



# SUBMITTAL DRAWING



## Type DB

### Sound Attenuation With and Without Air Flow:

#### Straight Flexible Duct - Insertion Loss (IL) in dB per Foot

Octive Band Number	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Center Frequency - Hz	125	250	500	1000	2000	4000	8000
<b>IL @ Zero FPM</b>							
6" ID Duct	2.9	2.9	3.2	3.4	3.5	3.6	2.3
12" ID Duct	2.7	2.7	2.3	2.8	3.2	2.5	1.5
16" ID Duct	2.3	2.5	2	2.6	3	2	1.4
<b>IL @ 2500 FPM</b>							
6" ID Duct	2.8	3	3.4	3.4	3.3	3.3	2
12" ID Duct	2.6	2.8	2.5	3	3.3	2.4	1.3
16" ID Duct	2.3	2.5	2.2	2.8	3	2.1	1.2

#### Flexible Duct with 90° Bend - Insertion Loss (IL) in dB per Foot

Octive Band Number	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Center Frequency - Hz	125	250	500	1000	2000	4000	8000
<b>IL @ Zero FPM</b>							
6" ID Duct	2.4	2.7	3.3	3.7	3.6	3.6	2.5
12" ID Duct	2.4	2.6	3	3.1	3.1	2.6	1.3
16" ID Duct	2.4	2.4	2.4	2.4	2.5	2.2	1.1
<b>IL @ 2500 FPM</b>							
6" ID Duct	2.2	2.9	3.5	3.6	3.3	2.8	2.1
12" ID Duct	2.2	2.6	2.9	3	2.8	2.3	1.2
16" ID Duct	2.1	2.5	2.3	2.3	2.2	1.9	1.1

ID Size	3"	4"	5"	6"	7"	8"	9"	10"	12"	14"	16"	18"
Weight - oz/ft	3.4	4.0	4.8	5.9	6.6	7.8	9.4	11.3	13.0	15.0	17.2	19.4
Crush Strength - lbs/ft	50	50	50	45	45	40	40	35	35	35	35	35
Span - Max. Unsupported	6'	8'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'

Note: ID sizes are nominal and weights are approximate.

### CORE

- \* One ply of perforated and corrugated aluminum with interlocked seams, folded flat and knurled for air-tightness, strength and flexibility.
- \* Rated pressures per UL-181 and recommended maximum operating pressures:
- \* Working Pressure: 2" W.C. positive and negative for all sizes
- \* Burst Pressure: 4" W.C.
- \* Maximum Air Velocity : 3000 FPM

### THERMAL CHARACTERISTICS

- \* 1 1/2" thick, .5 lbs density R 4.5 insulation

### VAPOR BARRIER

- \* Polyethylene vapor barrier
- \* Perm rating of 0.17 perms when measured per ASTM E-96, Method A

### OPERATING TEMPERATURE RANGE

- \* 10 to 200 degrees Fahrenheit

### SIZE RANGE (Standard lengths: 10 feet)

- \* Standard I.D. available: 3", 4", 5", 6", 7", 8", 9", 10", 12", 14", 16" & 18"

### APPROVALS

- \* UL 181, Flexible Air Duct Connectors, Class 1
- \* National Fire Protection Association, Bulletin 90A

Job Name:		Submitted By:		Date: 03/15/2004	SD-031504-DB
Location:		Clevaflex Type DB Acoustical			
Architect:		Insulated metal core flexible air duct			
Engineer:		Class 1, R 4.5			
Contractor:		Polyethylene Vapor Barrier			