

# Steel Frame Shelving

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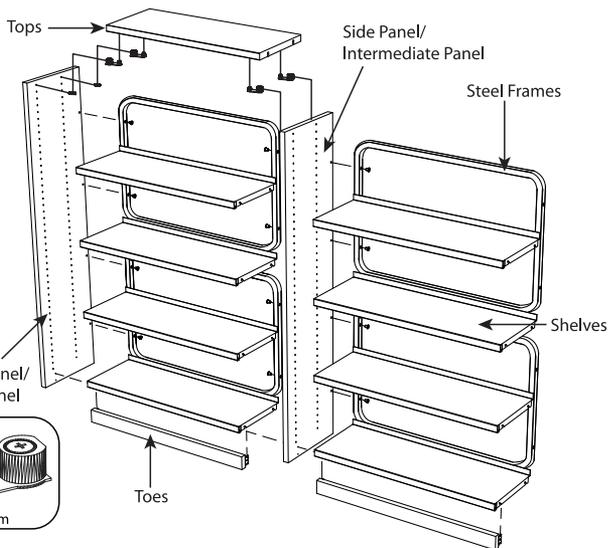
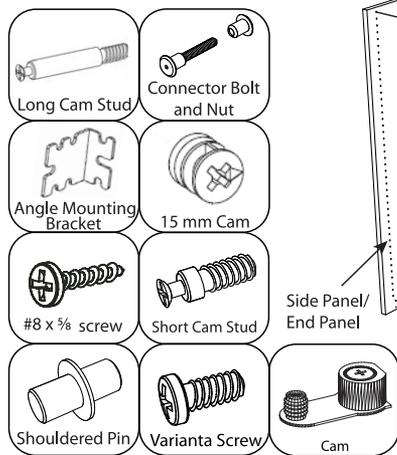
## 31 Series

Bookcases - shelving per unit	
Dimension	# of shelves
30" H	1 adjustable
36" H	2 adjustable
42" H	2 adjustable
48" H	2 adjustable
60" H	3 adjustable
72" H	4 adjustable
84" H	5 adjustable
90" H	6 adjustable



Assemble units only as described in this guide.  
All screws, nuts & bolts and other fasteners must  
be tightened securely and checked regularly.  
Failure to do so could cause instability and injury.

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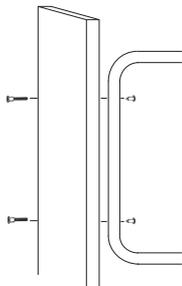
**Steel Frames- see STEP 1a**  
**Back Panels- see STEP 1b**

## STEP 1- Attaching side panels to steel frames

### For Starter Units:

Attach the tubular steel frames to an end panel using the shorter ( $1\frac{3}{4}$ " ) connector bolt and nut

- Make sure shelf pin hole lines face in towards shelves
- Single-sided units have specific right and left end panels
- Single and Double-sided units 48" and shorter use 1 tubular frame
- Single and Double-sided units over 48" use 2 tubular frames
- One person assembly can be started on the floor



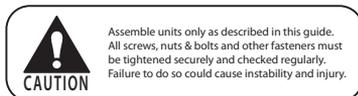
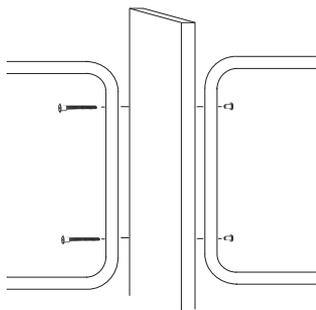
### For Adder Units:

Bolt through one steel frame, then an intermediate panel, then the next steel frame with the longer ( $2\frac{3}{4}$ " ) connector bolt and nut

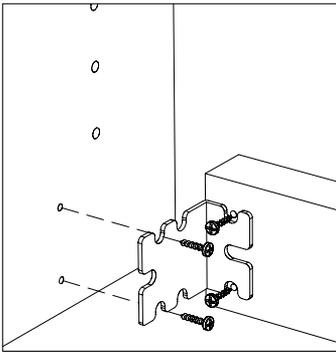
- For easier one person assembly you can attach steel frame(s) to end panel and first intermediate panel on the floor. Next attach toes (next page) then stand unit upright before adding additional frames and panels

*Lay out all initial, adder and end units but DO NOT tighten bolts, yet.*

- All bottoms **must** be level relative to each other- shim if necessary.



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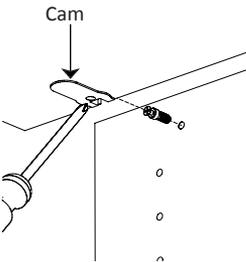


## STEP 2 - Attaching the Toes

Screw the toe/bracket assembly to the side panels using the #8 x  $\frac{5}{8}$ " screws.

Then attach the angle mounting brackets to either end of the rear face of the toes by screwing the #8 x  $\frac{5}{8}$ " screws.

- Toes will be offset to the inside of the front edge of the side panels but should be flush with the bottom of the panel.
- One toe is provided for single unit and two toes are provided for each double-sided unit



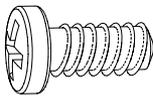
## STEP 3 - Attaching the Tops

Screw the short cam studs into every pre-bored 5mm holes at the top of each face of each side panel.

- 2 holes in a single end panel, 4 holes in a single intermediate panel or double-sided end panel, 8 holes in an double-sided intermediate panel

Insert cams into pre-drilled holes in top, then align cams onto the studs and tighten the cam about  $\frac{1}{4}$  turn clockwise.

- Make sure the unfinished edge of a single top faces to the rear



Varianta Screw



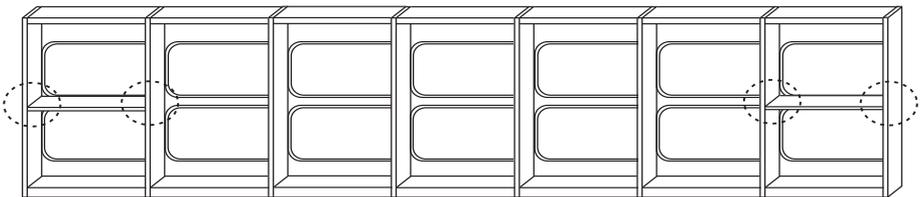
## STEP 4 - Installing Fixed Shelves in units 60" and taller

(For Units shorter than 60" skip to STEP 5)

**VARIANTA SCREWS MUST BE INSTALLED ON TALLER UNITS**

Shouldered pins must be replaced with Varianta screws on mid-height shelves of the bookcases at both ends of a run

**Note:** Units not using the optional tops must also substitute Varianta screws for the top shelf at the beginning and end of a run.



2 Varianta screws on each end of shelf at each end of the run



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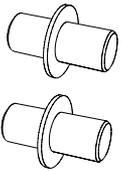
# Steel Frame Shelving

## STEP 4a - Installing Fixed Shelves in Double Faced units 60" and taller (For Units shorter than 60" skip to STEP 5)

For fixed steel shelves on units 60" and taller:  
Substitute (4) Varianta Screws for standard steel shelf pins on a middle shelf of the book case at each end of the run. One fixed shelf should be installed on each side of double unit. Install Varianta Screw w/ #2 Pozi Drive.

### Fixed shelves on mobile units:

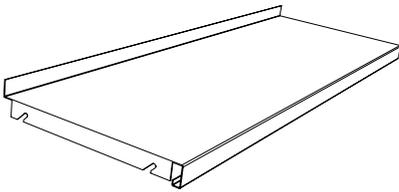
**A fixed shelf is required on mobile units.** Install fixed steel shelves as indicated above, but only one fixed shelf is required per mobile unit, not at each end of run as required above.



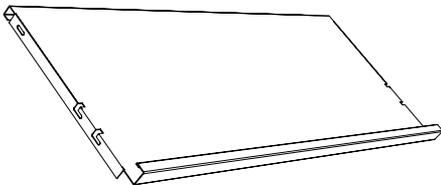
## STEP 5 - Installing Shelves

Slip shouldered pins into aligned holes in side panels and install shelves (4 pins per shelf)

- Pins in bottom line holes will hold the bottom shelf just above the toe



Standard 31 Series Shelf



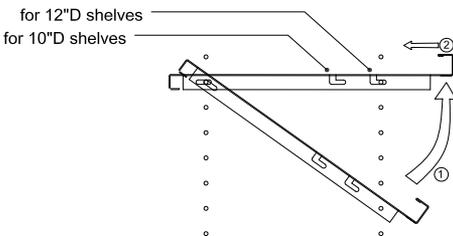
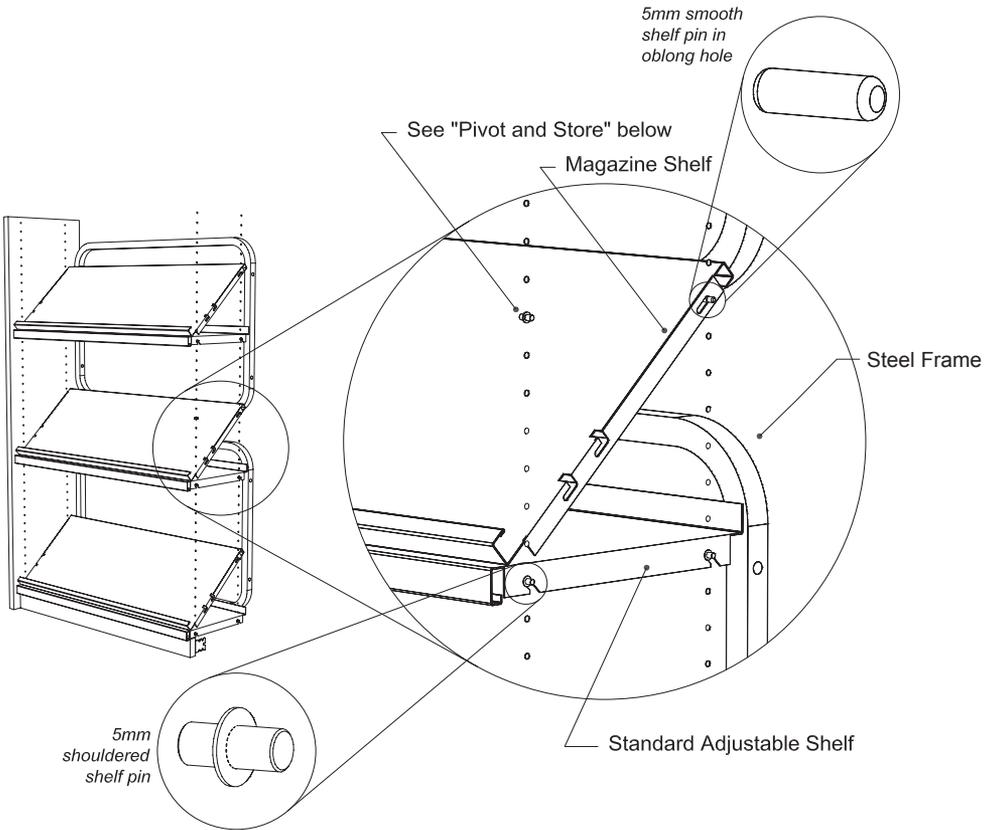
31 Series Magazine Shelf

# 31 Series Magazine Shelf

## Installing magazine display shelf

Install standard adjustable shelf as usual and then rest magazine shelf on top of it.

Lift rear of shelf to desired tilt angle and slip smooth 5 mm shelf pins through the pivot slots in the rear of each side flange.



## Pivot and Store Feature

To use the pivot and store feature, just place two shelf pins in the two line holes opposite the smooth shelf pins that act as pivots for the magazine shelf.

- (1) Swing the shelf up so the additional shelf pins slip through one of the "L" shaped slots in the side flanges
- (2) Push the shelf back to hold in place



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# 31 Series Mobile Shelving

- Mobile 31 Series shelving is assembled in the same manner as standard, non-mobile 31 Series shelving with the exception of the toes and **mobile shelving requires one fixed shelf**.
- Individual toes and brackets are replaced by a toe frame, shipped assembled with casters and metal caster support frames.
- To assemble, simply bolt through the metal caster frame and toe frame into the threaded inserts at the bottom of the side panels using the  $\frac{5}{16}$ " x  $1 - \frac{3}{4}$ " bolts provided.

