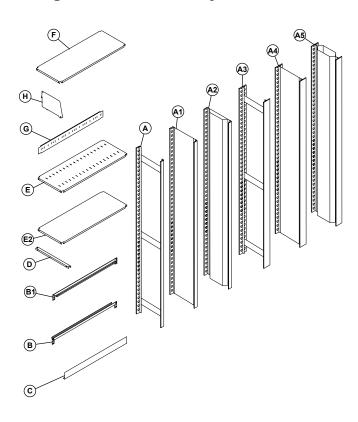
INSTALLATION MANUAL

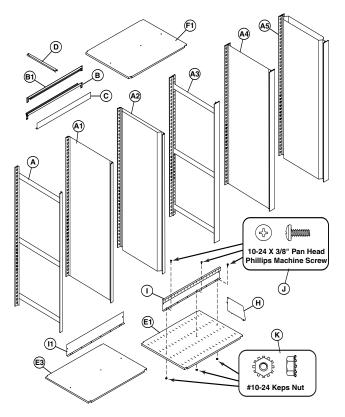
Static 4-Post Shelving Systems

Including: 4-Post open and closed upright systems and Case Type shelving systems.

Single Face Assembly Identification



Double Face Assembly Identification



A - Open Angle Upright (4-Post) A1 - Closed Angle Upright (4-Post) A2 - Closed Angle Upright (Case) A3 - Open Tee Upright (4-Post) A4 - Closed Tee Upright (4-Post) A5 - Closed Tee Upright (Case) B - Shelf Support (F) B1 - Shelf Support (H) C - Front Base D - Shelf Reinforcement E, E1 - Slotted Shelf E2, E3 - Plain Shelf F, F1 - Canopy Top Shelf G - Back Stop H - File Divider - Center Stop (Dividers) 11 - Center Stop (Plain) J - Pan Head Screw K - Keps Nut

PRE-INSTALLATION



Before you begin installation:

- Read through the installation procedure before starting the project.
- 2. Understand all safety statements.
- Make sure your shelving system will fit within the desired location.
- Plan to assemble the shelving system where it will be used. Once fully assembled, the unit may be difficult to move.
- Have the necessary tools for assembling and leveling the unit

Required tools include:

- Power screwdriver or Portable Hand Drill
- · Phillips Driver Bit
- Leveling Device
- Utility Knife
- Dead Blow Hammer
- · Slotted Screwdriver (assorted sizes)
- Phillips Screwdriver (assorted sizes)
- Measuring Rule or Tape
- 6. Keep these instructions for future references.

A Warning

Wear eye protection and other applicable safety equipment while assembling your shelving system. Know how to safely operate the required power tools before starting this project.

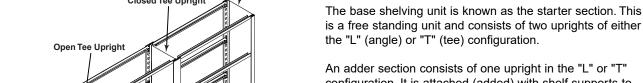
A Caution

Shelving must be anchored to the floor wall or carriage at every upright. Anchor through holes in HC shelf supports or see appropriate instructions:

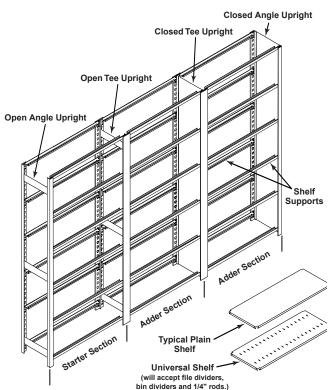
BRKT-STAT for floor anchoring
UWA for wall anchoring

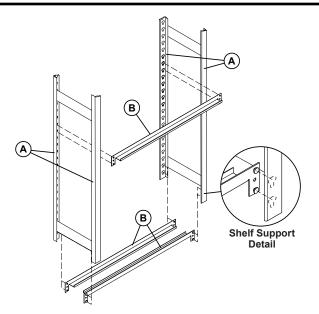
INSTALLATION

Starter and Adder Sections



An adder section consists of one upright in the "L" or "T" configuration. It is attached (added) with shelf supports to the starter section. This type of adding can continue until the shelving unit is terminated with an "L" upright.





NOTE: Cut shelf supports may be provided for use in the lowest upright location. These have only one rivet and sit closer to the floor.

A Important

If the optional case type shelving foam filler is to be used, install foam in the bottom of the uprights before beginning assembly.

- Hold uprights (A) in place and temporarily insert a shelf support (B) near the midpoint of the back posts to space the uprights. Drive the support in place if this is to be it's final location. If the final shelf location is not yet known, then set this support temporarily.
- With the uprights (A) in place, position the bottom rear shelf support (B) with the rivet tabs pointed down. If an optional 2-1/2" front base is to be used, insert the rivets in the 1st and 2nd keyhole slots. For a 4" front base use the 2nd and 3rd keyhole slots.

NOTE: When driving shelf supports in place, it is best to drive in one side securely then drive the other side in place. Strike the shelf support as close to the upright as possible to avoid bending.

NOTE: The standard shelf positions for a filing application are shelves spaced 10-1/2" on center with a 9-3/4" clear opening.

A Important

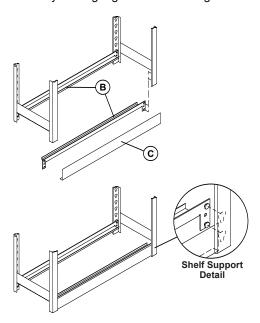
If an optional back panel is to be used, it should be installed now. Refer to the Back Panel installation sheet on the last page.

Assembly of the Base Unit

NOTE: Assembly of Single Face or Double Face 4-Post open or closed upright shelving and Case Type shelving is essentially the same. This also applies for standard "L" (angle) type uprights and "T" (tee) type uprights. The only difference between the "L" and "T" uprights is the "T" has keyhole slots on both sides of the upright to allow additional shelving to be added onto the base unit. This manual illustrates the assembly of a 4-Post open, "L" (angle) upright type shelving system with differences for Case Type shelving and heavy-duty shelving noted.

NOTE: Assemble the unit from the bottom up. Use two people to ease assembly. Know the number of shelves, their location and spacing ahead of time. Also, if using a front base, know it's height to allow proper placement of the bottom shelf supports.

NOTE: 18 gauge heavy-duty 4-Post shelving is identical to assembly of 22 gauge 4-Post shelving.

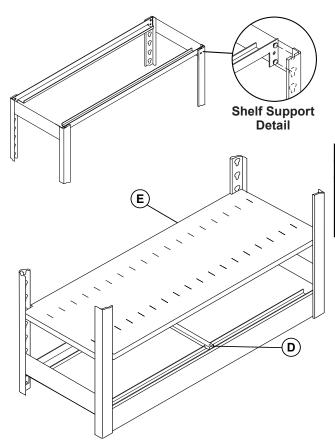


A Caution

Shelf supports MUST be driven securely into place.

A dead blow hammer should be used to keep from damaging the finish.

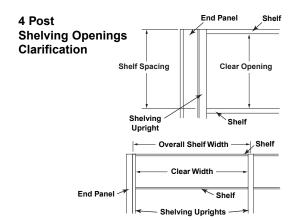
3. Insert the optional front base **(C)** behind the upright front posts and insert front bottom shelf support with rivet tabs pointed down. If an optional 2-1/2" front base is to be used, insert the rivets in the 1st and 2nd key hole slots. For a 4" front base use the 2nd and 3rd key hole slots. Drive the shelf support in place with a dead blow hammer. The shelf support retains the front base in place.



NOTE: Shelf reinforcements are not required on canopy tops unless they are to be used for storage.

- Insert shelf reinforcements (D) if required. Shelf rein forcements should be spaced evenly on the shelf supports. Refer to the chart to determine the number of shelf rein forcements necessary.
- Place shelf (E) on shelf supports and shelf reinforce ments (if installed).

NOTE: Shelves are symmetrical and may be placed either way into shelf section.



Insert shelf supports at the top of the unit and drive them in place with a dead blow hammer.

NOTE: Make sure the top of the shelf supports are even with the top of the uprights to allow the canopy top to fit correctly.

Recommended Shelf Reinforcements (4-Post Open and Closed Uprights)

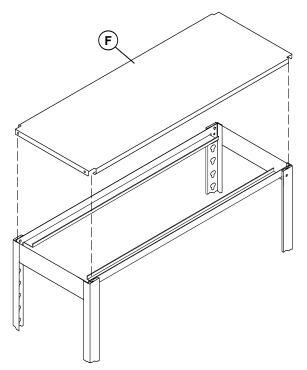
Shelf	Standa	elf De	Heavy-Duty					
Width	18"	20"	24"	30"	36"	24"	30"	36"
30"	_	1	1	2	2	1	2	2
36"	_	1	1	2	3	1	2	3
42"	1	2	2	3	3	2	2	3
48"	1	2	2	3	3	2	2	3

Not required on 9", 10", 12" and 15" standard depths.

Recommended Shelf Reinforcements (Case-Type Uprights)

Shelf	Standard Shelf Depths							
Width	18	" 20"	24	" 30'	' 36'	'		
28"	_	1	1	2	2			
34"	_	1	1	2	3			
40"	1	2	2	3	3			
46"	1	2	2	3	3			

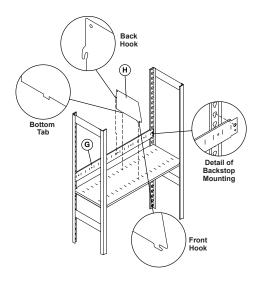
Not required on 9", 10", 12" and 15" standard depths.



NOTE: Assemble center stops to double entry slotted shelves before placing the shelf in place. Refer to **Shelf Assembly** section on next page.

- 7. Continue installation of shelf supports, reinforcements and shelves until all are in place.
- 8. Finish the installation by placing the canopy **(F)** onto the top shelf supports.

Shelf Assembly



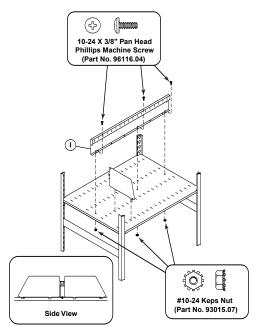
Double Entry Slotted Shelves

NOTE: To ease assembly, attach the center stop before placing the shelf on the shelf supports.

- Attach center stop (I) to the slotted shelf with provided screws and Keps nuts. Tighten securely.
- 2. Place shelf on the shelf supports and properly spaced shelf reinforcements (if required).

NOTE: Place the center stops of multiple slotted shelves facing the same direction for appearance purposes.

 Insert the file divider by hooking the bottom front hook into the front shelf slot, dropping the divider bottom tab into the rear shelf slot and hooking the rear hook into the backstop slot.



NOTE: Shelves as used in Case Type units are 2" less in width than shelves used in standard 4-Post units. For example, a 4-Post unit 36" wide will use a 36" wide shelf while a 36" wide Case Type unit will use a 34" wide shelf.

Single Entry Slotted Shelves

- Place shelf on shelf supports and properly spaced shelf reinforcements (if required).
- Orient the backstop (G) so the slots are located closest to the top edge.
- Insert tabs on slotted backstop into the 3rd keyhole slot above the slotted shelf. Lightly tap backstop into place with a dead blow hammer.

NOTE: While it is necessary to drive the shelf supports firmly into place, the backstop should just be **lightly** tapped into place.

 Insert the file divider (H) by hooking the bottom front hook into the front shelf slot, dropping the divider bottom tab into the rear shelf slot and hooking the rear hook into the backstop slot.

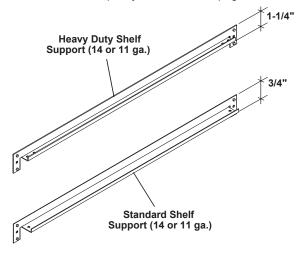
X-Ray Shelving Units

NOTE:

X-Ray shelving applications require the use of all closed uprights, heavy-duty shelves, heavy-duty shelf supports and heavy-duty reinforcements. Assembly is the same as for the standard 4-Post and Case-Style shelving units with the substitution of all heavy-duty components.

NOTE: All X-Ray applications must use "H" type shelf supports,1-1/4" high on all shelves.

- Shelves are normally spaced 16-1/2" on center with 15-1/4" clear opening.
- X-Ray levels of storage must not exceed the rated capacity of the closed upright.

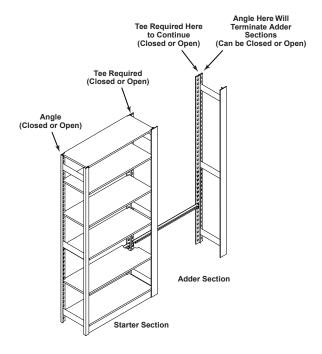


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Adder Sections

Attach an adder section to the base (starter) section as follows:

- Temporarily insert a shelf support at the midpoint between the finished unit and adder upright as previously done when assembling the starter section.
- Repeat the steps of "Assembling the Base Unit" for each adder unit to complete the range of shelving.



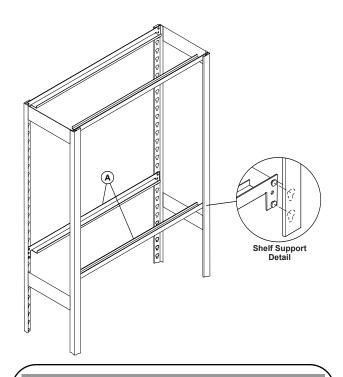
REFERENCE SHELF

NOTE: Reference shelves should be located at a convenient working height or positioned to suit conditions of assembly for shelf filing. Allow for an additional 1-1/2" of clearance for a sliding reference shelf when planning shelf layout. This installation should be done by two people.

- **1.** Drive two shelf supports **(A)** in place at the desired height.
- Place the reference shelf (B) face-up on a flat surface and remove the cardboard pieces (C) from the top. DO NOT discard the cardboard.
- Insert a carriage bolt (D) into the four keyhole slots
 (E) located at each corner of the mounting brackets and slide the bolt to the inside of the slot.
- 4. Slide the previously removed pieces of cardboard under the head of the carriage bolts to keep them in place temporarily.
- Hold the reference shelf assembly under the shelf supports.

NOTE: If installing a single entry sliding reference shelf, make sure it is opening in the desired direction.

6. Place the bracket (F) on top of the bolt and shelf support and thread a Keps nut (G) onto each bolt/bracket to hold the assembly in place.



A Caution

DO NOT place more than fifty pounds of weight on a sliding reference shelf.

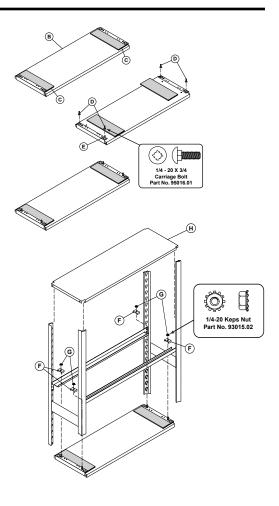
SOUTHWESTS OLUTIONS GROUP

- 7. Adjust the reference shelf from front to back until it is centered in the unit and tighten the nuts until snug with a nut driver.
- Remove the cardboard from beneath the carriage bolts.
- 9. Place shelf (H) on top of shelf supports.
- Fully extend completed reference shelf to test for proper alignment and clearance between shelving uprights.
- 11. Reference shelf should extend and retract smoothly without interference from shelving uprights, shelves or material that may be stored on lower shelves.

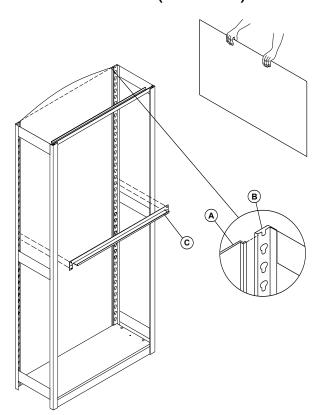
NOTE: Reference shelves can be used with slotted or plain shelves, "F" or "H" type shelf supports.

A Important

When tightening nuts, use a nut driver only. Use of a ratchet drive wrench may apply too much torque and distort the sheet metal.



BACK PANEL (STEEL)



NOTE: Because an unsupported back is a very flexible item, it is recommended that they be handled with care to keep from possible bends and creases. When moving a back it is recommended that you carry it according to the following illustration.

- 1. Position the back panel (A) vertically and insert the offset flange edge of one side behind the upright (B).
- 2. 'Bow' the back out slightly and fit the opposite flange behind the upright.
- Installation of shelf supports (C) will hold the back panel in place.

NOTE: During back panel installation, it is sometimes difficult to attain a perfectly smooth appearance. To correct this situation, drill a pair of 9/64" holes through each flange and into the upright approximately the midpoint of the back panel/upright. Insert a #8-5/8" pan head screw (not included). When these screws are tightened the back panel will draw down. This will also help keep the back panel secure while building up the shelves. Note that if these screws are placed where a shelf support is to be located, they will interfere with the installation of the shelf supports. Make sure to place these screws where a shelf support will not be located.