

The SEMCO Model MF2500 Media Free Silencer is designed to provide excellent broad band attenuation while being totally media free. The moderate pressure loss makes this silencer suitable for all applications and for systems operating at higher velocities. Applications may include hospitals, pharmaceuticals, electronics, clean rooms or other sensitive applications requiring a contaminate free environment.



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 actual production run units.

				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 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
MF2503	36"	0	10.42	0	2	4	10	15	11	11	10	6	2	4	10	15	11	11	10	6
		500		.16	2	5	12	17	11	11	10	7	3	6	13	17	11	12	8	6
		1000		.65	2	6	14	20	12	12	10	7	4	8	16	21	13	10	8	7
		1500		1.46	2	6	15	21	13	12	10	8	4	9	18	23	13	11	8	7
MF2506	72"	0	10.23	0	5	7	12	21	13	14	13	9	5	7	12	21	13	14	13	9
		500		.16	6	8	14	22	14	15	14	11	7	9	15	24	13	14	9	9
		1000		.36	7	10	17	26	16	15	14	12	8	12	19	29	15	15	10	8
		1500		.63	7	10	19	29	18	17	14	12	10	15	23	33	17	15	10	8
MF2509	108"	0	10.44	0	6	7	11	19	15	18	16	11	6	7	11	19	15	18	16	11
		500		.16	7	9	14	21	16	19	17	14	7	10	16	23	16	17	14	8
		1000		.65	8	12	20	26	20	19	17	15	9	16	22	29	21	17	12	9
		1500		1.46	9	14	22	29	23	22	18	15	10	20	27	32	23	17	11	9

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.

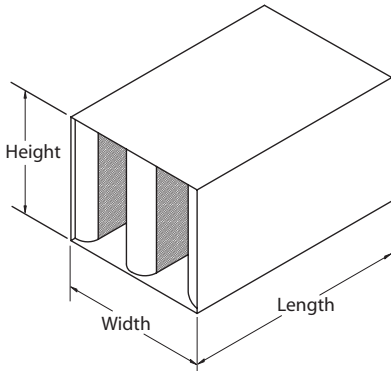
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

Also available in 304 and 316 Stainless Steel.

FIRE RATINGS:

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



Standard Sizes											
Std. Height	3'-0" Length Standard Width				6'-0" Length Standard Width				9'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"
18"	x	x	x	x	x	x	x	x	x	x	x
24"	x	x	x	x	x	x	x	x	x	x	x
36"	x	x	x	x	x	x	x	x	x	x	x
48"	x	x	x	x	x	x	x	x	n/a	n/a	n/a

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)																		
			Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
Model	Length	Face Velocity	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
MF2503	36"	500	63	51	41	44	46	45	35	26	65	50	40	42	46	49	41	28
		1000	66	58	53	55	56	61	64	55	67	56	50	53	55	62	66	58
		1500	72	68	61	61	63	67	72	70	73	66	57	59	61	65	72	73
MF2506	72"	500	60	46	38	38	43	41	30	29	63	48	36	38	44	46	36	27
		1000	65	57	51	51	53	60	63	52	68	55	50	50	53	62	65	56
		1500	73	67	59	58	60	65	72	70	72	62	56	57	58	64	73	72
MF2509	108"	500	57	45	38	37	42	41	28	29	58	44	39	40	45	46	36	30
		1000	62	55	51	51	53	60	62	50	62	55	51	51	53	62	65	55
		1500	71	66	58	58	60	65	72	68	68	64	57	58	60	64	73	72

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 MF5000 Media Free Silencer is designed to provide excellent broad band attenuation while being totally media free. The moderate pressure loss makes this silencer suitable for all applications and for systems operating at higher velocities. Applications may include hospitals, pharmaceuticals, electronics, clean rooms or other sensitive applications requiring a contaminate free environment.



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 actual production run units.

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
MF5003	36"	0	2.48	0	3	4	6	13	8	6	7	6	3	4	6	13	8	6	7	6
		500		.04	4	6	7	14	8	7	7	8	4	5	6	13	8	7	6	5
		1000		.15	4	6	7	14	8	7	7	8	4	5	7	14	8	7	5	4
		1500		.34	4	6	8	14	9	7	7	7	4	6	8	13	8	6	5	5
		2000		.62	4	6	8	14	10	8	7	7	5	7	8	13	8	6	5	5
MF5006	72"	0	2.88	0	4	5	8	15	9	10	10	6	4	5	8	15	9	10	10	6
		500		.05	5	6	10	17	11	11	11	10	5	5	9	16	10	11	7	6
		1000		.18	5	7	11	19	11	11	11	10	6	7	12	19	11	11	7	5
		1500		.40	5	8	13	21	14	12	10	10	6	8	14	21	12	11	7	6
		2000		.72	4	8	14	22	15	13	10	10	8	10	16	23	13	10	7	6
MF5009	108"	0	2.90	0	5	6	9	16	12	11	12	7	5	6	9	16	12	11	12	7
		500		.05	6	6	9	17	12	12	13	9	5	6	9	17	12	12	10	8
		1000		.18	6	7	11	20	13	13	14	10	6	8	13	21	14	13	9	7
		1500		.41	6	8	14	23	16	13	13	10	8	11	16	24	16	13	8	7
		2000		.72	6	9	15	23	18	15	13	10	9	12	18	25	17	13	8	7

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.

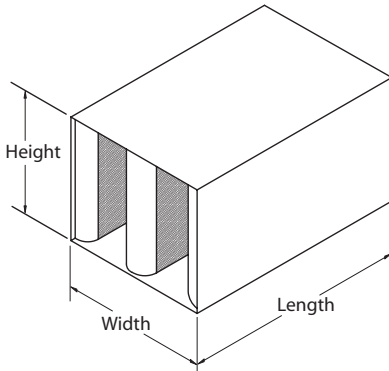
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

Also available in 304 and 316 Stainless Steel.

FIRE RATINGS:

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



Standard Sizes											
Std. Height	3'-0" Length Standard Width				6'-0" Length Standard Width				9'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"
18"	x	x	x	x	x	x	x	x	x	x	x
24"	x	x	x	x	x	x	x	x	x	x	x
36"	x	x	x	x	x	x	x	x	x	x	x
48"	x	x	x	x	x	x	x	x	n/a	n/a	n/a

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
MF5003	36"	500	56	43	38	36	31	33	27	31	57	45	37	33	30	21	24	29
		1000	60	49	45	48	50	53	47	34	61	47	43	45	49	51	44	32
		1500	62	58	52	54	55	61	62	51	69	56	51	52	54	60	62	51
		2000	69	64	57	58	60	64	69	64	75	63	57	57	58	63	68	65
MF5006	72"	500	56	46	38	33	32	22	25	30	57	45	36	31	31	21	23	29
		1000	60	50	47	48	51	54	48	33	59	49	45	46	50	53	46	32
		1500	62	59	54	55	56	62	64	53	66	56	52	53	54	61	63	51
		2000	69	64	58	59	61	66	71	65	71	62	58	58	59	64	70	63
MF5009	108"	500	59	44	25	32	32	22	24	30	57	43	35	29	27	19	24	30
		1000	60	50	46	46	50	53	46	32	59	50	43	43	49	53	46	33
		1500	63	59	54	54	55	62	63	52	66	58	51	51	53	61	64	52
		2000	71	66	59	59	60	66	71	65	71	63	57	56	58	64	70	64

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.



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The SEMCO Model MF7500 Media Free Silencer is designed to provide excellent broad band attenuation while being totally media free. The moderate pressure loss makes this silencer suitable for all applications and for systems operating at higher velocities. Applications may include hospitals, pharmaceuticals, electronics, clean rooms or other sensitive applications requiring a contaminate free environment.



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 actual production run units.

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
MF7503	36"	0	1.12	0	1	4	4	10	7	5	5	4	1	4	4	10	7	5	5	4
		500		.02	2	5	5	11	7	5	5	5	1	8	10	14	11	9	6	6
		1000		.07	2	5	6	12	8	6	5	4	2	9	11	16	12	10	5	5
		1500		.16	2	6	6	14	9	7	5	4	2	10	12	17	13	10	5	5
		2000		.28	1	7	6	13	10	8	6	5	2	12	14	21	14	10	5	4
MF7506	72"	0	1.28	0	2	5	6	12	11	9	9	7	2	5	6	12	11	9	9	7
		500		.02	3	6	7	14	11	9	9	8	2	10	12	17	15	13	9	6
		1000		.08	3	6	8	15	12	10	8	7	3	11	14	19	16	14	7	6
		1500		.18	3	7	8	17	13	11	8	6	3	12	16	21	17	14	7	5
		2000		.32	2	8	8	15	14	12	9	7	3	14	17	23	18	14	7	5
MF7509	108"	0	1.44	0	2	3	7	13	10	9	7	7	2	3	7	13	10	9	7	7
		500		.02	3	5	8	15	11	10	9	7	3	13	16	19	14	7	8	6
		1000		.09	3	6	9	17	13	11	9	7	5	15	18	21	16	8	6	4
		1500		.20	4	9	12	21	16	13	10	7	5	18	20	24	18	9	7	4
		2000		.36	4	10	14	22	17	14	10	7	5	17	18	23	18	11	8	5

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.

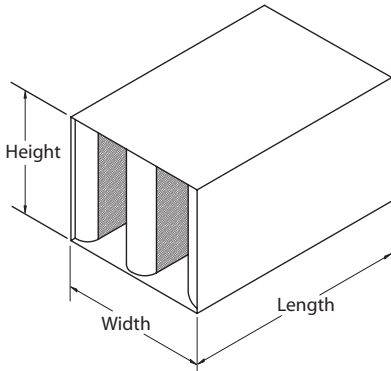
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

Also available in 304 and 316 Stainless Steel.

FIRE RATINGS:

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



Standard Sizes											
Std. Height	3'-0" Length Standard Width				6'-0" Length Standard Width				9'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"
18"	x	x	x	x	x	x	x	x	x	x	x
24"	x	x	x	x	x	x	x	x	x	x	x
36"	x	x	x	x	x	x	x	x	x	x	x
48"	x	x	x	x	x	x	x	x	n/a	n/a	n/a

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
MF7503	36"	500	62	57	48	42	43	43	37	35	60	54	47	44	41	41	36	35
		1000	61	55	50	50	50	44	37	35	60	54	52	57	56	53	44	36
		1500	61	54	54	55	58	60	54	44	64	61	62	62	64	66	59	48
		2000	70	67	63	67	63	67	64	48	75	69	65	69	67	70	68	60
MF7506	72"	500	61	53	46	41	38	40	36	35	60	51	50	42	42	41	37	35
		1000	60	53	46	43	48	45	37	35	62	51	52	56	58	56	45	35
		1500	64	56	53	54	55	57	48	39	66	61	61	63	64	67	61	51
		2000	70	62	62	62	61	65	61	57	71	66	66	69	67	72	71	61
MF7509	108"	500	64	55	46	44	39	42	37	35	59	59	55	58	58	57	47	36
		1000	59	50	46	42	47	42	37	35	66	54	53	56	56	54	43	35
		1500	61	55	54	57	56	58	51	43	62	52	57	58	61	62	54	42
		2000	68	66	63	61	61	65	61	54	61	56	59	63	62	64	57	53

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.



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Model MFL2500 Media Free Silencer

The SEMCO Model MFL2500 Media Free Silencer is designed to provide excellent broad band attenuation while being totally media free. The moderate pressure loss makes this silencer suitable for all applications and for systems operating at higher velocities. Applications may include hospitals, pharmaceuticals, electronics, clean rooms or other sensitive applications requiring a contaminate free environment.



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 actual production run units.

				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 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
MFL2503	36"	0	9.77	0	2	5	11	16	11	11	10	9	1	5	10	15	11	10	10	10
		500		.17	2	7	12	17	12	12	10	10	1	7	12	16	12	11	10	10
		1000		.60	1	6	14	18	12	12	10	10	1	9	14	19	13	12	9	9
		1500		1.29	1	8	14	20	13	13	11	11	1	13	16	21	14	13	10	9
		2000		2.30	1	7	12	19	13	13	10	9	1	11	17	22	15	13	11	10
MFL2506	72"	0	9.86	0	2	7	12	18	14	17	16	17	2	7	12	19	15	16	14	14
		500		.17	4	9	15	20	15	17	16	18	3	9	15	21	16	16	13	12
		1000		.62	4	9	17	23	16	18	15	17	4	13	18	25	18	17	11	12
		1500		1.31	3	10	17	26	17	19	15	14	4	16	21	28	21	17	11	11
		2000		2.26	3	11	16	22	18	21	17	16	4	19	24	32	24	17	11	10
MFL2509	108"	0	12.90	0	3	7	12	18	15	18	17	16	1	6	12	17	15	19	17	17
		500		.24	5	9	15	20	16	19	19	19	3	10	16	20	17	18	17	15
		1000		.79	5	11	17	23	19	20	19	19	5	14	19	24	20	16	15	13
		1500		1.68	6	14	20	27	22	23	20	19	5	19	23	28	22	17	14	12
		2000		2.95	5	15	22	30	23	25	20	19	6	23	27	31	24	19	13	11

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_v = Silencer Flow Coefficient

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

H_v = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

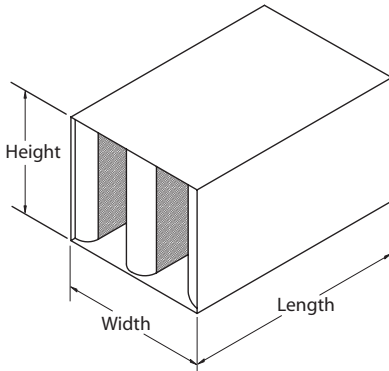
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

FIRE RATINGS:

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

Also available in 304 and 316 Stainless Steel.



Standard Sizes											
Std. Height	3'-0" Length Standard Width				6'-0" Length Standard Width				9'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"
18"	x	x	x	x	x	x	x	x	x	x	x
24"	x	x	x	x	x	x	x	x	x	x	x
36"	x	x	x	x	x	x	x	x	x	x	x
48"	x	x	x	x	x	x	x	x	n/a	n/a	n/a

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

Self Generated Noise (dB)																		
			Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
Model	Length	Face Velocity	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
MFL2503	36"	500	58	56	50	43	47	48	41	28	59	55	51	46	51	50	42	27
		1000	66	70	74	63	59	62	64	60	69	69	75	60	59	65	64	57
		1500	77	75	81	75	69	68	72	71	76	72	80	73	67	67	72	68
		2000	87	80	86	86	80	74	76	77	83	77	83	81	79	72	76	77
MFL2506	72"	500	59	47	45	38	42	42	32	18	52	47	41	39	47	45	38	21
		1000	66	65	67	57	55	58	60	58	57	61	61	49	53	62	61	54
		1500	73	71	76	68	64	62	65	61	70	64	73	61	59	66	72	67
		2000	80	76	85	77	73	70	70	71	71	66	80	71	67	68	78	76
MFL2509	108"	500	60	50	46	38	47	48	37	24	59	46	42	45	48	49	39	25
		1000	68	66	64	54	53	62	65	57	64	65	64	55	58	63	65	56
		1500	80	73	74	65	63	65	79	73	73	71	73	62	62	66	72	70
		2000	87	78	81	75	72	70	78	87	82	73	78	71	68	68	74	78

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.



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Model MFS2500 Media Free Silencer

The SEMCO Model MFS2500 Media Free Silencer is designed to provide excellent attenuation without the use of media, eliminating the possibility of introducing fibrous material into the airstream. This model is also designed to perform across all bands with low pressure drop for use in medium and 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"x24" production run unit.

				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
MFS2503	36"	0	11.97	0	2	4	8	17	15	13	10	9	1	4	7	16	12	11	10	9
		500		.22	2	6	10	18	16	14	11	10	2	7	11	18	13	11	10	10
		1000		.74	1	6	12	19	18	15	11	10	2	8	13	20	14	12	10	9
		1500		1.56	2	7	13	19	19	18	12	11	3	10	16	21	15	14	10	9
		2000	2.78	2	7	14	19	19	18	13	10	3	11	18	21	16	15	11	10	
MFS2506	72"	0	11.32	0	1	5	10	20	18	18	14	13	2	5	11	20	17	17	14	13
		500		.19	2	7	12	23	20	19	15	15	2	7	13	23	17	16	13	12
		1000		.68	2	7	17	27	23	22	17	18	4	11	20	30	19	15	13	12
		1500		1.53	2	8	17	29	24	24	16	13	4	15	25	33	21	18	12	11
		2000	2.76	3	10	20	25	27	28	21	18	4	19	30	33	24	20	14	13	
MFS2509	108"	0	13.14	0	1	5	10	19	19	21	17	16	1	5	10	18	18	20	17	16
		500		.24	2	7	13	21	20	22	18	17	1	9	14	21	19	19	16	14
		1000		.80	2	9	17	26	23	23	18	17	2	13	20	27	22	18	14	13
		1500		1.69	3	10	20	31	26	28	19	18	3	18	27	34	25	20	14	13
		2000	3.02	3	11	22	34	29	31	20	15	4	21	32	37	28	21	13	11	

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_v = Silencer Flow Coefficient

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

H_v = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

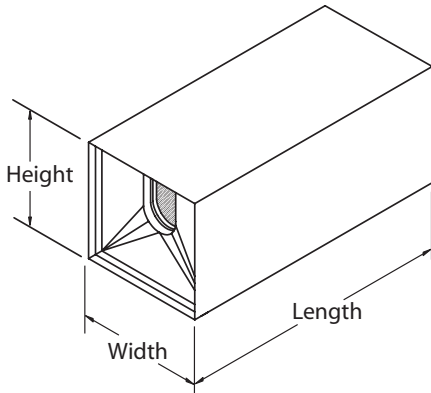
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

Also available in 304 and 316 Stainless Steel.

FIRE RATINGS:

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



Standard Sizes											
Std. Height	3'-0" Length Standard Width				6'-0" Length Standard Width				9'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"
18"	x	x	x	x	x	x	x	x	x	x	x
24"	x	x	x	x	x	x	x	x	x	x	x
36"	x	x	x	x	x	x	x	x	x	x	x
48"	x	x	x	x	x	x	x	x	n/a	n/a	n/a

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

Self Generated Noise (dB)																		
Model	Length	Face Velocity	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Aiflow Performance Octave Band/Frequency (hz)							
			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
MFS2503	36"	500	56	47	45	39	42	46	39	28	57	45	38	37	45	47	40	27
		1000	70	66	64	56	52	57	60	57	65	61	63	55	53	59	60	56
		1500	77	73	73	67	64	62	68	68	75	71	72	69	62	63	68	67
		2000	85	79	81	75	72	70	72	76	82	79	79	77	70	68	72	74
MFS2506	72"	500	52	42	42	36	40	40	30	19	60	45	40	37	43	44	38	21
		1000	62	58	59	52	50	56	56	49	63	56	59	52	51	58	60	54
		1500	74	70	71	67	64	62	67	65	75	66	68	64	59	62	68	67
		2000	81	76	77	74	71	68	70	71	72	69	75	73	67	66	72	74
MFS2509	108"	500	65	51	44	39	45	46	37	24	56	46	41	38	46	48	41	26
		1000	65	58	59	51	51	60	62	55	62	60	63	56	53	60	62	58
		1500	76	69	68	62	60	63	71	70	72	68	71	69	62	64	70	69
		2000	81	74	73	70	68	68	76	78	79	73	77	77	70	68	75	77

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.



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The SEMCO Model MFS5000 Media Free Silencer is designed to provide excellent attenuation without the use of media, eliminating the possibility of introducing fibrous material into the airstream. This model is also designed to perform across all bands with low pressure drop for use in medium and 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 30"x24" production run unit.

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
MFS5003	36"	0	3.54	0	2	3	7	14	9	8	7	6	2	3	7	13	8	8	7	6
		500		.05	2	3	8	15	9	9	8	7	2	4	8	14	8	8	7	6
		1000		.22	2	4	9	16	9	9	7	6	3	5	9	15	9	8	7	6
		1500		.50	1	5	10	16	10	10	8	7	3	6	11	15	10	8	7	6
		2000		.89	2	5	10	16	10	11	8	7	3	6	12	15	10	9	7	6
MFS5006	72"	0	3.50	0	2	3	8	16	11	12	11	9	2	3	8	15	10	12	10	9
		500		.05	2	4	9	16	11	12	11	9	1	4	10	16	11	12	10	9
		1000		.22	3	5	10	18	12	13	11	9	2	5	11	17	11	11	9	8
		1500		.50	3	6	12	22	13	14	11	9	3	7	14	20	12	11	9	9
		2000		.88	3	7	14	24	14	15	11	9	3	9	16	21	13	12	9	9
MFS5009	108"	0	3.51	0	3	4	9	18	12	14	13	11	1	3	9	17	12	15	13	11
		500		.05	3	4	10	19	13	15	14	13	3	4	10	18	12	14	13	11
		1000		.22	3	5	11	22	13	15	13	11	3	6	13	21	12	13	13	11
		1500		.50	3	7	14	26	15	16	14	11	3	8	16	25	13	11	12	10
		2000		.87	3	8	16	29	17	18	14	12	3	10	19	27	14	12	11	10

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.

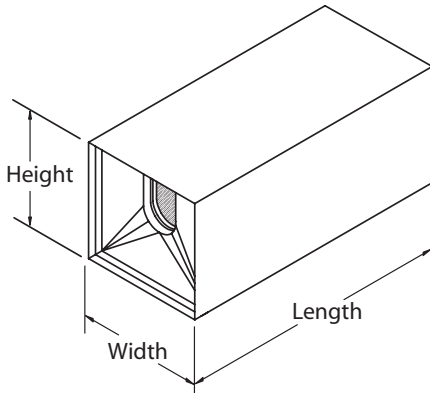
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

FIRE RATINGS:

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

Also available in 304 and 316 Stainless Steel.



Standard Sizes											
Std. Height	3'-0" Length Standard Width				6'-0" Length Standard Width				9'-0" Length Standard Width		
	12"	24"	36"	48"	12"	24"	36"	48"	12"	24"	36"
18"	x	x	x	x	x	x	x	x	x	x	x
24"	x	x	x	x	x	x	x	x	x	x	x
36"	x	x	x	x	x	x	x	x	x	x	x
48"	x	x	x	x	x	x	x	x	n/a	n/a	n/a

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

Self Generated Noise (dB)																		
Model	Length	Face Velocity	Forward Airflow Performance Octave Band/Frequency (hz)								Reverse Airflow Performance Octave Band/Frequency (hz)							
			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
MFS5003	36"	500	60	47	36	30	28	25	24	28	55	46	36	33	36	31	24	29
		1000	67	54	54	46	45	49	46	31	61	54	53	46	48	53	50	37
		1500	71	65	63	58	55	56	57	51	73	65	64	58	55	60	62	58
		2000	77	70	71	65	62	61	64	60	78	71	71	66	61	63	68	66
MFS5006	72"	500	59	45	36	30	29	26	21	27	55	46	39	34	36	31	22	27
		1000	66	53	51	43	46	50	45	29	66	55	55	47	49	54	51	34
		1500	70	62	60	57	55	58	58	50	69	62	63	59	56	61	63	57
		2000	76	70	69	65	62	61	65	60	76	70	69	66	61	64	69	66
MFS5009	108"	500	60	46	36	33	34	27	23	25	52	49	37	38	38	33	21	25
		1000	66	52	50	41	48	52	46	28	58	51	53	46	50	55	52	34
		1500	70	63	58	54	57	60	60	50	72	64	63	57	55	62	64	58
		2000	73	65	64	57	60	63	67	62	75	70	69	66	61	65	71	68

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.



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The SEMCO Model MF2500XS Media Free Silencer is designed to provide excellent attenuation without media, eliminating the possibility of introducing fibrous material into the airstream. The no media feature is especially suited for fume hood exhaust systems where absorption of the chemical fumes pose an environmental danger. This model is also designed to provide a moderate pressure drop on low to medium 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 an actual 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
MF2500XS 12"ø	36"	0	1.24	0	8	8	14	7	7	7	7	6	5	7	15	7	8	7	8	8
		500		.02	8	9	14	7	7	7	8	6	5	9	16	8	8	8	8	8
		1000		.08	9	9	15	8	8	7	8	6	5	9	18	9	9	8	8	8
		1500		.17	9	10	17	9	9	8	8	6	5	10	20	10	10	9	8	8
		2000		.30	9	11	18	10	10	8	8	6	6	11	23	12	11	9	8	8
MF2500XS 8"ø	36"	0	1.57	0	6	8	17	11	7	12	10	10	6	10	17	11	7	11	10	10
		500		.03	7	10	18	12	7	12	11	10	8	11	18	11	7	11	10	10
		1000		.10	7	10	20	13	8	12	11	10	8	12	21	13	8	12	10	10
		1500		.22	8	11	22	15	9	12	11	10	10	14	23	14	9	12	10	9
		2000		.40	6	11	23	17	11	13	11	10	9	14	26	16	10	13	10	9

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_v = Silencer Flow Coefficient

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

H_v = Velocity Pressure in Inches w.g.

V = Face velocity in Ft./Min.

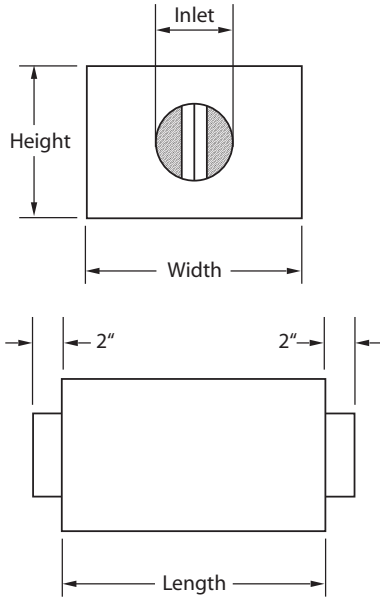
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

FIRE RATINGS:

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

Also available in 304 and 316 Stainless Steel.



Dimensions				
Inlet Diameter	Width	Height	Length	Weight (lbs)
8"	26"	20"	3'-0"	51
12"	36"	20"	3'-0"	66

Please contact SEMCO for availability of custom sizes.

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
MF2500XS 12"Ø	36"	500	63	48	33	21	18	20	21	25	63	48	33	27	21	17	20	25
		1000	63	49	40	37	37	34	23	25	62	50	41	38	42	36	27	25
		1500	68	55	49	45	48	47	42	33	66	57	49	46	49	49	45	35
		2000	72	64	55	51	52	55	53	45	68	61	53	51	53	56	55	47
MF2500XS 8"Ø	36"	500	70	55	35	23	17	17	21	26	70	56	34	24	17	17	21	26
		1000	70	53	43	39	39	35	26	26	70	55	43	39	41	37	29	26
		1500	74	60	53	47	48	49	45	34	71	56	49	46	47	49	46	34
		2000	76	67	59	52	51	55	54	46	73	63	55	50	50	55	55	47

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.



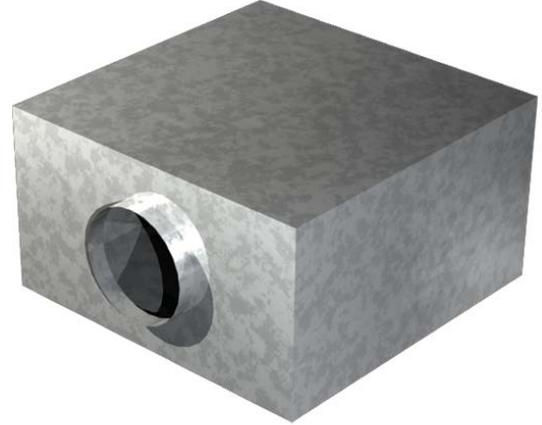
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**Model MF5000XL
Media Free
Silencer**

The SEMCO Model MF5000XL Media Free Silencer is designed to provide excellent attenuation without media, eliminating the possibility of introducing fibrous material into the airstream. The no media feature is especially suited for fume hood exhaust systems where absorption of the chemical fumes pose an environmental danger. This model is also designed to provide low pressure drop on medium to 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 an actual 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
MF5000XL 12"ø	36"	0	.32	0	7	7	16	7	7	5	5	3	4	8	16	7	7	5	5	3
		500		.01	8	7	16	7	7	5	5	3	4	7	16	7	7	5	5	4
		1000		.02	8	7	16	7	7	5	5	3	4	8	17	7	7	5	5	4
		1500		.04	8	7	17	7	7	5	5	3	5	8	18	8	8	5	5	4
		2000		.08	9	8	18	8	7	5	5	3	6	9	20	8	8	5	5	4
MF5000XL 8"ø	36"	0	.24	0	4	9	15	9	6	9	7	6	4	9	15	9	6	9	7	5
		500		.01	5	9	15	9	6	8	7	5	7	10	16	9	6	8	7	6
		1000		.02	6	10	17	9	6	8	7	5	7	10	16	9	7	9	7	6
		1500		.03	5	11	17	9	6	8	7	5	7	12	18	10	6	8	7	6
		2000		.06	6	11	18	10	7	8	7	5	6	13	19	10	7	8	7	6

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.

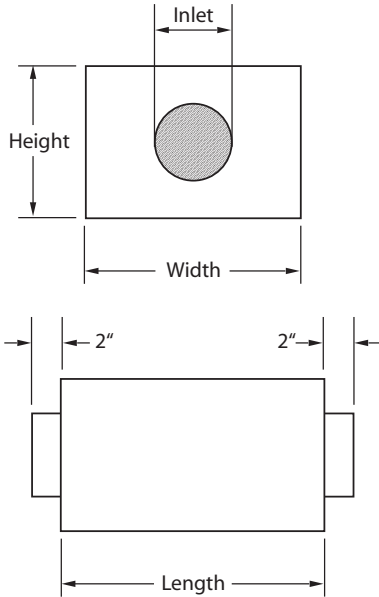
STANDARD CONSTRUCTION:

Shell and Nose: 22 Gauge Galvanized Steel
 Perforated Metal: 24 Gauge Galvanized Steel
 Fill Material: None

FIRE RATINGS:

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

Also available in 304 and 316 Stainless Steel.



Dimensions				
Inlet Diameter	Width	Height	Length	Weight (lbs)
8"	26"	20"	3'-0"	47
12"	36"	20"	3'-0"	61

Please contact SEMCO for availability of custom sizes.

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
MF5000XL 12"ø	36"	500	60	46	32	24	22	20	21	25	61	45	30	21	17	18	20	25
		1000	62	49	35	26	23	22	22	25	63	45	33	26	30	18	20	25
		1500	63	49	38	35	33	24	23	25	61	51	43	41	39	32	25	25
		2000	63	51	42	41	43	36	27	25	63	58	49	48	48	44	39	31
MF5000XL 8"ø	36"	500	67	54	35	21	16	17	21	26	70	54	36	22	17	17	21	26
		1000	67	54	37	28	20	17	21	26	70	56	36	25	22	20	22	26
		1500	67	55	42	38	33	23	21	26	70	55	44	42	36	30	24	26
		2000	68	55	48	44	42	37	27	26	71	57	50	47	44	41	37	32

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.



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