



CHILLER NOISE REDUCTION SYSTEM

HUSHCORE® **SUMMIT™ HDE 3I-2E** Chiller Noise Reduction System:

- a. Shall consist of HUSH GUARD™ Acoustical Panels, HUSH DUCT™ Acoustical Silencers & HUSH COVER™ Acoustical Blankets
 - 1. HUSH GUARD™ Acoustical Panels shall consist of a sandwich construction of galvanized steel outside and inside skins with acoustical insulation fill. The acoustical panels shall surround the condenser fans in a barrier wall configuration and also shall be used as "blank-off" panels for the ends of the specified chiller(s). One (1) Acoustical Access Panel shall be provided as indicated in detail.
 - 2. HUSH DUCT™ Acoustical Silencers (Extended Length) shall be constructed of galvanized steel outside skins with perforated galvanized steel "baffle" skins filled with acoustical insulation. The silencers shall be mounted to the condenser and compressor section openings on each side of the chiller (intake).
 - 3. HUSH DUCT™ Acoustical Silencers (Standard Length) shall be constructed of galvanized steel outside skins with perforated galvanized steel "baffle" skins filled with acoustical insulation. The silencers shall be placed inside the condenser section HUSH GUARD™ Acoustical Panel Barrier wall enclosure (discharge).
 - 4. HUSH COVER™ Acoustical Blankets shall consist of barriers and absorbers with finished mass of 3.0 lbs. per sq.ft., with Velcro flaps for connecting panels together (Stainless Steel Wire Tie's are NOT acceptable). The blankets shall cover Compressors and/or extended components (discharge line, suction line and oil separators).
- b. The complete system shall meet chiller manufacturers published data pertaining to heat loss of compressors, condenser fan airflow, and ensure minimal "de-rating" of chiller performance.
- c. The complete system shall meet all environmental conditions such as temperature, wind, shrinkage, UV-rays, and moisture.
- d. OEM Factory Acoustical Packages by the Chiller Manufacturer are not acceptable.
- e. Products and Systems shall be by BRD Noise and Vibration Control, Inc., Wind Gap, PA - (610) 863-6300, www.HUSHCORE.net.

ACOUSTICAL PERFORMANCE

- a. 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 chiller unit manufacturer as part of a complete package.
- b. All Noise Control Materials Manufacturer's shall deliver a complete submittal of the HUSHCORE® System in compliance with the acoustical performance as listed in this specification. Please contact BRD Noise and Vibration Control, Inc. (610) 863-6300 for acoustical compliance and noise reductions as listed below for the applicable project.
 - 1. When operating at worst case noise conditions, the chiller with prescribed noise treatments shall not exceed [] dBA at a distance of [].
 - 2. Acoustical readings shall be provided by the chiller manufacturer after completed installation. Readings shall be conducted by a qualified acoustical consultant.
 - 3. Chiller Sound Power (Lw), including the specified HUSHCORE® System, shall not exceed the following octave band sound levels:

Freq. (Hz)	<u>63</u>	<u>125</u>	<u>250</u>	<u>500</u>	<u>1000</u>	<u>2000</u>	<u>4000</u>	<u>8000</u>
Sound Power (Lw)	[]	[]	[]	[]	[]	[]	[]	[]