



CHILLER NOISE REDUCTION SYSTEM

HUSHCORE® **UNITARY™ IM-SB** Chiller Noise Reduction System:

- a. Shall consist of HUSH GUARD™ Acoustical Panels & HUSH DUCT™ Acoustical Silencers.
 - 1. HUSH GUARD™ Acoustical Panels shall consist of a sandwich construction of galvanized outside and inside steel barriers with acoustical insulation fill. The acoustical panels shall surround the condenser fans in a barrier wall configuration and shall be supported by structural steel columns independent of the chiller. One (1) Acoustical Access Panel shall be provided as indicated in detail.
 - 2. 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).
- b. The complete system shall be designed & stamped by a licensed professional engineer to meet all gravity, wind and seismic codes for the state of _____.
- c. 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. Total System Effect Pressure Drop shall not exceed 0.20 in.wg.
- d. The complete system shall meet all environmental conditions such as temperature, wind, shrinkage, UV-rays, and moisture.
- e. OEM Factory Acoustical Packages by the Chiller Manufacturer are not acceptable.
- f. The complete system is designed for a "elevated" receiver position.
- g. 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. Chiller Sound Power (Lw), including the specified HUSHCORE® System, shall not exceed the following octave band sound levels:

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



CHILLER NOISE CONTROL DETAIL