Material Handling USA

ESTEY SPECIFICATIONS

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TENNSCO CORP.
ESTEY WELD FRAME SPECIFICATIONS

DESIGN:

Shelving is a cantilever design manufactured by **Estey/Tennsco Corp.**, Dickson, TN. The bookstack section may be removed as a modular unit from any range without disturbing adjacent units in any way. Relocation and reuse of removed section(s) can be accomplished without acquiring additional parts. The uprights and cross member supports make up the fully welded frame construction, available with either closed fixed base shelf or adjustable base shelf with kickplate. Uprights are punched for bolting additional Weld Frame units into the bookstack range. Shelving design allows for either static or mobile installation.

MATERIAL AND WORKMANSHIP:

The shelving is made from only the finest materials and workmanship. All sheet metal is commercial quality furniture stock steel, hot & cold rolled, reannealed, fully pickled or equivalent. All gauge thicknesses conform to U.S. standards.

CAPACITY REQUIREMENTS:

Each shelf has a minimum clearance between end brackets of 35 13/32". Unit widths are 36" nominal overall. When properly installed, units are capable of supporting 50 lbs. evenly distributed weight per linear foot of shelving, multiplied times the number of shelves per unit, without deflection considered excessive by industry standards.

COLOR:

Shelving colors may be selected from Estey's standard color chart, or ordered special as requested.

FINISHES:

Shelving colors are as described above, with an epoxy powder applied electrostatically. The finish yields a minimum average thickness of 1.0 to 1.8 mils and has a medium gloss. Abrasion resistance requires a minimum of 60 liters of sand to remove finish to bare metal, as determined by **Library Technology** test guidelines.

SEISMIC REQUIREMENTS:

The Estey Weld Frame system conforms to the particular standards of all seismic codes through the use of seismic sway bracing, floor anchoring, trapezoidal gussets, or any combination thereof.

NOTE:

The following are the Estey standard Manufacturing Specifications for the Weld Frame system. For special application requirements not listed below contact factory.

1) UPRIGHT COLUMNS of the Weld Frame are formed of not less than #16 gauge steel into a channel shape with a total of 3/4" of stiffening flanges on the inside of the upright. Overall dimensions are 2 1/2" in the web and 1 1/4" across the front and rear area surfaces. Uprights are perforated the full height with a series of 1/4" x 5/8" slots spaced 1" on vertical centers and located within 5/16" of the outer web surface. Every fifth and sixth slot has square corners as viewed against the remaining rounded corner slots to aid visual alignment of shelves. This pattern is repeated over the full height of the upright.

2) TOP SPREADERS are formed of not less than #16 gauge tubular steel measuring 1"x 3" in cross section. The spreader is electrically welded to the uprights.

3) BOTTOM SPREADER of the Weld Frame is a channel shape measuring 1" x 1 3/4" in cross section, and consists of not less than #16 gauge steel. The outer ends of the channel are punched to receive leveling nuts and floor levelers. The bottom channel is electrically welded to the uprights with the open face of the channel positioned upward. Weld Frames heights are as specified; widths are 36" standard. Weld Frames are equipped with two (2) adjustable floor levelers. Levelers can be provided with an optional elastomeric plastic shoe to prevent "walking" of units. Levelers are either inverted hex head mushroom type standard for regular floors or conical (pin) point type, optional.

4) CLOSED BASE BRACKETS are designed to fit snugly in and around the welded frame upright. Material is no less than #16 gauge steel. Brackets have a 90 degree flange at the bottom to rest on the floor covering. Hardware for leveling the bookstack is included. Top and front edge of the base bracket are flanged outward approximately 1/4". The profile of the bracket matches that of the adjustable shelf end bracket. The embossed area incorporates a hole to allow attaching of adjoining base brackets with a fastener.

5) CLOSED BASE SHELVES are formed from not less than #18 gauge steel into a one piece construction designed to fit snugly around base brackets without the need for fasteners. Front height is 3 5/16", and sides have stiffening flanges.

6) ADJUSTABLE SHELVES are formed of #18 gauge steel with the front and rear edges having a box-formed, 13/16" high profile capable of receiving wire book supports and snap-on label holders. The nominal depth of shelf is 1" greater than the actual dimension. The sides of the shelf are flanged for locking into end bracket lances. Shelves are capable of supporting 50 lbs. per linear foot without deflection in excess of 3/16".

7) SHELF END BRACKETS are formed of not less than #16 gauge steel, with all but the rear edge flared outward approximately 1/4". The rear edge has two crimped hooks at the top for engaging frame upright slots, and a positioning tab at the bottom to prevent accidental dislodgement. The bracket incorporates two lances with protruding dimples in the sides for securing shelf side flanges. Bracket design allows for shelf adjustment upward and downward (i.e. "walking-the-shelf") without disturbing any of the other shelves. Bracket emboss prevents overlapping of adjoining brackets. Brackets extend at least 6" above the shelf surface.

8) NO. OF SHELVES per unit are as listed below, unless otherwise specified.

HEIGHT	NO. of ADJUSTABLE SHELVES
93"	7
90"	6
84"	6
78"	5
66"	4
42"	2

9) OVERHEAD TOP BRACING is made of #18 gauge steel measuring 7/8" x 2" x 96" and is used at a ratio of one length for every three units of double faced bookstack sections.

10) SLOPING PERIODICAL SHELVING is equipped with adjustable alternating display and storage shelves as follows: Flat storage shelves, when ordered, may be any standard size and are mounted on inverted brackets. Sloped display shelves are at least 12" actual height with a 1 5/16" flange at the bottom and boxed flanged upwards with inside safety hem. Brackets allow for a slope of approximately 30 degrees from vertical. Display shelves are equipped with rubber bumpers on support brackets for sound deadening, and will remain positively located without holding them open.

11) PIVOTING PERIODICAL SHELVING consists of pivoting display shelves hinged to shelf brackets which engage in slots in upright. Sloped display shelves are 14" actual height with a 1 5/16" flange at the bottom and boxed flanged upwards with inside safety hem. Included storage shelf is 12" deep nominal. Brackets allow for a slope of approximately 20 degrees from vertical.

12) TWO PIECE DIVIDER TYPE SHELF is formed of no less than #18 gauge steel and resembles a standard adjustable storage shelf except for slots on 1" centers to receive dividers. A separate 5" high back piece with matching slots serve as a back for the shelf. Standard quantity and size of divider is five (5) per shelf with an overall height of 7 7/16".

13) STEEL CANOPY TOPS are formed of no less than #19 gauge steel. Tops have a 13/16" front edge and extend the full width and depth of the unit base. Tops are supported by #14 gauge brackets engaged in slots in the frame uprights.

14) HPL COUNTER TOPS have a high pressure laminate surface on top and edges which covers a particleboard core, producing an overall height of 1 3/16". Underside of countertop is covered by a balancing sheet. Support is from #14 gauge brackets engaged in slots in upright frames.

15) STEEL END PANELS cover the entire height and depth of the unit. Panels are formed from #18 gauge steel in a one piece construction to create a flush profile with a 1 1/2" square edge and exposed return flange of no less than 3". Closure flanges at top produces tightly closed corners. Centers of double faced panels are equipped with a full height channel (which is resistance-welded to panel) for use in securing panel to upright and for sound deadening.

16) HPL WOOD END PANELS have a high pressure laminate surface on all exposed surfaces and edges, which covers a particleboard core and produces an overall thickness of either 3/4" or 1 1/4", as specified. Core to have a density of not less than 45 lbs.

ACCESSORIES:

A) BOOK SUPPORTS

1) Wire book supports are either 6" or 9" high, and made from zinc plated 3/16" diameter steel wire. Profile allows for easy positioning into underside of above shelf flanges. Supports have a return leg and a rubber boot on the opposite leg to ensure against slippage due to weight of books.

2) Non-losable plate-type book supports of 6" or 9" high are made of #16-19 gauge steel and include a non-skid composition on the base.

3) Lock-on book supports, 6" or 9" high, are made of #16-19 gauge steel and are designed to fit around and hook onto adjustable shelf edge.

B) SHELF LABEL HOLDERS are made of plastic to tightly grip the edges of book or divider type shelves for card size of 5/8" x 5".

C) CARD HOLDERS are made with a #20 gauge standard black powder coated finish, and are sized to accommodate 3" x 5" cards. Card holder is provided with double-faced tape to ensure positive adhesion to end panel surface.

D) RANGE FINDERS consist of #22 gauge steel formed into a "V" shape, furnished in standard black powder coat finish, and are sized to accommodate 3" x 5" cards.

E) STEEL BACK PANELS are of a one-piece construction with (2) mounting channels, and completely fill the space between upright channels. Backs extend from base shelf to the underside of the top spreader, and are formed from #18 gauge steel.

F) CORNER FILLERS are formed from #18-20 gauge steel to dimensions as required. Each filler includes a tightly fitting cap.

G) WORK SHELVES are 36" wide by 24" deep, and are supported by #14 gauge inverted brackets engaged into slots in the upright frame. Tops consists of a high pressure laminate as selected covering 1 1/8" cores, and are self-edged with a balancing sheet on bottom.

H) SLIDING REFERENCE SHELVES are formed from #18 gauge steel. Reference shelves attach to brackets of book shelves and extend the same depth of shelf above when fully extended. Reference shelves operate on ball bearing double extension slides.

I) NEWSPAPER RACKS are formed from #16 gauge steel, and are designed to hold six or ten newspaper sticks as specified. Racks are adjustable vertically on unit, and

can be incorporated into any standard shelving unit of 12" nominal depth of larger.

J) SHELF BACKSTOPS are formed of #18 gauge steel, and have an overall height of 2". Backstops have return stiffening flanges and slots for engaging in shelf end bracket tabs.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.