

The SEMCO Model ST2500 sound silencers are applicable in low to medium velocity systems where good attenuation across all bands and a moderate pressure drop are required.



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" x 24" production run unit.

Dynamic Insertion Loss (dB)																				
Model	Length	Face Velocity	Cv	Press. Drop	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
					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
ST2503	36"	0	3.37	0	5	7	15	29	38	37	23	14	4	6	15	29	38	36	24	13
		500		.05	5	7	14	28	37	37	23	14	4	7	16	30	36	35	22	12
		1000		.21	3	4	11	24	34	34	21	12	5	9	16	29	36	32	22	12
		1500		.47	3	4	11	24	32	33	21	12	5	9	17	30	35	23	17	11
		2000	.84	3	4	10	22	31	31	20	10	2	8	18	31	34	25	12	7	
ST2505	60"	0	4.63	0	7	12	25	38	44	45	36	21	7	12	25	38	44	45	36	21
		500		.07	6	12	23	37	44	45	36	21	6	12	23	37	44	45	36	21
		1000		.29	5	10	21	35	41	42	34	20	5	10	21	35	41	42	34	20
		1500		.66	5	9	20	35	39	41	33	19	5	9	20	35	39	41	33	19
		2000	1.17	4	8	18	31	38	38	31	18	4	8	18	31	38	38	31	18	
ST2507	84"	0	6.02	0	8	17	34	47	50	53	48	27	8	17	34	47	50	53	48	27
		500		.09	7	16	31	46	50	52	48	27	7	16	31	46	50	52	48	27
		1000		.37	7	15	30	46	48	49	46	27	7	15	30	46	48	49	46	27
		1500		.84	6	14	28	45	46	48	44	26	6	14	28	45	46	48	44	26
		2000	1.50	4	11	25	40	44	45	41	25	4	11	25	40	44	45	41	25	
ST2510	120"	0	7.89	0	10	25	48	61	59	65	67	37	10	25	48	61	59	65	67	37
		500		.12	10	23	44	60	59	63	67	37	10	23	44	60	60	63	67	37
		1000		.49	10	23	44	60	59	60	65	37	10	23	44	60	59	60	65	37
		1500		1.12	8	22	41	60	57	59	61	37	8	22	41	60	57	59	61	37
		2000	2.00	5	16	36	54	54	56	57	36	5	16	36	54	54	56	57	36	

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

Cv = Silencer Flow Coefficient

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

Hv = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

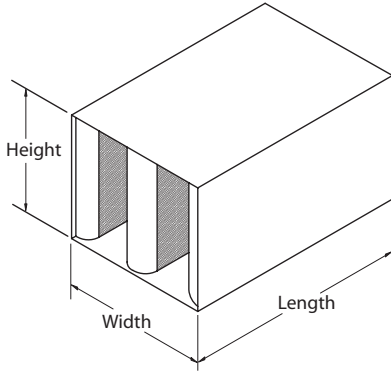
STANDARD CONSTRUCTION:

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.



Standard Sizes & Weights														
Std. Height	3'-0" Length Standard Width				5'-0" Length Standard Width				7'-0" Length Standard Width			10'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"	12"	24"	36"
12"	31	52	68	81	51	85	110	133	71	120	154	101	171	218
24"	49	78	101	118	78	125	161	186	109	172	222	140	207	278
36"	67	105	135	154	105	165	210	238	145	226	288	190	280	366
48"	85	132	168	191	133	204	260	291	-	-	-	-	-	-

Non-standard sizes are available.

Non-standard height dimensions are available within the following restrictions:
 48" heights are not available in 7' through 10' lengths.

Self Generated Noise (dB)																		
Model	Length	Face Velocity	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
			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
ST2503	36"	500	48	43	40	32	25	19	19	19	50	42	41	47	56	53	42	31
		1000	52	47	44	43	43	45	41	34	55	45	44	49	57	61	49	40
		1500	62	59	58	51	51	56	57	53	62	54	52	55	58	64	62	57
		2000	69	65	68	60	57	62	64	61	68	62	61	59	60	69	74	66
ST2505	60"	500	49	43	39	35	30	23	21	19	49	43	39	35	30	23	21	19
		1000	53	47	43	42	43	44	41	34	53	47	43	42	43	44	41	34
		1500	62	59	56	50	51	55	56	52	62	59	56	50	51	55	56	52
		2000	71	66	66	60	56	61	64	61	71	66	66	60	56	61	64	61
ST2507	84"	500	50	42	38	37	35	27	23	19	50	42	38	37	35	27	23	19
		1000	53	46	42	41	43	43	40	33	53	46	42	41	43	43	40	33
		1500	62	58	54	49	50	54	55	51	62	58	54	49	50	54	55	51
		2000	72	66	63	59	55	60	64	61	72	66	63	59	55	60	64	61
ST2510	120"	500	52	41	37	41	43	33	26	19	52	41	37	41	43	33	26	19
		1000	54	45	41	40	43	42	39	32	54	45	41	40	43	42	39	32
		1500	62	57	51	48	49	53	54	50	62	57	51	48	49	53	54	50
		2000	74	67	59	58	54	59	64	61	74	67	59	58	54	59	64	61

Face Area Adjustment for Self Noise										
Attenuator Face Area (sq. ft.)	0.5	1	2	4	8	16	32	64	128	
PWL Adjustment Factor dB re 10 ⁻¹² Watts	-9	-6	-3	0	+3	+6	+9	+12	+15	

Add or Deduct From Power Level Above.

For intermediate face areas, interpolate to nearest whole number.



The SEMCO Model ST5000 sound silencers provide good attenuation across all bands and are designed to be used in low to medium pressure ranges where low to medium velocities are present.



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" x 24" production run unit.

Dynamic Insertion Loss (dB)																				
Model	Length	Face Velocity	Cv	Press. Drop	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
					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
ST5003	36"	0	1.93	0	2	3	11	24	33	29	17	10	4	4	12	24	33	29	18	12
		500		.03	1	2	10	22	32	29	16	9	3	5	13	24	34	29	18	12
		1000		.12	1	2	10	21	32	29	16	9	3	3	11	21	31	27	15	10
		1500		.27	0	2	9	20	31	29	16	9	2	4	11	22	30	22	14	7
		2000		.48	0	2	9	20	29	29	16	9	0	4	12	22	30	20	10	5
ST5005	60"	0	2.47	0	4	8	19	35	41	40	26	15	6	8	19	33	37	36	26	16
		500		.04	3	7	18	34	41	40	26	14	6	10	21	33	38	36	25	15
		1000		.16	3	6	17	33	40	39	26	14	6	9	20	31	36	34	24	14
		1500		.35	2	6	17	32	39	37	25	14	4	10	20	31	33	24	17	11
		2000		.62	2	6	16	32	36	33	23	14	2	10	21	31	33	22	12	8
ST5007	84"	0	3.01	0	6	12	27	45	49	50	35	19	8	12	26	41	41	42	34	19
		500		.05	5	11	26	45	49	50	35	19	8	14	28	41	41	43	32	17
		1000		.19	4	10	24	44	48	49	35	19	8	14	29	41	40	41	32	17
		1500		.42	4	10	24	44	46	44	34	19	5	15	29	40	36	25	19	15
		2000		.75	4	9	22	43	43	37	29	18	4	15	29	39	35	24	13	10
ST5010	120"	0	3.85	0	9	19	39	61	61	66	49	26	11	18	37	54	47	52	46	24
		500		.07	8	18	38	62	62	66	49	27	12	21	39	54	46	54	43	21
		1000		.24	6	16	35	61	60	64	49	27	12	22	43	56	47	52	45	22
		1500		.53	7	16	35	62	57	55	48	27	7	23	43	54	41	27	23	21
		2000		.95	7	14	32	60	54	43	39	25	7	23	42	52	39	27	15	14

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

Cv = Silencer Flow Coefficient

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

Hv = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

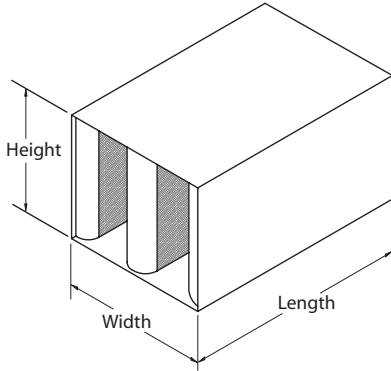
STANDARD CONSTRUCTION:

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.



Standard Sizes & Weights														
Std. Height	3'-0" Length Standard Width				5'-0" Length Standard Width				7'-0" Length Standard Width			10'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"	12"	24"	36"
12"	30	49	64	77	49	82	105	126	69	115	148	98	163	210
24"	47	75	93	111	76	120	147	176	105	166	204	136	206	244
36"	64	101	122	145	102	159	189	226	141	219	259	185	278	314
48"	82	126	150	179	129	197	230	276	-	-	-	-	-	-

Non-standard sizes are available.

Non-standard height dimensions are available within the following restrictions:
 48" heights are not available in 7' through 10' lengths.

Self Generated Noise (dB)																		
Model	Length	Face Velocity	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
			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
ST5003	36"	500	49	45	39	37	30	22	19	19	50	41	37	43	48	38	28	21
		1000	55	49	43	43	43	42	37	29	52	44	42	48	56	52	41	30
		1500	62	59	51	48	50	52	51	44	62	56	53	56	61	71	65	55
		2000	64	64	66	56	54	59	61	57	68	62	59	60	62	74	75	66
ST5005	60"	500	47	46	39	35	28	21	19	19	48	41	38	43	48	38	28	20
		1000	53	49	42	41	42	41	35	28	53	47	41	46	54	51	40	29
		1500	59	57	49	46	49	51	49	43	64	56	53	55	60	70	66	56
		2000	64	62	62	54	53	57	59	55	68	61	59	59	62	72	74	65
ST5007	84"	500	45	46	38	33	25	19	19	19	45	41	38	43	47	38	28	19
		1000	51	48	40	39	41	39	33	27	54	49	40	44	52	49	38	28
		1500	56	55	47	44	47	49	47	41	65	56	53	54	59	69	67	57
		2000	63	59	57	51	51	55	57	53	67	59	58	58	61	70	73	64
ST5010	120"	500	42	47	37	30	21	17	19	19	41	41	39	43	46	38	28	18
		1000	48	47	38	36	40	37	30	26	56	53	39	41	49	47	36	27
		1500	52	52	44	41	45	47	44	39	67	56	53	53	58	68	69	59
		2000	62	55	50	47	49	52	54	50	66	57	57	57	60	67	72	63

Face Area Adjustment for Self Noise											
Attenuator Face Area (sq. ft.)		0.5	1	2	4	8	16	32	64	128	
PWL Adjustment Factor dB re 10 ⁻¹² Watts		-9	-6	-3	0	+3	+6	+9	+12	+15	

Add or Deduct From Power Level Above.

For intermediate face areas, interpolate to nearest whole number.



The SEMCO Model ST6000 sound silencers provide good performance in all octave bands while maintaining low pressure drops in medium and high velocity systems.



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" x 24" production run unit.

Dynamic Insertion Loss (dB)																				
Model	Length	Face Velocity	Cv	Press. Drop	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
					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
ST6003	36"	0	.82	0	3	4	9	18	25	27	18	12	3	4	9	18	25	27	18	12
		500		.01	3	4	9	18	24	27	18	12	3	4	9	18	24	27	18	12
		1000		.05	3	3	9	17	24	26	18	11	3	3	9	17	24	26	18	11
		1500		.11	2	3	9	17	24	26	18	11	2	3	9	17	24	26	18	11
		2000	.20	2	3	9	17	24	26	18	11	2	3	9	17	24	26	18	11	
ST6005	60"	0	1.18	0	4	7	15	29	37	39	25	14	4	7	15	29	37	39	25	14
		500		.02	4	6	14	28	37	39	25	14	4	6	14	28	37	39	25	14
		1000		.07	4	6	14	27	37	39	25	14	4	6	14	27	37	39	25	14
		1500		.16	3	5	14	27	36	38	25	14	3	5	14	27	36	38	25	14
		2000	.29	3	5	14	27	36	36	25	14	3	5	14	27	36	36	25	14	
ST6007	84"	0	1.51	0	5	9	20	39	49	51	32	16	5	9	20	39	49	51	32	16
		500		.02	5	8	18	38	49	51	32	16	5	8	18	38	49	51	32	16
		1000		.09	5	8	18	37	49	51	32	16	5	8	18	37	49	51	32	16
		1500		.21	4	7	18	37	48	49	32	16	4	7	18	37	48	49	32	16
		2000	.37	3	7	18	36	47	45	32	16	3	7	18	36	47	45	32	16	
ST6010	120"	0	1.98	0	7	13	28	55	67	69	43	19	7	13	28	55	67	69	43	19
		500		.03	7	11	25	53	68	69	43	19	7	11	25	53	68	69	43	19
		1000		.12	7	12	25	52	68	70	43	20	7	12	25	52	68	70	43	20
		1500		.29	6	10	25	52	66	66	43	20	6	10	25	52	66	66	43	20
		2000	.50	4	10	25	50	64	59	43	20	4	10	25	50	64	59	43	20	

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

Cv = Silencer Flow Coefficient

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

Hv = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

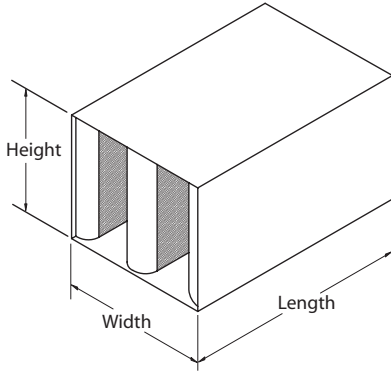
STANDARD CONSTRUCTION:

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.



Standard Sizes & Weights														
Std. Height	3'-0" Length Standard Width				5'-0" Length Standard Width				7'-0" Length Standard Width			10'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"	12"	24"	36"
12"	26	47	61	76	43	78	100	124	60	110	141	85	156	201
24"	40	71	88	109	64	115	141	174	90	159	196	123	201	240
36"	54	96	116	142	86	152	181	223	119	211	249	163	271	309
48"	68	120	143	175	108	189	221	273	-	-	-	-	-	-

Non-standard sizes are available.

Non-standard height dimensions are available within the following restrictions:
 48" heights are not available in 7' through 10' lengths.

Self Generated Noise (dB)																		
Model	Length	Face Velocity	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
			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
ST6003	36"	500	49	40	36	28	20	19	19	19	49	40	36	28	20	19	19	19
		1000	53	42	38	34	22	19	19	53	42	38	34	22	19	19	19	
		1500	60	58	49	42	43	43	37	31	60	58	49	42	43	43	37	31
		2000	62	60	53	49	48	51	49	44	62	60	53	49	48	51	49	44
ST6005	60"	500	51	43	37	29	23	20	19	51	43	37	29	23	20	19	19	
		1000	55	44	40	33	23	20	19	55	44	40	33	23	20	19	19	
		1500	62	57	49	43	43	43	37	31	62	57	49	43	43	43	37	31
		2000	63	60	52	51	48	51	49	44	63	60	52	51	48	51	49	44
ST6007	84"	500	52	45	38	30	26	20	19	52	45	38	30	26	20	19	19	
		1000	56	45	41	32	24	21	19	56	45	41	32	24	21	19	19	
		1500	63	55	48	43	42	42	37	30	63	55	48	43	42	42	37	30
		2000	63	60	50	52	48	50	48	43	63	60	50	52	48	50	48	43
ST6010	120"	500	54	49	40	32	31	21	19	54	49	40	32	31	21	19	19	
		1000	58	47	43	31	31	26	23	58	47	43	31	31	26	23	19	
		1500	65	53	47	44	41	41	37	29	65	53	47	44	41	41	37	29
		2000	64	60	48	54	48	49	47	42	64	60	48	54	48	49	47	42

Face Area Adjustment for Self Noise											
Attenuator Face Area (sq. ft.)		0.5	1	2	4	8	16	32	64	128	
PWL Adjustment Factor dB re 10 ⁻¹² Watts		-9	-6	-3	0	+3	+6	+9	+12	+15	

Add or Deduct From Power Level Above.

For intermediate face areas, interpolate to nearest whole number.



The SEMCO Model ST7500 sound silencers provide good attenuation across all bands. Their design assures minimal pressure drops in high velocity applications.



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" x 24" production run unit.

Dynamic Insertion Loss (dB)																				
Model	Length	Face Velocity	Cv	Press. Drop	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
					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
ST7503	36"	0	.74	0	1	5	8	21	26	21	12	9	3	5	9	21	25	21	12	9
		500		.01	1	5	8	21	25	22	14	10	3	5	9	21	26	21	12	8
		1000		.05	1	5	8	20	25	22	14	10	3	6	9	21	26	21	12	7
		1500		.10	2	5	8	19	25	22	13	10	3	7	10	22	26	21	12	6
		2000	.18	2	5	8	19	24	22	13	10	2	6	10	22	27	21	11	6	
ST7505	60"	0	1.08	0	4	8	14	33	41	31	18	11	3	7	14	34	41	31	19	12
		500		.02	4	8	13	32	41	32	19	11	3	7	14	34	41	31	18	11
		1000		.07	4	8	13	32	41	32	19	11	3	8	14	34	41	31	18	11
		1500		.15	3	8	13	32	40	32	19	12	3	9	15	34	42	31	17	11
		2000	.27	3	8	12	31	40	32	19	13	2	9	15	35	42	31	17	11	
ST7507	84"	0	1.22	0	2	9	17	42	51	40	21	13	3	10	18	42	52	41	21	12
		500		.02	2	9	16	42	51	41	21	13	3	10	19	43	52	40	20	12
		1000		.08	2	9	16	42	50	41	22	13	3	11	19	43	53	39	20	12
		1500		.17	2	9	16	41	50	42	22	14	3	11	21	45	52	39	20	12
		2000	.30	1	9	16	40	48	42	22	15	2	11	21	42	51	39	20	12	
ST7510	120"	0	1.46	0	7	14	26	60	74	55	30	16	3	15	26	62	76	56	32	17
		500		.02	7	14	24	60	74	55	30	16	3	15	27	62	76	55	30	17
		1000		.10	7	14	22	60	74	56	30	16	3	16	27	63	76	54	29	18
		1500		.21	4	14	24	61	73	57	31	17	3	14	30	63	76	54	28	20
		2000	.37	3	14	22	58	72	57	31	20	2	16	30	62	74	54	29	20	

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

Cv = Silencer Flow Coefficient

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

Hv = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

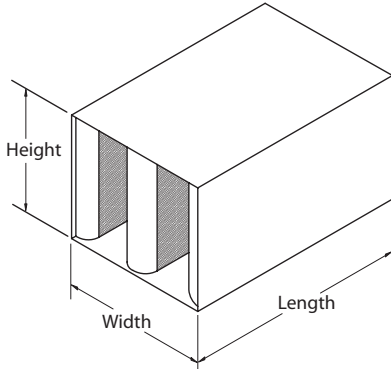
STANDARD CONSTRUCTION:

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.



Standard Sizes & Weights														
Std. Height	3'-0" Length Standard Width				5'-0" Length Standard Width				7'-0" Length Standard Width			10'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"	12"	24"	36"
12"	26	47	60	74	43	78	99	121	60	110	139	85	156	199
24"	40	71	87	106	64	115	139	170	90	159	194	123	201	239
36"	54	96	114	138	86	152	179	218	118	211	246	163	271	308
48"	68	120	141	170	108	189	218	267	-	-	-	-	-	-

Non-standard sizes are available.

Non-standard height dimensions are available within the following restrictions:
 48" heights are not available in 7' through 10' lengths.

Self Generated Noise (dB)																		
Model	Length	Face Velocity	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
			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
ST7503	36"	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1000	51	46	40	36	36	31	24	20	47	42	36	34	32	21	19	20
		1500	54	53	47	42	43	45	39	31	59	54	49	48	51	50	42	34
		2000	60	60	60	51	48	53	51	44	70	65	56	54	55	58	53	34
ST7505	60"	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1000	49	47	45	37	34	29	22	25	53	49	48	46	45	39	28	25
		1500	54	51	48	42	42	43	37	30	59	57	54	53	54	52	42	35
		2000	61	58	54	49	49	51	49	43	63	62	60	58	59	60	54	46
ST7507	84"	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1000	53	46	38	34	34	27	21	25	52	48	47	45	44	37	26	25
		1500	58	52	46	44	43	43	36	29	58	57	54	52	52	52	43	35
		2000	64	61	55	52	50	51	48	42	68	62	60	57	57	59	53	46
ST7510	120"	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		1000	50	45	28	30	31	24	18	25	51	47	46	44	43	34	23	25
		1500	64	49	43	44	42	40	33	28	57	57	54	51	49	52	43	35
		2000	69	58	46	49	52	48	45	41	58	58	60	56	54	58	52	46

Face Area Adjustment for Self Noise										
Attenuator Face Area (sq. ft.)	0.5	1	2	4	8	16	32	64	128	
PWL Adjustment Factor dB re 10 ⁻¹² Watts	-9	-6	-3	0	+3	+6	+9	+12	+15	

Add or Deduct From Power Level Above.

For intermediate face areas, interpolate to nearest whole number.



SEMCO round sound silencers are available in several different performance ranges to fit the needs of most round, high velocity applications.



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" round production run unit. Larger units will produce higher insertion losses.

Dynamic Insertion Loss (dB)																				
Model	Length	Face Velocity	Cv	Press. Drop	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
					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
RS1000	2 x Dia.	0	.15	0	4	6	14	21	15	12	12	8	4	6	14	21	15	12	8	
		1000		.01	4	5	14	21	15	12	12	8	4	5	14	21	15	12	8	
		1500		.02	3	5	13	20	15	12	12	8	3	5	13	20	15	12	8	
		2000		.04	2	5	13	20	15	12	12	8	2	5	13	20	15	12	8	
		2500		.06	2	5	13	20	15	12	12	8	2	5	13	20	15	12	8	
RS7800T	2 x Dia.	0	.36	0	7	11	16	31	39	36	26	18	9	11	16	31	39	36	25	18
		1000		.02	6	11	16	30	38	36	26	18	9	12	17	32	39	36	25	17
		1500		.05	4	10	16	29	37	36	26	18	2	9	15	30	36	33	21	14
		2000		.09	3	8	13	25	35	33	24	17	1	8	12	25	33	31	19	13
		2500		.14	2	8	12	25	33	32	23	17	1	8	12	25	31	29	18	11
RS7800R	2 x Dia.	0	.40	0	6	7	16	28	35	28	20	16	5	9	15	29	36	34	23	16
		1000		.03	6	7	16	28	34	28	20	16	5	10	16	30	37	34	22	13
		1500		.06	6	7	15	27	34	28	20	16	5	10	15	30	37	34	22	13
		2000		.10	5	7	15	26	33	28	20	16	3	10	15	30	34	32	20	12
		2500		.16	4	6	14	25	33	28	20	16	2	10	15	28	32	29	19	10
RS6100T	2 x Dia.	0	.64	0	5	9	13	23	30	25	18	13	7	9	13	23	30	25	17	14
		1000		.04	5	9	13	22	29	25	18	13	8	10	14	24	30	25	17	12
		1500		.09	5	9	13	22	29	25	18	13	3	8	12	23	28	22	13	9
		2000		.16	4	9	13	22	29	25	18	13	2	8	12	22	27	23	13	9
		2500		.25	3	8	12	22	29	25	18	13	1	8	12	22	27	22	13	7
RS6100R	2 x Dia.	0	.80	0	8	9	21	34	43	38	27	20	7	11	20	35	44	44	30	20
		1000		.05	7	8	18	33	41	37	27	20	6	11	18	35	44	43	29	17
		1500		.11	7	8	18	32	41	37	27	20	6	11	18	35	44	43	29	17
		2000		.20	7	8	18	31	40	36	26	20	5	11	18	35	41	40	26	16
		2500		.31	4	8	17	30	39	35	26	20	2	11	18	33	38	36	25	14

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.

Minimum Length is 36"

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

Cv = Silencer Flow Coefficient

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

Hv = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

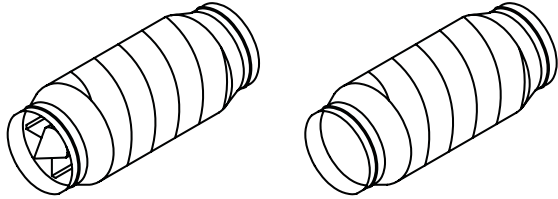
STANDARD CONSTRUCTION:

Diameter	Spiral Shell (ga. galv.)	Nose (ga. galv.)	Perf. Liner (ga. galv.)	Perf. Bullet (ga. galv.)
12" - 14"	26	20	26	24
15" - 18"	24	20	26	24
19" - 26"	24	20	24	24
28" - 36"	22	20	22	24
38" - 50"	20	20	22	22
52" - 60"	18	20	22	22

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

FIRE RATINGS:

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



Round Silencer Weights									
Model	12	18	24	30	36	42	48	54	60
RS1000	40	61	108	174	241	321	482	616	753
RS7800	41	66	121	197	291	388	573	724	896
RS6100	42	86	163	267	391	624	878	1178	1445

Round silencers are available in all even sizes, 12 round through 60 round.

Self Generated Noise (dB)																		
Model	Length	Face Velocity	Forward Airflow Performance								Reverse Airflow Performance							
			Octave Band/Frequency (hz)								Octave Band/Frequency (hz)							
			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
RS1000	2 x Dia.	1000	49	50	36	30	29	26	22	19	49	50	36	30	29	26	22	19
		1500	52	51	42	38	34	28	23	19	52	51	42	38	34	28	23	19
		2000	56	56	48	45	41	36	33	23	56	56	48	45	41	36	33	23
		2500	61	62	59	58	49	46	43	34	61	62	59	58	49	46	43	34
RS7800T	2 x Dia.	1000	53	45	35	30	19	18	18	18	48	42	35	35	31	27	20	18
		1500	57	49	38	36	28	21	19	18	52	44	38	37	33	30	24	19
		2000	60	52	41	39	35	27	20	18	60	54	48	49	48	47	45	38
		2500	63	58	47	46	42	39	32	21	67	63	58	59	55	45	54	49
RS7800R	2 x Dia.	1000	52	50	39	34	30	29	23	19	52	50	39	34	30	29	23	19
		1500	56	51	42	41	40	36	30	19	56	51	42	41	40	36	30	19
		2000	63	61	55	53	50	49	45	37	63	61	55	53	50	49	45	37
		2500	67	65	63	65	53	53	51	43	67	65	63	65	53	53	51	43
RS6100T	2 x Dia.	1000	51	44	36	34	26	19	18	18	52	46	42	44	40	36	28	24
		1500	59	48	40	36	28	20	18	18	54	49	45	47	46	42	34	27
		2000	62	53	42	41	39	35	28	22	60	56	52	53	52	51	46	39
		2500	64	60	50	50	47	46	42	35	65	62	59	59	58	59	56	49
RS6100R	2 x Dia.	1000	51	43	35	35	34	28	26	19	51	43	35	35	34	28	26	19
		1500	59	55	45	44	44	43	39	25	59	55	45	44	44	43	39	25
		2000	59	56	47	48	48	48	46	36	59	56	47	48	48	48	46	36
		2500	65	63	58	58	54	56	55	50	65	63	58	58	54	56	55	50

Minimum Length is 36"

Face Area Adjustment for Self Noise									
Attenuator Face Area (sq. ft.)	0.5	1	2	4	8	16	32	64	128
PWL Adjustment Factor dB re 10 ⁻¹² Watts	-9	-6	-3	0	+3	+6	+9	+12	+15

Add or Deduct From Power Level Above.

For intermediate face areas, interpolate to nearest whole number.

