

Cambridgeport

Custom Roof Curbs

Custom Roof Curbs shall include the following features:

- (a) Curb sides and ends shall be continuous with a minimum of 16 gauge G90 galvanized sheet metal. All sides, ends and corner joints can be continuously welded or unassembled for field erecting. Curbs are fabricated per NRCA standards.
- (b) Shall be capable of accepting external insulation. All external insulation shall be furnished by the installing contractor.
- (c) Wood nailer around the perimeter of the curb shall be supplied for the installing contractor. Curbs shall be installed based on the NRCA standards.
- (d) Prefabricated galvanized pans for rooftop units that require drainage pans under the condensing sections that are located within the curb perimeter.
- (e) Duct supports shall be provided as required by unit manufacturer. Supports shall be capable of supporting the duct work with a maximum deflection over the width of the curb of L/360.
- (f) Lifting lugs can be attached to the lower section of assembled curbs.
- (g) Seismic brackets can be located on upper section of the curb for unit attachment.
- (h) Shall have a minimum operating height of 14 inches
- (i) Provide with framed supply and return air duct openings. Openings shall match sizes given by the unit manufacturer.

Options

- (j) Sound barrier package, supported from the top or bottom of the curb consisting of galvanized steel members. Sound barrier package shall be capable of supporting two layers of Durock concrete board furnished and installed by the General Contractor.
- (k) Provide galvanized insulated hinged access doors with handles for access into the curb. The hinged access doors shall be installed and sealed to be weather tight. Wood nailers shall be provided as required.
- (l) Curb walls, floor and/or plenum dividers shall be acoustically lined internally with *(select from table)* thick fiber glass acoustical duct liner with reinforced coating system designed to withstand up to 6000 fpm air velocity. Acoustical performance shall be shown in the Table. Liner shall not support microbial growth and shall be EPA registered and pass ASTM C 1071 & ASTM G 21 bacterial tests conducted in accordance with ASTM G 22. Liner shall be fastened in strict accordance with liner

manufacturer's instructions utilizing weld pins not self adhesive stick pins. Submit liner manufacturer's installation instructions for approval.

- (m) Provide double wall acoustical walls, floors and/or plenum dividers. Floor shall be constructed of 22 gauge solid galvanized bottom panels and 22 gauge galvanized perforated 23 % open area top panel. Floor shall be attached to walls and plenum divider to provide an air tight plenum. Insulation shall be *(select from table)* thick fiber glass acoustic insulation.
 - (1) Walls shall have 22 gauge galvanized perforated 23 % open area inside panels. Insulation shall be *(select from table)* thick fiber glass acoustic duct liner with reinforced coating systems.
 - (2) Plenum divider shall be double wall 22 gauge galvanized perforated 23% open area panels on both supply and return sides with 18 gauge galvanized interior septum wall. Insulation shall be *(select from table)* thick fiber glass acoustic duct liner with reinforced coating systems.
- (n) In the supply air stream provide turning vanes.
- (o) Sound attenuators scheduled on the drawings shall be provided as an integral part of the fully assembled curbs. The curb manufacturer shall provide all the required supports, flexible connections, flashing and safing.
- (p) Provide a 48" wide integral service platform that is attached to the curb without short circuiting the effectiveness of the vibration isolation. The outside of the service platform shall be supported by adjustable steel stanchions provided by the curb manufacturer. The platform shall be capable of supporting 125 lb. / sq. ft. The platform shall be galvanized expanded metal grating. All railings shall be fixed and welded in place as instructed by the General Contractor. Removable railing is available upon request. Provide a staircase with railings (OSHA) approved to roof level bolt to the platform. Platform shall be provided in prefabricated bolt together sections for final field assembly. All welds shall be sprayed with cold galvanized compound grey.
- (q) Curbs shall be built to match the roof pitch in accordance with all seismic & wind load requirements of said project. Positive attachment of the curb to the structure is imperative.
- (r) Filter racks shall be installed internally to accommodate such requirements.

Insulation Table

Thickness (in)	Sound Absorption Coefficients, 1/3 Octave Bands (ASTM C 423, Type A Mounting)						
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1"	0.18	0.36	0.59	0.86	0.95	0.90	0.70

Thickness (in)	Sound Absorption Coefficients, 1/3 Octave Bands (ASTM C 423, Type A Mounting)						
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1-1/2"	0.35	0.51	0.83	0.93	0.97	0.96	0.80

Thickness (in)	Sound Absorption Coefficients, 1/3 Octave Bands (ASTM C 423, Type A Mounting)						
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
2"	0.34	0.64	0.96	1.03	1.00	1.03	0.90