**SECTION - 07721 PREFABRICATED METAL ROOF CURBS**

**1.00 - GENERAL**

1.01 The general conditions and supplemental general conditions of the contract apply to this section as if completely written herein.

1.02 The General Contractor shall provide all labor, materials and equipment to hoist in place and completely install Prefabricated Metal Roof Curbs.

1.03 Prefabricated Metal Roof Curbs shall be used at all roof penetrations including but not limited to HVAC units, skylights, duct openings, pipe penetrations, and exhaust fans.

1.04 Installation of the Prefabricated Metal Roof Curb shall be in accordance with the instructions and as detailed in the Shop Drawings.

1.05 Coordination of the roof profile and slope, required size of opening and curb height options shall be coordinated between SSM and Mechanical or Roofing Contractor prior to fabrications. Shop Drawing approval required prior to fabrication commencing.

**2.00 - PRODUCTS**

2.01 Prefabricated Metal Roof Curb, Model SHC, shall be manufactured by:

 SSM, 405 N. Olive St., Kansas City, MO 64120.

 Phone: 816.221.5434, Fax: 816.221.8022.

 Contact: Derek Mills, dmills@ssm-kc.com.

**3.00 - FINISHES**

3.01 Curbs are available in one of the following finishes:

 a. Galvalume®, unpainted.

b. Aluminum with a mill finish.

 c. Stainless steel in a 2B mill finish.

 d. Custom painted finish (as specified by Architect / Owner).

**4.00 - FABRICATION**

4.01 Model SHC curbs shall be constructed per the one-piece hybrid curb system developed by the curb manufacturer.

4.02 Standard components to be fabricated from 18 gauge (0.05”), Galvalume® or heavier gauge, as required, to support the load of the equipment. All corners to be fully mitered and welded.

4.03 Integral base elements to be seamless, with integral water diverter cricket, as part of the complete assembly. All welds to be sealed with Rustoleum® UV Protectant.

4.04 Minimum height of Curb shall be 10" above finished roof (or as specified).

4.05 Curbs shall be constructed to match slope and profile of roof to provide a level work surface for the mounting of equipment, unless specified otherwise.

4.06 Bottom curb flange and welded caps shall be constructed to match configuration of roof panel. Side flanges shall extend inward allowing enough area for drainage on the sides.

4.07 2” thick, vinyl backed insulation (R = 6.2) is the standard factory installed insulation. Other options are available upon request.

**5.00 - OPTIONS**

5.01 Manufacturer offers a range of options including, but not limited to, the following:

 a. Special insulation requirements as needed.

 b. Heavier material gauges of metal as required.

 c. Exterior color if other than one of our primary colors offered.

 d. Engineered calculations.

 e. Additional height.

 f. Damper trays.

 g. Inner metal liners.

 h. Ridge mounted.

 i. Curb caps.

 j. Insolation retainers.

**6.00 - COORDINATION**

6.01 Size of curbs and required options shall be coordinated by curb manufacturer, general contractor, and mechanical contractor prior to fabrication.

6.02 Shop drawings, approved by Customer, shall be used for the fabrication of roof curbs.

**7.00 - MATERIALS**

7.01 Model SHC Roof Curb should come complete, from the Manufacturer, with the following components:

 a. Sealant.

 b. Butyl Tape.

 c. Stainless steel fasteners with sealing washers.

 d. 11 gauge galvanized support channels.

 e. Installation manual.

**8.00 - INSTALLATION**

8.01 Installation of the hybrid curb is designed to be easy and straight forward. Be certain that installation crew wears the proper safety equipment - including fall protection devices as required.

 a. Set the curb in the place where it is to be installed.

 b. Mark the roof, inside of the roof curb opening, to define the area to be removed from the roof decking.

 c. Cut the opening needed and trim back the roof’s standing seam components, as needed, for the roof to seat properly.

 d. Clean the area around the opening area to remove loose particles and debris from the cutting of the opening. This step is essential to ensure that the curb seats properly.

 e. Apply the double stick, butyl tape (provided by Manufacturer) to the underneath side of the perimeter of the roof curb to be installed.

 f. Trim all excess butyl tape and verify that the tape is secure to the curb assembly.

 g. Remove the backing layer from the butyl tape and flip the hybrid curb over - holding it above the roof - to check for alignment to the roof opening cut in step C above.

 h. Place the curb assembly in position and press down along the butyl tape edges to ensure even contact.

 i. Secure the curb in place, as per the provided fastener holes, with the fasteners provided.

 j. Clean up the area around the opening joint between the hybrid curb assembly and the roof surface to remove any loose particles.

 k. Apply caulk around the perimeter of the hybrid curb in an even and concise manner, utilizing the proper tools, to ensure a consistent seal around the product’s edge conditions.

**9.00 - WARRANTEE**

9.01 The Prefabricated Metal Roof Curbs shall be guaranteed to be free from defects in materials and workmanship for a period of 5 years from date of delivery.

9.02 Paint finish warrantee to be based upon type of paint specified and color as issued by paint manufacturer.

9.03 SSM assumes no responsibility for the workmanship for roof curb components installed by other.