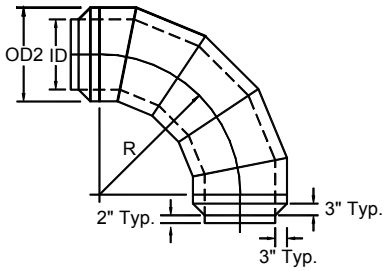
McGill AirSilence LLC

An enterprise of United McGill Corporation - Founded in 1951

CEF-HV-L20

Circular, Elbow, Fiber-Filled, High Velocity Sounpak® Silencer



Availability
Diameters from 3 to 26 inches, in 1-inch increments; 26 to 60 inches, in 2-inch increments. Standard lengths shown in Table 1 below. Custom lengths also available.

Table 1: Insertion Loss

ID (in)	Face Velocity (fpm)	Insertion Loss (dB)							
		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
6	-3000 to 3000	3	8	13	16	24	26	26	20
12	-3000 to 3000	3	6	13	15	20	22	15	13
18	-3000 to 3000	1	6	12	16	16	15	13	17
24	-3000 to 3000	1	4	9	17	18	16	18	18
36	-3000 to 3000	1	5	12	16	15	15	18	14
48	-3000 to 3000	2	5	13	13	12	14	15	14

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: Dimensions

ID (in)	OD (in)	Elbow Radius, R
3 to 60	ID + 6	1.5(ID) + 9

Airflow Generated Sound Power

This silencer does not have internal components that would cause generated noise. The results of laboratory testing indicate indiscernible differences between the noise generated by the silencer and the noise generated by the connecting duct.

Table 3: Pressure Loss

ID (in)	Total Weight (lbs)	Loss Coefficient	Dynamic Pressure Loss (in wg)				
			Face Velocity (fpm)				
			1000	1500	2000	2500	3000
3	15	0.92	0.06	0.13	0.23	0.36	0.52
6	25	0.60	0.04	0.08	0.15	0.23	0.34
12	50	0.38	0.02	0.05	0.09	0.15	0.21
18	85	0.25	0.02	0.04	0.06	0.10	0.14
24	140	0.18	0.01	0.03	0.04	0.07	0.10
36	255	0.12	0.01	0.02	0.03	0.05	0.07
48	510	0.10	0.01	0.01	0.02	0.04	0.06
60	2015	0.08	0.00	0.01	0.02	0.03	0.04

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