GERHMAN

Duct Silencer

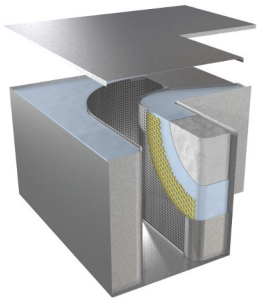
Hertz Elbow

At Gerhman we are driven by a strong desire to continuously generate improvements. We do that by developing products and systems that are easy to use and energy efficient, together with industry-leading knowledge, support, logistics and efficient availability.

gerhman.com

Duct Silencer

Hertz Elbow



Rectangular Elbow Silencers are designed to provide a solution to undesirable noise in short runs of ductwork, with the additional benefit of improved mid frequency insertion loss, provided by the 90° bend.

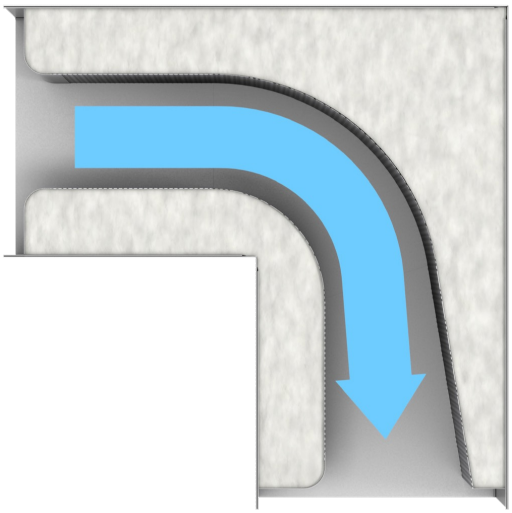
- Compact Design
- Excellent broadband performance
- Wide variety of configurations
- Acoustically transparent perforated liner
- Acoustical grade fibrous media

Characteristics

- Acoustical attenuation across all eight octave bands
- Can be stacked to allow for banks of larger than maximum module size
- Aerodynamically designed for low system effects

Ideal for low to medium velocity applications, Hertz Elbow provides high levels of insertion loss across the targeted range of frequencies, and makes use of a tapered tail baffle arrangement to allow for static regain and minimize pressure drop.

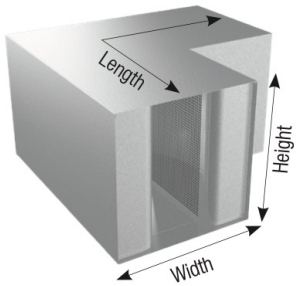
The rectangular elbow silencer is intended for silencing noise in ductwork in applications with limited space, where straight lengths of ductwork are not available. The simple design, relatively low cost, high sound attenuation, and low pressure drop make the Hertz Elbow a reliable and cost-effective choice. With a wide range of design options Hertz Elbow silencers can be integrated into any HVAC system with ease.



Material

- Galvanized Steel
- Aluminum
- 304 Stainless Steel
- 316 Stainless Steel

Performance Data



Hertz Elbow

Width (mm): 600

Dynamic Insertion Loss (DIL)

Length (mm.)	Face Velocity (fpm)	Pressure Drop	Dynamic Insertion Loss (dB)							
			63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
900	+1750	25 pa	8	12	16	21	24	23	20	19
	+1250	10 Pa	8	12	17	21	24	23	20	19
	0	0 Pa	8	12	17	21	25	23	20	19
	-1250	10 Pa	8	13	18	22	25	23	20	18
	-1750	25 Pa	9	13	18	22	26	23	20	18
1500	+1750	25 pa	9	13	18	24	28	27	23	21
	+1250	10 Pa	9	13	19	25	29	27	23	21
	0	0 Pa	9	13	19	25	29	27	23	20
	-1250	10 Pa	9	14	20	26	30	27	23	20
	-1750	25 Pa	10	14	21	26	30	27	23	20
2000	+1750	27 Pa	11	15	22	34	37	34	29	25
	+1250	10 Pa	11	15	23	35	38	34	29	25
	0	0 Pa	11	16	24	35	38	34	29	24
	-1250	10 Pa	12	17	25	36	39	34	29	24
	-1750	27 Pa	12	17	25	36	40	34	29	24
2750	+1750	30 Pa	14	17	26	44	46	41	35	29
	+1250	10 Pa	14	18	27	45	47	41	35	29
	0	0 Pa	14	18	28	45	47	41	35	28
	-1250	10 Pa	15	19	29	46	48	41	35	28
	-1750	30 Pa	15	20	30	47	49	41	35	28

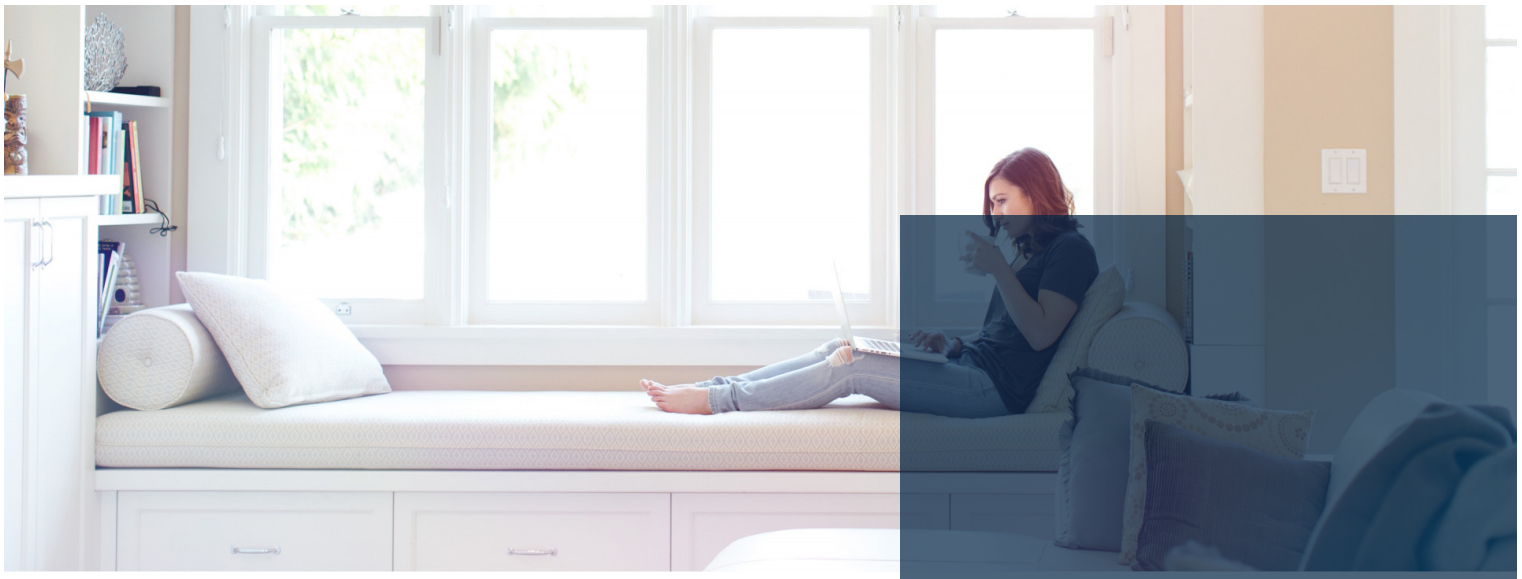
Generated Noise (GN)

Length (in.)	Face Velocity (fpm)	Generated Noise (dB)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
All Lengths	+1750	57	52	46	46	45	41	44	37
	+1250	44	43	36	38	38	31	34	25
	0	25	20	15	15	10	10	10	10
	-1250	49	42	36	23	37	36	35	26
	-1750	57	49	45	35	44	44	45	38

Generated Noise Corrections

Silencer Face Area (ft²)	0.5	1	2	4	8	16	32	64	128
dB Addition or Reduction	-9	-6	-3	0	+3	+6	+9	+12	+15

GERHMAN



gerhman.com

+90 0850 303 4766 • info@gerhman.com • gerhman.com