



## Series 2000 Clip Shelving

### Angle Post

Post material shall be 14 gauge, hot-rolled, pickled and oiled steel. Angle post shall be roll formed, the overall shape being that of an angle, the side leg which shall be 1-7/8", and the front leg which shall be 1". The 1-7/8" leg of the angle shall have a channel shaped rolled into it for added strength. Both legs shall be punched with 5/16" diameter holes on 1-1/2" centers for attaching shelves, backs, uprights and accessories.

Rectangular slots 7/16" x 15/32" shall be punched in the 1-7/8" leg to accommodate shelf clips. Posts shall be longer by 1" than the designated length in feet. Available heights are 3'-1" through 16'-1". Angle posts are available in 1-1/2" height increments. Overall height of spliced posts will be 2" over the nominal full foot heights.

### Beaded Post

Post material shall be 14 gauge, hot-rolled, pickled and oiled steel. Front face of beaded post 7/8". Overall side dimension of post 2-11/16". Post sides to be punched with 5/16" diameter holes on 1-1/2" centers for attaching shelves, side sheets and accessories. 7/16" x 15/32" rectangular slots shall be punched on 1-1/2" centers on both sides for attaching shelf clips. Posts shall be longer by 1" than the designated length in feet. Available heights are 3'-1" through 16'-1". Beaded posts are available in 1-1/2" height increments. Overall height of spliced posts will be 2" over the nominal full foot heights.

### Angle Post Splice

Post splice shall be made from 13 gauge, hot-rolled steel. Angle shaped 3/4" x 1-1/8". Length 5". Punched with four 5/16" diameter holes on each leg of angle for attaching to angle posts. Used to tie two angle posts together to obtain higher units.

### Beaded Post Splice

Post splice shall be made from 1/4" x 1-1/4" bar stock. Length 5". Punched with four 5/16" diameter holes for attaching to beaded posts. Used to tie two beaded posts together to obtain higher units.

### Angle/Beaded Post Foot Plate

Foot plate shall be made from 13 gauge, hot-rolled pickled steel. Used for anchoring angle or beaded posts to floor and to spread post load over more floor area. Punched with one 5/16" diameter hole for attaching to post and two 7/16" diameter holes for inserting an anchor bolt. Floor must be drilled for anchoring. Size 2-1/8" x 2-7/8". Finish bright zinc plated. Anchor bolt not included.

### Series 2000 Clip Shelf

Series 2000 shelf shall be made from 18, 20, or 22 gauge, cold-rolled steel. Has 1-1/4" face on all four sides. Front and rear faces have a closed box formation nominal 1-1/4" x 3/4" bottom flange. The box formation is spot welded to the underside of the shelf on a maximum 8" centers. Sides have a 1/2" bottom return flange at 90 degrees. Shelf is interchangeable for top, bottom or intermediate positions. All four corners are reinforced by lapping and spot welding. Typical widths are 24", 30", 36", 42", 48", 54" and 60". Standard depths are 9", 12", 15", 18", 24", 30", 32" and 36". Overall depth dimension is 5/32" less than nominal size. Overall width dimension is 7/16" less than nominal size. Shelf punched for attaching shelf dividers on 1" centers. Both front and rear faces of shelf are punched for attaching label holder. All four sides of shelf punched at corner for bolting if bolted construction is desired. 18-gauge, extra heavy-duty shelves are stamped on the front and rear flange with the number "18"; 20-gauge, heavy duty shelves are stamped with the number "20"; and 22-gauge medium duty shelves are stamped with the number "22". Shelves are shipped in cartons or can be bulk palletized.

### **Shelf Reinforcing Hat Channel**

Reinforcing hat channel shall be made of 16 gauge, cold-rolled steel. The reinforcing hat channel is used to reinforce Series 2000 shelves at the center. They are only used with 18-gauge shelves. When used with side shelf supports a class 3 shelf is created. Will be punched at ends for attaching to side shelf supports. The shape is that of a hat. The flanges are 3/4" long. The height of the hat is 1-9/64". The width of the hat is 1-1/4" at the top. This channel is field attached. Lengths are available for 30", 36", 42" & 48" shelves.

### **Side Shelf Support**

Side shelf support shall be made from 13 gauge, hot-rolled steel. Each end of side shelf support provided with two lugs for attaching to posts. Top edge offset at each end to hold shelf and flanged at the center to support the shelf reinforcing hat channel. Flange at center provided with hole for attaching shelf reinforcing hat channel. Standard sizes 18", 24", 30" and 36". To be used in pairs. Overall length dimension is 1-3/16" less than listed size.

### **Shelf Clip**

Shelf clip shall be made from 13 gauge, hot-rolled, pickled, and oiled steel. Width 29/32", overall length 3-17/64". Finish shall be bright zinc plated. "LYON" is stamped on the inside surface of shelf clip. Shelf clips are available in packages of 100 or can be bulk shipped in cartons. Four shelf clips per shelf are automatically furnished with Series 2000 Clip Shelves.

### **Backs**

Shall be made from 24 gauge, cold-rolled steel. Back shall have three rows of 3/8" diameter holes punched on 1-1/2" centers. The two outside rows punched to coincide with the holes in the 1" flange of the angle post. Width of back is 13/16" less than nominal sizes. Standard widths 24", 30", 36", 42", 48", 54" and 60". Standard heights 3'-1", 3'-4", 5'-1", 6'-1", 7'-1" and 8'-1". 54" & 60" wide backs are limited to a maximum height of 5'-1". Backs are available in 1-1/2" increments. On shelving units above 8'-1" that do not use spliced posts, two shorter backs will be combined to achieve the necessary height (i.e. two 5'-1" backs would be used for a 10'-1" unit). A minimum of 1" overlap would result. On units where the posts are spliced, the height of the back will match the height of the post making the unit 2" taller than nominal. Back splices may be required where the backs are exposed.

### **Back Splice**

Back splice shall be made from 22 gauge, cold-rolled steel. Height 5", standard widths 24", 30", 36", 42", 48", 54" and 60". Punched with three rows of 5/16" diameter holes for attaching to backs and posts. Used to tie backs when posts are spliced and the backs are exposed. Overall width is 3/16" less than listed size.

### **Upright Side Sheet**

Upright side sheet shall be made from 24 gauge, cold-rolled steel. Each side punched with 3/8" diameter holes on 1-1/2" centers. No center row of holes. Overall depth dimension is 2-9/16" less than listed depths. Standard available depths are 12", 15", 18", 24", 30", 32" and 36". Heights available 3'-1" to 8'-1" in height increments of 1-1/2". On shelving units above 8'-1" that do not use spliced posts, two shorter upright sheets will be combined to get the necessary height (i.e. two 5'-1" would be used for a 10'-1" unit). A minimum of 1" overlap would result. On units where the posts are spliced, the height of the upright sheet will match the height of the post making the unit 2" taller than nominal. Side sheet splices may be required where the Upright Side Sheets are exposed.

### **Side Sheet Splice**

Side sheet splice shall be made from 22 gauge, cold-rolled steel. Height 5", standard depths 12", 15", 18", 24", 30", 32" and 36". Overall depth is 2-5/8" less than listed size. Offset at each end to fit around post. Each end punched with four 5/16" diameter holes for attaching to upright and posts. Used to tie Upright Sheets together when posts are spliced and the Upright Sheets are exposed.

### **End Upright Assembly - Angle Post**

End upright assembly consists of one plain upright sheet and two angle posts welded together to form one assembly. Maximum spacing of spot welds shall be 7-1/2" centers. Heights available 3'1" to 10'1" in height increments of 1-1/2". Heights greater than 10'1" may be obtained by splicing two standard size end upright assemblies together with angle post splices. Overall height of spliced upright will be 2" over nominal full foot height.

### **Intermediate Upright Assemblies - Angle Post**

Intermediate upright assembly consists of one plain upright sheet and four angle posts welded together to form one assembly. Maximum spacing of spot welds shall be 7-1/2" centers. Heights available 3'1" to 10'1" in height increments of 1-1/2". Heights greater than 10'1" may be obtained by splicing two standard size intermediate upright assemblies together with angle post splices. Overall height of spliced upright will be 2" over nominal full foot height.

### **End Upright Assembly - Beaded & Angle Post**

Beaded post end upright assembly consists of one plain upright sheet, one beaded post and one angle post welded together to form one assembly. Maximum spacing of spot welds shall be 7-1/2" centers. Heights available 3'1" to 10'1" in height increments of 1-1/2". Heights greater than 10'1" may be obtained by splicing two standard size end upright assemblies together with beaded and angle post splices. Overall height of spliced upright will be 2" over nominal full foot height.

### **Intermediate Upright Assembly - Beaded & Angle Post**

Beaded post intermediate upright assembly consists of one plain upright sheet, one beaded post and two angle posts welded together to form one assembly. Maximum spacing of spot welds shall be 7-1/2" centers. Heights available 3'1" to 10'1" in height increments of 1-1/2". Heights greater than 10'1" may be obtained by splicing two standard size intermediate upright assemblies together with beaded and angle post splices. Overall height of spliced upright will be 2" over nominal full foot height.

### **Sway Braces - Side or Back**

Diagonal sway braces shall be made from 3/4" x 12-gauge steel and are punched at each end with 9/32" diameter hole for attaching to angle or beaded post. Standard sizes 20-7/8" long for units 9" and 15" deep; 34-11/16" long for units 12" and 24" deep, and units 24" wide; 40-29/32" long for units 18" and 24" deep, and for units 30" wide; 46-21/32" for units 32" deep; 50-7/16" long for units 30" and 36" deep, and units 36" wide; 62-9/32" long for units 42" and 48" wide; 64-9/32" long for units 54" wide and 69-5/16" for units 60" wide.

### **Front Base - Angle and Beaded Post**

Front base shall be made from 22 gauge, cold-rolled steel in widths up to 48" and 18 gauge for 54" and 60" wide. The top and bottom flanges are 1/2". The 1-1/2" and 3" high bases are punched with one hole at each end. The 4-1/2" base is punched at each end with two holes. The 1-1/2" high base positions the bottom shelf 2-1/2" off the floor. The 3" high base positions the bottom shelf 4" off the floor and the 4-1/2" base positions the bottom shelf 5-1/2" off the floor. Standard heights 1-1/2", 3" and 4-1/2". Standard widths 24", 30", 36", 42", 48", 54" and 60". Overall height dimension is 1/8" less than listed size. Overall length dimension 5/8" less than listed size.

### **Front Base Attachment - Angle Post**

Front base for angle posts is attached to post by two Tinnerman nuts and two #10 x 1/2" sheet metal screws. On 4-1/2" high bases, use four attachments. Half shelf clips are automatically furnished with 1-1/2" bases.

### **Front Base Attachment - Beaded Post**

Front base for beaded posts is attached by using two base clips and attached to the post with bolts and nuts. The base clip is then attached to the base front by sheet metal screws. On 4-1/2" high bases, use four attachments. Half shelf clips are automatically furnished with 1-1/2" bases.

**Base Clip**

Base clip used to attach front bases to beaded post. Clip is made from 18-gauge steel. One side punched with 5/16" diameter hole for attaching to beaded post with bolt and nut. Other side punched with 5/32" diameter hole for attaching to front base with sheet metal screw. The base clip used with 1-1/2" high bases is 7/16" wide x 1" high x 1-5/16" deep. The base clip used with 3" and 4-1/2" high bases is 1-1/16" wide x 3/4" high x 1-1/16" deep. Different clips are used because on the 1-1/2" high base the base clip bolts to the half shelf clip. Finish bright zinc plated.

**End Base**

End base shall be made of 22 gauge, cold-rolled steel. Base end is attached by two Tinnerman nuts, and two #10 x 3/4" sheet metal screws. End base may be used with angle, beaded or heavy-duty posts. Standard heights 1-1/2" and 3". Standard depths 12", 15", 18", 24", 30" and 36". Overall length is 2-11/32" less than listed size. Overall height dimension is 1/8" less than listed size.

**Label Holder**

Label holder shall be made from 28 gauge, cold-rolled steel. Face of label holder 7/8" and punched with three 5/16" diameter holes for attaching to front face of Series 2000 shelf with nylon panel clips. Top and bottom folded over provides a groove for inserting of 1" labels. Standard widths 36", 42" and 48". Overall width dimension is 2-1/4" less than listed size.

**Shelf Divider – Main**

Shelf divider shall be made from 22 gauge, cold-rolled steel up to and including 18" high. 21" and 24" high dividers shall be made from 20 gauge, cold-rolled steel. Front and rear edges beaded. Top and bottom have 3/4" flange punched with two 5/16" x 1/2" slots for attaching to Series 2000 shelf with nylon panel clips. Overall is 13/16" less than listed depth. Standard depths 12", 15", 18" and 24". Standard heights 6", 7-1/2", 9", 10-1/2", 12", 13-1/2", 15" 16-1/2", and 18". If dividers are used with shelves having class 3 reinforcing hat channel, they must be specially notched.

**Angle Divider**

Angle divider shall be made from 22 gauge, cold-rolled steel. Angle dividers have 3/4" flange at bottom only. Bottom flange punched with two 5/16" x 1/2" slots for attaching to shelf at bottom only. Must be attached with bolts and nuts. Overall depth is 13/16" less than listed depth. Standard depths 12" and 18". Standard heights are 2", 3" and 4".

**Shelf Box**

Shelf boxes 4-1/8", 5-1/2" and 8-3/8" wide shall be made from 22 gauge, cold-rolled steel. 11-1/8" wide box shall be made from 20 gauge, cold-rolled steel. Shelf box made from three-piece welded construction. Rigid handle provided at front of box. Label holder on front and rear. Box slotted for dividers on 1" centers. All shelf boxes are 4-5/8" high and fit between shelves spaced on 6" centers. Standard widths 4-1/8", 5-1/2", 8-3/8" and 11-1/8". Standard depths 11-5/8", 17-5/8" and 23-5/8".

**Box Divider**

Box divider shall be made from 26 gauge, cold-rolled steel. Punched for card holder so that every compartment can be indexed. Standard width sizes 4-1/8", 5-1/2", 8-3/8" and 11-1/8". Standard height 4-5/8".

**Box Guide**

Box guide shall be made from 24 gauge, cold-rolled steel. Used as guide on side of shelf to prevent angle post from interfering with sliding boxes. Two box guides required per shelf. Attached to posts by bolt and nut. Overall height 1-3/8". Standard depths 12", 15", 18" and 24". Overall depth dimension is 1/2" less than listed size.

**Doors – Swinging**

Doors shall be made from 20 gauge, cold-rolled steel, top and bottom frame 16 gauge, cold-rolled steel, side frame 14 gauge and reinforcing panel 24 gauge. Each door is reinforced on the inside to prevent warping and each pair has its own rigid frame to prevent sag. A three-point locking mechanism is controlled by an "L" shaped handle with a built-in lock. Standard widths are 36" and 48". Shelving unit must be plumb and square before installing swinging doors.

**Post Corner Cover Plate**

Corner cover plate shall be made from 22 gauge, cold-rolled steel. Used to cover corner angle posts to give finished appearance. Formed in shape of angle, front leg 1-9/16", side leg 2-1/2". Attached to post by means of #12 x 1/2" sheet metal screw. No holes on outside corner cover plate. Standard lengths are 3'4", 6'-1" and 7'1".

**Post Intermediate Cover Plate**

Intermediate cover plate shall be made from 22 gauge, cold-rolled steel. Used to cover angle posts at intermediate position to give finished appearance. Attach by placing leg of clip angles, which are spot welded to cover, between legs of angle posts. No holes on outside of intermediate cover plate. Overall width 2-1/4". Standard lengths are 3'4", 6'-1" and 7'1".

**Post Side Cover Plate**

Cover plate shall be made from 22 gauge, cold-rolled steel. Used to cover side of angle post when door is used to give finished appearance. Overall width 2", attached by means of #12 x 1/2" sheet metal screw. No holes on outside face of cover plate. Standard sizes 3'4", 6'1", and 7'1".