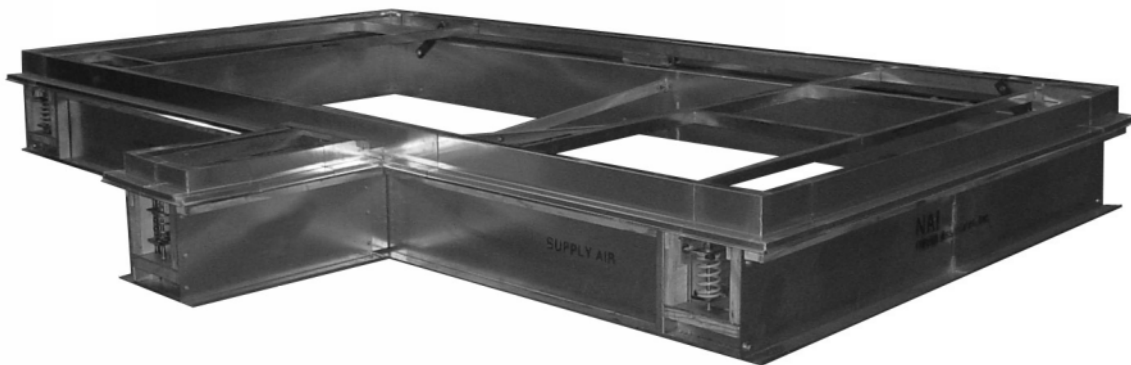




VibCurb Installation Instructions

Date: 11/07/14

Supersedes: 08/27/13



Do it once—Do it right

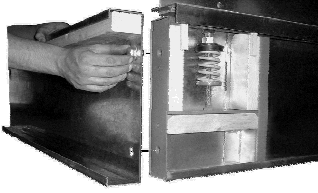
Please do not attempt to install this curb until you have read and fully understand these instructions - All spring curbs are not built the same.

Some springs are capable of handling loads of over one ton each, **only** qualified technicians should undertake spring adjustments.

Before rigging equipment onto curbs, verify that there are no conflicts with the underside of the unit and the curb. Check all dimensions to ensure a good fit.

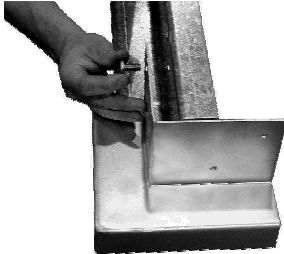
We have made every attempt to reduce the effort required in the field to successfully install our curbs. Spring curbs are vibration isolation devices meant to reduce the amount of vibration transmitted to the structure.

**Novia Associates, Inc. 1 Northwestern Drive
Salem, NH 03079 603-898-8600**



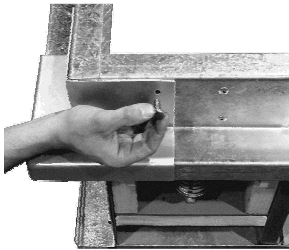
[1] Sides & Ends

- Attach ends to sides with $\frac{1}{2}$ " tap bolts and lock washers provided.
- Visually inspect that all spring pockets have two $\frac{3}{8}$ " thick yellow angle spacers.



[2] Top Rail

- Attach corner cap to end top rail with two $\frac{3}{8}$ " pan head bolts, nuts and lock washers provided.



[3] Top Rail

- Attach corner cap to side top rail with two $\frac{3}{8}$ " pan head bolts, nuts and lock washers provided.

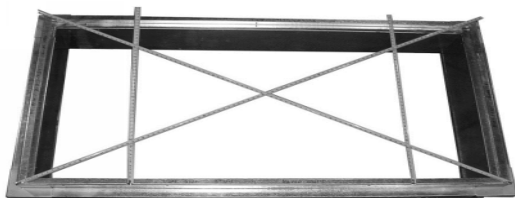
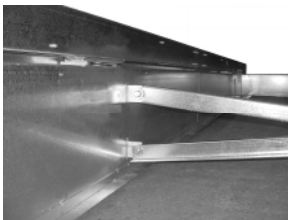
Top



[4] Cross Braces

- *Install cross braces at pre-drilled clips with $\frac{1}{2}$ " bolts, nuts and lock washers provided.*
- *Do not tighten until curb is squared & leveled.*

Bottom



[5] Squaring

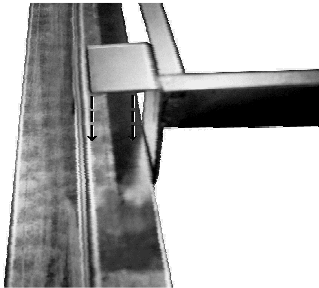
- Square up curb by checking diagonals and two locations across the width of the curb.
- *Tighten cross braces .*

Instructions in italics—may not pertain to all curbs.



[6] Leveling

- See RTU 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 curb to the roof structure. See our submittal for tie-down options.
- Remove and discard lifting lugs. Install plastic plug w/ silicone to seal top rail; from interior for positive pressure, exterior for negative pressure . (Plug not necessary for eye-bolt type lugs).



[7] Duct supports & Sound Barrier Package (SBP)

- Slip duct support and/or SBP assemblies over top rail. Align as noted on our submittal.
- Install gypsum board or Durock™ as specified (By others) into SBP frame. Caulk all edges and overlap any joints.
- Before placing RTU on curb, verify that the duct supports align with the RTU opening(s) and that there are no conflicts with the underside of the RTU and the duct supports or SBP.

See Figure 1 (last page) for Duct Drop Requirements

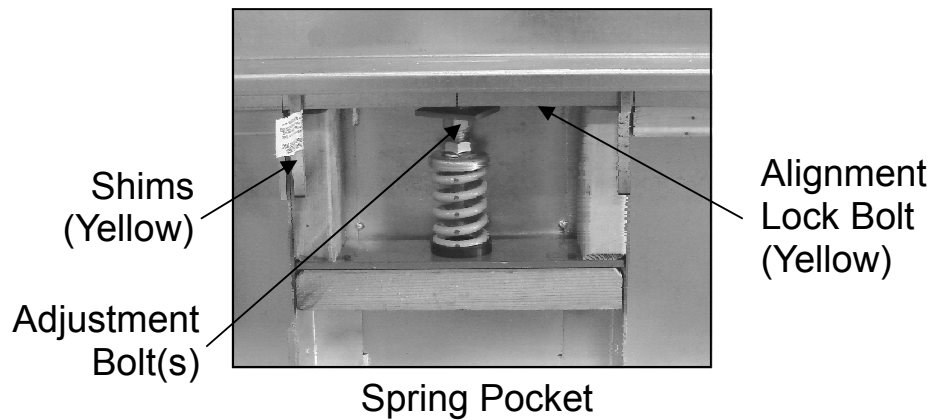
[8] Closed cell neoprene gasket (CCN)

- Just prior to rigging the RTU, install the provided, 3/8" x 1" CCN with the sticky side towards curb, on all top surfaces of curb that mate up to the RTU. This includes the entire top rail, *duct supports and plenum divider*.

Notes:

- All piping, ductwork and electrical connections to RTU should be flexible to prevent short circuiting of the spring curb's effectiveness.
- RTU can be installed before or after the curb is externally insulated and roofing membrane is installed.
- Exterior insulation, if not supplied with curb, can now be installed.
- Roofing membrane can now be installed. Membrane should terminate at the top of the sheet metal sides & ends of the curb and cover the spring pockets until springs are ready to be adjusted.
- *Remove access door(s) and apply roof membrane to inside edge of framed opening to form weather seal, then reinstall access door(s).*

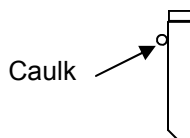
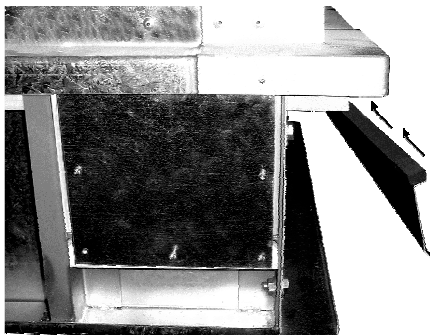
Instructions in italics—may not pertain to all curbs.



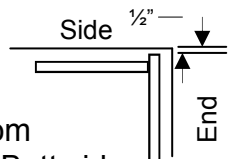
[9] Spring Adjustment

- Only to be done by qualified technicians after RTU is installed on curb.
- 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. *Include condensing unit isolators in rotation if applicable.*
- Continue rotating from pocket to pocket, keep moving around the curb 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 caulking to all inside edges of cover plate, slip top edge under bottom flashing and secure with #8 wood screws provided.
- One spring is shown - two may be used for heavier loads.

[10] Bottom Flashing



- Care should be taken installing the bottom flashing, as it seals the curb from air and water leakage.
- The bottom flashing is installed after the RTU 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.
- Apply a $\frac{1}{4}$ " bead of caulk 1-1/2" down from the 90° bend to the inside of the flashing.
- Firmly press bottom flashing upwards under the top flashing until it seats.
- Screw bottom (6" O.C.) 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 joints.



Instructions in italics—may not pertain to all curbs.

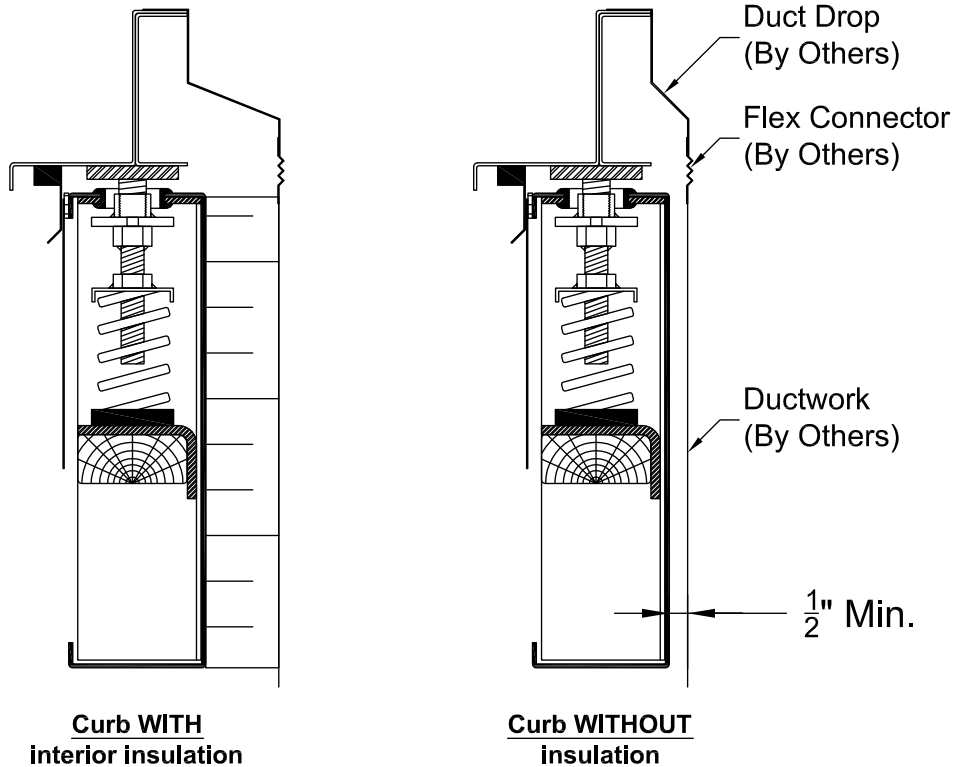
Curb to Structure:

If wood blocking is used, the minimum blocking width must be equal to or greater than the maximum blocking height or additional anchors may be required. If this condition cannot be met contact NAI with maximum blocking height and minimum width prior to installation.

Contractor is responsible for providing a transition to their ductwork, away from the main curb wall - $\frac{1}{2}$ " **clearance minimum**. Failure to do so can short out the curb and could cause the unit to crash into improperly fabricated duct drops, or create unwanted noise & vibration.

FIGURE 1

Refer back to Step [7]
"Duct supports & Sound Barrier Package"



EXAMPLE: Contractor Installed duct drop profile against curb wall.