

The SEMCO Model STE2500 Elbow Silencer is designed to provide excellent attenuation for applications when the use of standard silencers is not possible due to spatial limitations. This model is also designed to provide maximum broad band attenuation and moderate pressure drop where system velocities are in the low to medium range.



### INDEPENDENTLY CERTIFIED TEST DATA

Published data is derived from Independent Certified Testing conducted in accordance with ASTM E477. For testing purposes, specified lengths of straight duct are used both upstream and downstream of the silencer. Static pressure losses must therefore be adjusted when the unit is installed, at or near transitions, elbows, or at the intake or discharge of the system. Consult SEMCO for adjustment values. All data published herein was obtained from a 24"x24" production run unit of equivalent centerline length for straight through silencer.

					Dynamic Insertion Loss (dB)															
					Forward Airflow Performance								Reverse Airflow Performance							
					Octave Band/Frequency (hz)								Octave Band/Frequency (hz)							
Model	Length	Face Velocity	Cv	Press. Drop	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
					63	125	250	500	1K	2K	4K	8K	63	125	250	500	1K	2K	4K	8K
STE2503	36"	0	4.49	0	5	7	16	31	41	40	26	17	5	6	16	32	41	39	27	17
		500		.07	5	7	15	30	40	40	26	17	5	7	17	32	39	38	25	15
		1000		.28	3	4	12	26	37	37	24	15	5	9	17	32	39	35	25	15
		1500		.63	3	4	12	26	35	36	24	15	5	9	18	32	38	33	20	14
STE2505	60"	0	5.46	0	7	12	26	40	47	48	39	24	7	12	26	40	47	48	39	24
		500		.09	6	10	24	39	47	48	39	24	6	12	24	39	47	48	39	24
		1000		.34	5	10	22	37	44	45	37	23	5	10	22	37	44	45	37	23
		1500		.77	5	9	21	37	42	44	36	22	5	9	21	37	42	44	36	22
STE2507	84"	0	6.74	0	8	17	35	49	53	56	51	30	8	17	35	49	53	56	51	30
		500		.11	7	16	32	48	53	55	51	30	7	16	32	48	53	55	51	30
		1000		.42	7	15	31	48	51	52	49	30	7	15	31	48	51	52	49	30
		1500		.95	6	14	29	47	49	51	47	29	6	14	29	47	49	51	47	29
STE2510	120"	0	8.67	0	10	25	49	63	62	68	70	40	10	25	49	63	62	68	70	40
		500		.14	10	23	45	62	61	68	70	40	10	23	45	63	62	66	70	40
		1000		.54	10	23	45	60	61	63	68	40	10	23	45	63	62	63	68	40
		1500		1.22	8	22	42	60	60	62	64	40	8	22	42	63	60	62	64	40

Forward Airflow Performance applies when both noise and airflow are traveling in the same direction.

Reverse Airflow Performance applies when noise and airflow are traveling in opposite directions.

**Pressure Drops** for velocities not shown above can be calculated using the following formula:

$$P.D. = C_v \times H_v$$

where: P.D. = Pressure Drop

C<sub>v</sub> = Silencer Flow Coefficient

$$H_v = (V/4005)^2$$

H<sub>v</sub> = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

## STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel  
 Perforated Metal: 24 Gauge Galvanized Steel  
 Fill Material: Fiberglass

## FIRE RATINGS:

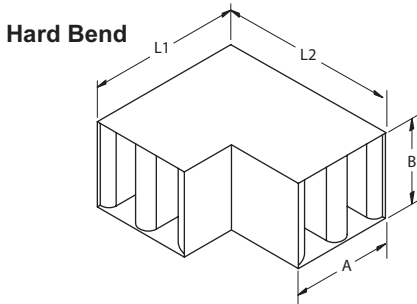
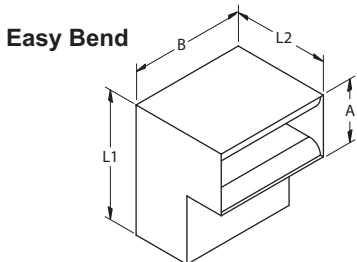
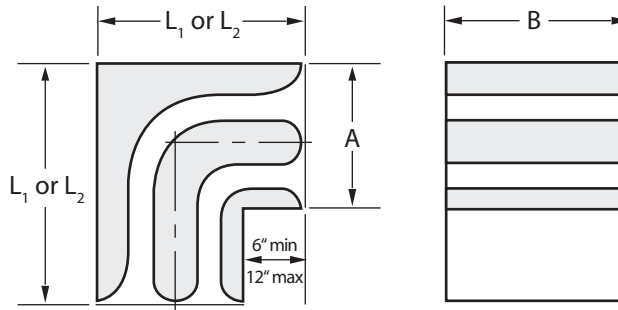
Fire Hazard Classification Ratings in accordance with ASTM-E84 is FHC 25/20.

Additional materials, gauges, and configurations are available, such as stainless or aluminum, with mylar or polyethylene liners or bagging. Please contact SEMCO for details.

For ordering purposes  $L_1$  is considered the inlet leg.

Total centerline dimensions through elbow should not exceed 120".

No one leg shall exceed 108".



Standard Sizes (A x B)											
12x12	15x12	18x12	21x12	24x12	30x12	33x12	36x12	39x12	42x12	45x12	48x12
12x15	15x15	18x15	21x15	24x15	30x15	33x15	36x15	39x15	42x15	45x15	48x15
12x18	15x18	18x18	21x18	24x18	30x18	33x18	36x18	39x18	42x18	45x18	48x18
12x21	15x21	18x21	21x21	24x21	30x21	33x21	36x21	39x21	42x21	45x21	48x21
12x24	15x24	18x24	21x24	24x24	30x24	33x24	36x24	39x24	42x24	45x24	48x24
12x27	15x27	18x27	21x27	24x27	30x27	33x27	36x27	39x27	42x27	45x27	48x27
12x30	15x30	18x30	21x30	24x30	30x30	33x30	36x30	39x30	42x30	45x30	48x30
12x33	15x33	18x33	21x33	24x33	30x33	33x33	36x33	39x33	42x33	45x33	48x33
12x36	15x36	18x36	21x36	24x36	30x36	33x36	36x36	39x36	42x36	45x36	48x36
12x39	15x39	18x39	21x39	24x39	30x39	33x39	36x39	39x39	42x39	45x39	48x39
12x42	15x42	18x42	21x42	24x42	30x42	33x42	36x42	39x42	42x42	45x42	48x42
12x45	15x45	18x45	21x45	24x45	30x45	33x45	36x45	39x45	42x45	45x45	48x45
12x48	15x48	18x48	21x48	24x48	30x48	33x48	36x48	39x48	42x48	45x48	48x48

Non-standard sizes are available. Please contact SEMCO for limitations.



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The SEMCO Model STE5000 Elbow Silencer is designed to provide excellent attenuation for applications when the use of standard silencers is not possible due to spatial limitations. This model is also designed to provide maximum broad band attenuation and moderate pressure drop where system velocities are in the low to medium range.



### INDEPENDENTLY CERTIFIED TEST DATA

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		Dynamic Insertion Loss (dB)																		
		Forward Airflow Performance Octave Band/Frequency (hz)												Reverse Airflow Performance Octave Band/Frequency (hz)						
Model	Length	Face Velocity	Cv	Press. Drop	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
					63	125	250	500	1K	2K	4K	8K	63	125	250	500	1K	2K	4K	8K
STE5003	36"	0	2.56	0	2	3	12	26	36	32	20	13	4	4	13	26	36	32	21	15
		500		1	2	11	24	35	32	19	12	3	4	13	26	36	32	21	15	
		1000		.16	1	2	11	23	35	32	19	12	3	4	12	24	34	30	18	13
		1500		.36	1	2	10	22	34	32	19	12	2	4	12	24	33	25	17	10
STE5005	60"	0	3.20	0	4	8	20	37	44	43	29	18	6	8	20	35	40	39	29	19
		500		3	7	19	36	44	43	29	17	6	10	21	35	40	39	28	18	
		1000		.20	3	6	18	35	43	42	29	17	6	10	21	33	39	37	27	17
		1500		.45	2	6	18	34	42	41	28	17	4	10	21	33	36	27	20	14
STE5007	84"	0	3.85	0	6	12	28	47	52	53	38	22	8	12	27	43	44	45	37	22
		500		5	11	27	47	52	53	38	22	8	14	29	43	44	45	35	20	
		1000		.24	4	10	25	46	51	52	38	22	8	14	30	43	43	44	35	20
		1500		.54	4	10	25	46	49	47	37	22	5	15	30	42	39	28	22	17
STE5010	120"	0	4.66	0	9	19	40	63	64	69	52	30	11	18	38	56	50	55	49	27
		500		.07	8	18	39	63	64	69	52	30	12	21	40	56	49	57	46	24
		1000		.29	7	16	36	63	63	67	52	30	12	22	44	58	50	55	48	25
		1500		.65	7	14	33	62	60	58	51	30	7	23	44	56	44	30	26	24

Forward Airflow Performance applies when both noise and airflow are traveling in the same direction.

Reverse Airflow Performance applies when noise and airflow are traveling in opposite directions.

**Pressure Drops** for velocities not shown above can be calculated using the following formula:

$$P.D. = C_v \times H_v$$

where: P.D. = Pressure Drop

C<sub>v</sub> = Silencer Flow Coefficient

$$H_v = (V/4005)^2$$

H<sub>v</sub> = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

## STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel  
 Perforated Metal: 24 Gauge Galvanized Steel  
 Fill Material: Fiberglass

## FIRE RATINGS:

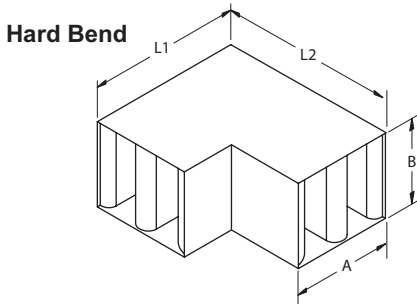
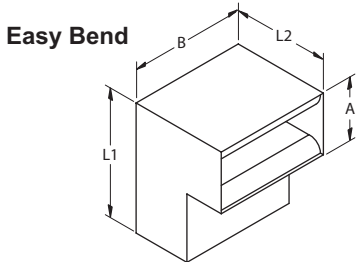
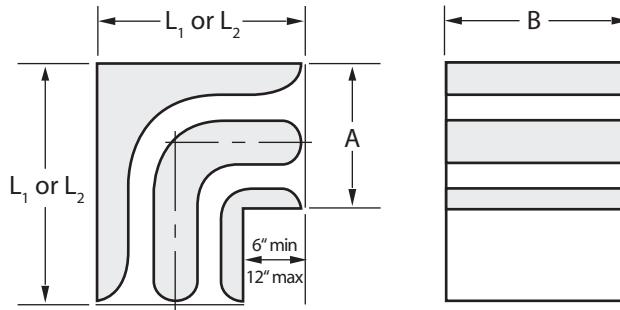
Fire Hazard Classification Ratings in accordance with ASTM-E84 is FHC 25/20.

Additional materials, gauges, and configurations are available, such as stainless or aluminum, with mylar or polyethylene liners or bagging. Please contact SEMCO for details.

For ordering purposes  $L_1$  is considered the inlet leg.

Total centerline dimensions through elbow should not exceed 120".

No one leg shall exceed 108".



Standard Sizes (A x B)											
12x12	15x12	18x12	21x12	24x12	30x12	33x12	36x12	39x12	42x12	45x12	48x12
12x15	15x15	18x15	21x15	24x15	30x15	33x15	36x15	39x15	42x15	45x15	48x15
12x18	15x18	18x18	21x18	24x18	30x18	33x18	36x18	39x18	42x18	45x18	48x18
12x21	15x21	18x21	21x21	24x21	30x21	33x21	36x21	39x21	42x21	45x21	48x21
12x24	15x24	18x24	21x24	24x24	30x24	33x24	36x24	39x24	42x24	45x24	48x24
12x27	15x27	18x27	21x27	24x27	30x27	33x27	36x27	39x27	42x27	45x27	48x27
12x30	15x30	18x30	21x30	24x30	30x30	33x30	36x30	39x30	42x30	45x30	48x30
12x33	15x33	18x33	21x33	24x33	30x33	33x33	36x33	39x33	42x33	45x33	48x33
12x36	15x36	18x36	21x36	24x36	30x36	33x36	36x36	39x36	42x36	45x36	48x36
12x39	15x39	18x39	21x39	24x39	30x39	33x39	36x39	39x39	42x39	45x39	48x39
12x42	15x42	18x42	21x42	24x42	30x42	33x42	36x42	39x42	42x42	45x42	48x42
12x45	15x45	18x45	21x45	24x45	30x45	33x45	36x45	39x45	42x45	45x45	48x45
12x48	15x48	18x48	21x48	24x48	30x48	33x48	36x48	39x48	42x48	45x48	48x48

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The SEMCO Model STE7500 Elbow Silencer is designed to provide excellent attenuation for applications when the use of standard silencers is not possible due to spatial limitations. This model is also designed to provide maximum broad band attenuation and moderate pressure drop where system velocities are in the low to medium range.



### INDEPENDENTLY CERTIFIED TEST DATA

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					Dynamic Insertion Loss (dB)															
					Forward Airflow Performance								Reverse Airflow Performance							
					Octave Band/Frequency (hz)								Octave Band/Frequency (hz)							
Model	Length	Face Velocity	Cv	Press. Drop	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
					63	125	250	500	1K	2K	4K	8K	63	125	250	500	1K	2K	4K	8K
STE7503	36"	0	1.61	0	1	5	9	23	29	25	17	13	3	5	10	23	28	24	15	12
		500		.02	1	5	9	22	28	25	17	13	3	5	10	23	28	24	15	11
		1000		.10	1	5	9	22	28	25	17	13	3	6	10	23	29	24	15	10
		1500		.23	1	5	9	21	28	25	16	13	3	7	11	24	29	24	15	9
STE7505	60"	0	1.93	0	4	8	15	35	44	35	22	14	3	7	15	36	44	34	22	15
		500		.03	4	8	14	35	44	35	22	14	3	7	15	36	44	34	22	14
		1000		.12	4	8	14	34	44	35	22	14	3	8	15	36	44	34	21	14
		1500		.27	3	8	13	33	43	35	22	14	3	9	16	36	45	34	20	14
STE7507	84"	0	2.09	0	2	9	18	44	54	44	25	17	3	10	19	44	55	44	24	15
		500		.03	2	9	17	44	53	44	25	16	3	10	20	44	55	43	23	15
		1000		.13	2	9	17	44	53	44	25	16	3	11	20	45	56	42	23	15
		1500		.29	2	9	17	43	53	44	25	16	3	11	22	47	55	42	23	15
STE7510	120"	0	2.41	0	7	14	27	62	77	58	33	19	3	15	27	64	79	59	35	20
		500		.04	7	14	23	62	77	59	33	19	3	15	27	64	79	58	34	20
		1000		.15	7	14	23	62	77	60	34	20	3	16	28	65	79	57	32	21
		1500		.34	4	14	25	63	76	60	34	20	3	14	31	65	79	57	31	23

Forward Airflow Performance applies when both noise and airflow are traveling in the same direction.

Reverse Airflow Performance applies when noise and airflow are traveling in opposite directions.

**Pressure Drops** for velocities not shown above can be calculated using the following formula:

$$P.D. = C_v \times H_v$$

where: P.D. = Pressure Drop

C<sub>v</sub> = Silencer Flow Coefficient

$$H_v = (V/4005)^2$$

H<sub>v</sub> = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

## STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel  
 Perforated Metal: 24 Gauge Galvanized Steel  
 Fill Material: Fiberglass

## FIRE RATINGS:

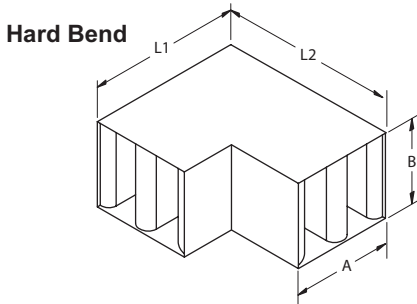
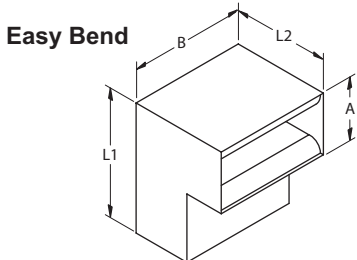
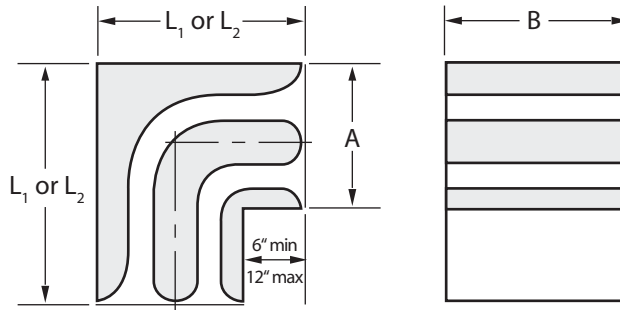
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Standard Sizes (A x B)											
12x12	15x12	18x12	21x12	24x12	30x12	33x12	36x12	39x12	42x12	45x12	48x12
12x15	15x15	18x15	21x15	24x15	30x15	33x15	36x15	39x15	42x15	45x15	48x15
12x18	15x18	18x18	21x18	24x18	30x18	33x18	36x18	39x18	42x18	45x18	48x18
12x21	15x21	18x21	21x21	24x21	30x21	33x21	36x21	39x21	42x21	45x21	48x21
12x24	15x24	18x24	21x24	24x24	30x24	33x24	36x24	39x24	42x24	45x24	48x24
12x27	15x27	18x27	21x27	24x27	30x27	33x27	36x27	39x27	42x27	45x27	48x27
12x30	15x30	18x30	21x30	24x30	30x30	33x30	36x30	39x30	42x30	45x30	48x30
12x33	15x33	18x33	21x33	24x33	30x33	33x33	36x33	39x33	42x33	45x33	48x33
12x36	15x36	18x36	21x36	24x36	30x36	33x36	36x36	39x36	42x36	45x36	48x36
12x39	15x39	18x39	21x39	24x39	30x39	33x39	36x39	39x39	42x39	45x39	48x39
12x42	15x42	18x42	21x42	24x42	30x42	33x42	36x42	39x42	42x42	45x42	48x42
12x45	15x45	18x45	21x45	24x45	30x45	33x45	36x45	39x45	42x45	45x45	48x45
12x48	15x48	18x48	21x48	24x48	30x48	33x48	36x48	39x48	42x48	45x48	48x48

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The SEMCO Model LFE2500 Elbow Silencer is designed to provide excellent attenuation for applications when the use of standard silencers is not possible due to spatial limitations. This model is also designed to provide maximum low band attenuation and moderate pressure drop where system velocities are in the low to medium range.



### INDEPENDENTLY CERTIFIED TEST DATA

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					Dynamic Insertion Loss (dB)															
					Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
Model	Length	Face Velocity	Cv	Press. Drop	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
LFE2503	36"	0	9.95	0	4	12	24	26	25	24	20	20	4	12	24	26	23	21	17	17
		500		.16	4	12	23	26	25	24	20	20	5	14	26	26	24	21	18	18
		1000		.62	2	12	23	25	25	24	20	20	5	14	26	27	25	22	18	18
		1500		1.40	2	12	22	25	25	24	20	20	5	15	26	28	26	22	18	18
LFE2505	60"	0	10.75	0	9	17	32	34	33	34	30	28	9	17	33	30	30	32	27	24
		500		.17	9	16	31	34	34	34	30	28	9	17	35	31	30	32	26	24
		1000		.67	9	15	30	34	35	35	32	29	9	19	35	32	30	32	26	24
		1500		1.51	8	15	29	34	35	36	32	30	9	19	36	33	31	33	26	24
LFE2507	84"	0	14.29	0	12	22	41	44	36	34	31	27	11	22	40	38	31	31	31	26
		500		.22	10	22	41	45	36	35	32	28	13	26	42	39	32	32	30	23
		1000		.89	9	22	41	45	36	35	32	28	13	27	42	40	33	33	29	23
		1500		2.00	9	22	39	45	36	35	32	29	15	28	46	42	35	34	28	23
LFE2510	120"	0	17.82	0	15	32	49	51	43	40	38	32	17	30	49	50	45	42	41	33
		500		.28	15	31	50	53	43	40	38	32	17	33	49	50	45	43	41	31
		1000		1.11	13	32	50	52	44	41	39	35	18	33	50	51	46	43	39	29
		1500		2.50	13	30	48	53	45	43	39	34	19	34	52	54	47	43	35	26

Forward Airflow Performance applies when both noise and airflow are traveling in the same direction.

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$$P.D. = C_v \times H_v$$

where: P.D. = Pressure Drop

C<sub>v</sub> = Silencer Flow Coefficient

$$H_v = (V/4005)^2$$

H<sub>v</sub> = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

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 Perforated Metal: 24 Gauge Galvanized Steel  
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## FIRE RATINGS:

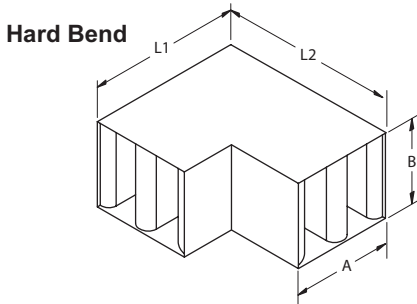
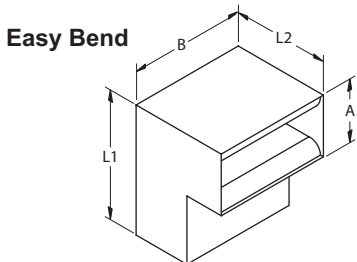
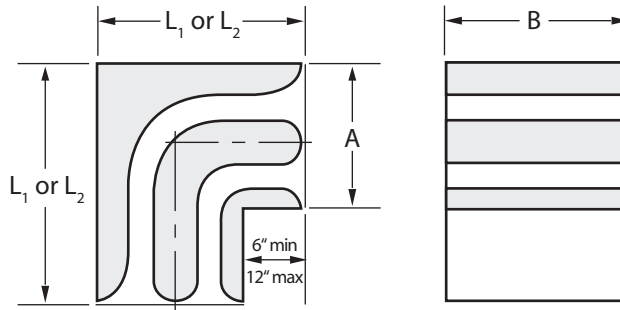
Fire Hazard Classification Ratings in accordance with ASTM-E84 is FHC 25/20.

Additional materials, gauges, and configurations are available, such as stainless or aluminum, with mylar or polyethylene liners or bagging. Please contact SEMCO for details.

For ordering purposes  $L_1$  is considered the inlet leg.

Total centerline dimensions through elbow should not exceed 120".

No one leg shall exceed 108".



Standard Sizes (A x B)											
12x12	15x12	18x12	21x12	24x12	30x12	33x12	36x12	39x12	42x12	45x12	48x12
12x15	15x15	18x15	21x15	24x15	30x15	33x15	36x15	39x15	42x15	45x15	48x15
12x18	15x18	18x18	21x18	24x18	30x18	33x18	36x18	39x18	42x18	45x18	48x18
12x21	15x21	18x21	21x21	24x21	30x21	33x21	36x21	39x21	42x21	45x21	48x21
12x24	15x24	18x24	21x24	24x24	30x24	33x24	36x24	39x24	42x24	45x24	48x24
12x27	15x27	18x27	21x27	24x27	30x27	33x27	36x27	39x27	42x27	45x27	48x27
12x30	15x30	18x30	21x30	24x30	30x30	33x30	36x30	39x30	42x30	45x30	48x30
12x33	15x33	18x33	21x33	24x33	30x33	33x33	36x33	39x33	42x33	45x33	48x33
12x36	15x36	18x36	21x36	24x36	30x36	33x36	36x36	39x36	42x36	45x36	48x36
12x39	15x39	18x39	21x39	24x39	30x39	33x39	36x39	39x39	42x39	45x39	48x39
12x42	15x42	18x42	21x42	24x42	30x42	33x42	36x42	39x42	42x42	45x42	48x42
12x45	15x45	18x45	21x45	24x45	30x45	33x45	36x45	39x45	42x45	45x45	48x45
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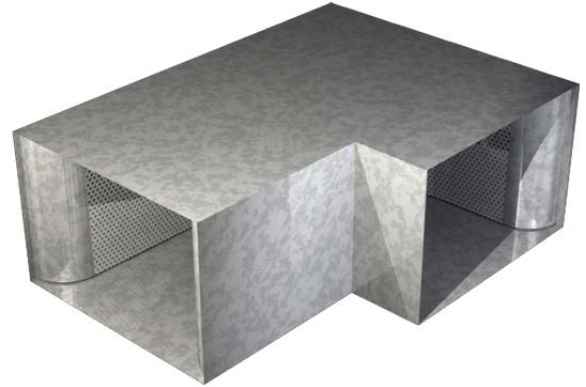
Non-standard sizes are available. Please contact SEMCO for limitations.



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The SEMCO Model LFE5000 Elbow Silencer is designed to provide excellent attenuation for applications when the use of standard silencers is not possible due to spatial limitations. This model is also designed to provide maximum low band attenuation and moderate pressure drop where system velocities are in the low to medium range.



### INDEPENDENTLY CERTIFIED TEST DATA

Published data is derived from Independent Certified Testing conducted in accordance with ASTM E477. For testing purposes, specified lengths of straight duct are used both upstream and downstream of the silencer. Static pressure losses must therefore be adjusted when the unit is installed, at or near transitions, elbows, or at the intake or discharge of the system. Consult SEMCO for adjustment values. All data published herein was obtained from a 24"x24" production run unit of equivalent centerline length for straight through silencer.

					Dynamic Insertion Loss (dB)															
					Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
Model	Length	Face Velocity	Cv	Press. Drop	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
LFE5003	36"	0	3.85	0	3	10	17	20	22	18	16	17	3	9	17	20	20	16	14	15
		500		.06	3	9	17	20	22	18	16	17	3	11	19	21	21	17	14	18
		1000		.24	3	9	16	20	22	18	16	17	3	10	19	22	22	17	14	18
		1500		.54	3	9	16	19	22	18	16	17	3	11	19	23	22	17	14	18
LFE5005	60"	0	4.17	0	6	14	23	28	32	27	21	21	5	16	26	28	28	25	21	20
		500		.07	5	12	23	27	31	27	21	21	5	16	27	29	29	25	22	21
		1000		.26	5	12	22	27	31	27	21	21	5	16	27	29	29	24	20	18
		1500		.59	5	12	21	26	31	27	21	20	5	16	26	30	29	24	18	16
LFE5007	84"	0	4.82	0	7	18	34	40	35	30	22	20	7	18	34	37	33	29	24	21
		500		.08	6	18	33	39	35	30	22	20	8	19	35	38	34	30	24	22
		1000		.30	5	18	33	39	35	31	24	21	9	20	36	38	34	30	24	22
		1500		.68	5	16	31	38	36	31	23	21	9	21	36	39	35	30	24	22
LFE5010	120"	0	5.30	0	9	24	46	47	42	38	28	23	6	21	41	41	38	38	27	21
		500		.08	8	22	44	47	42	38	28	23	10	25	45	45	42	39	28	22
		1000		.33	6	22	44	48	43	38	29	26	11	26	45	45	42	39	28	22
		1500		.74	6	22	43	48	43	39	29	25	12	26	45	47	43	38	28	22

Forward Airflow Performance applies when both noise and airflow are traveling in the same direction.

Reverse Airflow Performance applies when noise and airflow are traveling in opposite directions.

**Pressure Drops** for velocities not shown above can be calculated using the following formula:

$$P.D. = C_v \times H_v$$

where: P.D. = Pressure Drop

C<sub>v</sub> = Silencer Flow Coefficient

$$H_v = (V/4005)^2$$

H<sub>v</sub> = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

## STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel  
 Perforated Metal: 24 Gauge Galvanized Steel  
 Fill Material: Fiberglass

## FIRE RATINGS:

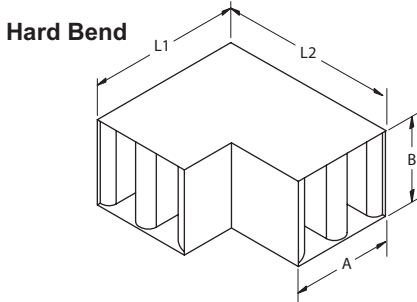
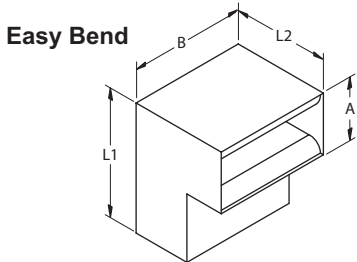
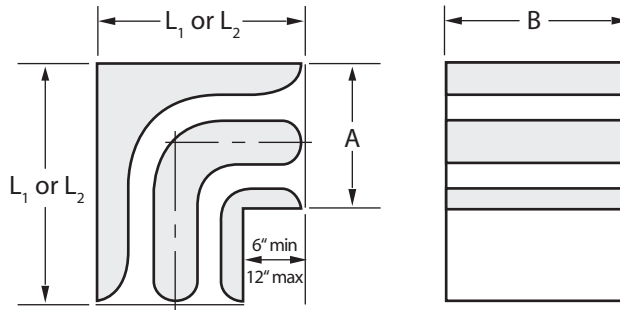
Fire Hazard Classification Ratings in accordance with ASTM-E84 is FHC 25/20.

Additional materials, gauges, and configurations are available, such as stainless or aluminum, with mylar or polyethylene liners or bagging. Please contact SEMCO for details.

For ordering purposes  $L_1$  is considered the inlet leg.

Total centerline dimensions through elbow should not exceed 120".

No one leg shall exceed 108".



Standard Sizes (A x B)											
12x12	15x12	18x12	21x12	24x12	30x12	33x12	36x12	39x12	42x12	45x12	48x12
12x15	15x15	18x15	21x15	24x15	30x15	33x15	36x15	39x15	42x15	45x15	48x15
12x18	15x18	18x18	21x18	24x18	30x18	33x18	36x18	39x18	42x18	45x18	48x18
12x21	15x21	18x21	21x21	24x21	30x21	33x21	36x21	39x21	42x21	45x21	48x21
12x24	15x24	18x24	21x24	24x24	30x24	33x24	36x24	39x24	42x24	45x24	48x24
12x27	15x27	18x27	21x27	24x27	30x27	33x27	36x27	39x27	42x27	45x27	48x27
12x30	15x30	18x30	21x30	24x30	30x30	33x30	36x30	39x30	42x30	45x30	48x30
12x33	15x33	18x33	21x33	24x33	30x33	33x33	36x33	39x33	42x33	45x33	48x33
12x36	15x36	18x36	21x36	24x36	30x36	33x36	36x36	39x36	42x36	45x36	48x36
12x39	15x39	18x39	21x39	24x39	30x39	33x39	36x39	39x39	42x39	45x39	48x39
12x42	15x42	18x42	21x42	24x42	30x42	33x42	36x42	39x42	42x42	45x42	48x42
12x45	15x45	18x45	21x45	24x45	30x45	33x45	36x45	39x45	42x45	45x45	48x45
12x48	15x48	18x48	21x48	24x48	30x48	33x48	36x48	39x48	42x48	45x48	48x48

Non-standard sizes are available. Please contact SEMCO for limitations.



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The SEMCO Model LFE7500 Elbow Silencer is designed to provide excellent attenuation for applications when the use of standard silencers is not possible due to spatial limitations. This model is also designed to provide maximum low band attenuation and moderate pressure drop where system velocities are in the low to medium range.



**INDEPENDENTLY CERTIFIED TEST DATA**

Published data is derived from Independent Certified Testing conducted in accordance with ASTM E477. For testing purposes, specified lengths of straight duct are used both upstream and downstream of the silencer. Static pressure losses must therefore be adjusted when the unit is installed, at or near transitions, elbows, or at the intake or discharge of the system. Consult SEMCO for adjustment values. All data published herein was obtained from a 24"x24" production run unit of equivalent centerline length for straight through silencer.

					Dynamic Insertion Loss (dB)															
					Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
Model	Length	Face Velocity	Cv	Press. Drop	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K	1 63	2 125	3 250	4 500	5 1K	6 2K	7 4K	8 8K
LFE7503	36"	0	2.25	0	2	7	12	17	19	14	15	14	2	7	13	17	18	15	16	16
		500		.04	2	7	12	17	19	14	15	14	2	7	13	17	18	15	16	16
		1000		.14	2	6	12	16	19	14	15	14	2	7	12	17	18	15	16	15
		1500		.32	2	6	12	16	19	14	15	14	1	7	12	17	18	15	16	15
LFE7505	60"	0	2.25	0	3	10	18	28	26	19	17	15	3	9	20	28	25	20	20	20
		500		.04	3	9	18	28	27	19	19	18	4	11	20	28	25	21	21	21
		1000		.14	2	9	18	27	27	19	19	18	4	11	20	28	25	21	21	21
		1500		.32	2	9	18	27	27	20	19	18	4	11	20	28	25	21	20	19
LFE7507	84"	0	2.41	0	4	12	23	38	31	21	18	16	2	12	23	35	31	22	20	19
		500		.04	4	12	23	38	31	21	19	18	3	13	24	36	31	23	22	22
		1000		.15	2	12	22	36	31	22	19	18	4	14	25	36	31	24	22	22
		1500		.34	2	11	22	36	31	22	19	18	5	14	26	36	31	25	22	22
LFE7510	120"	0	2.57	0	6	15	30	45	40	25	20	15	6	17	32	42	40	28	24	23
		500		.04	5	14	29	45	40	25	21	18	7	17	33	43	39	28	26	25
		1000		.16	5	13	28	45	40	25	21	18	7	18	33	43	38	28	26	25
		1500		.36	5	13	28	45	41	25	22	18	9	19	34	44	38	29	27	25

Forward Airflow Performance applies when both noise and airflow are traveling in the same direction.

Reverse Airflow Performance applies when noise and airflow are traveling in opposite directions.

**Pressure Drops** for velocities not shown above can be calculated using the following formula:

P.D. = Cv x Hv

where: P.D. = Pressure Drop

Cv = Silencer Flow Coefficient

$H_v = (V/4005)^2$

Hv = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

## STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel  
 Perforated Metal: 24 Gauge Galvanized Steel  
 Fill Material: Fiberglass

## FIRE RATINGS:

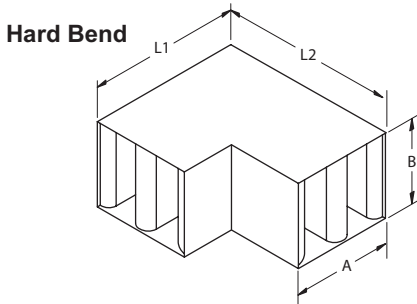
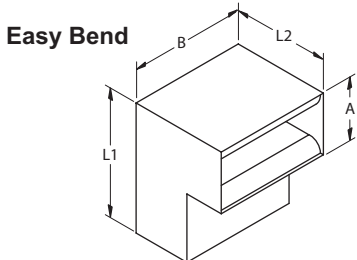
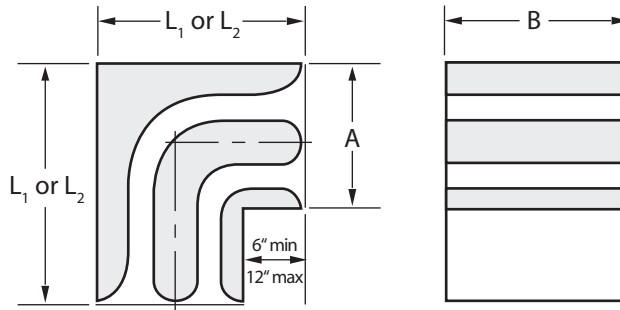
Fire Hazard Classification Ratings in accordance with ASTM-E84 is FHC 25/20.

Additional materials, gauges, and configurations are available, such as stainless or aluminum, with mylar or polyethylene liners or bagging. Please contact SEMCO for details.

For ordering purposes  $L_1$  is considered the inlet leg.

Total centerline dimensions through elbow should not exceed 120".

No one leg shall exceed 108".



Standard Sizes (A x B)											
12x12	15x12	18x12	21x12	24x12	30x12	33x12	36x12	39x12	42x12	45x12	48x12
12x15	15x15	18x15	21x15	24x15	30x15	33x15	36x15	39x15	42x15	45x15	48x15
12x18	15x18	18x18	21x18	24x18	30x18	33x18	36x18	39x18	42x18	45x18	48x18
12x21	15x21	18x21	21x21	24x21	30x21	33x21	36x21	39x21	42x21	45x21	48x21
12x24	15x24	18x24	21x24	24x24	30x24	33x24	36x24	39x24	42x24	45x24	48x24
12x27	15x27	18x27	21x27	24x27	30x27	33x27	36x27	39x27	42x27	45x27	48x27
12x30	15x30	18x30	21x30	24x30	30x30	33x30	36x30	39x30	42x30	45x30	48x30
12x33	15x33	18x33	21x33	24x33	30x33	33x33	36x33	39x33	42x33	45x33	48x33
12x36	15x36	18x36	21x36	24x36	30x36	33x36	36x36	39x36	42x36	45x36	48x36
12x39	15x39	18x39	21x39	24x39	30x39	33x39	36x39	39x39	42x39	45x39	48x39
12x42	15x42	18x42	21x42	24x42	30x42	33x42	36x42	39x42	42x42	45x42	48x42
12x45	15x45	18x45	21x45	24x45	30x45	33x45	36x45	39x45	42x45	45x45	48x45
12x48	15x48	18x48	21x48	24x48	30x48	33x48	36x48	39x48	42x48	45x48	48x48

Non-standard sizes are available. Please contact SEMCO for limitations.



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The SEMCO Model RGS Return Grille Silencer is designed to provide maximum noise reduction between a return system and an occupied space. This model is especially applicable to return systems in buildings which use the ceiling space or wall space as a return plenum. Such as schools and office buildings.



**INDEPENDENTLY CERTIFIED TEST DATA**

Published data is derived from Independent Certified Testing conducted in accordance with ASTM E477. For testing purposes, specified lengths of straight duct are used both upstream and downstream of the silencer. Static pressure losses must therefore be adjusted when the unit is installed, at or near transitions, elbows, or at the intake or discharge of the system. Consult SEMCO for adjustment values. All data published herein was obtained from a 24"x24" production run unit.

<b>Dynamic Insertion Loss (dB)</b>											
<b>Model</b>	<b>Face Velocity</b>	<b>Cv</b>	<b>Press. Drop</b>	<b>Reverse Airflow Performance Octave Band/Frequency (hz)</b>							
				<b>1 63</b>	<b>2 125</b>	<b>3 250</b>	<b>4 500</b>	<b>5 1K</b>	<b>6 2K</b>	<b>7 4K</b>	<b>8 8K</b>
<b>RGS</b>	0	26.30	0	2	3	3	4	6	10	13	15
	200		.065	2	3	3	4	7	10	14	15
	300		.15	3	3	3	4	7	10	14	15
	500		.41	3	3	3	5	7	10	14	15

Reverse Airflow Performance applies when noise and airflow are traveling in opposite directions.

**Pressure Drops** for velocities not shown above can be calculated using the following formula:

P.D. = Cv x Hv

where: P.D. = Pressure Drop

Cv = Silencer Flow Coefficient

$H_v = (V/4005)^2$

Hv = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

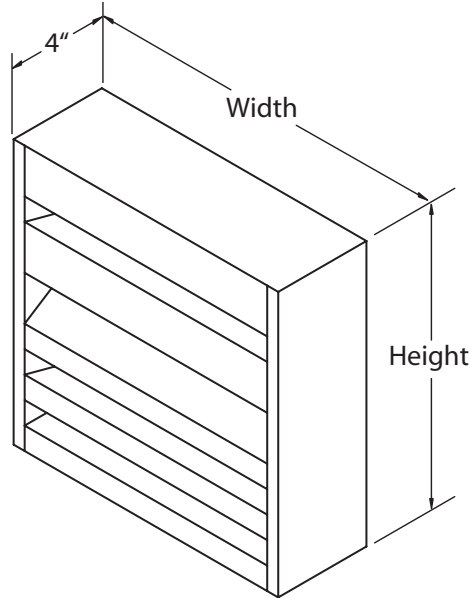
## STANDARD CONSTRUCTION:

Shell: 18 Gauge Galvanized Steel  
 Perforated Metal: 24 Gauge Galvanized Steel  
 Fill Material: Fiberglass

## FIRE RATINGS:

Fire Hazard Classification Ratings in accordance with ASTM-E84 is FHC 25/20.

For information concerning non-standard materials please contact SEMCO directly.



Standard Sizes (Width x Height)											
12x12	15x12	18x12	21x12	24x12	30x12	33x12	36x12	39x12	42x12	45x12	48x12
12x15	15x15	18x15	21x15	24x15	30x15	33x15	36x15	39x15	42x15	45x15	48x15
12x18	15x18	18x18	21x18	24x18	30x18	33x18	36x18	39x18	42x18	45x18	48x18
12x21	15x21	18x21	21x21	24x21	30x21	33x21	36x21	39x21	42x21	45x21	48x21
12x24	15x24	18x24	21x24	24x24	30x24	33x24	36x24	39x24	42x24	45x24	48x24

Non-standard sizes are available. Please contact SEMCO for limitations.



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