



SPECIFICATION

(visit www.vibro-acoustics.com for complete specification)

Performance:

- Hole size, shape and location, and internal aerodynamic configuration of the Sil-Throw Duct system shall be designed to maintain self-generated noise below NC-___ while maintaining proper lengthwise flow distribution. Hole patterns shall be located so that thrown air does not impinge upon structural elements or other components of the roof system. Contained throw angle should achieve throw distance and maximum throw velocity specified, without creating unwanted drafts.
- Added internal flow straighteners and flow distribution control shall be used to balance flow delivery, but shall not be used in sections where they would generate noise in excess of the NC-___ criteria.

Submittals:

- Submittals shall include throw distances, throw velocities, pressure drop at rated flow, and NC level at rated flow.
- Submit acoustical calculations for all systems with Sil-Throw to demonstrate that the resultant space noise level, including breakout and airflow generated noise, in the occupied spaces meet the resulting noise criteria.
- Submit aerodynamic calculations for all Sil-Throw systems to demonstrate hole distribution pattern and spacing provides scheduled throw distance.
- Submit pressure drop calculations for all Sil-Throw systems to demonstrate a constant system pressure drop that meets the scheduled pressure drop.
- Submitted acoustical and aerodynamic calculations shall be stamped by a registered PE or P.Eng.
- Fabric Duct or field fabricated, rigid duct solutions are not acceptable.

APPLICATION FOR SIL-THROW DUCTING

Possible building applications:

- Swimming Pools
- Gymnasiums
- Auditoriums
- Art Galleries
- Airports
- Exhibit Halls
- Laboratories

Possible system applications:

- Supply Systems
- Return Systems

Sil-Throw Air Distribution

S-TAD

File No.: DS-S-TAD-001

Date: 5 Mar 2014

Supersedes: New

Date: New

DESCRIPTION

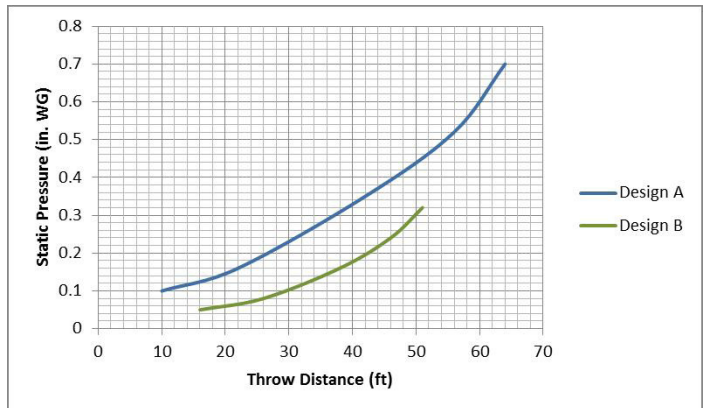
Vibro-Acoustics' Sil-Throw air distribution systems are designed, fabricated and supplied as a total system ready to install to meet the architectural, acoustic, and aerodynamic requirements of the project. Sil-Throw is manufactured of metal (galvanized, aluminum or stainless steel) according to project requirements. Architectural paint finish may be applied on site to match interior design requirements. Because Sil-Throw is a metal system, it meets all requirements for non-combustibility for ducting systems.

Sil-Throw is designed to provide a steady draft free flow of uniform, low velocity air to occupied spaces. Both supply and return air systems are available in straight, curved, horizontal, and vertical applications. Air can be supplied with constant throw distances having constant throw velocities; with varying throw distances having the same throw velocity, and with different throw directions, to suit needs of the occupied space.

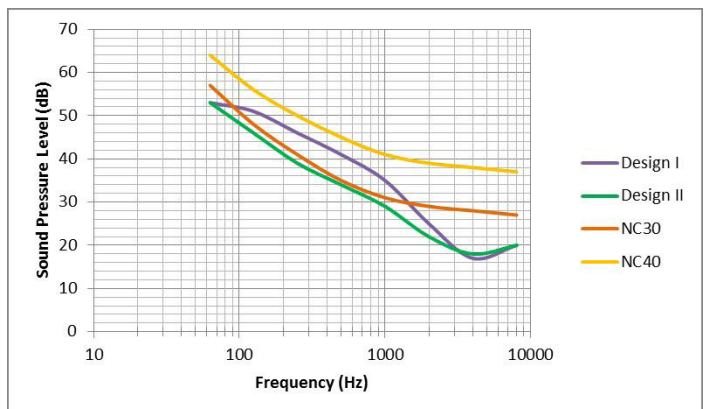
PERFORMANCE

Sil-Throw is designed to help meet ASHRAE Standard 62.1 (minimum ventilation requirements for acceptable indoor air quality in the space occupied zone), and ASHRAE Standard 55 (stipulates maximum temperature difference between any two points in the room in the occupied zone should not exceed 5.4 °F). ASHRAE standard 62.1 recommends a discharge to room temperature difference of no more than 15 °F to prevent stratification. Care should be taken when applying the maximum temperature differential, to prevent condensation on the ducting system.

Each Sil-Throw system is designed to meet noise levels as recommended by ASHRAE, or as specified by the mechanical or acoustical consultant.



Selected aerodynamic data – Test file VA2270
Laboratory Aerodynamic Measurements



Selected sound level data – Test file VA2545
Laboratory Noise Measurements