

## Four-Post Shelving

- a. Design: Wedge-lock type consisting of uprights, shelves, and shelf supports, designed to be assembled without fasteners or clips. Shelves shall not have any holes on exposed surfaces. Front and back flanges shall be flush with outside faces of posts. Design shall permit individual shelf adjustment and/or removal anywhere along the entire height of uprights.
- b. Materials and Workmanship: Fabricate units from Class 1, cold-rolled steel sheet with all bends sharp and true and no exposed “knife” edges.
  - 1) All units shall be free of burrs, sharp edges and projecting hardware with smooth, non-abrasive surfaces and edges.
  - 2) After fabrication, shelving shall exhibit no dents, “oil canning”, buckling or other surface irregularities.
- c. Uprights: Formed from steel sheet to a hollow “tee” shape for intermediate supports and formed angles for end supports. Uprights shall have keyhole slots on inner wall only. Provide with sheet steel panels full height and depth of end uprights. Provide intermediate “tee” uprights between adjacent units.
- d. Shelves: Form from sheet steel with flanges on all sides and return hem on front and back flanges. Ends shall be formed to clear inside of upright offset panels. Shelves shall be independently adjustable. Provide all shelves with slots for file dividers.
- e. Canopy Tops: Same construction as shelf units.
- f. Shelf Supports: Form from heavy gauge steel sheet with four solid steel shoulder rivets, two per ear, that interlock with inner wall of uprights.
- g. Nominal Shelf Dimensions:
  - 1) Standard Width: 36 inches (914MM), with 30, 42, or 48 inch (762, 1067, or 1219MM) sections used to meet project requirements.
  - 2) Shelf Edge Vertical Profile: 3/4 inch (19MM) maximum.
  - 3) Vertical Adjustment Increment: 1-1/2 inches (38MM).
  - 4) Width Of Intermediate Uprights: 2 inches (51MM).
  - 5) Clearance Between Uprights: Nominal shelf section width minus 2 inches (51MM).
  - 6) Levelness Of Completed Shelf Units: Maximum 1/8 inch (3.2MM) between bottom shelf and canopy top, measured along the edge of any upright in any direction.
  - 7) Number of Vertical Shelf Spaces: As indicated on the drawings [\_\_\_\_\_].
  - 8) Vertical Shelf-To-Shelf Spacing: As indicated on the drawings [\_\_\_\_\_].
- h. Load Carrying Capabilities: Provide shelf units capable of supporting 40 pounds per lineal foot (18kg/305MM) with maximum deflection of L/140. Shelves shall exhibit no permanent deflection under fully loaded conditions.
- i. Accessories: Provide [\_\_\_\_\_] file dividers per shelf.
- j. Powder Coat Paint Finish: All parts are cleaned in a six stage surface prep machine prior to coating, including:
  1. Heated alkaline wash
  2. Fresh water rinse

3. Heated iron phosphate coat
4. Fresh water rinse
5. Recirculated deionized water rinse
6. Fresh deionized water mist

After prepping, the material is dried at 250 degrees for 5-1/2 minutes.

The painting process is an electrostatically applied powder coating system using an epoxy-polyester hybrid powder paint. All overspray is collected and reused within the self-contained application booths with no venting or emissions to the environment. The film is applied to an average thickness of 1 to 1.5 mils.

The coated parts are then oven cured for 20 minutes at up to 450 degrees to provide a furniture quality finish. The hot parts are cooled to ambient temperature prior to packaging.

After curing, the paint finish is inert and no volatile emissions are present. There are no fugitive (stray) emissions in the finished product.

During the manufacturing process, there are no volatile emissions and there is no hazardous waste produced.

Gloss: 50 - 60 degrees  
Impact Resistance: 160 in. lbs.  
Flexibility: 180 degrees, 1/4" mandrel  
Pencil Hardness: 2H  
Cross Hatch Adhesion: 100%

Color to be selected from manufacturers standard color card.

## **MANUFACTURERS**

General: Products are based upon mobile shelving system products manufactured by Spacesaver Corporation. Spacesaver or equal as determined by owner/architect.  
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