



BY RTU UNIT MANUFACTURER

1. RTU Base
2. SARA Unit Openings

BY ACOUSTICAL MANUFACTURER

3. HUSHCORE® **DECK™** Model **DS-53** System - In-Curb Acoustical Treatment
4. HUSH SEALANT™ Acoustical Caulk at all Duct Drops, any penetrations within the curb, & Curb Perimeter

BY HVAC CONTRACTOR

5. RTU Curb
6. Duct Drop
7. Flex Connector
8. Duct Work
9. Turning Vane
10. Roof Deck Flashing to within 1/4" of all Duct Drops & penetrations, but not in contact with Duct Wall
11. Submit letter of certification from acoustical supplier following inspection.

BY GENERAL CONTRACTOR

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

RTU NOISE REDUCTION SYSTEM

HUSHCORE® **DECK™ Model **DS-53** System**

- a. Shall be a multi-layered acoustical composite for placement inside rooftop equipment curbs.
 1. The overall installed thickness of the composite panels shall be a maximum of 14" thick.
 2. The composite panels shall get HUSH SEALANT™ model HSAC-100 acoustical grade caulk at seams and all perimeter edges inside the curb. Decking shall be maintained inside the RTU roof curb to a clearance of 1/4" maximum around all duct drops but never contact the duct.
 3. The mechanical contractor shall provide digital evidence of the in-curb acoustical treatment installation prior to lowering of the rooftop units to the acoustical manufacturer. The acoustical manufacturer shall issue a letter of certification stating that the products have been properly installed and sealed around all ductwork and drops to eliminate air gaps which can compromise performance.
 4. Basis of Bid: BRD Noise and Vibration Control, Inc., Wind Gap, PA - (610) 863-6300, www.HUSHCORE.net.

PERFORMANCE

- a. The HUSHCORE® **DECK™** System shall be supplied by the rooftop unit manufacturer as part of a turnkey package.
- b. HUSHCORE® **DECK™** Model **DS-53** System In-Curb Acoustical Treatment Performance shall be tested in accordance with procedure ASTM E-90-10 with material seams and layering present in the test specimen representing actual field contractor installed conditions. Pre-assembled test specimen data shall not be acceptable as it overstates performance that is not reproducible in field conditions. The In-curb composite panel assembly shall be rated with 1/3 octave performance values as listed below for sound radiation through the deck inside the curb.

		HUSHCORE® In-Curb Composite - (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
Transmission Loss (dB)	26	29	30	32	36	41	46	51	55	57	60	61	64	65	65	65	69	72	74	73	75