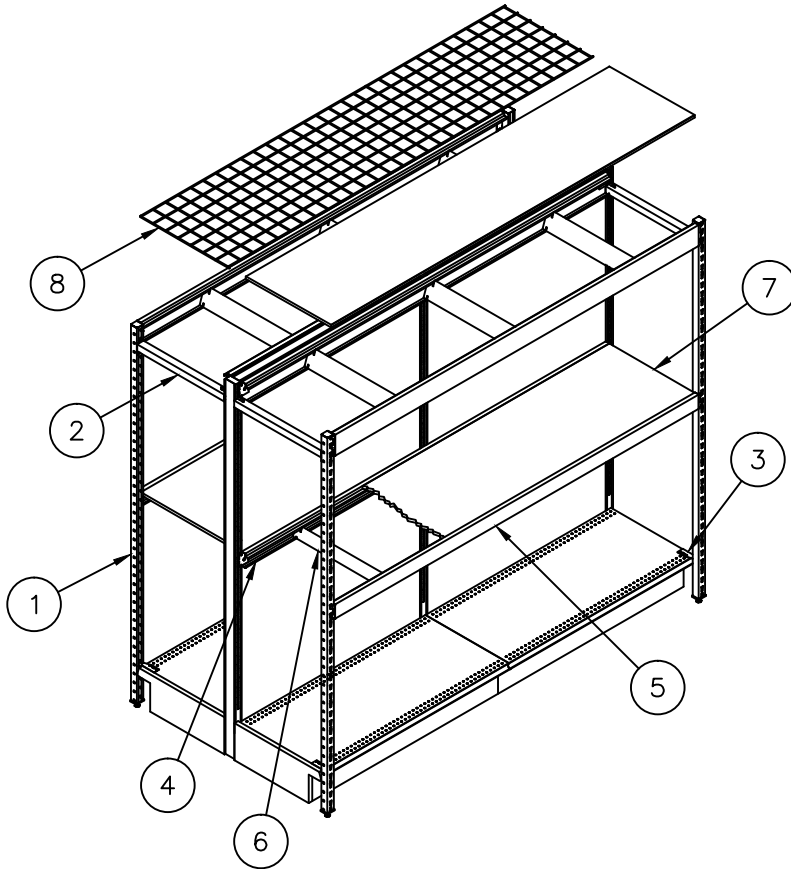


INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

NOTE: Multi-Function Beams are identified by a **MF** stamped into the right end of each beam. Multi-Function Shelf Supports are identified by a **MF** stamped into the end of each Shelf Support.

NOTE: Personnel must be provided with safe access to all elevations of storage equipment or display fixtures via ladders, stairways, or other means in accordance with applicable OSHA regulations. In **NO** case should anyone be allowed to climb or stand on storage or display equipment.



ITEM NO.	DESCRIPTION	PART NUMBER
1	Multi-Function Upright	MFU or MFU_RE
2	Multi-Function Upright Brace	MFUB
3	Multi-Function Upright Deck Connector	MF1151
4	Multi-Function Back Beam	MFBB or MFBB_HD
5	Multi-Function Front Beam	MFFB or MFFB_HD
6	Multi-Function Shelf Support	MFWSS or MFWSS_HD
7	Multi-Function Wood Shelf	MFS
8	Multi-Function Wiregrid Shelf	MFWG
9	Multi-Function Wood Deck (not shown)	MFD
10	Beam Locking Clip	WS1291
11	Beam Locking Hardware	WS9111

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

Install Standard Lozier Shelving in accordance with the installation instructions provided. Do not install shelves at this time.

Assemble the Multi-Function components to the standard shelving as follows:

NOTE: Use of a light valance may require that the MFUB be located differently than shown in the following steps. Review the light valance installation instruction now before proceeding.

STEP 1: Attach the Multi-Function Upright Brace (MFUB) to the Multi-Function Upright Post (MFU or MFU_RE).

- a) Insert the "T" Tab of the Upright Brace into the rear opening of the upright and rotate into a vertical position (SEE FIGURE 1).
 - b) Be sure the Locator Lug is inside the upright rear opening.
 - c) The 5/16-18 x 2" Bolt is optional and can be used to help hold the Upright Brace and the Upright together while installing the assembly into the Display Upright.
- If Standard Front Beams (MFFB) are to be used, align the hole in the Upright Brace with the upper square hole in the Upright and fasten the bolt.
- If Heavy Duty Front Beams (MFFB_HD) are to be used, align the hole in the Upright Brace with the diamond shaped hole in the Upright and fasten the bolt.

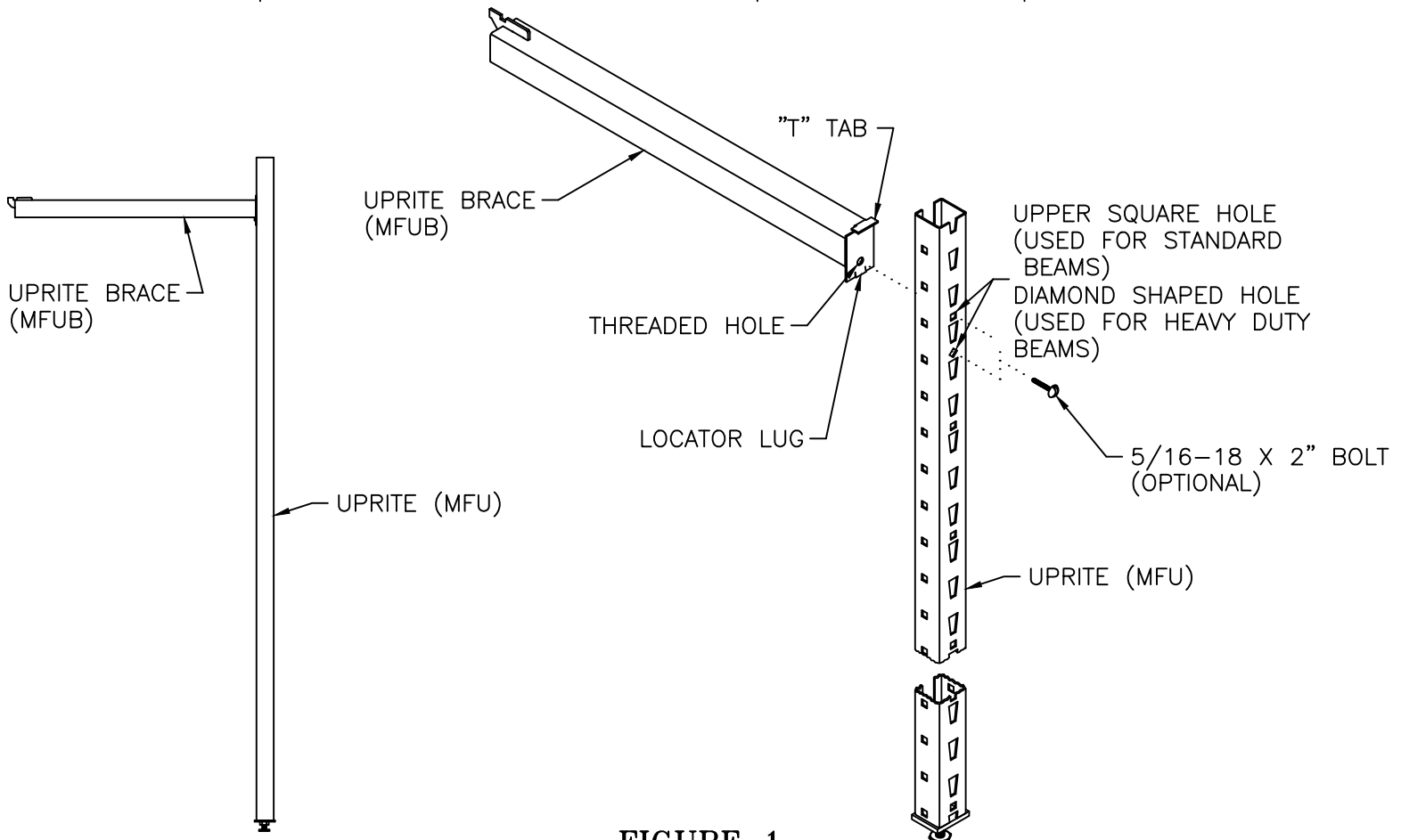


FIGURE 1

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

STEP 2: Install the assembled Upright/Upright Brace in the Display Shelving Uprights.

- a) Tilt Upright/Upright Brace and insert the Upright Brace Hook into the Display Shelving Upright Slot.
 - Use 3rd slot from top if Standard Front Beams (MFFB) are to be used.
 - Use 5th slot from top if Heavy Duty Front Beams (MFFB_HD) are to be used.
- b) Rotate Upright/Upright Brace as shown to bring the Upright to a vertical position (SEE FIGURE 2).

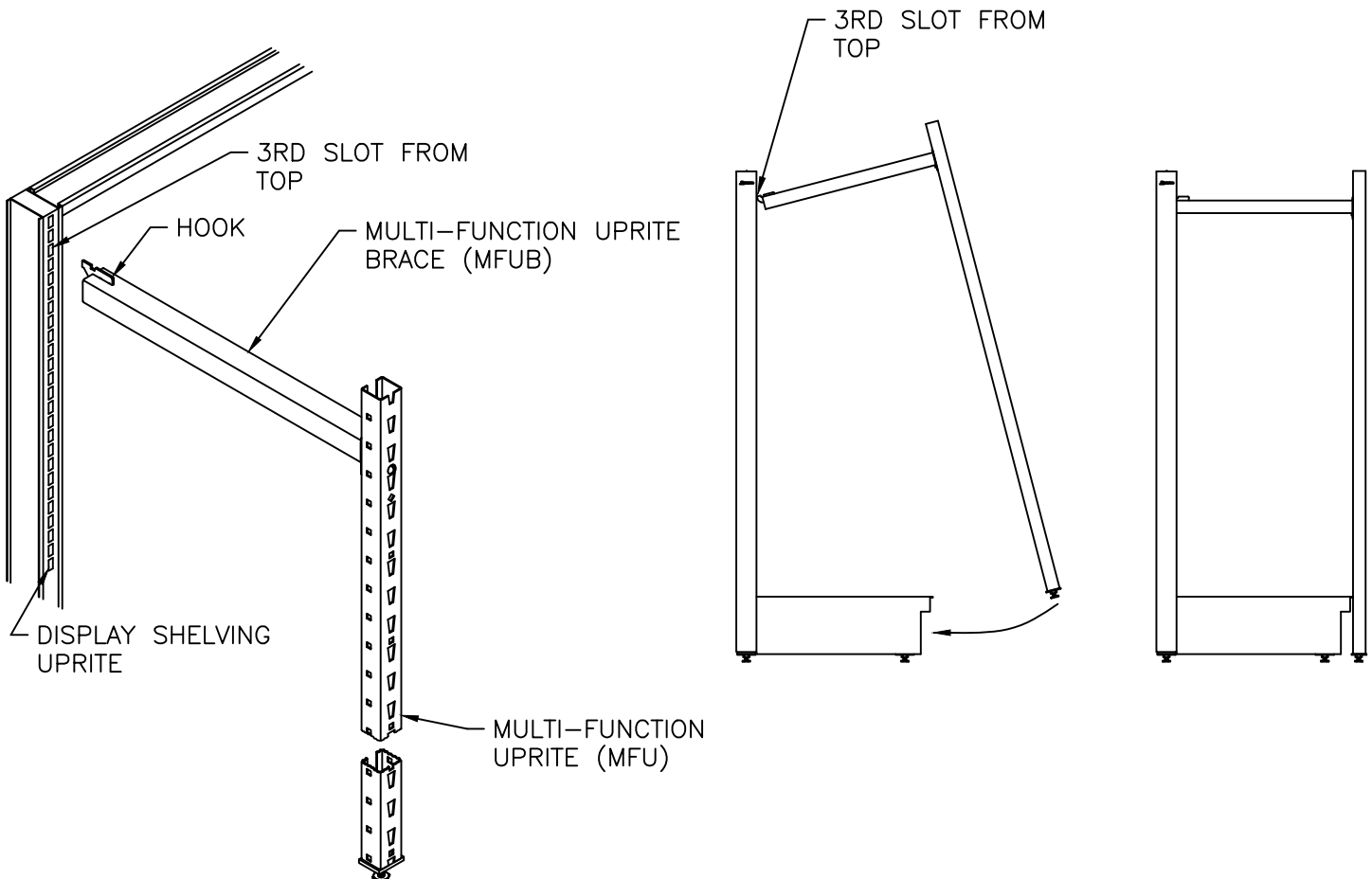


FIGURE 2

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

- STEP 3:** Insert the Multi-Function Upright/Deck Connector (MFUDC) into the lower rear of the Multi-Function Upright Post and rotate it so the slots fit around the rear flanges in the post.
- Attach the Deck Connector using the holes required to provide desired clearance at front of deck. Using two #10 x 1/2" bolts and nuts, fasten to the outward pair of holes in the SD Deck (SEE FIGURE 3).
 - Adjust the leveling screw at bottom of Upright until it touches the floor.

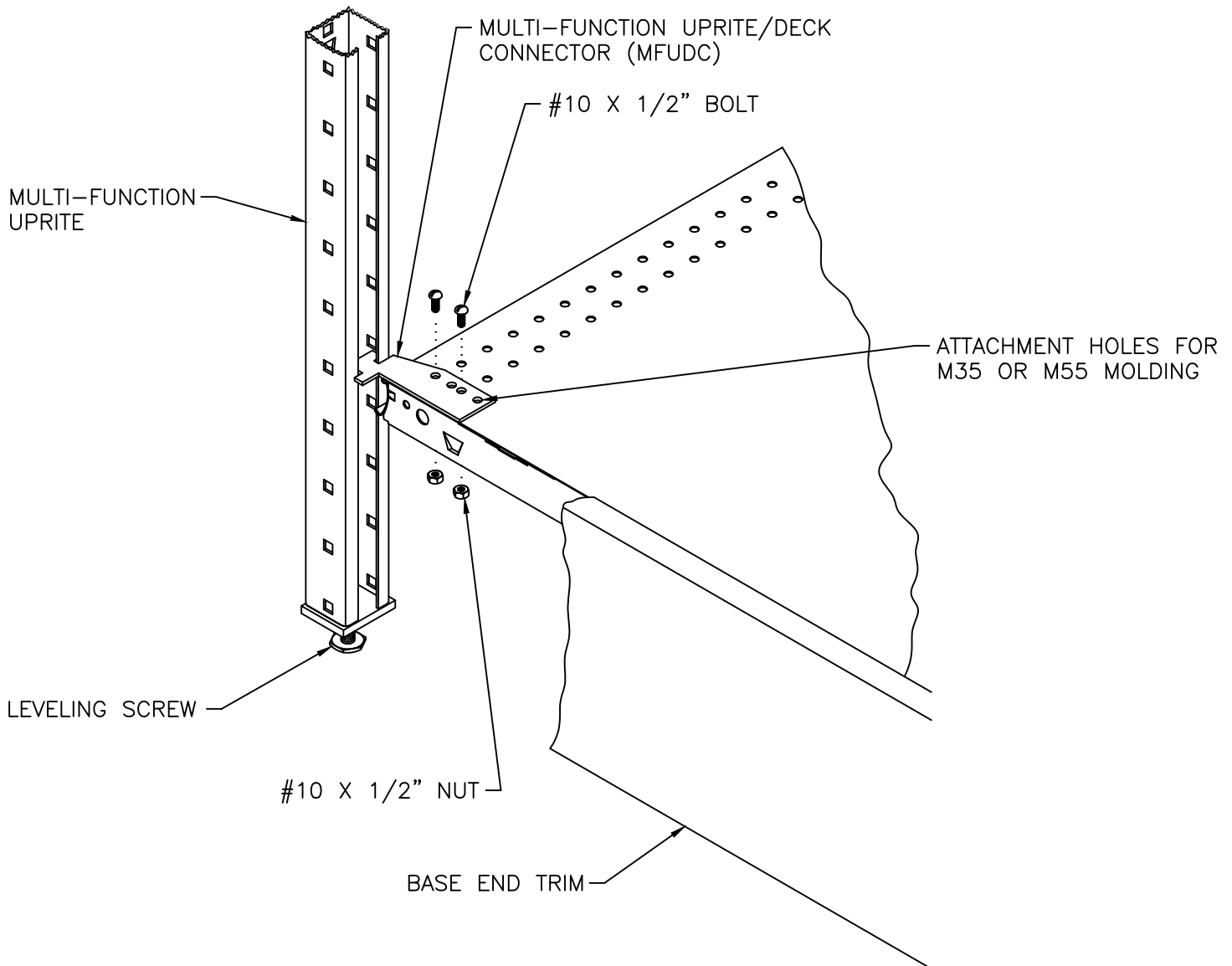


FIGURE 3

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

STEP 4a: Installation of beams and shelves without a TOP LEVEL OVERSTOCK SHELF

NOTE: A minimum of one Multi-Function Shelf must be used at the top of the gondola for stability and proper spacing of MF Uprites.

NOTE: MFFB and MFFB_HD are 2" shorter than same nominal size widespan beams.

- a) Install Multi-Function Back Beam (MFBB or MFBB_HD) into top slots of U Uprites.
- b) Install Multi-Function Front Beam (MFFB or MFFB_HD) into top slots in MF Uprite. **(NOTE: MFFB has 2 hooks per end; MFFB_HD has 3 hooks per end).** Top cap must be removed from the uprite to install beam, then reinsert top cap.
- c) Install Multi-Function Shelf Supports (MFWSS or MFWSS_HD) between the Beams. See FIGURE 4 for load capacities and FIGURE 4A and 4B for locations of shelf supports.

MULTI-FUNCTION SHELF CAPACITY (UNIFORMLY DISTRIBUTED LOAD)						
SHELF DEPTH	SECTION WIDTH (BEAM LENGTH)	NUMBER OF REGULAR DUTY SHELF SUPPORTS WITH REGULAR DUTY BEAMS			NUMBER OF HEAVY DUTY SHELF SUPPORTS WITH HEAVY DUTY BEAMS	
		2	3	4	2	3
UP TO 31" DEEP	36"	1,600	2,400	3,000	3,000	—
	48"	1,600	2,400	3,000	3,000	—
	72"	1,600	2,000	2,400	—	3,000
	84"	1,600	1,800	2,000	—	3,000
	96"	1,600	1,600	1,600	—	3,000

FIGURE 4

NOM SIZE	ACTUAL LENGTH OF SHELF SUPPORT
16"	18 1/32"
19"	21 1/32"
22"	24 1/32"
25"	27 1/32"
28"	30 1/32"
31"	33 1/32"



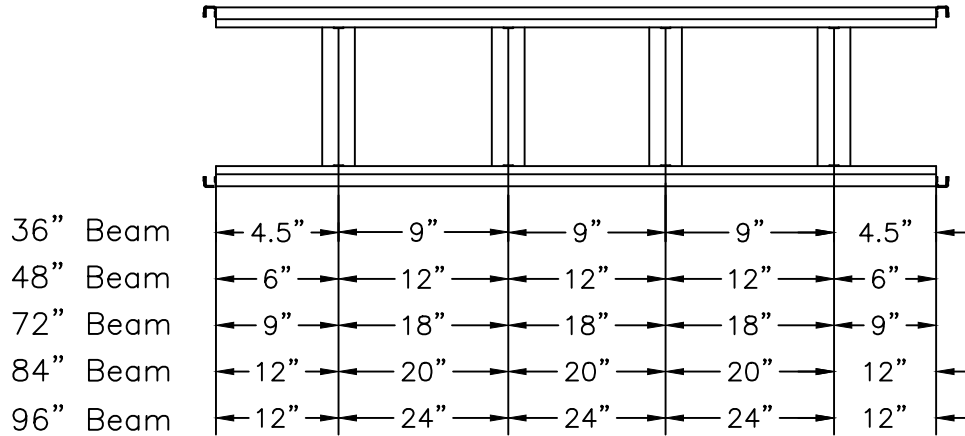
WARNING!

Do not overload shelves or uprites. Overloading can result in collapse, causing personal injury and property damage.

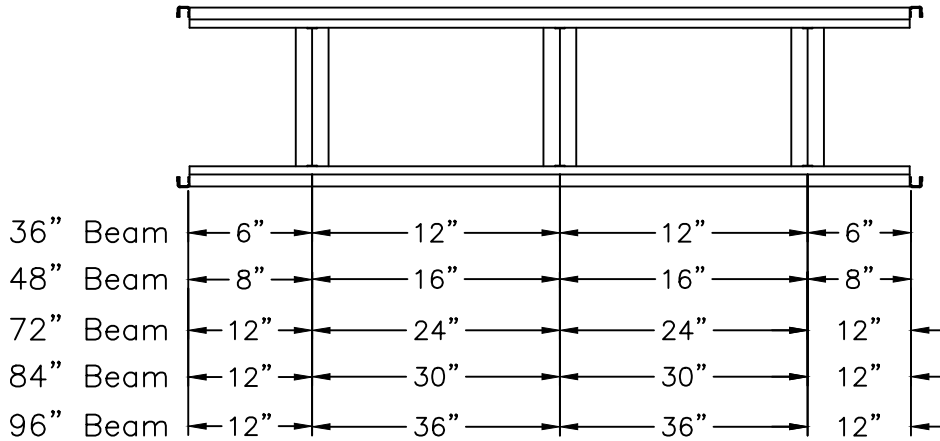
INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

Regular Duty 4 Shelf Supports



Regular Duty 3 Shelf Supports



Regular Duty 2 Shelf Supports

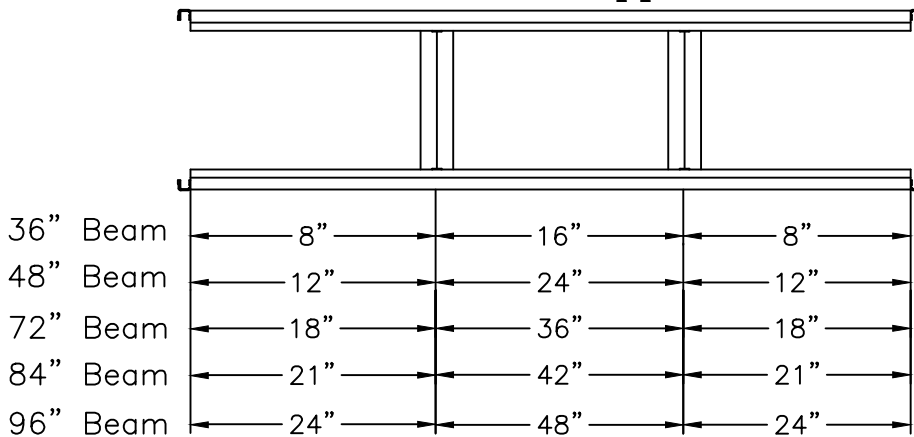


FIGURE 4A

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

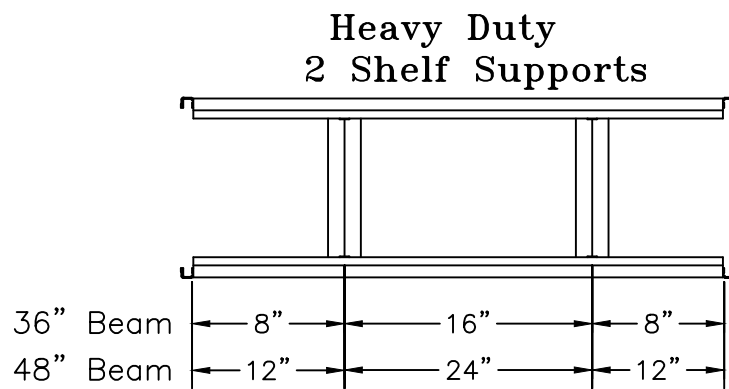
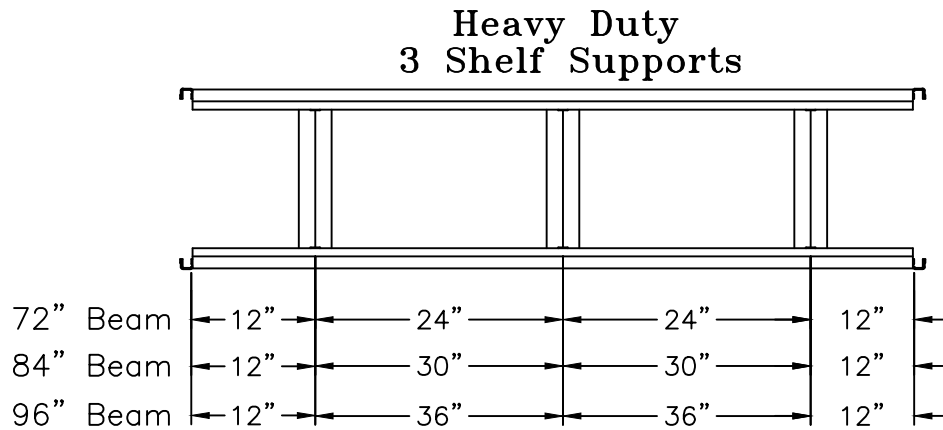
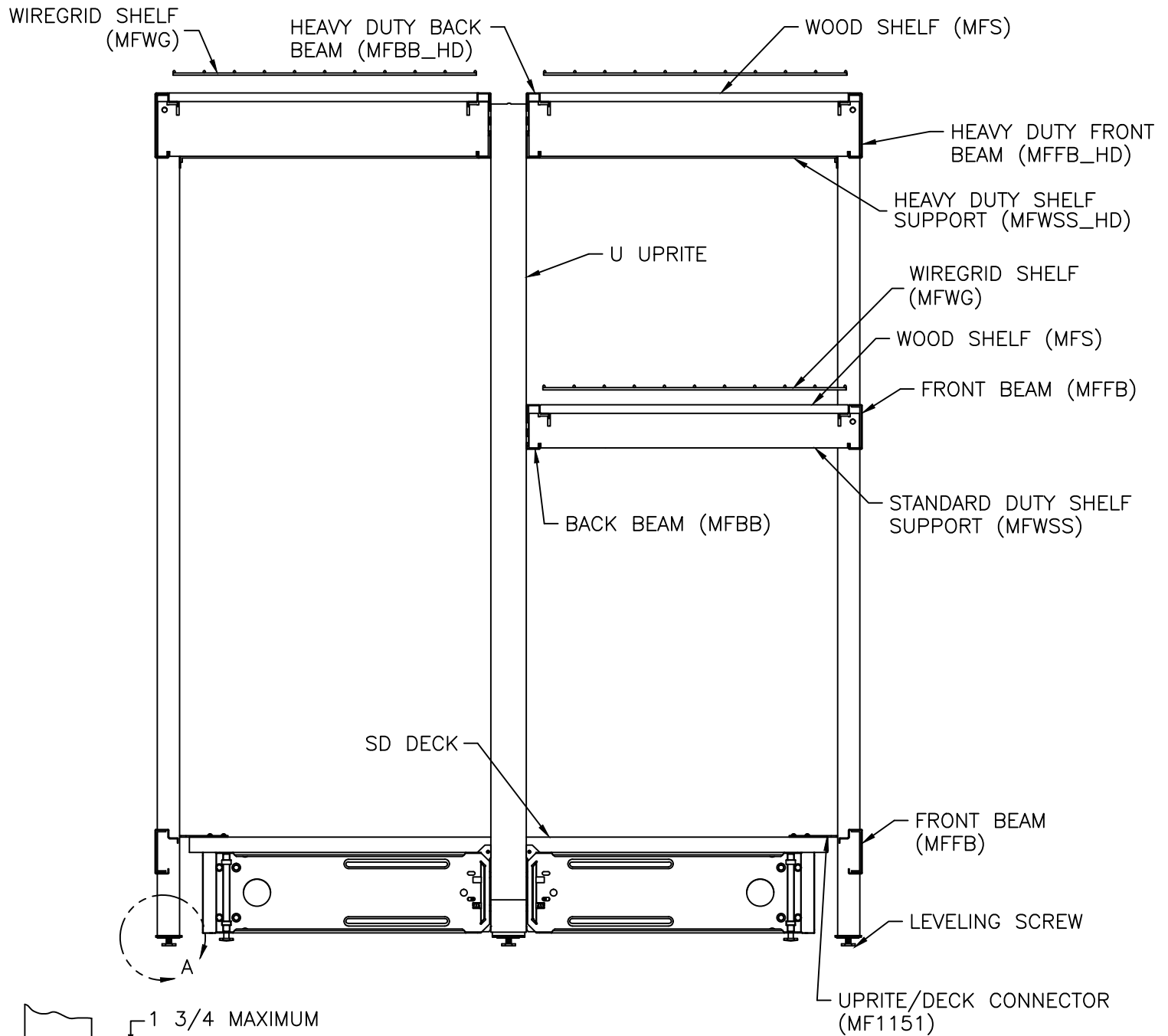


FIGURE 4B

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

- d) Place the Multi-Function Wood Shelf (MFS) or Wiregrid Shelf (MFWG) between the Beams. Corner notches on the Wood Shelf fit around the MF Uprite. (SEE FIGURE 5)
- e) Adjust the leveling screws in the MF Uprites so the shelf is level from front to back. Maximum leveling screw extension is 1 3/4". (See DETAIL A)
- f) Add other MF Shelf levels as desired following Steps A through D.



DETAIL A

FIGURE 5
Example Shelf Arrangement

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

STEP 4b: Installation of beams and shelves with a TOP LEVEL OVERSTOCK SHELF

CAUTION:

1. Heavy-duty beams (MFFB_HD) are required for the Top Level Overstock shelf.
2. Only one Top Level Overstock shelf allowed per gondola section.
3. The minimum gondola height is 12" less than the MFU height.
4. The Top Level shelf does not satisfy the requirement for a MF shelf level at the top of the gondola. A standard MF shelf level must be installed near the top of the gondola uprite.

- a) Install Multi-Function Front Beams (MFBB_HD) into top slots of the MF uprites. Remove top cap from the MF uprite to install beam, then reinsert top cap.
- b) Install Multi-Function Shelf Supports (MFTS_HD) between the beams. These are special length supports for the top level. The actual length is the nominal size plus 3 3/4".
- c) Install shelf surface between the beams
- d) Adjust leveling screws in MF uprites so the shelf is level. Maximum leveling screw extension is 1 3/4".
- e) See FIGURE 6 for a typical shelf installation.
- f) See FIGURE 4C below for Top Level shelf load capacities and FIGURE 4B for the locations of HD shelf supports.

MULTI-FUNCTION TOP LEVEL OVERSTOCK SHELF CAPACITY (UNIFORMLY DISTRIBUTED LOAD)			
SHELF DEPTH	SECTION WIDTH (BEAM LENGTH)	NUMBER OF HEAVY DUTY SHELF SUPPORTS WITH HEAVY DUTY BEAMS	
		2	3
UP TO 47" DEEP (22"/22" DECKS)	36"	3,000	—
	48"	3,000	—
	72"	—	3,000
	84"	—	3,000
	96"	—	3,000

FIGURE 4C



WARNING!

Do not overload shelves or uprites. Overloading can result in collapse, causing personal injury and property damage.

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

STEP 4b (continued):

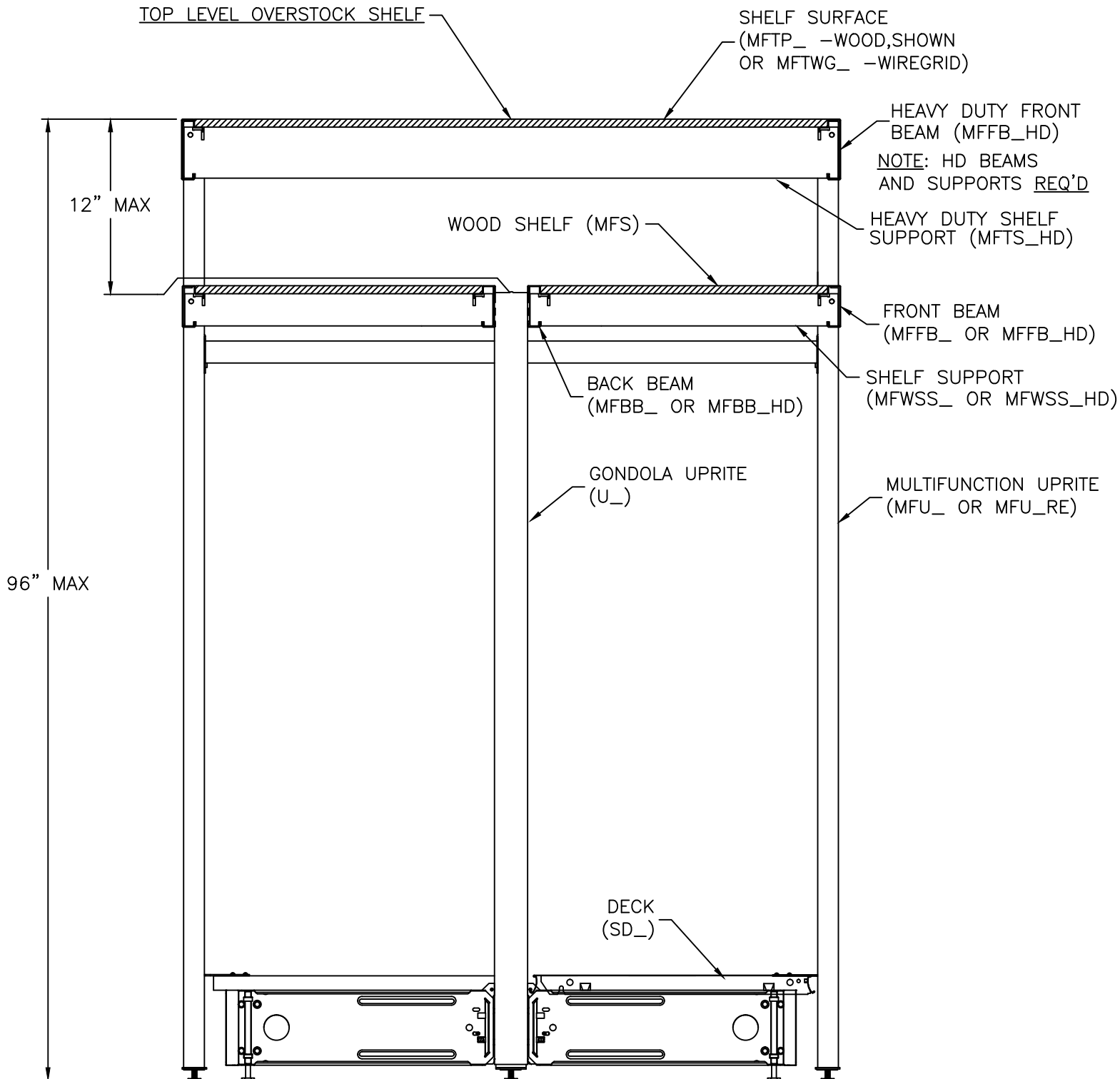


FIGURE 6

Example Top Level Shelf Installation

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

STEP 5: If Multi-Function Wood Decks (MFD) are to be used, install a MF Front Beam (MFFB) $1/8$ " lower than the level of the SD Deck (SEE FIGURE 7).

NOTE: Adjust leveling leg screws on MFU to obtain $1/8$ " spacing. Maximum leveling screw extension is $1\ 3/4$ ".

a) Place a Multi-Function Wood Deck (MFD) on the SD and on the MF Front Beam.

NOTE: MF Wood Decks are 1" longer front to back than MF Wood Shelves.

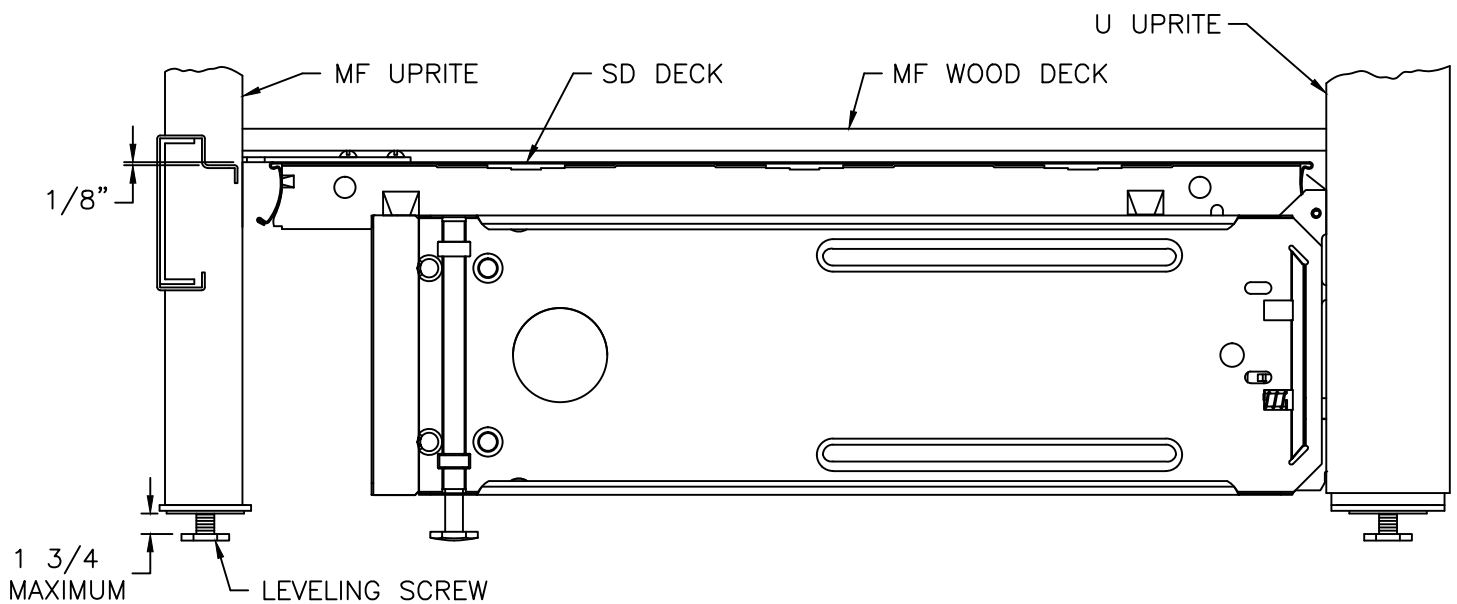


FIGURE 7

INSTALLATION INSTRUCTIONS

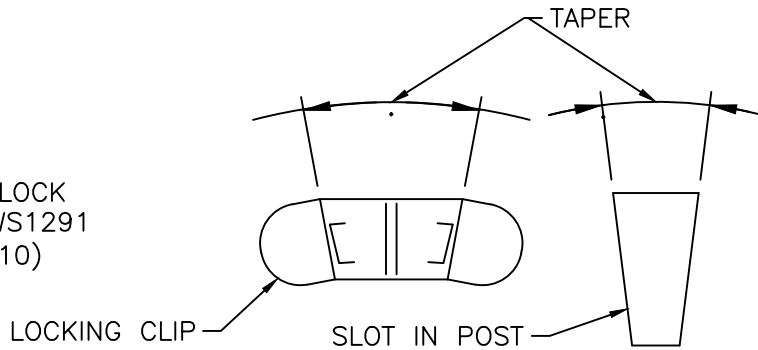
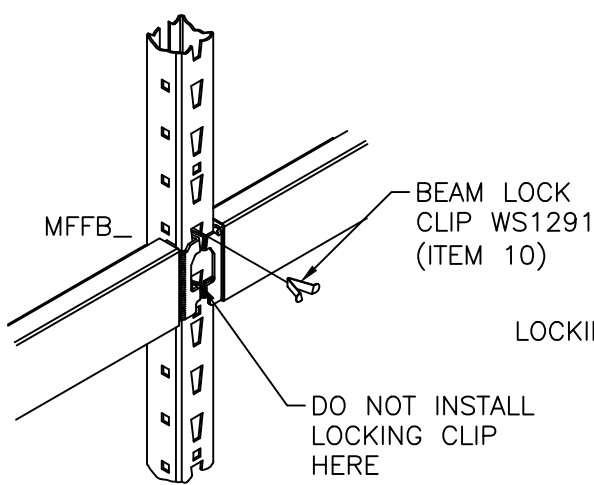
MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

STEP 6: BEAM LOCKING:

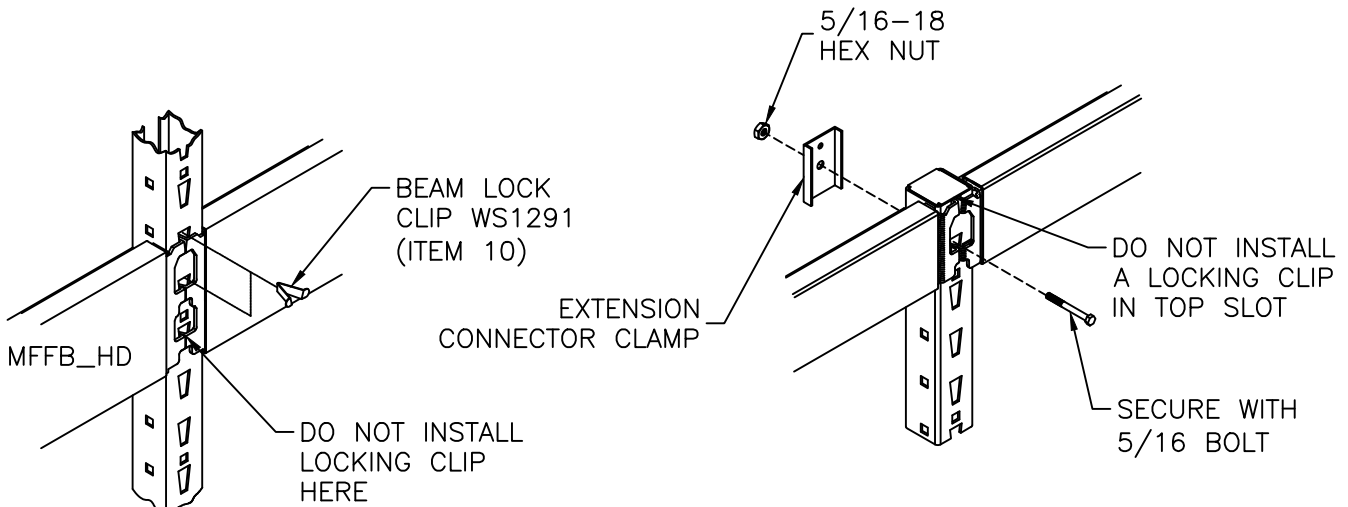
- Beam locking clips (WS1291) or locking hardware (WS9111) must be used when beams are used singly, not as a beam pair with shelf supports connecting them.
- Locking clips must be oriented so that their taper aligns with the tapered sides of the shelf slots in the upright. The clips will not function unless they are correctly oriented when installed.
- Insert the beam locking clip into the portion of the upright slot above the beam connector hook, as shown in Detail B. Always install the clip in the slots shown.



WARNING: DO NOT INSTALL THE LOCKING CLIP IN THE SLOT WITH BOTTOM HOOK OR THE TOP HALF SLOT OF THE UPRITE. THE CLIP WILL NOT LOCK THE BEAM IN THOSE SLOTS.



Position clip so taper of clips legs matches taper of the slot in post.



DETAIL B

MFFB_ AT TOP OF MFU_:
BEAM LOCKING HARDWARE
WS9111 (ITEM 11)

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

Upright Load Limit Without Top Level Overstock Shelves

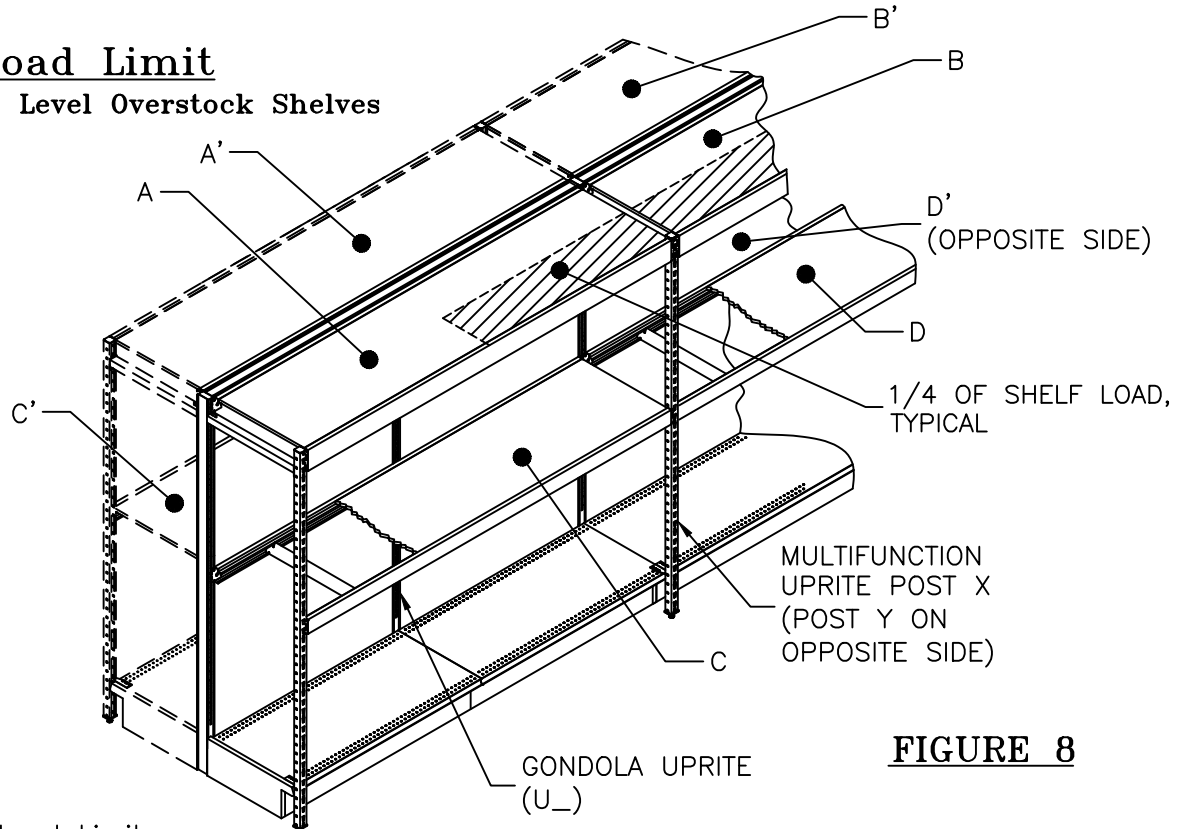


FIGURE 8

Multi Function Upright Load Limit:

The published Multi-Function Upright (MFU_ or MFU_RE) rated maximum load is based on the load capacity of the MFU post and the gondola upright combined (uniformly distributed shelf loads.)

The load on the Multi-Function post is **1/4** of the adjacent Multi-Function shelf loads. For the system shown in Figure 8, the load on Multi-Function Upright post X is calculated as follows:

$$\frac{\text{Load A} + \text{Load B} + \text{Load C} + \text{Load D}}{4} = \text{Load on post X}$$

The same method can be used for island systems. For the system shown in Figure 8, the load on Multi-Function Upright post Y is calculated as follows:

$$\frac{\text{Load A}' + \text{Load B}' + \text{Load C}' + \text{Load D}'}{4} = \text{Load on post Y}$$

The MFU post load **must not exceed 1/2 of the rated load** for the MFU post and gondola upright combined. Those combined rated loads are as follows:

MFU_ and U_ (gondola upright) combined: **4,000 lbs Max**
MFU_RE and U_ (gondola upright) combined: **5,000 lbs Max**

Therefore, the maximum post loads are as follows:

Maximum MFU_ post load = **2,000 lbs Max**
Maximum MFU_RE post load = **2,500 lbs Max**

Note: Multi-Function shelves apply a vertical load to the gondola upright. The applied load is **1/4** of the adjacent Multi-Function shelf loads. The method of calculation is the same as described above. MF shelves on both sides of an island gondola apply a load to the gondola upright. Combined loads (including display shelving loads) applied to the gondola upright should not exceed **4,500 lbs**.



WARNING!

Do not overload shelves or uprights. Overloading can result in collapse, causing personal injury and property damage.

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)

Upright Load Limit

With Top Level Overstock Shelves

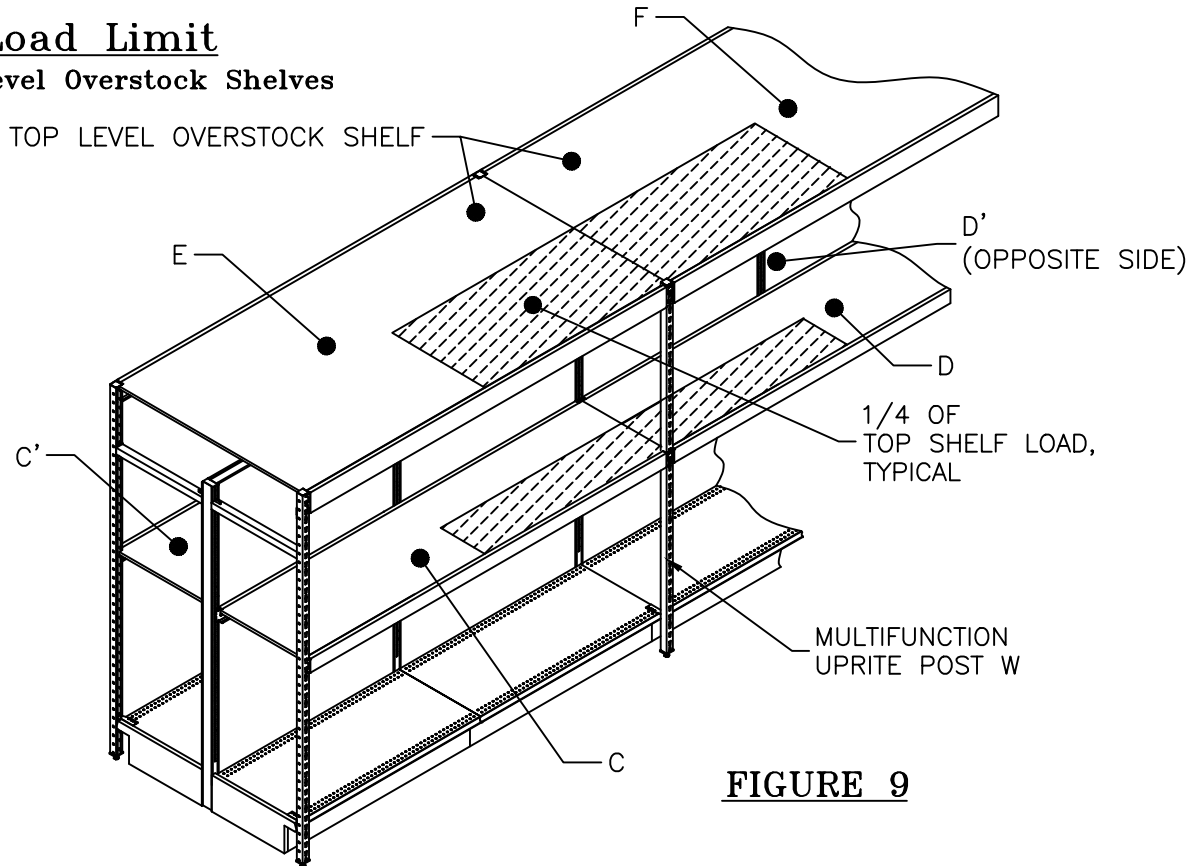


FIGURE 9

Multi Function Upright Load Limit:

The load on the Multi-Function post is $\frac{1}{4}$ of the adjacent Multi-Function shelf loads, including the Top Level shelf loads. For the system shown in Figure 9, the load on Multi-Function Upright post W is calculated as follows:

$$\frac{\text{Load C} + \text{Load D} + \text{Load E} + \text{Load F}}{4} = \text{Load on post W}$$

The MFU post load **must not exceed $\frac{1}{2}$ of the rated load** for the MFU post and gondola uprite combined. Those combined rated loads are as follows:

MFU_ and U_ (gondola uprite) combined: **4,000 lbs Max**

MFU_RE and U_ (gondola uprite) combined: **5,000 lbs Max**

Therefore, the maximum post loads are as follows:

Maximum MFU_ post load = **2,000 lbs Max**

Maximum MFU_RE post load = **2,500 lbs Max**

Note: Multi-Function Top Level shelves do not apply a vertical load to the gondola uprite. The combined loads (including display shelving loads) applied to the gondola uprite should not exceed **4,500 lbs**.



WARNING!

Do not overload shelves or uprights. Overloading can result in collapse, causing personal injury and property damage.

INSTALLATION INSTRUCTIONS

MULTI-FUNCTION SHELVING SYSTEM (UP TO 96" TALL)
User Instructions

POST IN CONSPICUOUS PLACE



WARNING: Overloading, misuse, abuse of Multi-Function Shelving can contribute to collapse and personal injury.

PLEASE NOTE: To avoid product damage or personal injury, Personnel must be provided with safe access to all elevations of storage equipment or display fixtures via ladders, stairways, or other means in accordance with applicable OSHA regulations. In NO case should anyone be allowed to climb or stand on storage or display equipment.

Combined rated load, one Multi-Function uprite used with one gondola uprite (wall section) MFU_+ U_ = 4,000 lbs. Max
MFU_RE + U_ = 5,000 lbs. Max

Wood Shelf rated load (with recommended number of shelf supports) With 8' Standard Beams = 1,600 lbs. Max
With 8' Heavy Duty Beams = 3,000 lbs. Max



WARNING:

1. Shelf capacities are for evenly distributed loads. If loads are concentrated, reduce these capacities 50%.
2. Shelves to be hand loaded only. Do not use mechanical equipment to load shelves.

SAFETY PRECAUTIONS: In order to assure that the Multi-Function Shelving is used in a safe manner, the following safety precautions must be observed.

1. This shelving **MUST** be installed strictly according to the manufacturer's instructions.
2. **NEVER OVERLOAD** the uprites or beams (see loading instructions above).
3. Be sure the shelving sections remain aligned.
4. If any portion of the shelving or any component is damaged, shelving must be unloaded and the damaged portion replaced immediately.
5. If any shelf support or beam becomes partially or completely dislodged, it must be unloaded and corrected immediately.
6. Do not lean tall or heavy items against shelving unless shelving is anchored to a suitable building wall, to the floor, or is otherwise braced to prevent overturning. Weight and force of leaning items on unanchored or unbraced shelving may cause shelving to overturn or collapse.
7. Shelving (or racks) that are leaning or bending when loaded may indicate a dangerous overload or impending collapse. Loads should be immediately reduced, and the cause for this condition should be corrected, before reloading. Refer to appropriate installation instructions to assure shelving (or racks) are properly assembled, replace any damaged components or parts, and do not exceed recommended maximum loads or engage in any other unsafe use of the shelving (racks).