.	
Shakers, Salt	4 "	6 "	6 "	
Shredder, Lettuce	1 each	1 each	2 each	
Slicer, Meat	1 "	1 "	1 "	
Spade, Ice Cream	1 "	1 "	1 "	
Spatula	1 "	1 "	2 "	
Sponges, Cellulose	1 "	1 "	2 "	
Spoons	4 "	4 "	6 "	
Spoons, Wooden	3 "	3 "	6 "	
Strainer, 8", Wire Extension	3 "	3 "	4 "	
Straw Jars	2 "	2 "	4 "	
Straws, Soda (10M)	1 pkg.	1 pkg.	2 pkg.	
Washing Powder - Tay-Kof or equal 50# drum	3	4	5	
Whip, 16" - Piano Wire	1 each	1 each	2 each	

SODA FOUNTAIN UTENSILS AND FURNISHINGS

List B. The following list of utensils is for the soda fountain in the lobby of the tenant activities building in the Unit Nos. 250-400, 650-1000, 1500-2100. It is to be used only where cafeterias are provided.

<u>GLASSWARE, CHINAWARE & FLATWARE</u>	Unit Nos.	250 400	650 1000	1500 2100
Banana Splits	2 doz.	2 doz.	2 doz.	
Glasses, Coca Cola	12 "	12 "	18 "	
Goblets, Soda	6 "	8 "	12 "	
Sherbets	2 "	4 "	5 "	
Spoons, Soda	6 "	12 "	12 "	
Sundaes, Fancy	3 "	3 "	4 "	

FOUNTAIN SUPPLIES

Board, Cutting	1 ea.	1 ea.	1 ea.
Bowls, Covered	3 "	3 "	6 "
Bowl, Hardwood - 15" diameter	1 "	1 "	1 "
Cake Covers, 12"	4 "	4 "	6 "
Coffee Bowls - Dorex or equal	6 "	6 "	12 "
Coffee Maker - Dorex or equal	1 "	1 "	2 "
Cups, Mixing - to fit mixer	6 "	6 "	6 "
Cutlery Boxes	1 "	1 "	2 "
Dishers, Ice Cream - 12's	3 "	5 "	8 "
Dishers, Ice Cream - 16's	3 "	5 "	8 "
Dishers, Ice Cream - 20's	3 "	5 "	8 "
Dispenser, Malted Milk - Straus U 1715 or equal	1 ea.	1 ea.	1 ea.
Double Boiler - 4 qts.	1 "	1 "	1 "
Extractor, Sunkist Juice or equal	1 "	1 "	1 "
Funnel, Cream	1 "	1 "	1 "
Ice Picks	1 "	1 "	2 "
Ice Tongs	1 "	1 "	2 "
Ice Chipper	1 "	1 "	2 "
Ladles, Crushed Fruit	6 "	6 "	12 "
Mixers, Drink - Hamilton Beach or equal	2 "	4 "	4 "
Napkin Holders	3 "	5 "	6 "
Napkins, Paper (10M) 13 $\frac{1}{2}$ " x 13 $\frac{1}{2}$ "	1 pkg.	1 pkg.	2 pkg.
Pail, 12 qts. - galvanized	2 ea.	2 ea.	4 ea.
Pail, 10 gal. - garbage	2 "	2 "	4 "
Pan, Dish	1 "	1 "	1 "
Pitchers, Fudge	6 "	6 "	12 "
Pitchers, Syrup	2 "	2 "	4 "
Scoop, Ice	1 "	1 "	2 "
Setups, Counter	5 "	5 "	12 "
Shakers, Nutmeg	1 "	1 "	2 "
Spade, Ice Cream	1 "	1 "	1 "
Sponges, Cellulose	1 "	1 "	2 "
Straw Jars	2 "	2 "	4 "
Straws, Soda (10M)	1 pkg.	1 pkg.	2 pkg.
Washing Powder - Tay-Kof or equal 50# drum	3 "	4 "	5 "

