

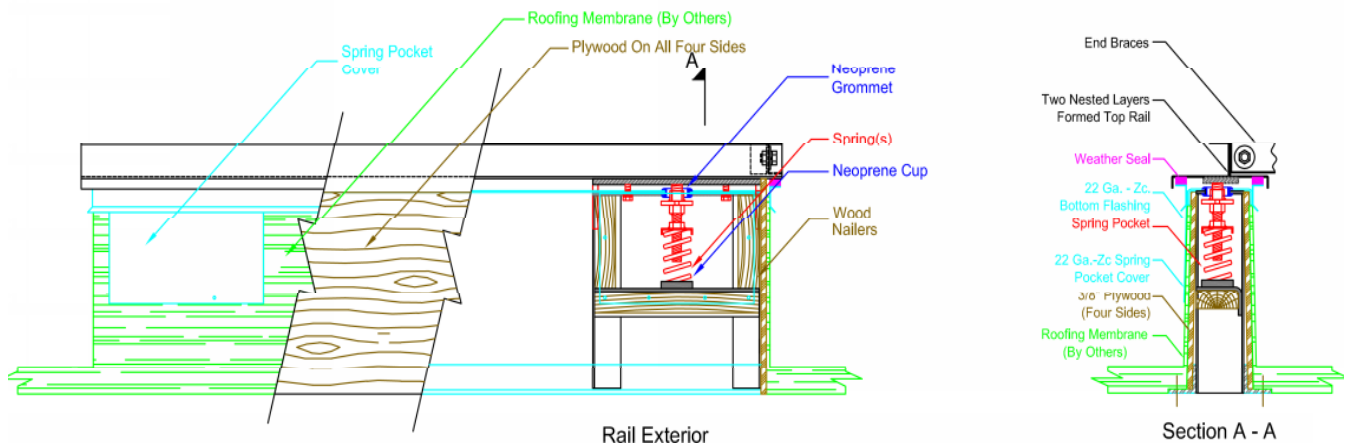


FRR

Flashable Roof Rail Installation Instructions

Date: 08/27/13

Supersedes: 06/17/11



Do it once—Do it right

Please do not attempt to install this rail until you have read and fully understand these instructions - All spring rails are not built the same.

- Some springs are capable of handling loads of over one ton each, **only** qualified technicians should undertake spring adjustments.
- Before rigging equipment onto rails, verify that there are no conflicts with the underside of the unit and the rail. Check all dimensions to ensure a good fit.

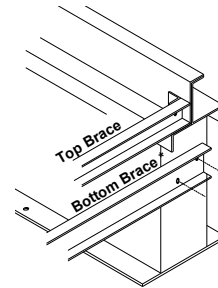
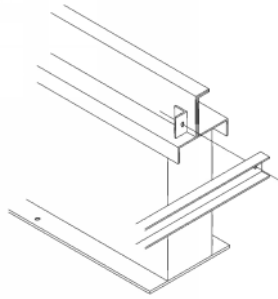
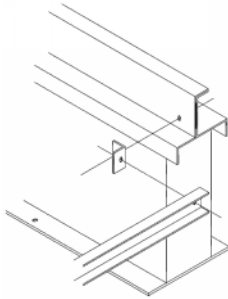
We have made every attempt to reduce the effort required in the field to successfully install our rails. Spring rails are vibration isolation devices meant to reduce the amount of vibration transmitted to the structure.

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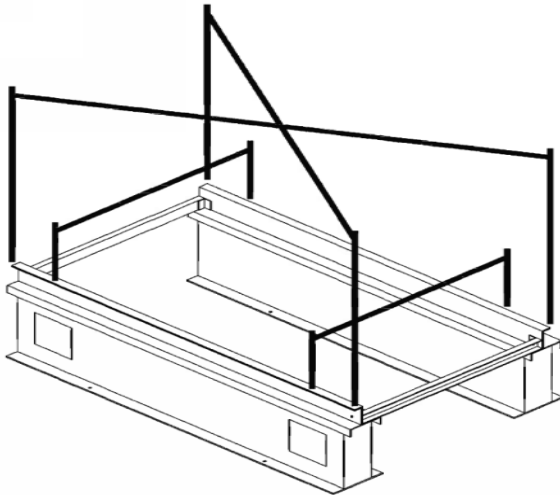
Salem, NH 03079 603-898-8600

[1] Cross Braces

- Install top cross braces at pre-drilled clips with 1/2" bolts, nuts and lock washers provided.
- DO NOT TIGHTEN UNTIL RAIL IS SQUARED AND LEVELED.
- Install bottom cross braces as shown on submittal. Caulk all holes water tight.
- Visually inspect that all spring pockets have two $\frac{3}{8}$ " thick yellow angle spacers.



* Bottom Brace may not be required on all projects. Refer to Submittal.



[2] Squaring

- Square up rail by checking diagonals and two locations across the width of the rails.
- *Tighten cross braces .*

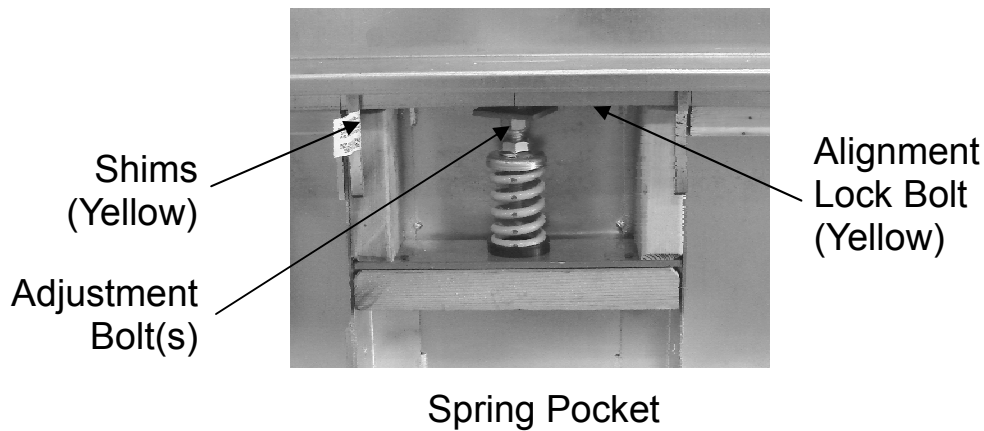
[3] Leveling

- See Equipment manufacturer's installation instructions for maximum out-of-level tolerances.
- On metal decks, solid blocking is required between deck and support steel, under each spring pocket.
- Attach rail to the roof structure. See our submittal for tie-down options.
- Remove and discard lifting lugs. Reinstall bolt nut and washer to seal top rail. (Not necessary for eye-bolt type lugs)

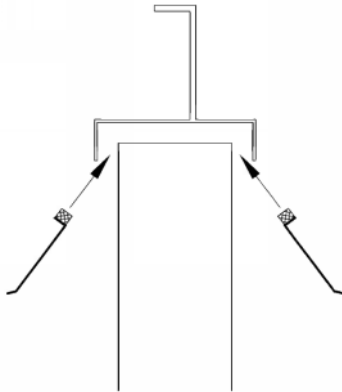


Notes:

- All piping, ductwork and electrical connections to equipment should be flexible to prevent short circuiting of the spring rail's effectiveness.
- Equipment can be installed before or after the roofing membrane is installed.
- Roofing membrane can now be installed. Membrane should terminate at the top of the plywood sides & ends of the rail and cover the spring pockets until springs are ready to be adjusted.

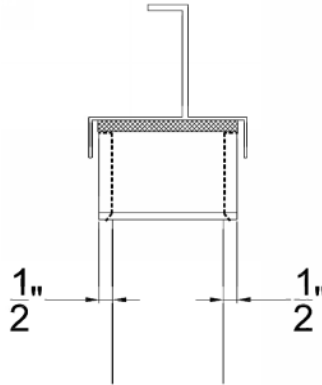
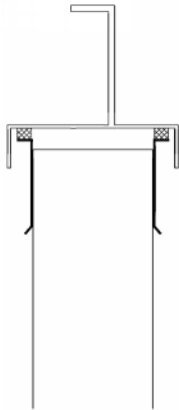
**[4] Spring Adjustment**

- Only to be done by qualified technicians after equipment is installed on rail.
- If roofing membrane covers the spring pocket, find the inside edge of the wood nailer and cut away roofing material with a utility knife.
- Remove and discard $\frac{3}{8}$ " x 1" Alignment Lock Bolts (Two per spring pocket)
- Turn adjustment bolt(s) three turns clockwise, loading the spring(s), one spring pocket at a time.
- Move on to next adjacent spring pocket and repeat.
- Continue rotating from pocket to pocket, keep moving around the unit until angle shims can be removed by hand. (Angles can stick to curb—tap gently) Once a pocket's shims can be removed, skip that pocket in the rotation. That pocket's adjustment is complete.
- Apply silicone to all inside edges of cover plate and install with #8 wood screws provided.
- One spring is shown - two may be used for heavier loads.



[5] Bottom Flashing

- Care should be taken installing the bottom flashing, as it seals the rail from air and water leakage.
- The bottom flashing is installed after the equipment is set, roofing is completed, springs are adjusted and spring pocket covers are installed.
- Attach $\frac{3}{4}$ " x $\frac{1}{2}$ " closed cell neoprene foam gasket to the top outside edge of the bottom flashing.
- Firmly press bottom flashing upwards under the top flashing until it seats. Zip screw bottom flashing to wood nailer.
- Lap all joints by 2" - 3", Extend end bottom flashing $\frac{1}{2}$ " away from side top flashing. Butt side bottom flashing to end bottom flashing-caulk all joints.



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Due to continuing product improvement materials & specifications are subject to change without notice.