McGill AirSilence LLC

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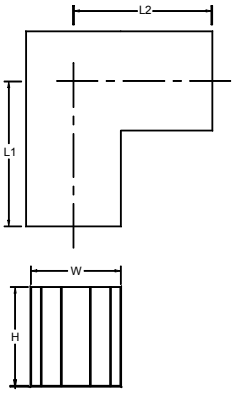

REF-LV-L37

Rectangular, Elbow, Fiber-Filled, Low Velocity Sounpak® Silencer

Availability
L1 and L2: 2 feet and greater
W: 11.5-12.5, 23-25, 35-38, 46-50 inches
H: any length (72 inches practical limit)

Quick Rating = P15-L37-M104

See bottom of page for explanation.

Table 1: Insertion Loss

L1 x L2 (in)	Face Velocity (fpm)	Insertion Loss (dB)							
		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
36 x 36	- 1500	5	12	26	33	33	31	21	13
	0	5	10	24	32	40	38	24	15
	1500	5	9	22	29	37	35	22	15

Test data based on a 24Wx24Hx36L1x36L2 unit utilizing ASTM E 477 test method. Note that ASTM inter-laboratory testing has shown insertion loss may vary as much as 6 dB in the 63hz band, and 3 dB for all other frequencies. Data in parenthesis () may be greater than shown due to limitations in laboratory equipment and/or facilities.

Table 2: Airflow Generated Sound Power Level

Face Velocity (fpm)	Airflow Generated Sound Power Level (dB)							
	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
- 1500	58	55	44	45	48	55	54	47
- 1000	46	40	34	43	44	41	35	36
1000	(51)	40	34	40	43	43	38	34
1500	62	56	45	45	49	57	55	48

Note that ASTM inter-laboratory testing has shown that generated noise may vary as much as 6 dB in the 63hz band, and 3 dB for all other frequencies. Data in parenthesis () may be less than shown due to limitations in laboratory equipment and/or facilities.

Table 3: Face Area Adjustment Factor

Silencer cross-sectional area (sq ft)							
1	2	4	8	16	32	64	128
-6	-3	0	+3	+6	+9	+12	+15

Look up silencer cross-sectional area in table. Add adjustment to each octave band airflow generated sound power level from Table 2.

Weight = 5.8 lb/ft^3

Table 4: Pressure Loss

L1 x L2 (in)	Loss Coefficient	Dynamic Pressure Loss (in wg)					
		Face Velocity (fpm)					
		500	1000	1500	2000	2500	3000
36 x 36	2.35	0.04	0.15	0.33	0.59	0.92	1.32

Note: Shaded regions represent a design condition that may have negative consequences for acoustically sensitive applications.

The Quick Rating is a designation used for comparing different silencer models to note differences in energy consumption (pressure loss), low frequency performance, and mid-frequency performance . The P rating is the pressure drop at 1000 fpm where PXX is the pressure drop in hundredths of an inch wg. The LYY rating is the total insertion loss, YY dB, of the 63, 125 and 250 Hz octave bands at 0 fpm. The MZZ rating is the total insertion loss, ZZ dB, of the 500, 1000 and 2000 Hz octave bands at 0 fpm. See the sheet titled “Quick Rating Guide” for further information.