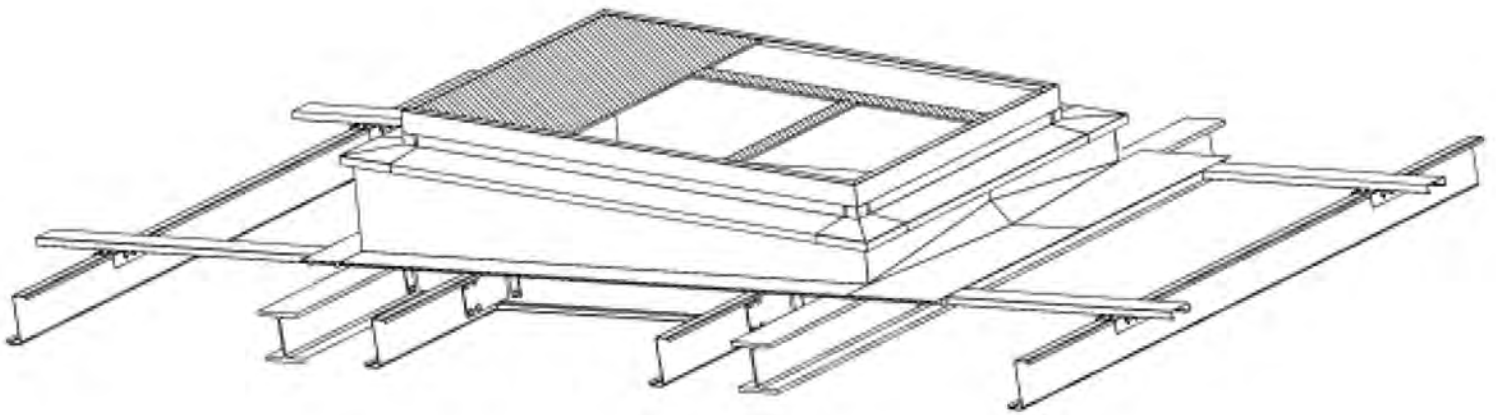




Double Floating Curb System

- Product Description
- Installation Instructions



ROOF CURB SYSTEMS - SYSTEM SOLUTIONS FOR COMPONENT PROBLEMSSM

T - 800.683.5848 • F - 800.683.5849 • www.roofcurb.com



DOUBLE FLOATING CURB SYSTEM

Double Curbs are typically used for the following reasons...

- The roof top unit weight can not be supported by purlins and loads must be transferred to the main frames with I-Beams.
- Roof top unit weight would not allow thermal movement of the Standing Seam Roof System if the units were placed on standard curbs attached to the roof.
- Framed Opening or HVAC ductwork requirements are larger than the purlin spacing.

Typically the framed opening is boxed out with secondary members, hot or cold roll channels connected to the I-Beams, (carry beams). Purlins are terminated/spliced to the secondary members with standard angle clip connections to form the framed opening.

A Double Curb System includes:

- **Inner Structural Curb**

The Inner Curb supports the weight of the HVAC unit. The Inner Curb is attached to the structural frame out by fasteners 6" O.C. into the secondary members, or by stitch welding the inner curb flange to the I-beams and secondary members. The I-beams will transfer the HVAC unit weight over to the main frames.

- **Outer Floating Curb**

The Outer Floating Curb is placed around the Inner Curb. The roof panel is attached to the Outer Curb. This allows the roof to move (float) with thermal expansion and contraction, while the inner curb remains stationary.

- **Cee-TRAC Outer Floating Curb Support**

The Cee-TRAC is what the Outer Floating Curb is attached to. The Cee-TRAC will be pre-elevated to match the roof elevation, (roof clip), i.e. 1 $\frac{3}{8}$ " for high clip. The Cee-TRAC curb support allows for full thermal movement.

- **Flash Collar**

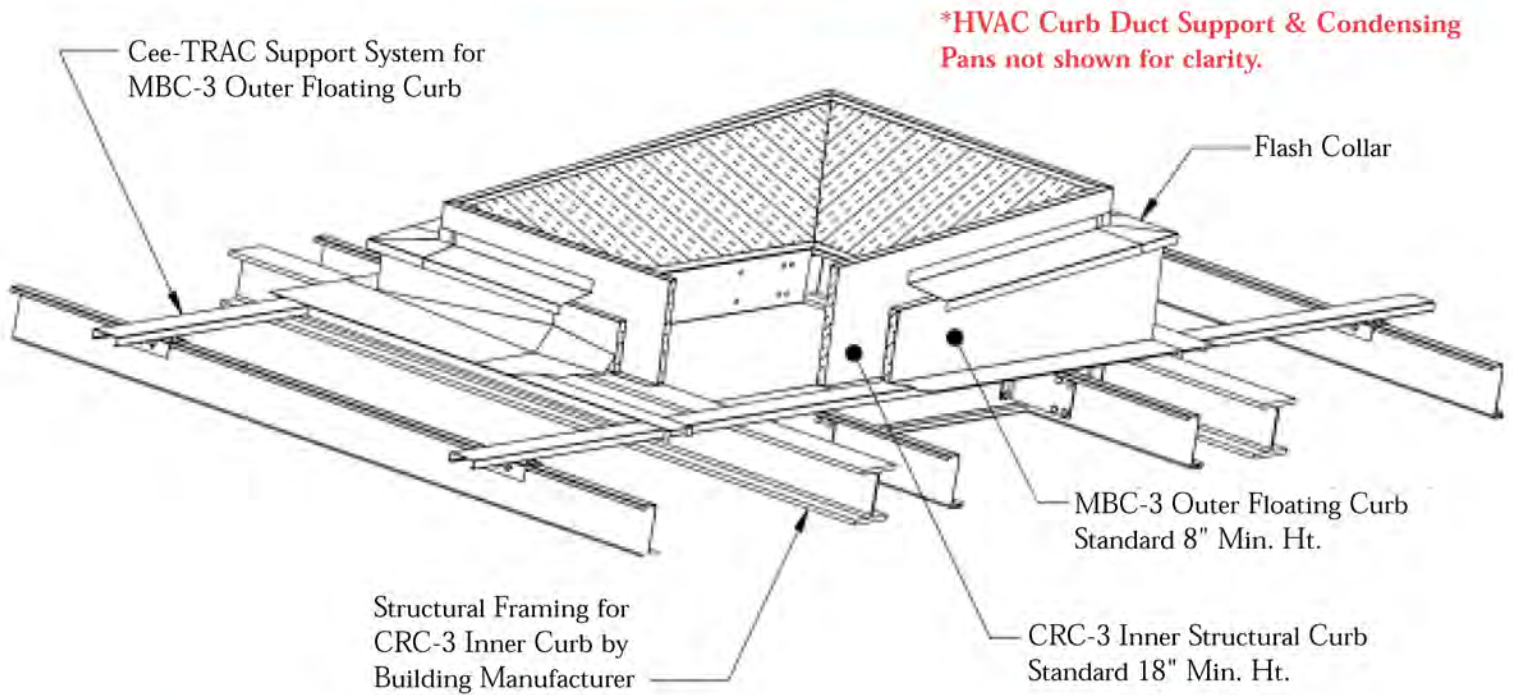
The Flash Collar provides weather tight seal between the Inner Curb and the Outer Floating Curb. The Flash Collar is attached to the Inner Curb and extends over the Outer Floating Curb to allow for thermal movement. Metal Building Insulation is typically used to fill the space, (4 $\frac{1}{2}$ ") between the Inner Curb and the Outer Curb.

- **Additional Accessories**

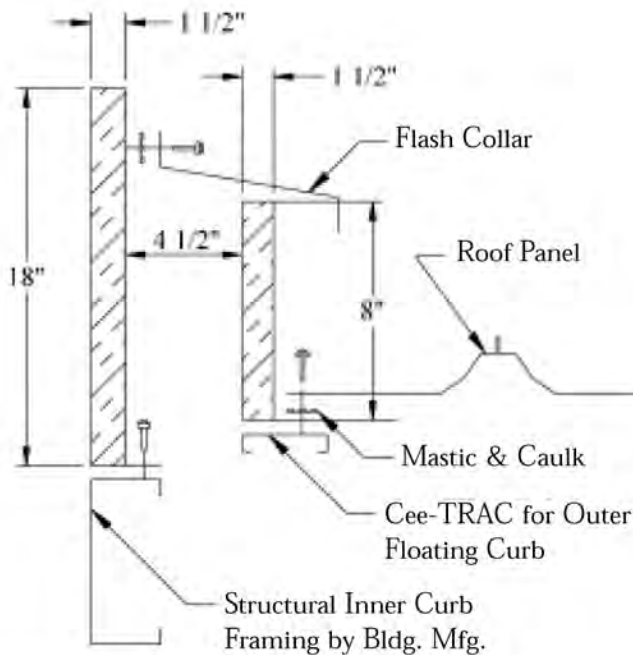
- Standard accessories are supplied as with all RCS Roof Penetration Systems.
- Triple Bead Roll Mastic 2 $\frac{1}{2}$ " x 20"
- Polyurethane Tube Caulk
- Long Life 1 $\frac{1}{4}$ " Fasteners
- Loose Rib Caps

DOUBLE FLOATING CURB SYSTEM

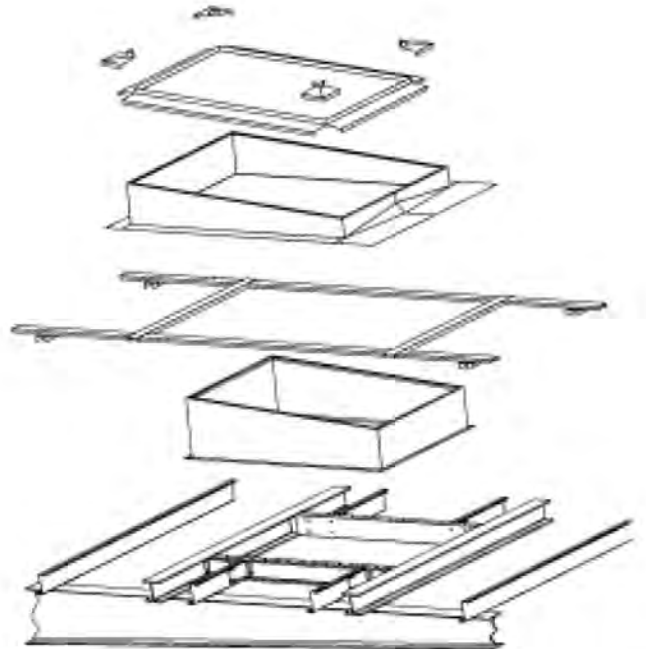
Double Curb Cutaway



Double Curb Cross-Section

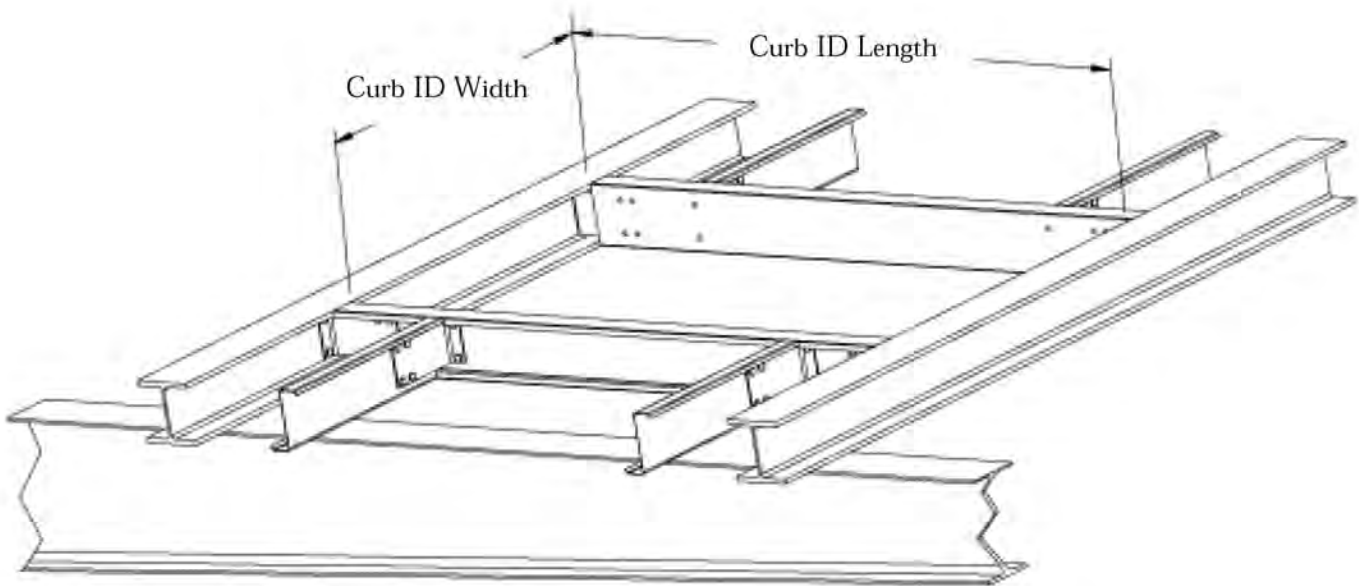
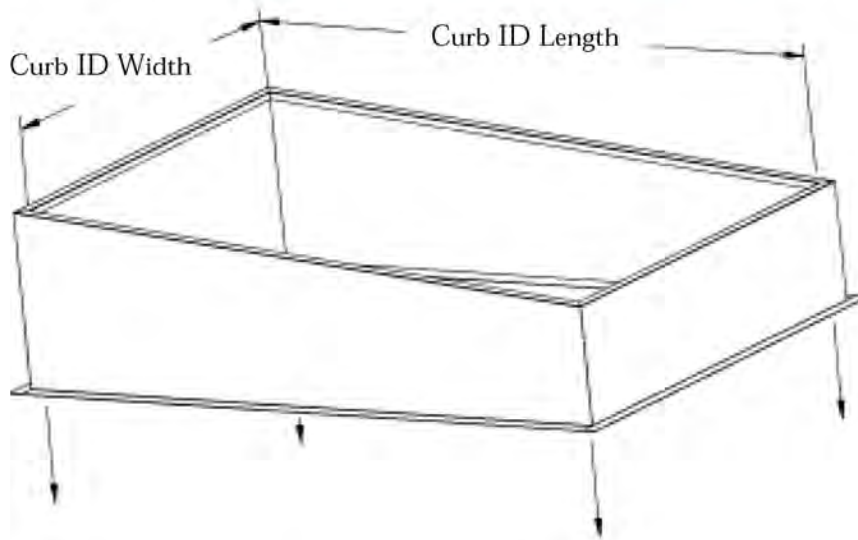


Double Curb Exploded Assembly



DOUBLE FLOATING CURB SYSTEM

Structural Frame Out/Box Out



The inside dimension of the I-Beam secondary members are to be the same as the Inner Curb ID length.

The inside dimension of the C-Channel secondary members are to be the same as the Inner Curb ID width.



DOUBLE FLOATING CURB SYSTEM

Inner Curb Attachment to Structural Frame Out by Building Manufacturer

NOTE: If seismic zone considerations are a factor, consult building manufacturer or structural engineer for attachment method.

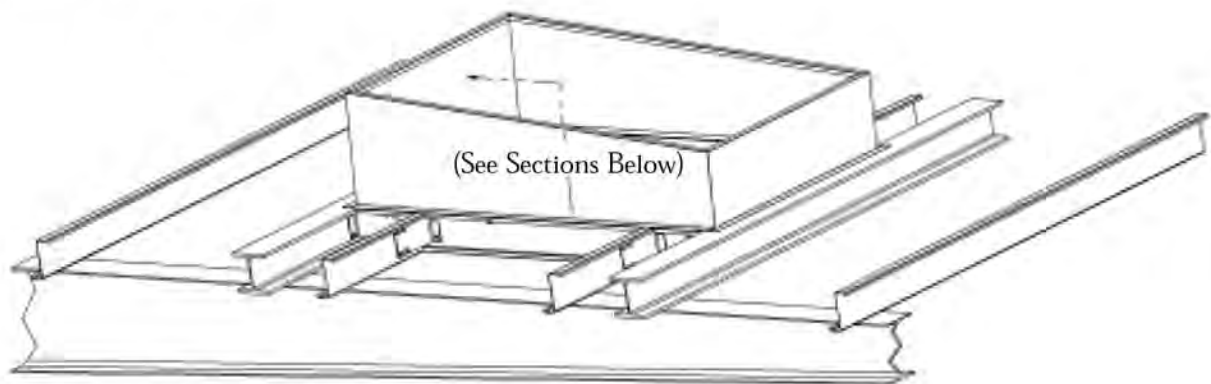
Inner Curb shall be secured to structural frame out secondary members by using self-tapping fasteners through Inner Curb side flanges into secondary members 6-8" on center, or apply a 1" stitch weld 8-12" on center.

See sectioned illustrations below.

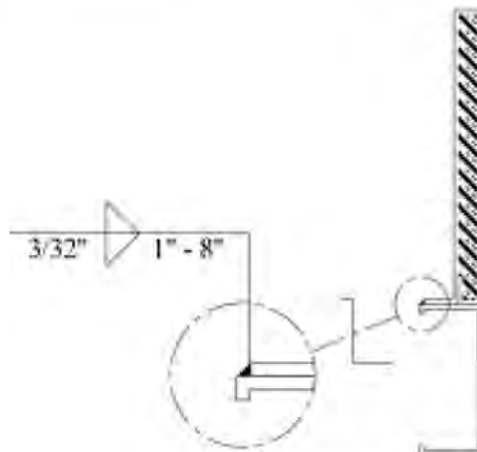
Suggested fastener types:

1. If secondary members are cold rolled sections, i.e. 12-gauge C-Channels, use $\frac{1}{4}$ x 14 x $1\frac{1}{4}$ " self-tapping fasteners.
2. If secondary members are hot rolled sections, the fastener type will depend on the thickness of the hot rolled sections. Suggested fasteners types: $\frac{1}{4}$ x 20 x $1\frac{1}{2}$ ", $\frac{1}{4}$ x 24 x $1\frac{1}{2}$ ", with drill point sufficient to drill through steel thickness i.e. Impax #4.5, or Tek #5

NOTE: Pre-drilling may be required.



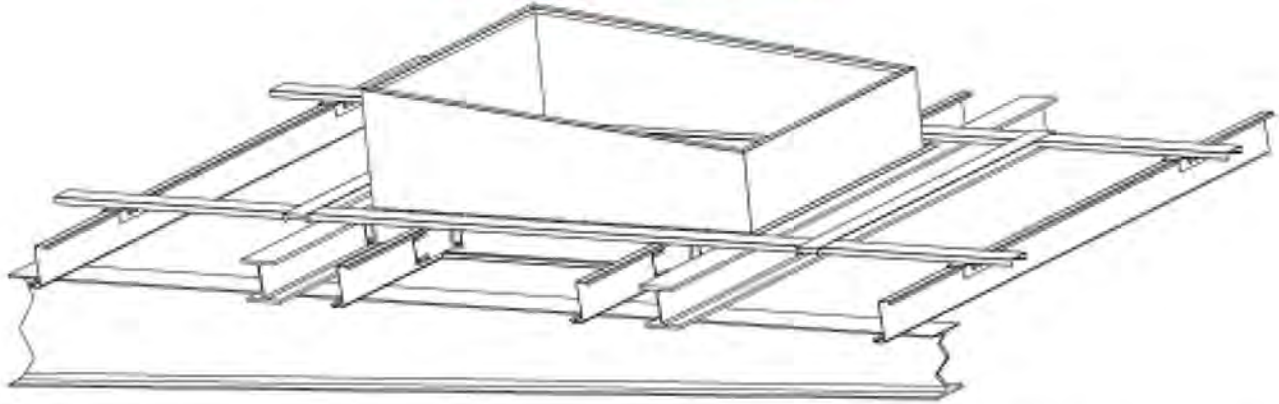
Curb attached by fasteners



Curb attached by welds

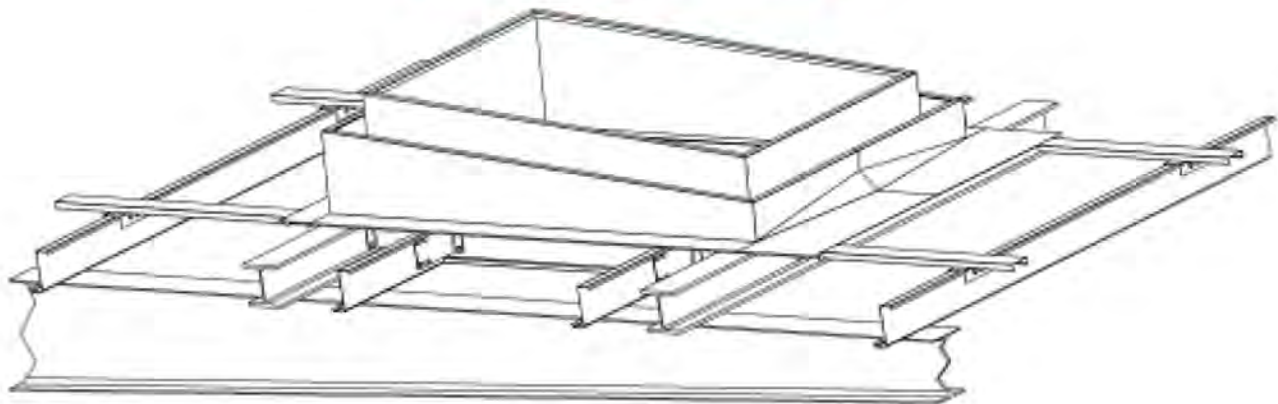
DOUBLE FLOATING CURB SYSTEM

Cee-TRAC Attachment

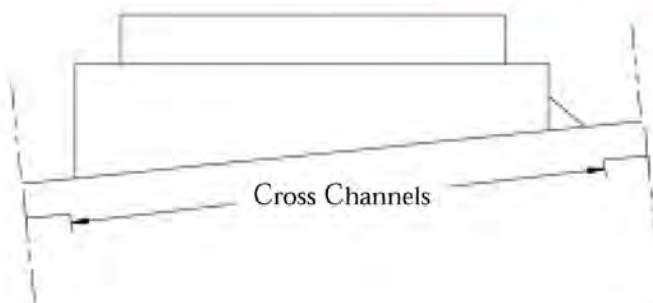


Cee-TRAC Curb Support Framing is used to support the outer floating curb. Like TRAC-Rail, Cee-TRAC allows for thermal movement, resists negative pressure, and elevates the curb (outer curb) flange to the roof panel elevation. There are two types of Cee-TRAC; high and low. The type of Cee-TRAC required depends on the SSR roof clip.

Outer Curb Attachment



Placement of Cross Channels

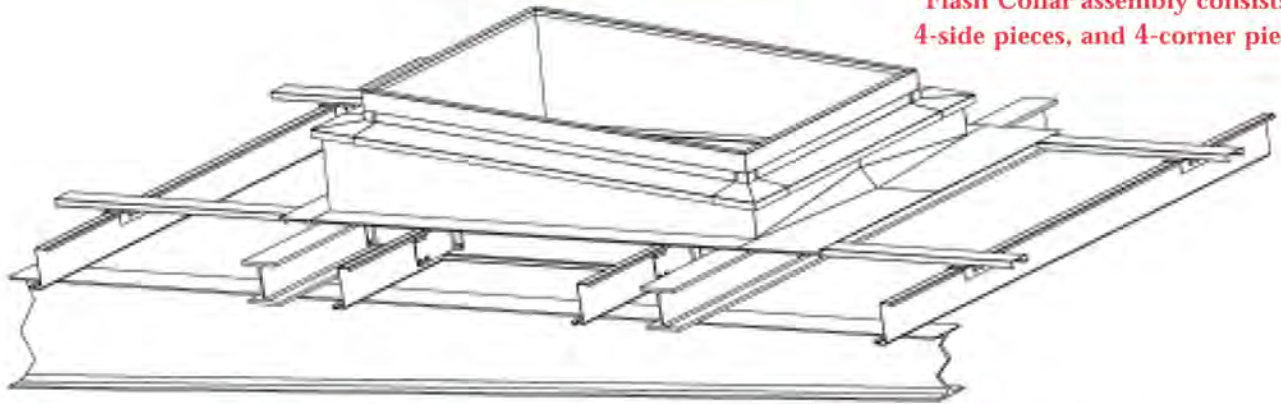


The OD of cross channels is equal to, or flush with the outer edges of the front and rear Outer Curb Flanges. Cross Channels are used to support curb flange and roof panel connection.

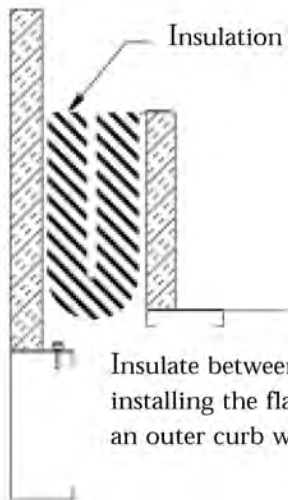
DOUBLE FLOATING CURB SYSTEM

Flash Collar Attachment

*Flash Collar assembly consists of 4-side pieces, and 4-corner pieces

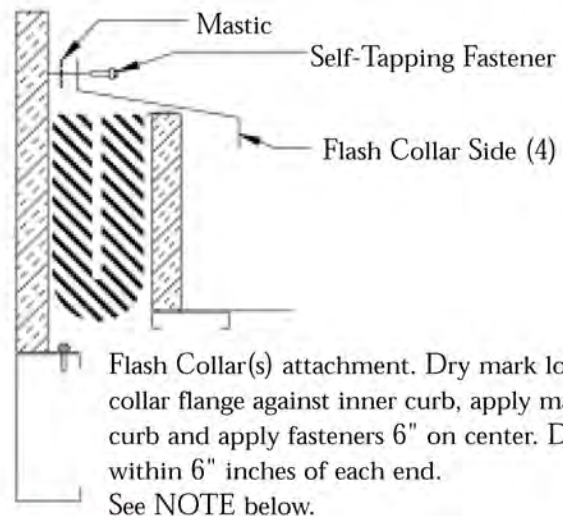


Insulate between Inner/Outer Curbs



Insulate between inner and outer curbs before installing the flash collar. Fill void between inner and outer curb with metal building insulation.

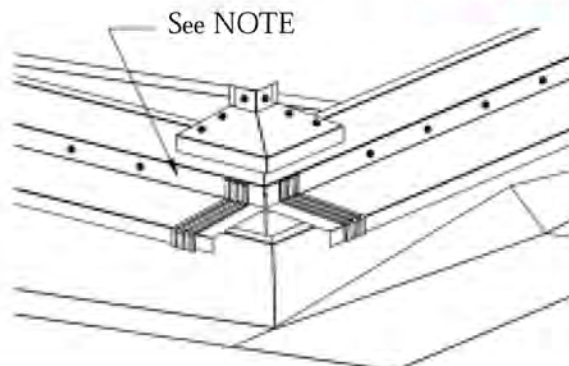
Flash Collar Sides Attachment



Flash Collar(s) attachment. Dry mark location of flash collar flange against inner curb, apply mastic to inner curb and apply fasteners 6" on center. Do not fasten within 6" inches of each end.

See NOTE below.

Flash Collar Corner(s) Attachment



Apply mastic to flash collar corner, fasten to flash collar side pieces and to inner curb.

NOTE: Do not place fasteners within 6" of the ends on all side pieces. Doing this will interfere with a flush fit when installing the corners.

* Refer to RCS curb installation details for attaching roof panel to curb. Installation details will vary depending on roof panel type and installation method.