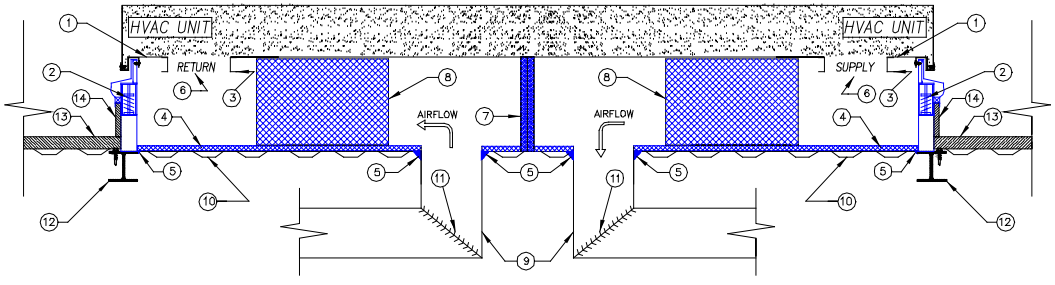
HUSHCORE™ *ULTRA™* SYSTEM *"CUSTOM"* PLENUM STYLE ACOUSTICAL VIBRATION CURB



BY RTU UNIT MANUFACTURER

1. RTU BASE
2. HUSH CURB™ HIC VIBRATION ROOF CURB
3. INTEGRAL CURB DUCT SUPPORT
4. HUSH GUARD™ HG MODULAR PANELIZED FLOOR
5. HUSH SEALANT™ ACOUSTICAL GRADE CAULK AT ALL DUCT DROPS & CURB PERIMETER
6. RTU OPENING
7. PLENUM DIVIDER
8. HUSH DUCT™ SILENCERS

BY HVAC CONTRACTOR

9. DUCT WORK
10. ROOF DECK FLASHED TO WITHIN 1/4" OF ALL DUCT DROPS BUT NOT IN CONTACT WITH DUCT WALL
11. TURNING VANE

BY GENERAL CONTRACTOR

12. BUILDING STEEL
13. BUILT-UP ROOF OR CONCRETE
14. INSULATION AND CANT STRIP

RTU NOISE REDUCTION SYSTEM

HUSHCORE™ ***ULTRA™*** System shall shall be a 2" deflection, totally integrated, totally sealed and pre-assembled vibration isolated curb with internal in-curb deck treatment and fan sound attenuation designed to meet the specified sound pressure levels at the building deck supply and return openings as shown in Performance Section below.

The HUSH CURB™ shall bear directly on the roof support structure and be flashed and waterproofed into the roof's membrane waterproofing system. The curb shall be capable of being re-flashed without lifting the unit. Curb sides and ends shall be manufactured from minimum 14 ga. G90 galvanized sheet metal (expanded metal or painted steel is not acceptable), reinforced and cross braced as required. The ULTRA System shall have restraints and snubbers to resist wind and seismic forces. The completely isolated top and bottom steel structural frames shall have a continuous flexible weatherseal. The HUSH CURB™ shall be shipped completely assembled. The HUSH CURB™ shall have fully integrated and internal HUSH DUCT™ horizontal silencers for supply and return supported by the curb. The HUSH CURB™ shall have a factory installed panelized acoustical floor sound package for radiated noise. Materials shall meet Class "A" per ASTM E84 for flammability The Acoustical Panelized Floor shall have transmission loss ratings as listed below in accordance with ASTM-E-90-10. Products and systems shall be by BRD Noise and Vibration Control, Inc., Wind Gap, PA, (610) 863-6300, www.HUSHCORE.net.

PERFORMANCE

To assure optimized aerodynamic and acoustic performance as well as proper integration and coordination of the final installation, the HUSHCORE™ System shall be supplied by the rooftop unit manufacturer as part of a turnkey package. The HUSH CURB™ shall provide minimum 85% vibration isolation efficiency. HUSHCORE™ Plenum Style Acoustical/Vibration Curbs shall be tested in accordance with procedure ASTM E-90-10. The assembly shall be rated at not less than STC [ ] with 1/3 octave performance values as listed below for sound radiation through the deck inside the curb.

HUSHCORE™ Panelized Acoustical Floor - (Transmission Loss) in accordance with ASTM E-90-10																						
Freq. (Hz)	80	100	125	160	200	250	315	400	500	630	800	1K	1.25K	1.6K	2K	2.5K	3.15K	4K	5K	6.3K	8K	STC
Transmission Loss (dB)	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Sound Pressure Levels at the SA Dischage & RA Intake shall be as per Octave Band dB Levels and Overall dBA level shown below:

Sound Pressure Level with HUSHCORE ™ CURB at Silencer Openings									
Freq. (Hz)	63	125	250	500	1000	2000	4000	8000	dBA
Supply	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Return	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]