

HIGH PERFORMANCE SILENCER™

Guide Specification Language

Sound Attenuators: High Performance Silencer (HPS)

- A. Sound Attenuator (Silencer) shall be provided. Unit length shall not be more than indicated on drawings and equipment schedule.
- B. Silencer shall provide performance as indicated in the chart below specific to the model (fill and/or liner type). Pressure drop shall not exceed 0.19 in. w.g. at face velocity of 500 FPM.

HPS Model	Length (inches)	Static Pressure Drop (iwg)*	Sound Insertion Loss (dB)					
			Octave Band Center Frequency (Hz)					
			63	125	250	500	1,000	2,000
Standard Fiberglass Fill	20	0.19	3	7	17	19	15	12
Poly Film Lined	20	0.19	3	5	14	16	10	7
Fiberglass Cloth Lined	20	0.19	3	7	17	19	15	12
Packless (No Media)	20	0.19	3	4	12	12	8	6

*APD based on 500 FPM face velocity

- C. Silencer performance shall be based on measured test results in Air Handling Units according to AHRI Standard 260 with actual air flow. Performance data based on test results in accordance with ASTM Standard E477 is not acceptable.
- D. Silencer casing shall be galvanized steel (G90). *(stainless steel [SS304][SS316])*
- E. Silencer filler material shall be inorganic glass fiber of a proper density to obtain the specified acoustic performance and be packed under not less than 5% compression to eliminate voids due to vibration and settling. Material shall be inert, vermin-proof and moistureproof. *(Filler material shall be totally encapsulated and sealed with polymeric film of an appropriate thickness. The encapsulated fill material shall be separated from the interior perforated baffles by means of a noncombustible, erosion-resistant, factory-installed acoustic stand-off. It shall not be acceptable to omit the acoustic stand-off and try to compensate for its absence by means of corrugated baffles.[hospital grade])*
- F. Combustion ratings for the silencer acoustic fill shall not be greater than the following when tested to ASTM E 84, NFPA Standard 90A and 90B, UL No. 723, CAN/ULC 122.

1. Max Flamespread 25
2. Max Smoke Developed Rating Index 50