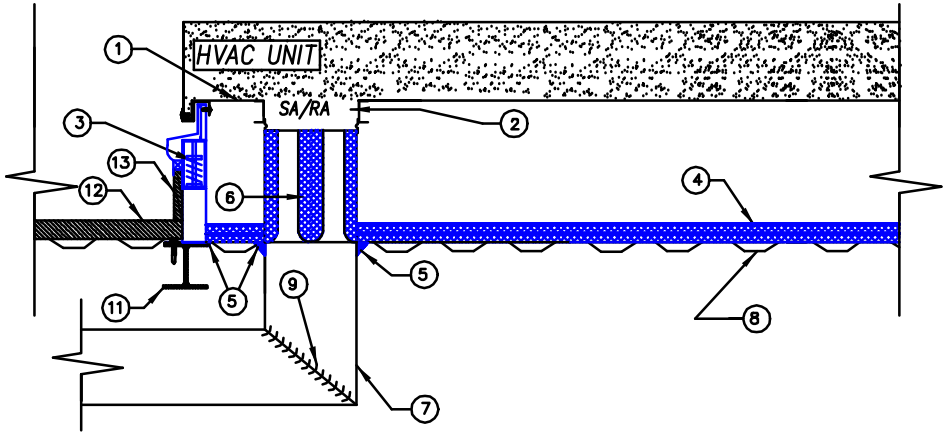
HUSHCORE™ *WHISPER™ "V"* SYSTEM MODEL *HIC-DS-41-V* ACOUSTICAL VIBRATION CURB



BY RTU UNIT MANUFACTURER

1. RTU Base
2. RTU Openings

BY ACOUSTICAL MANUFACTURER

3. HUSH CURB™ HIC Vibration Roof Curb
4. HUSHCORE™ DS-41 In-Curb DECK™ System
5. HUSH SEALANT™ Acoustical Caulk at all Duct Drops & Curb Perimeter
6. HUSH DUCT™ Vertical Silencer

BY HVAC CONTRACTOR

7. Duct Work
8. Roof Deck Flashed to within $\frac{1}{4}$" of all Duct Drops but not in contact with Duct Wall
9. Turning Vane
10. Submit Letter of Certification from Acoustical Supplier following Inspection

BY GENERAL CONTRACTOR

11. Building Steel
12. Built-up Roof or Concrete
13. Insulation and Cant Strip
14. Curb Slope requirements where applicable

RTU NOISE REDUCTION SYSTEM

HUSHCORE™ ***WHISPER™ "V"*** System Model ***HIC-DS-41-V*** shall be a 2" deflection, fully adjustable and fully assembled Acoustical Curb System with integrated HUSH DUCT™ SA and RA Silencers. The completely isolated top and bottom steel structural frames shall have a continuous flexible weatherseal. The system shall be capable of serving as a blocking device during installation. The springs shall have built-in limit stops to snub out wind resistance. Model ***HICS-DS-41-V*** incorporates seismic construction. The HUSH CURB™ shall be 24" high and shipped completely assembled. Factory curbs with a secondary vibration rail kit are not acceptable.

The HUSH CURB™ shall have a field installed ***DS-41*** in-curb acoustical composite sound package for radiated noise. The ***DS-41*** acoustical composite shall be 4" thick and have transmission loss ratings as listed below in accordance with ASTM-E-90-10. HUSH DUCT™ Silencers are shipped loose for SA and RA. HUSH SEALANT™ model HSAC-100 acoustical grade caulk shall be used around curb perimeter edges and around all curb openings for duct drops and utility lines. Coordinate silencer sizes and configuration as well as curb bottom openings with building ductwork. A letter of certification shall be issued by the acoustical system supplier stating the complete system has been properly installed prior to setting the units. 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™ Model ***HIC-DS-41-V*** Acoustical/Vibration Curbs shall be tested in accordance with procedure ASTM E-90-10. The assembly shall be rated at not less than STC-41 with 1/3 octave performance values as listed below for sound radiation through the deck inside the curb.

HUSHCORE™ ***DS-41*** In-Curb Treatment - (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)	13	13	18	20	25	40	48	52	56	58	60	58	60	60	61	62	65	69	72	72	74	41

Sound Pressure Levels at the ***HIC-DS-41-V*** SA Silencer Exit & RA Silencer Inlet shall be as per Octave Band dB Levels and Overall dBA levels shown below:

Sound Pressure Levels with HUSHCORE ™ ***HIC-DS-41-V*** at Deck Openings									
Freq. (Hz)	63	125	250	500	1000	2000	4000	8000	dBA
SUPPLY	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
RETURN	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]