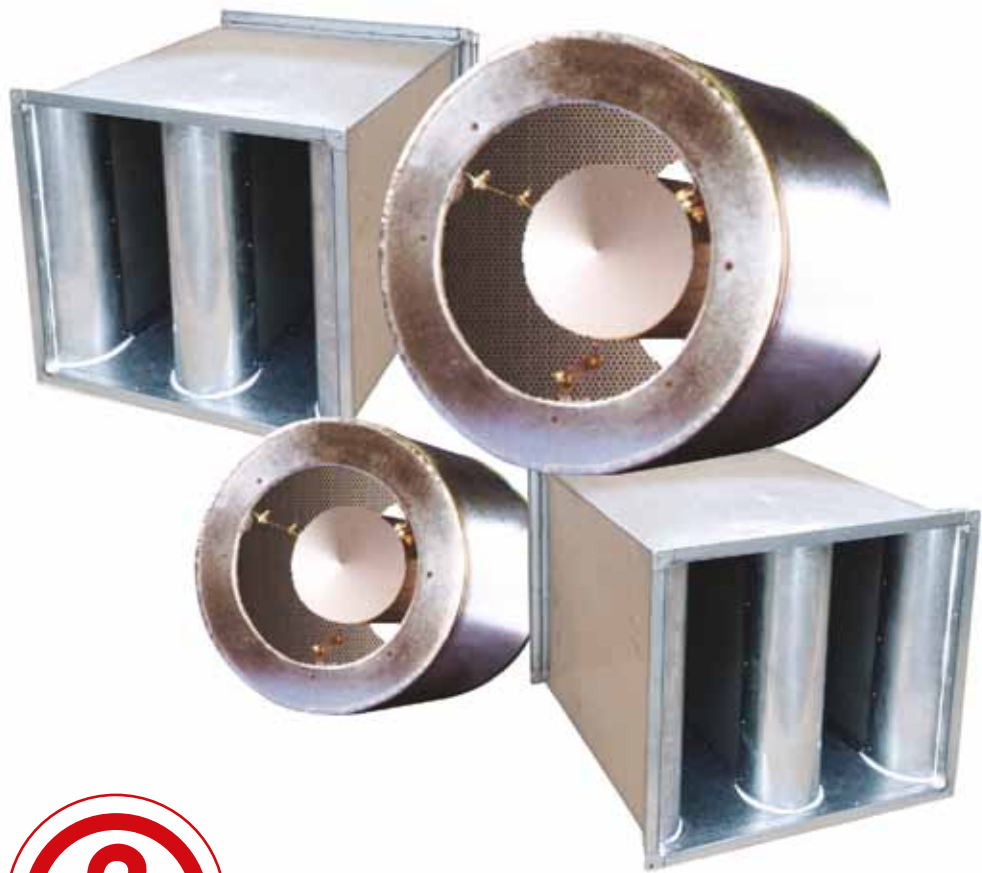


WE CONTROL
NOISE



BETA
industrial
PRODUCTS CATALOGUE



JULY 2025

PRODUCT BULLETIN

11



BETA
i n d u s t r i a l

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CONSTRUCTION

- CASING:
LOCK FORMED, PRE-GALVANISED STEEL SHEET OF 0.9mm THICKNESS. ALL FIXINGS ARE BY RIVETS.
- INSULATION :
2 INCH THICK ROCKWOOL FIBERS BOUND WITH THERMOSETTING BINDER FACED WITH VAPOR-RETARDANT ALUMINUM FOIL FROM ONE SIDE. AND COMPLIES WITH ASTM C612.
NON COMBUSTIBLE (EN ISO 1182)
50 KG/M³ DENSITY (ASTM C303).
FUNGI-RESISTANT (ASTM C665).
- SPLITTERS:
GALVANISED SHEET, BENDED TO FORM CHANNEL SECTIONS, FIXED WITH RIVETS. PERFORATED SHEET OF 0.7MM THICKNESS IS USED TO COVER THE SPLITTERS.
- FLANGES : ROLL FORMED DUCTO MATE 35mm FLANGES.

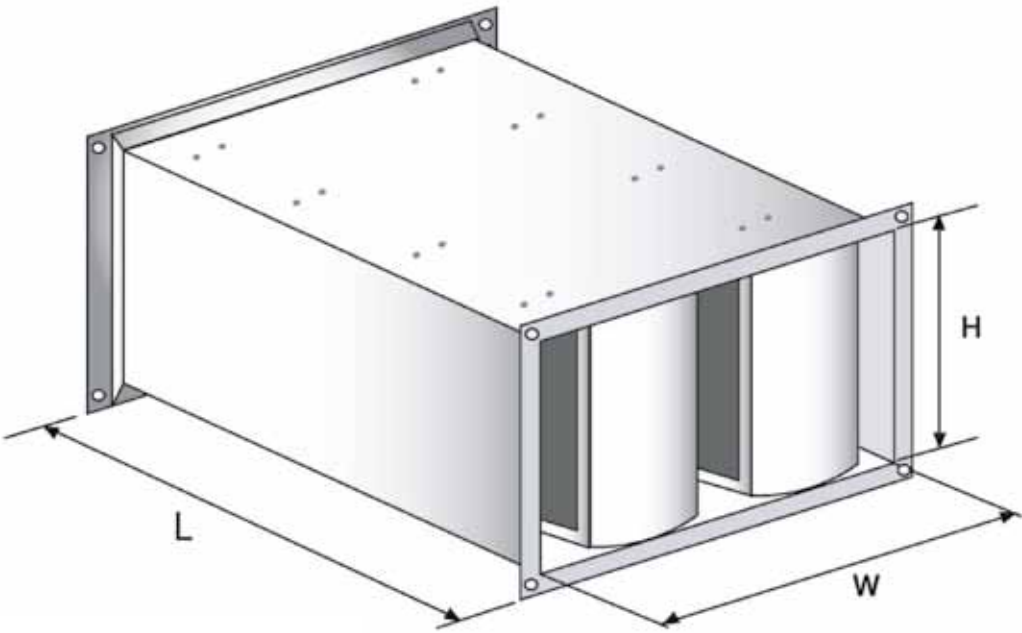
BETA INDUSTRIAL LLC Certifies that Sound Attenuators PGL-D - L850 PGL-D L1150 shown herein are Licensed to bear AMCA seal. Sound Attenuators are certified by AMCA to ASTM standard E477-13e1 and comply with requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to dynamic insertion loss & Airflow generated sound power level.

ADVANTAGES

- * Efficient at medium and high frequencies.
- * AMCA certified performance for PGL-D L-850mm & PGL-D L-1150mm
- * Suitable for installation in fire rated ductwork (2h) & smoke exhaust ductwork (400 deg C - 2h).



DIMENSIONS:

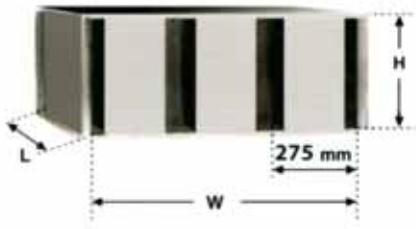


Ordering Key:

P	G	L	A	W	X	H	X	L
RECTANGULAR SOUND ATTENUATOR PGL MODEL								
AIRWAY CODE: A,B,C,D,E OR F								
SIZE: WIDTH X HEIGHT X LENGTH								



SERIES PGL

LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE A

Lengths 850 mm and 1150 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
850	7	11	19	33	38	35	27	23
1150	8	14	24	41	41	39	33	27

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	275	550	825	1100	1375	1650	1925	2200
300	0.38	0.76	1.14	1.52				
400	0.51	1.02	1.53	2.04	2.55			
500	0.65	1.29	1.94	2.58	3.23	3.87	4.52	
600	0.79	1.57	2.35	3.14	3.92	4.70	5.49	6.27
700	0.92	1.83	2.75	3.66	4.57	5.49	6.40	7.32
800	1.05	2.09	3.14	4.18	5.23	6.27	7.32	8.36
900	1.18	2.35	3.53	4.70	5.88	7.05	8.23	9.40
1000	1.31	2.62	3.92	5.23	6.53	7.84	9.14	10.5
1100	1.44	2.88	4.31	5.75	7.18	8.62	10.1	11.5
1200		3.14	4.70	6.27	7.84	9.40	11.0	12.6
1300		3.40	5.10	6.79	8.49	10.2	11.9	13.6
1400		3.66	5.49	7.32	9.14	11.0	12.8	14.7
1500		3.92	5.88	7.84	9.80	11.8	13.7	15.7
1600		4.18	6.27	8.36	10.5	12.6	14.7	16.8
1700		4.44	6.66	8.88	11.1	13.4	15.6	17.8
1800		4.70	7.05	9.40	11.8	14.1	16.5	18.8
1900		4.97	7.45	9.93	12.4	14.9	17.4	19.9
2000		5.23	7.84	10.5	13.1	15.7	18.3	20.9
2100		5.49	8.23	11.0	13.7	16.5	19.2	22.0
2200		5.75	8.62	11.5	14.4	17.3	20.1	23.0
2300			9.01	12.1	15.1	18.1	21.1	24.1
2400			9.40	12.6	15.7	18.8	22.0	25.1*

Lengths 1450 mm and 1750 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
1450	9	17	29	46	44	42	37	31
1750	10	20	35	50	46	44	39	35

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	275	550	825	1100	1375	1650	1925	2200
300	0.34	0.68	1.01	1.35				
400	0.46	0.91	1.37	1.82	2.28			
500	0.58	1.16	1.73	2.31	2.89	3.47	4.04	
600	0.71	1.41	2.11	2.81	3.52	4.22	4.92	5.62
700	0.82	1.64	2.46	3.28	4.10	4.92	5.74	6.56
800	0.94	1.88	2.81	3.75	4.69	5.62	6.56	7.50
900	1.06	2.11	3.16	4.22	5.27	6.33	7.38	8.43
1000	1.17	2.35	3.52	4.69	5.86	7.03	8.20	9.37
1100	1.29	2.58	3.87	5.16	6.44	7.73	9.02	10.3
1200		2.81	4.22	5.62	7.03	8.43	9.84	11.3
1300		3.05	4.57	6.09	7.61	9.14	10.7	12.2
1400		3.28	4.92	6.56	8.20	9.84	11.5	13.2
1500		3.52	5.27	7.03	8.78	10.6	12.3	14.1
1600		3.75	5.62	7.50	9.37	11.3	13.2	15.0*
1700		3.98	5.97	7.96	9.96	12.0	14.0	16.0*
1800		4.22	6.33	8.43	10.6	12.7	14.8*	16.9*
1900		4.45	6.68	8.90	11.2	13.4	15.6*	
2000		4.69	7.03	9.37	11.7	14.1	16.4*	
2100		4.92	7.38	9.84	12.3	14.8*	17.2*	
2200		5.16	7.73	10.3	12.9	15.5*		
2300			8.08	10.8	13.5	16.2*		
2400			8.43	11.3	14.1	16.9*		

* SEE NOTE 7

Lengths 2050 mm and 2350 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
2050	12	23	40	50	50	45	43	41
2350	13	26	44	50	50	46	46	43

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	275	550	825	1100	1375	1650	1925	2200
300	0.31	0.62	0.92	1.23				
400	0.42	0.83	1.25	1.66	2.08			
500	0.53	1.06	1.58	2.11	2.63	3.16	3.69	
600	0.65	1.29	1.93	2.57	3.21	3.85	4.49	5.14
700	0.75	1.50	2.25	3.00	3.75	4.49	5.24	5.99
800	0.86	1.71	2.57	3.43	4.28	5.14	5.99	6.85
900	0.97	1.93	2.89	3.58	4.82	5.78	6.74	7.70
1000	1.07	2.14	3.21	4.28	5.35	6.42	7.49	8.56
1100	1.18	2.36	3.53	4.71	5.88	7.06	8.24	9.41
1200		2.57	3.85	5.14	6.42	7.70	8.99	10.3*
1300		2.78	4.17	5.56	6.95	8.34	9.73	11.2*
1400		3.00	4.49	5.99	7.49	8.99	10.5*	
1500		3.21	4.82	6.42	8.02	9.63	11.3*	
1600		3.43	5.14	6.85	8.56	10.3*		
1700		3.64	5.46	7.27	9.09	10.9*		
1800		3.85	5.78	7.70	9.63*			
1900		4.07	6.10	8.13	10.2*			
2000		4.28	6.42	8.56	10.7*			
2100		4.49	6.74	8.99	11.3*			
2200		4.71	7.06	9.41				
2300			7.38	9.84				
2400			7.70	10.3*				

*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result at 60 Pa pressure losses for ducted attenuators, at air density of 1.2 kg/m³

2. Pressure loss varies in proportion to density.

3. Pressure loss varies in proportion to the square of the volume flow rate.

4. Maximum allowable volume flow rate is 1.25* the values given in the tables, pressure loss varying in proportion to the square of the factor.

5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale
Over 0.63 to 0.8 * Tabulated Values	30	35
Over 0.8 to 1.0 * Tabulated Values	35	40
Over 1.0 to 1.25 * Tabulated Values	40	45

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

Length	Plenum to Duct	Duct to Plenum	Plenum to Plenum
850/1150	1.15	2.78	3.03
1450/1750	1.13	2.51	2.63
2050/2350	1.10	2.26	2.60

7. Selection marked * are available only with the shorter attenuator

in collaboration with: 



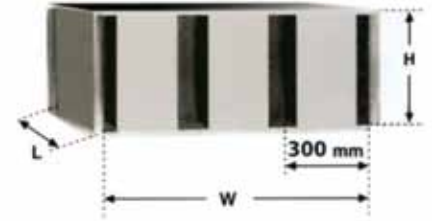


SERIES PGL

RECTANGULAR ATTENUATORS - AIR WAY CODE B

DYNAMIC INSERTION LOSS RATING:

FORWARD FLOW (+)/ REVERSE FLOW (-)



Model Dimensions (W x H x L)	Face Velocity		Static Pressure		Octave Band Center Frequency (Hz)							
	(fpm)	(m/s)	(in.wg)	(Pa)	63	125	250	500	1000	2000	4000	8000
PGL-B (W24in. x H24in. x L22in.) (W600mm x H600mm x L550mm)	-1500	-7.62	0.8	200	4	4	11	21	24	21	17	12
	-1000	-5.08	0.35	88	4	4	11	16	28	26	17	13
	-500	-2.54	0.09	23	4	3	10	15	28	25	17	14
	0	0	-	-	3	3	9	14	27	24	17	14
	500	2.54	0.09	23	3	3	9	13	27	25	18	14
	1000	5.08	0.35	88	2	2	8	12	26	25	18	13
	1500	7.62	0.8	200	1	2	8	12	26	24	17	13
	2000	10.16	1.35	336	1	2	8	12	23	23	19	14
PGL-B (W24in. x H24in. x L35in.) (W600mm x H600mm x L850mm)	-1500	-7.62	0.87	217	6	7	15	25	31	26	19	13
	-1000	-5.08	0.38	95	5	7	15	24	35	30	19	14
	-500	-2.54	0.10	25	5	6	14	23	35	29	19	15
	0	0	-	-	4	6	13	22	34	28	19	15
	500	2.54	0.10	25	4	5	13	21	34	29	20	15
	1000	5.08	0.38	95	3	5	12	20	33	29	20	15
	1500	7.62	0.87	217	2	5	11	19	32	28	20	15
	2000	10.16	1.53	381	2	4	11	19	29	27	21	16
PGL-B (W24in. x H24in. x L46in.) (W600mm x H600mm x L1150mm)	-1500	-7.62	1.03	257	7	10	20	33	32	25	23	15
	-1000	-5.08	0.47	117	6	10	19	32	34	36	24	16
	-500	-2.54	0.12	30	5	10	18	30	45	36	23	17
	0	0	-	-	4	8	17	29	44	36	23	18
	500	2.54	0.12	30	4	8	16	28	43	36	24	19
	1000	5.08	0.47	117	3	7	16	27	42	36	25	18
	1500	7.62	1.03	257	3	7	15	26	38	33	25	19
	2000	10.16	1.86	463	2	6	14	25	30	29	25	19
PGL-B (W24in. x H24in. x L58in.) (W600mm x H600mm x L1450mm)	-1500	-7.62	1.06	264	9	13	24	37	39	30	25	16
	-1000	-5.08	0.492	123	7	13	23	40	41	40	26	17
	-500	-2.54	0.126	32	6	13	22	38	52	40	25	18
	0	0	-	-	5	11	21	37	51	40	25	19
	500	2.54	0.126	32	5	10	20	36	50	40	26	20
	1000	5.08	0.492	123	4	10	20	35	49	40	27	20
	1500	7.62	1.06	264	4	10	18	33	44	37	28	21
	2000	10.16	1.959	488	3	8	17	32	36	33	27	21
PGL-B (W24in. x H24in. x L70in.) (W600mm x H600mm x L1750mm)	-1500	-7.62	1.161	289	11	17	29	41	47	35	27	17
	-1000	-5.08	0.528	132	9	17	28	48	49	45	29	19
	-500	-2.54	0.135	34	8	17	27	46	60	44	27	20
	0	0	-	-	7	14	25	45	58	45	27	21
	500	2.54	0.135	34	7	13	24	44	57	45	29	22
	1000	5.08	0.528	132	6	13	24	43	56	45	30	22
	1500	7.62	1.161	289	5	13	22	41	51	41	31	23
	2000	10.16	2.092	521	4	11	21	39	43	38	30	23
PGL-B (W24in. x H24in. x L84in.) (W600mm x H600mm x L2100mm)	-1500	-7.62	1.226	306	13	20	33	45	54	40	29	18
	-1000	-5.08	0.557	139	10	20	32	56	56	49	31	20
	-500	-2.54	0.142	36	9	20	31	54	67	48	29	21
	0	0	-	-	8	17	29	53	65	49	29	22
	500	2.54	0.142	36	8	15	28	52	64	49	31	23
	1000	5.08	0.557	139	7	16	28	51	63	49	32	24
	1500	7.62	1.226	306	6	16	25	48	57	45	34	25
	2000	10.16	2.208	550	5	13	24	46	49	42	32	25
PGL-B (W24in. x H24in. x L96in.) (W600mm x H600mm x L2400mm)	-1500	-7.62	1.291	322	15	24	38	49	62	45	31	19
	-1000	-5.08	0.586	146	12	24	37	64	64	54	34	22
	-500	-2.54	0.149	38	11	24	36	62	75	52	31	23
	0	0	-	-	10	20	33	61	72	54	32	24
	500	2.54	0.149	38	10	18	32	60	71	54	34	25
	1000	5.08	0.586	146	9	19	32	59	70	54	35	26
	1500	7.62	1.291	322	7	19	29	56	64	49	37	27
	2000	10.16	2.324	579	6	16	28	53	56	47	35	27



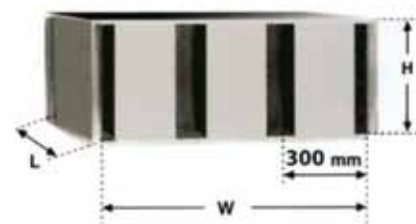


SERIES PGL

RECTANGULAR ATTENUATORS - AIR WAY CODE B

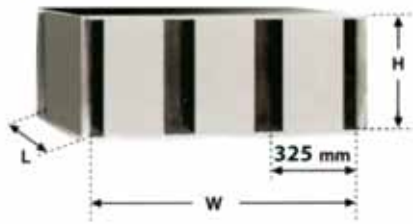
GENERATED SOUND POWER LEVEL:

FORWARD FLOW (+)/ REVERSE FLOW (-)



Model Dimensions (W x H x L)	Face Velocity		Static Pressure		Octave Band Center Frequency (Hz)							
	(fpm)	(m/s)	(in.wg)	(Pa)	63	125	250	500	1000	2000	4000	8000
PGL-B (W24in. x H24in. x L22in.) (W600mm x H600mm x L550mm)	-1500	-7.62	0.80	200	63	61	58	60	66	68	58	49
	-1000	-5.08	0.35	88	66	51	50	54	58	52	42	31
	-500	-2.54	0.09	23	65	43	41	42	37	25	19	24
	500	2.54	0.09	23	66	42	37	39	34	24	19	24
	1000	5.08	0.35	88	65	51	50	53	51	50	42	30
	1500	7.62	0.80	200	64	63	60	60	61	60	57	48
	2000	10.16	1.35	336	76	69	68	67	67	66	65	58
PGL-B (W24in. x H24in. x L35in.) (W600mm x H600mm x L850mm)	-1500	-7.62	0.87	217	62	60	57	60	66	68	58	49
	-1000	-5.08	0.38	95	65	50	50	54	58	52	43	31
	-500	-2.54	0.10	25	65	44	41	41	36	25	19	24
	500	2.54	0.10	25	66	43	37	38	34	24	19	24
	1000	5.08	0.38	95	65	52	50	52	51	49	42	30
	1500	7.62	0.87	217	65	63	60	60	60	59	56	47
	2000	10.16	1.53	381	76	69	68	67	67	66	64	58
PGL-B (W24in. x H24in. x L46in.) (W600mm x H600mm x L1150mm)	-1500	-7.62	1.03	257	66	59	58	60	66	71	61	52
	-1000	-5.08	0.47	117	60	52	51	55	64	55	48	37
	-500	-2.54	0.12	30	59	46	41	42	38	28	20	23
	500	2.54	0.12	30	64	46	38	38	36	27	19	23
	1000	5.08	0.47	117	62	53	50	52	52	50	45	34
	1500	7.62	1.03	257	72	62	60	59	60	60	58	50
	2000	10.16	1.86	463	75	69	68	67	67	66	66	60
PGL-B (W24in. x H24in. x L58in.) (W600mm x H600mm x L1450mm)	-1500	-7.62	1.06	264	65	58	57	60	66	71	61	52
	-1000	-5.08	0.492	123	59	51	51	55	64	55	49	37
	-500	-2.54	0.126	32	59	47	41	43	39	28	20	22
	500	2.54	0.126	32	64	47	38	37	36	27	19	23
	1000	5.08	0.492	123	62	54	50	51	52	49	45	34
	1500	7.62	1.06	264	73	62	60	59	59	59	57	49
	2000	10.16	1.959	488	75	69	68	67	67	66	65	60
PGL-B (W24in. x H24in. x L70in.) (W600mm x H600mm x L1750mm)	-1500	-7.62	1.161	289	64	57	57	60	66	71	62	53
	-1000	-5.08	0.528	132	59	51	51	56	65	56	50	38
	-500	-2.54	0.135	34	59	48	41	40	36	28	20	24
	500	2.54	0.135	34	64	48	39	37	36	27	19	23
	1000	5.08	0.528	132	63	55	50	51	52	49	45	34
	1500	7.62	1.161	289	75	62	60	59	59	59	57	49
	2000	10.16	2.092	521	75	70	68	67	67	66	65	60
PGL-B (W24in. x H24in. x L84in.) (W600mm x H600mm x L2100mm)	-1500	-7.62	1.226	306	63	56	56	60	66	71	62	53
	-1000	-5.08	0.557	139	58	50	51	56	65	56	51	38
	-500	-2.54	0.142	36	59	49	41	39	35	28	20	24
	500	2.54	0.142	36	64	49	39	36	36	27	19	23
	1000	5.08	0.557	139	63	56	50	50	52	48	45	34
	1500	7.62	1.226	306	76	62	60	59	58	58	56	48
	2000	10.16	2.208	550	75	70	68	67	67	66	64	60
PGL-B (W24in. x H24in. x L96in.) (W600mm x H600mm x L2400mm)	-1500	-7.62	1.291	322	62	55	56	60	66	71	63	54
	-1000	-5.08	0.586	146	58	50	51	57	66	57	52	39
	-500	-2.54	0.149	38	59	50	41	38	34	28	20	25
	500	2.54	0.149	38	64	50	40	36	36	27	19	23
	1000	5.08	0.586	146	64	57	50	50	52	48	45	34
	1500	7.62	1.291	322	78	62	60	59	58	58	56	48
	2000	10.16	2.324	579	75	71	68	67	67	66	64	60





SERIES PGL

LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE C

Lengths 850 mm and 1150 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
850	6	9	15	26	32	27	18	15
1150	7	10	19	35	37	32	24	16

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	325	650	975	1300	1625	1950	2275
300	0.67	1.33	2.00				
400	0.91	1.81	2.72	3.62			
500	1.16	2.31	3.46	4.61	5.77	6.92	
600	1.42	2.83	4.24	5.65	7.07	8.48	9.89
700	1.65	3.30	4.95	6.59	8.24	9.89	11.6
800	1.89	3.77	5.65	7.54	9.42	11.3	13.2
900	2.12	4.24	6.36	8.48	10.6	12.8	14.9
1000	2.36	4.71	7.07	9.42	11.8	14.2	16.5
1100	2.59	5.18	7.77	10.4	13.0	15.6	18.2
1200	2.83	5.65	8.48	11.3	14.2	17.0	19.8
1300	3.06	6.12	9.18	12.3	15.3	18.4	21.5
1400		6.59	9.89	13.2	16.5	19.8	23.1
1500		7.07	10.6	14.2	17.7	21.2	24.8
1600		7.54	11.3	15.1	18.9	22.6	26.4
1700		8.01	12.0	16.0	20.0	24.0	28.1
1800		8.48	12.8	17.0	21.2	25.5	29.7
1900		8.95	13.5	17.9	22.4	26.9	31.3
2000		9.42	14.2	18.9	23.6	28.3	33.0
2100		9.89	14.9	19.8	24.8	29.7	34.6
2200		10.4	15.6	20.8	25.9	31.1	36.3
2300		10.9	16.3	21.7	27.1	32.5	37.9*
2400		11.3	17.0	22.6	28.3	33.9	39.6*

Lengths 1450 mm and 1750 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
1450	7	12	23	42	41	37	28	19
1750	8	15	28	46	43	41	33	21

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	325	650	975	1300	1625	1950	2275
300	0.60	1.20	1.79				
400	0.82	1.63	2.44	3.25			
500	1.04	2.08	3.11	4.15	5.18	6.22	
600	1.28	2.55	3.82	5.09	6.36	7.63	8.90
700	1.49	2.97	4.45	5.94	7.42	8.90	10.4
800	1.70	3.39	5.09	6.78	8.48	10.2	11.9
900	1.91	3.82	5.73	7.63	9.54	11.5	13.4
1000	1.12	4.24	6.36	8.48	10.6	12.8	14.9
1100	2.33	4.67	7.00	9.33	11.7	14.0	16.4
1200	2.55	5.09	7.63	10.2	12.8	15.3	17.8
1300	2.76	5.51	8.27	11.1	13.8	16.6	19.3
1400		5.94	8.90	11.9	14.9	17.8	20.8
1500		6.36	9.54	12.8	15.9	19.1	22.3
1600		6.78	10.2	13.6	17.0	20.4	23.8*
1700		7.21	10.8	14.4	18.1	21.7	25.3*
1800		7.63	11.5	15.3	19.1	22.9*	26.7*
1900		8.06	12.1	16.1	20.2	24.2*	
2000		8.48	12.8	17.0	21.2	25.5	
2100		8.90	13.4	17.8	22.3	26.7*	
2200		9.33	14.0	18.7	23.3		
2300		9.75	14.7	19.5	24.4*		
2400		10.2	15.3	20.4	25.5*		* SEE NOTE 7

Lengths 2050 mm and 2350 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
2050	7	9	32	50	47	44	38	24
2350	8	10	37	50	50	47	44	28

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	325	650	975	1300	1625	1950	2275
300	0.54	1.08	1.62				
400	0.54	1.48	2.2	2.95			
500	0.95	1.89	2.84	3.78	4.73	5.67	
600	1.17	2.34	3.50	4.67	5.83	7.00	8.16
700	1.36	2.72	4.08	5.44	6.80	8.16	9.52
800	1.56	3.11	4.67	6.22	7.77	9.33	10.9
900	1.75	3.50	5.25	7.00	8.75	10.5	12.3
1000	1.95	3.89	5.83	7.77	9.72	11.7	13.6
1100	2.14	4.28	6.41	8.55	10.7	12.9	15.0
1200	2.34	4.67	7.00	9.33	11.7	14.0	16.4*
1300	2.53	5.06	7.58	10.1	12.7	15.2	
1400		5.44	8.16	10.9	13.6	16.4*	
1500		5.83	8.75	11.7	14.6	17.5*	
1600		6.22	9.33	12.5	15.6*		
1700		6.61	9.91	13.3	16.6*		
1800		7.00	10.5	14.0	17.5*		
1900		7.39	11.1	14.8			
2000		7.77	11.7	15.6*			
2100		8.16	12.3	16.4*			
2200		8.55	12.9	17.1*			
2300		8.94	13.4				
2400		9.33	14.0				* SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result at 60 Pa pressure losses for ducted attenuators, at air density of 1.2 kg/m³

2. Pressure loss varies in proportion to density.

3. Pressure loss varies in proportion to the square of the volume flow rate.

4. Maximum allowable volume flow rate is 1.25* the values given in the tables, pressure loss varying in proportion to the square of the factor.

5. Approximate regenerated noise levels.

Volume	Flow	Rate	NC	A-Scale
Over 0.63 to 0.8 * Tabulated Values			30	35
Over 0.8 to 1.0 * Tabulated Values			35	40
Over 1.0 to 1.25 * Tabulated Values			40	45

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

Length	Plenum to Duct	Duct to Plenum	Plenum to Plenum
850/1150	1.25	3.48	3.73
1450/1750	1.20	3.01	3.22
2050/2350	1.17	2.69	2.86

7. Selection marked * are available only with the shorter attenuator

In collaboration with: **Donkin Fans**



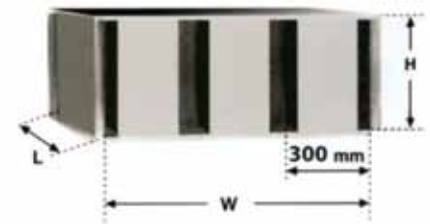


SERIES PGL

RECTANGULAR ATTENUATORS - AIR WAY CODE D

DYNAMIC INSERTION LOSS RATING:

FORWARD FLOW (+)/ REVERSE FLOW (-)



Model Dimensions (W x H x L)	Face Velocity		Static Pressure		Octave Band Center Frequency (Hz)							
	(fpm)	(m/s)	(in.wg)	(Pa)	63	125	250	500	1000	2000	4000	8000
PGL-D (W24in. X H24in. X L22in.) (w600mm x H600mm x L550mm)	-2000	-10.16	1.91	474	5	7	15	24	33	29	18	13
	-1500	-7.62	1.09	271	5	7	15	24	33	29	18	13
	-1000	-5.08	0.52	129	4	7	14	23	34	30	19	13
	-500	-2.54	0.13	33	4	7	14	22	34	30	18	14
	0	0	-	-	4	6	12	21	33	30	19	15
	500	2.54	0.13	33	3	5	12	20	32	30	20	16
	1000	5.08	0.52	129	2	5	12	20	32	30	20	16
	1500	7.62	1.09	271	2	5	11	19	31	30	20	16
	2000	10.16	1.91	474	1	4	11	19	30	28	20	16
PGL-D (W24in. X H24in. X L35in.) (w600mm x H600mm x L850mm) (AMCA certified)	-2000	-10.2	2.10	521	5	7	15	24	33	29	18	13
	-1500	-7.62	1.20	298	5	7	15	24	33	29	18	13
	-1000	-5.08	0.57	142	4	7	14	23	34	30	19	13
	-500	-2.54	0.14	35	4	7	14	22	34	30	18	14
	0	0	-	-	4	6	12	21	33	30	19	15
	500	2.54	0.14	35	3	5	12	20	32	30	20	16
	1000	5.08	0.57	142	2	5	12	20	32	30	20	16
	1500	7.62	1.20	298	2	5	11	19	31	30	20	16
	2000	10.16	2.10	521	1	4	11	19	30	28	20	16
PGL-D (W24in. X H24in. X L46in.) (w600mm x H600mm x L1150mm) (AMCA certified)	-1500	-7.62	1.32	328	6	10	21	32	35	29	23	14
	-1000	-5.08	0.58	144	6	9	19	30	38	37	23	15
	-500	-2.54	0.15	38	6	8	18	29	43	39	23	17
	0	0	-	-	5	7	16	27	42	39	23	18
	500	2.54	0.15	38	4	7	16	27	41	39	24	19
	1000	5.08	0.58	144	3	6	15	26	40	38	25	19
	1500	7.62	1.32	328	2	6	15	25	36	34	25	19
	2000	10.16	2.40	596	2	5	14	24	33	29	25	19
PGL-D (W24in. X H24in. X L58in.) (w600mm x H600mm x L1450mm)	-1500	-7.62	1.39	345	8	13	25	36	42	34	25	15
	-1000	-5.08	0.61	152	7	12	23	38	45	43	25	16
	-500	-2.54	0.16	40	7	11	22	37	50	45	25	18
	0	0	-	-	6	10	20	35	49	45	25	19
	500	2.54	0.16	40	5	9	20	35	48	45	26	20
	1000	5.08	0.61	152	4	9	19	34	47	43	27	21
	1500	7.62	1.39	345	3	9	18	32	42	38	28	21
	2000	10.16	2.52	625	3	7	17	31	39	33	27	21
PGL-D (W24in. X H24in. X L70in.) (w600mm x H600mm x L1750mm)	-1500	-7.62	1.49	370	10	17	30	40	50	39	27	16
	-1000	-5.08	0.65	162	9	15	28	46	53	48	28	19
	-500	-2.54	0.17	43	9	15	27	45	58	49	27	20
	0	0	-	-	8	13	24	43	56	50	27	21
	500	2.54	0.17	43	7	11	23	39	56	50	29	22
	1000	5.08	0.65	162	6	12	23	42	54	48	30	23
	1500	7.62	1.49	370	4	12	22	40	49	42	31	23
	2000	10.16	2.7	670	4	10	21	38	46	38	30	23
PGL-D (W24in. X H24in. X L84in.) (w600mm x H600mm x L2100mm)	-1500	-7.62	1.58	392	12	20	34	44	57	44	29	17
	-1000	-5.08	0.69	172	10	18	32	54	69	55	30	20
	-500	-2.54	0.18	45	10	18	30	53	65	53	29	21
	0	0	-	-	9	16	28	51	63	54	29	22
	500	2.54	0.18	45	8	13	27	47	63	54	31	23
	1000	5.08	0.69	172	7	15	27	50	61	52	32	25
	1500	7.62	1.58	392	5	15	25	47	55	46	34	25
	2000	10.16	2.86	710	5	12	24	45	52	42	32	25
PGL-D (W24in. X H24in. X L96in.) (w600mm x H600mm x L2400mm)	-1500	-7.62	1.66	412	14	24	39	48	65	49	31	18
	-1000	-5.08	0.72	179	12	22	37	62	77	60	33	22
	-500	-2.54	0.19	48	12	22	35	61	73	57	31	23
	0	0	-	-	11	19	32	59	70	59	32	24
	500	2.54	0.19	48	10	16	31	55	70	59	34	25
	1000	5.08	0.72	179	9	17	31	58	68	55	35	26
	1500	7.62	1.66	412	6	18	29	55	62	50	37	27
	2000	10.16	3.01	747	6	15	28	52	59	47	35	27



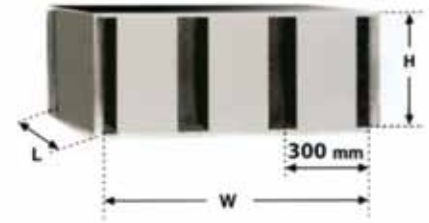


SERIES PGL

RECTANGULAR ATTENUATORS - AIR WAY CODE D

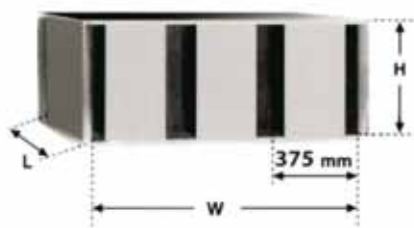
GENERATED SOUND POWER LEVEL:

FORWARD FLOW (+)/ REVERSE FLOW (-)



Model Dimensions (W x H x L)	Face Velocity		Static Pressure		Octave Band Center Frequency (Hz)							
	(fpm)	(m/s)	(in.wg)	(Pa)	63	125	250	500	1000	2000	4000	8000
PGL-D (W24in. X H24in. X L22in.) (w600mm x H600mm x L550mm)	-2000	-10.16	1.91	474	76	63	60	61	64	67	68	59
	-1500	-7.62	1.09	271	74	62	59	60	63	67	65	57
	-1000	-5.08	0.52	129	65	57	54	56	61	61	54	45
	-500	-2.54	0.13	33	59	42	44	48	46	38	26	21
	500	2.54	0.13	33	66	47	39	40	37	29	19	21
	1000	5.08	0.52	129	67	54	49	52	52	53	47	37
	1500	7.62	1.09	271	70	63	58	58	60	62	59	53
	2000	10.16	1.91	474	75	70	65	65	65	67	68	62
PGL-D (W24in. X H24in. X L35in.) (w600mm x H600mm x L850mm) (AMCA certified)	-2000	-10.2	2.10	521	75	62	59	61	64	67	68	59
	-1500	-7.62	1.20	298	73	61	59	60	63	67	66	57
	-1000	-5.08	0.57	142	65	56	54	56	61	61	54	45
	-500	-2.54	0.14	35	59	43	44	47	45	38	26	21
	500	2.54	0.14	35	66	48	39	39	37	29	19	21
	1000	5.08	0.57	142	67	54	49	51	52	52	47	37
	1500	7.62	1.20	298	71	63	58	58	59	61	59	52
	2000	10.16	2.10	521	75	70	65	65	65	67	67	62
PGL-D (W24in. X H24in. X L46in.) (w600mm x H600mm x L1150mm) (AMCA certified)	-1500	-7.62	1.32	328	74	62	60	61	64	68	67	58
	-1000	-5.08	0.58	144	66	54	52	55	60	59	51	42
	-500	-2.54	0.15	38	62	48	44	47	44	36	24	21
	500	2.54	0.15	38	60	44	38	37	35	25	18	21
	1000	5.08	0.58	144	64	56	53	53	54	54	49	39
	1500	7.62	1.32	328	70	64	61	60	61	62	60	53
	2000	10.16	2.40	596	76	70	67	66	66	67	67	62
PGL-D (W24in. X H24in. X L58in.) (w600mm x H600mm x L1450mm)	-1500	-7.62	1.39	345	73	61	59	61	64	68	67	58
	-1000	-5.08	0.61	152	65	53	52	55	60	59	50	42
	-500	-2.54	0.16	40	62	49	44	46	45	36	24	22
	500	2.54	0.16	40	60	45	38	38	35	25	18	21
	1000	5.08	0.61	152	64	57	53	54	54	53	49	39
	1500	7.62	1.39	345	71	64	61	60	60	61	59	52
	2000	10.16	2.52	625	76	70	67	66	66	67	66	62
PGL-D (W24in. X H24in. X L70in.) (w600mm x H600mm x L1750mm)	-1500	-7.62	1.49	370	72	60	59	61	64	68	68	59
	-1000	-5.08	0.65	162	65	53	52	55	61	60	51	43
	-500	-2.54	0.17	43	62	50	44	46	43	36	24	24
	500	2.54	0.17	43	60	46	39	39	35	25	18	21
	1000	5.08	0.65	162	56	58	53	54	54	53	49	39
	1500	7.62	1.49	370	73	64	61	60	60	61	58	52
	2000	10.16	2.7	670	76	71	67	66	66	67	65	62
PGL-D (W24in. X H24in. X L84in.) (w600mm x H600mm x L2100mm)	-1500	-7.62	1.58	392	71	61	58	61	64	68	68	59
	-1000	-5.08	0.69	172	64	54	52	55	61	60	52	43
	-500	-2.54	0.18	45	62	50	44	45	42	36	24	24
	500	2.54	0.18	45	60	46	39	38	35	25	18	21
	1000	5.08	0.69	172	56	58	53	53	54	52	49	39
	1500	7.62	1.58	392	74	65	61	60	59	60	57	51
	2000	10.16	2.86	710	76	71	67	66	66	67	64	62
PGL-D (W24in. X H24in. X L96in.) (w600mm x H600mm x L2400mm)	-1500	-7.62	1.66	412	72	62	58	61	64	68	69	60
	-1000	-5.08	0.72	179	64	54	52	56	62	61	53	44
	-500	-2.54	0.19	48	62	51	44	46	43	36	24	25
	500	2.54	0.19	48	60	47	40	38	35	25	18	21
	1000	5.08	0.72	179	57	59	53	53	54	52	49	39
	1500	7.62	1.66	412	67	65	61	60	59	60	57	51
	2000	10.16	3.01	747	76	72	67	66	66	67	64	62





SERIES PGL

LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE E

Lengths 850 mm and 1150 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
850	5	7	13	20	26	20	13	9
1150	6	8	17	27	31	25	15	10

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)					
(mm)	375	750	1125	1500	1875	2250
300	1.01	2.02	3.03			
400	1.38	2.75	4.13	5.50		
500	1.76	3.52	5.28	7.04	8.80	
600	2.17	4.33	6.50	8.66	10.9	13.0
700	2.53	5.06	7.58	10.1	12.7	15.2
800	2.89	5.78	8.66	11.6	14.5	17.4
900	3.25	6.50	9.75	13.0	16.3	19.5
1000	3.61	7.22	10.9	14.5	18.1	21.7
1100	3.97	7.94	11.9	15.9	19.9	23.9
1200	4.33	8.66	13.0	17.4	21.7	26.0
1300	4.69	9.39	14.1	18.8	23.5	28.2
1400	5.06	10.1	15.2	20.2	25.3	30.4
1500	5.42	10.9	16.3	21.7	27.1	32.5
1600		11.6	17.4	23.1	28.9	34.7
1700		12.3	18.4	24.6	30.7	36.8
1800		13.0	19.5	26.0	32.5	39.0
1900		13.8	20.6	27.5	34.3	41.2
2000		14.5	21.7	28.9	36.1	43.3
2100		15.2	22.8	30.4	37.9	45.5
2200		15.9	23.9	31.8	39.7	47.7
2300		16.6	24.9	33.2	41.5	49.8
2400		17.4	26.0	34.7	43.3	52.0*

Lengths 1450 mm and 1750 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
1450	7	10	20	34	37	29	18	12
1750	7	12	24	39	40	34	22	13

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)					
(mm)	375	750	1125	1500	1875	2250
300	0.92	1.84	2.75			
400	1.26	2.51	3.76	5.01		
500	1.61	3.22	4.82	6.43	8.03	
600	1.99	3.97	5.95	7.93	9.91	11.9
700	2.32	4.63	6.94	9.25	11.6	13.9
800	2.65	5.29	7.93	10.6	13.2	15.9
900	2.98	5.95	8.92	11.9	14.9	17.9
1000	3.31	6.61	9.91	13.2	16.6	19.9
1100	3.64	7.27	10.9	14.6	18.2	21.8
1200	3.97	7.93	11.9	15.9	19.9	23.8
1300	4.30	8.59	12.9	17.2	21.5	25.8
1400	4.63	9.25	13.9	18.5	23.2	27.8
1500	4.96	9.91	14.9	19.9	24.8	29.8
1600		10.6	15.9	21.2	26.5	31.7*
1700		11.3	16.9	22.5	28.1	33.7*
1800		11.9	17.9	23.8	29.8	35.7*
1900		12.6	18.9	25.1	31.4*	
2000		13.2	19.9	26.5	33.1	
2100		13.9	20.8	27.8	34.7*	
2200		14.6	21.8	29.1	36.4*	
2300		15.2	22.8	30.4		
2400		15.9	23.8	31.7*		*SEE NOTE 7

Lengths 2050 mm and 2350 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
2050	7	15	28	44	45	38	25	14
2350	8	17	32	47	50	42	28	15

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)					
(mm)	375	750	1125	1500	1875	2250
300	0.84	1.67	2.51			
400	1.15	2.30	3.45	4.59		
500	1.49	2.97	4.45	5.94	7.42	
600	1.85	3.69	5.54	7.38	9.23	11.1
700	2.16	4.31	6.46	8.61	10.8	13.0
800	2.46	4.92	7.38	9.84	12.3	14.8
900	2.77	5.54	8.30	11.1	13.9	16.6
1000	3.08	6.15	9.23	12.3	15.4	18.5
1100	3.39	6.77	10.2	13.6	16.9	20.3
1200	3.69	7.38	11.1	14.8	18.5	22.2*
1300	4.00	8.00	12.0	16.0	20.0	24.0*
1400	4.31	8.61	13.0	17.3	21.6*	
1500	4.62	9.23	13.9	18.5	23.1*	
1600		9.84	14.8	19.7		
1700		10.5	15.7	20.9		
1800		11.1	16.6	22.2*		
1900		11.7	17.6	23.4*		
2000		12.3	18.5			
2100		13.0	19.4			
2200		13.6	20.3			
2300		14.2	21.3*			
2400		14.8	22.2*			*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result at 60 Pa pressure losses for ducted attenuators, at air density of 1.2 kg/m³

2. Pressure loss varies in proportion to density.

3. Pressure loss varies in proportion to the square of the volume flow rate.

4. Maximum allowable volume flow rate is 1.25* the values given in the tables, pressure loss varying in proportion to the square of the factor.

5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale
Over 0.63 to 0.8 * Tabulated Values	30	35
Over 0.8 to 1.0 * Tabulated Values	35	40
Over 1.0 to 1.25 * Tabulated Values	40	45

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

Length	Plenum to Duct	Duct to Plenum	Plenum to Plenum
850/1150	1.35	4.19	4.53
1450/1750	1.28	3.68	3.96
2050/2350	1.25	3.32	3.56

7. Selection marked * are available only with the shorter attenuator

In collaboration with: Donkin Fans

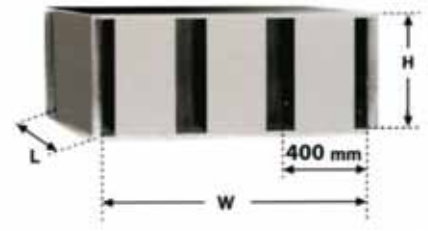




SERIES PGL

LOW PRESSURE LOSS RECTANGULAR ATTENUATORS

ATTENUATOR PERFORMANCE - AIR WAY CODE F



Lengths 850 mm and 1150 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
850	5	6	12	18	21	16	11	7
1150	5	8	16	24	28	21	12	8

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	400	800	1200	1600	2000
300	1.20	2.41	3.61		
400	1.65	3.29	4.93	6.57	
500	2.11	4.21	6.32	8.43	10.6
600	2.60	5.20	7.79	10.4	13.0
700	3.03	6.06	9.09	12.2	15.2
800	3.47	6.93	10.4	13.9	17.3
900	3.90	7.79	11.7	15.6	19.5
1000	4.33	8.66	13.0	17.3	21.7
1100	4.76	9.52	14.3	19.1	23.8
1200	5.20	10.4	15.6	20.8	26.0
1300	5.63	11.3	16.9	22.5	28.2
1400	6.06	12.2	18.2	24.3	30.3
1500	6.50	13.0	19.5	26.0	32.5
1600	6.93	13.9	20.8	27.7	34.7
1700		14.8	22.1	29.5	36.8
1800		15.6	23.4	31.2	39.0
1900		16.5	24.7	32.9	41.2
2000		17.3	26.0	34.7	43.3
2100		18.2	27.3	36.4	45.5
2200		19.1	28.6	38.1	47.6
2300		19.9	29.9	39.9	49.8
2400		20.8	31.2	41.6	52.0*

Lengths 1450 mm and 1750 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE		BAND		MEAN		FREQUENCY (Hz)	
	63	125	250	500	1K	2K	4K	8K
1450	6	10	20	30	35	25	14	9
1750	6	12	23	35	39	28	15	10

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	400	800	1200	1600	2000
300	1.11	2.22	3.32		
400	1.52	3.04	4.56	6.07	
500	1.96	3.91	5.86	7.82	9.77
600	2.42	4.84	7.26	9.68	12.1
700	2.83	5.65	8.47	11.3	14.2
800	3.23	6.46	9.68	12.9	16.2
900	3.63	7.26	10.9	14.6	18.2
1000	4.04	8.07	12.1	16.2	20.2
1100	4.44	8.88	13.3	17.8	22.2
1200	4.84	9.68	14.6	19.4	24.2
1300	5.25	10.5	15.8	21.0	26.3
1400	5.65	11.3	17.0	22.6	28.3
1500	6.05	12.1	18.2	24.2	30.3
1600	6.46	12.9	19.4	25.8	32.3
1700		13.8	20.6	27.5	34.3
1800		14.6	21.8	29.1	36.3*
1900		15.4	23.0	30.7	38.3*
2000		16.2	24.2	32.3	40.4*
2100		17.0	25.4	33.9	
2200		17.8	26.7	35.5*	
2300		18.6	27.9	37.1*	
2400		19.4	29.1	38.8*	

*SEE NOTE 7

Lengths 2050 mm and 2350 mm

LENGTH	STATIC INSERTION LOSS							
	OCTAVE BAND MEAN FREQUENCY (Hz)							
	63	125	250	500	1K	2K	4K	8K
2050	7	14	27	40	45	32	17	10
2350	8	16	30	45	50	36	18	11

TABLE OF VOLUME FLOW RATES (m³/s)
WIDTH (mm)

HEIGHT (mm)	400	800	1200	1600	2000
300	1.02	2.04	3.06		
400	1.41	2.81	4.22	5.63	
500	1.83	3.66	5.48	7.31	9.13
600	2.29	4.57	6.86	9.14	11.5
700	2.67	5.33	8.00	10.7	13.4
800	3.05	6.10	9.14	12.2	15.3
900	3.43	6.86	10.3	13.7	17.2
1000	3.81	7.62	11.5	15.3	19.1
1100	4.19	8.38	12.6	16.8	21.0
1200	4.57	9.14	13.7	18.3	22.9
1300	4.95	9.90	14.9	19.8	24.8*
1400	5.33	10.7	16.0	21.4	26.7*
1500	5.71	11.5	17.2	22.9	
1600	6.10	12.2	18.3	24.4*	
1700		13.0	19.5	25.9*	
1800		13.7	20.6	27.4	
1900		14.5	21.7		
2000		15.3	22.9		
2100		16.0	24.0		
2200		16.8	25.2*		
2300		17.6	26.3*		
2400		18.3	27.4*		

*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result at 60 Pa pressure losses for ducted attenuators, at air density of 1.2 kg/m³
2. Pressure loss varies in proportion to density.
3. Pressure loss varies in proportion to the square of the volume flow rate.
4. Maximum allowable volume flow rate is 1.25* the values given in the tables, pressure loss varying in proportion to the square of the factor.
5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale
Over 0.63 to 0.8 * Tabulated Values	30	35
Over 0.8 to 1.0 * Tabulated Values	35	40
Over 1.0 to 1.25 * Tabulated Values	40	45

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

Length	Plenum to Duct	Duct to Plenum	Plenum to Plenum
850/1150	1.40	4.61	5.03
1450/1750	1.34	4.13	4.50
2050/2350	1.31	3.79	4.12

7. Selection marked * are available only with the shorter attenuator

in collaboration with: Donkin Fans





SERIES SILAX AND SILAX-P cylindrical attenuators have been designed for the purpose of reducing airborne fan noise from the inlet and/or discharge of axial flow fans. They are also suitable for installation on the inlet of centrifugal fans or in sections of ducting remote from the fans. Series SILAX and SILAX-P cylindrical attenuators are available in sizes suitable for fitting directly to all DONKIN axial flow fans.

Series SILAX

Series SILAX attenuators comprise outer casings incorporating acoustic materials retained between the casings and internal wire mesh cylinders. Perforated steel internal cylinders have the same diameters as the nominal attenuator sizes, i.e. the size of the fan or duct to which the attenuator is connected.

Series SILAX attenuators fit directly to the fans or ducts, by bolting to threaded fasteners integral with the attenuator flanges. The positions of these fasteners correspond to the flange drilling of the equivalent size of DONKIN axial flow fans. Series SILAX attenuators cause a negligible resistance to the flow of air.

Series SILAX-P

Series SILAX-P attenuators contain centrally mounted, cylindrical acoustic pods. The outer sections of the attenuators are identical to the Series SILAX attenuators. Removal of the pod from the SILAX-P attenuator converts the attenuator to a SILAX unit.

The incorporation of the central pod considerably improves the acoustic performance of the attenuator, but also creates a resistance to the flow of air. It is normal practice to select SILAX-P attenuators for a pressure loss not exceeding 60Pa.

Sizes

Series SILAX and SILAX-P attenuators are available in a range of standard sizes matching all DONKIN axial flow fans from 315mm to 2000mm nominal diameter. The units are available in lengths of 1, 1.5 and 2.0 diameters. Non standard sizes will be manufactured to customer requirements.

CONSTRUCTION

- Casings are constructed from pre-galvanised steel sheet incorporating lock formed seams. Standard casings are designed to withstand pressures up to 2500Pa.

- Flanges. Sizes up to and including 1000mm in diameter, incorporate spun flanges, manufactured from pregalvanised steel sheet. Threaded fasteners are projection welded to the inside of the flanges. These flanges are primed and enamel painted prior to assembly.

- Acoustic materials. The acoustic infill is a patented sound absorbing material consisting of glass fibre material selected for the combination of density, resilience and porosity, that achieves optimum broadband acoustic performance. This patented sound absorbing material satisfies the requirements of BS 476:Part 7, class 1 spread of flame. Standard material limits the attenuator to be used at a maximum temperature of 80° C.

- Inner Cylinder. The casing inner cylinder which retains the acoustic material is constructed from pre-galvanised perforated sheet

thickness of 0.7 mm.

- Acoustic Pod (Series SILAX-P only) This pod comprises a cylinder constructed from pre-galvanised sheet with a thickness of 0.7 mm, to which are attached moulded fiberglass, or spun steel, fairings at both ends, designed to minimize the resistance to airflow. The pod is filled internally with patented acoustic material.

PERFORMANCE

- Acoustic Performance. Dynamic Attenuation values are derived from tests conducted in accordance with BS 848. The Dynamic Attenuation values constitute the numerical difference between the sound power level of the fan with the attenuator replaced by a straight duct of equivalent length to the attenuator.

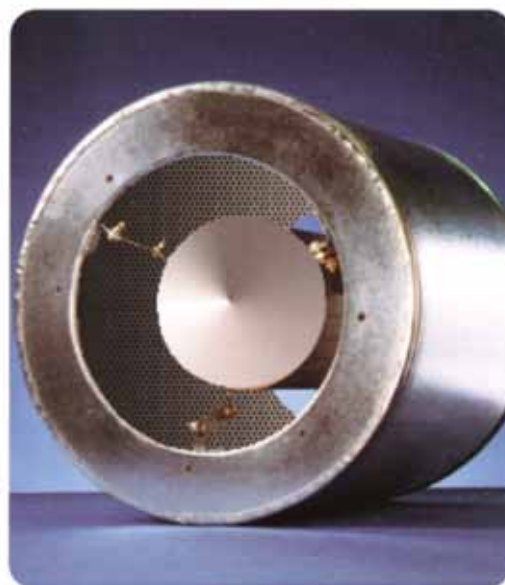
- Aerodynamic Performance. The pressure loss of Series SILAX attenuators can be considered as negligible for the range of velocities normally encountered in ventilation and air-conditioning systems. The pressure loss versus volume for the range of SILAX-P attenuators is illustrated graphically in this brochure. The pressure loss values are derived from tests conducted in accordance with BS 848, and are equal to the difference in fan performance resulting from the attachment of the attenuator.

OPTIONAL FEATURES

Various optional extras are available including;

- Counter flanges.
- Mounting feet.
- Inlet cones & inlet cone Screens or standard screens
- Special Paint Finishes.
- Heavy Welded Construction for high pressures or rigorous industrial or mining applications.
- High temperature construction i.e. above 80° C.
- Melines / clean seal available for special / hospital applications.

All technical information contained herein is subject to change without prior notice.





ACCUSTIC PERFORMANCE - Dynamic attenuation values in dB

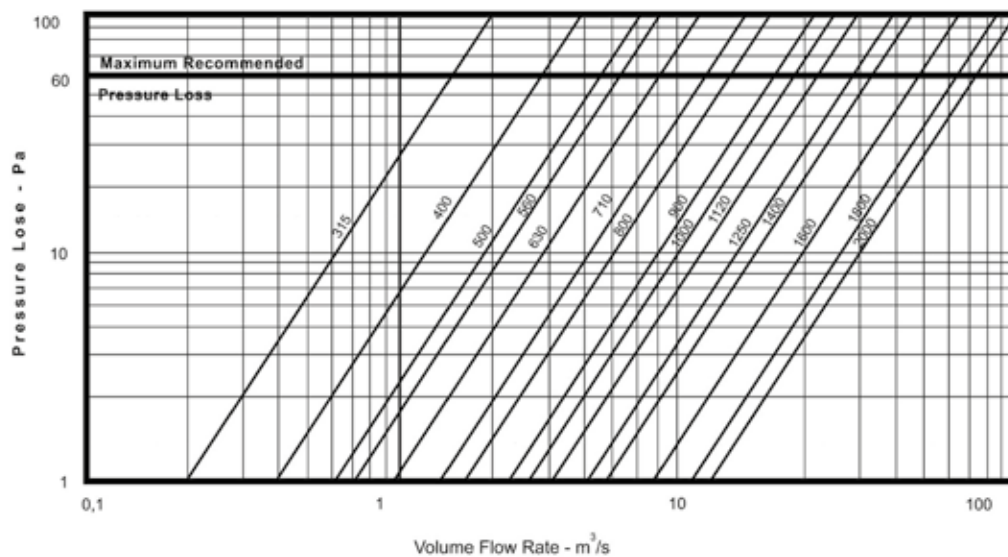
FAN SIZE	SILAX (1.0 D)								SILAX (1.5 D)								SILAX (2 D)							
	OCTAVE BAND MEAN FREQUENCY								OCTAVE BAND MEAN FREQUENCY								OCTAVE BAND MEAN FREQUENCY							
	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k
315	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
400	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
500	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
560	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
630	3	4	8	14	14	9	8	7	5	6	11	18	18	12	11	8	6	8	13	22	22	14	13	9
710	3	4	8	14	14	9	8	7	5	6	11	18	18	12	11	8	6	8	13	22	22	14	13	9
800	3	4	8	14	14	9	8	7	5	6	11	18	18	12	11	8	6	8	13	22	22	14	13	9
900	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1000	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1120	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1250	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1400	4	5	10	14	11	7	6	6	5	6	11	17	15	10	9	8	5	7	12	19	18	13	11	9
1600	4	5	10	14	11	7	6	6	5	6	11	17	15	10	9	8	5	7	12	19	18	13	11	9
1800	4	5	10	14	11	7	6	6	-	-	-	-	-	-	-	-	5	7	12	19	18	13	11	9
2000	4	5	10	14	11	7	6	6	-	-	-	-	-	-	-	-	5	7	12	19	18	13	11	9

FAN SIZE	SILAX - P (1.0 D)								SILAX - P (1.5 D)								SILAX - P (2 D)							
	OCTAVE BAND MEAN FREQUENCY								OCTAVE BAND MEAN FREQUENCY								OCTAVE BAND MEAN FREQUENCY							
	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k
315	3	5	7	11	17	16	13	12	4	6	9	14	19	16	13	12	4	7	11	17	21	17	13	12
400	3	5	7	11	17	16	13	12	5	7	10	15	20	19	17	15	6	9	14	20	24	23	20	19
500	3	5	7	11	17	16	13	12	5	7	10	15	20	19	17	15	6	9	14	20	24	23	20	19
560	3	5	7	11	17	16	13	12	5	7	10	15	20	19	17	15	6	9	14	20	24	23	20	19
630	4	5	9	16	13	16	15	10	5	8	12	21	21	21	19	13	7	10	15	25	29	26	23	16
710	4	5	9	16	13	16	15	10	5	8	12	21	21	21	19	13	7	10	15	25	29	26	23	16
800	4	5	9	16	13	16	15	10	5	8	12	21	21	21	19	13	7	10	15	25	29	26	23	16
900	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1000	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1120	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1250	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1400	5	6	11	17	16	11	9	8	6	9	15	20	20	16	12	10	8	12	19	23	24	21	14	13
1600	5	6	11	17	16	11	9	8	6	9	15	20	20	16	12	10	8	12	19	23	24	21	14	13
1800	5	6	11	17	16	11	9	8	-	-	-	-	-	-	-	-	8	12	19	23	24	21	14	13
2000	5	6	11	17	16	11	9	8	-	-	-	-	-	-	-	-	8	12	19	23	24	21	14	13

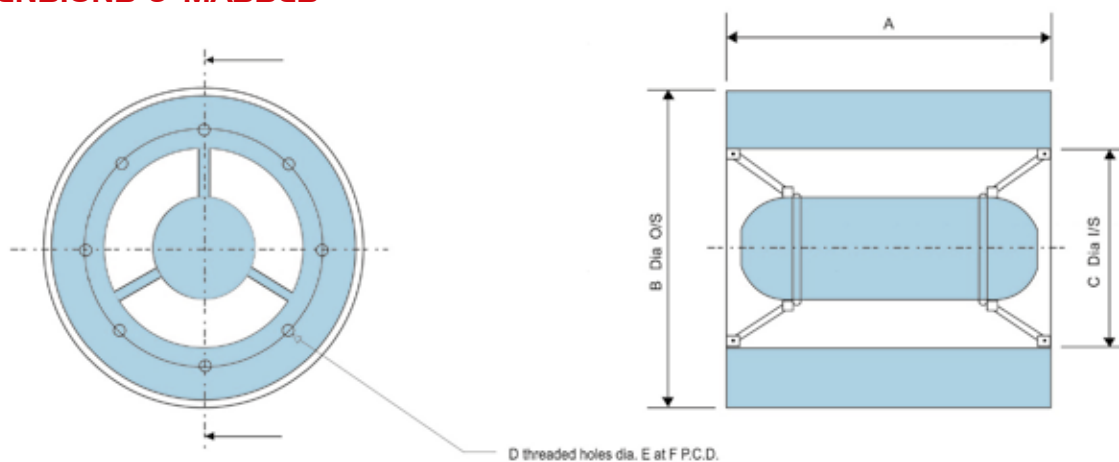




SILAX & SILAX-P CIRCULAR ATTENUATORS



DIMENSIONS & MASSES



FAN Dia. mm	A 1D mm	A 1.5D mm	A 2D mm	B mm	C mm	D mm	E mm	F mm	Silax 1D kg	Silax 1.5D kg	Silax 2D kg	Silax-P 1D kg	Silax-P 1.5D kg	Silax-P 2D kg
315	315	475	630	467	315	8	8	355	10	13	20	13	19	26
400	400	600	800	552	400	8	10	450	14	20	28	19	27	38
500	500	750	1000	692	500	12	10	560	23	31	46	31	43	62
560	560	840	1120	752	560	12	10	620	27	38	54	38	54	76
630	630	945	1260	822	630	12	10	690	32	36	64	44	54	88
710	710	1065	1420	902	710	16	10	770	44	62	88	58	84	116
800	800	1200	1600	992	800	16	10	860	54	76	108	73	107	146
900	900	1350	1800	1092	900	16	12	970	68	97	136	91	119	182
1000	1000	1500	2000	1192	1000	16	12	1070	83	119	166	114	167	228
1120	1120	1680	2240	1312	1120	20	12	1190	140	189	280	183	255	366
1250	1250	1875	2500	1442	1250	20	12	1320	162	226	324	211	301	422
1400	1400	2100	2800	1592	1400	20	12	1470	222	313	444	290	418	580
1600	1600	2400	3200	1840	1600	24	16	1680	322	446	644	401	579	802
1800	1800	-	-	2043	1800	24	16	1880	390	-	-	481	-	-
2000	2000	-	-	2243	2000	24	16	2080	470	-	-	598	-	-





ALI & AL2 Acoustic Louvres

- Providing an ideal acoustic / weather barrier
- Unique louvre blade shape results in lower pressure drop Models can be used as single or dual unit depending on sound reduction requirements
- Acoustic performance in accordance to BS-2750, reverberant room to reverberant room test method
- ALI units installed back to back form AL2
- Manufactured from pre-galvanised sheet

CONSTRUCTION

The Standard acoustic louvers are manufactured from pre-galvanised sheet. The unit consists of an outer frame 300mm deep for the AL louvre. Blades are manufactured to a hollow aerofoil section design, to offer a reduced pressure drop across the units, and are filled with sound absorbing acoustic material.

The Single units can be manufactured up to 2400mmW by 2400mmH, for larger openings the units can be supplied as multi-section.

The AL2 coustic louvers is made up of two standard AL acoustic louvers fixed back to back.

Applications

The acoustic louvers provide an ideal acoustic / weather barrier wherever ventilation apertures are created in a structure. Applications are numerous and some of the more common are listed below:

- Airconditioning plants
- Process plants
- Standby diesel generator sets
- Closed cars parks
- Refrigeration machinery
- Cooling towers

Acoustic Performance

The sound reduction index of the acoustic louvre is obtained using a substitution technique designed to simulate typical site mounting conditions.

Acoustic Louvres are available in either ALI or AL2 configurations. Their acoustic performance is as detailed below and is presented as a sound reduction index which can be designed as being a function of the acoustic louvre.

	63	125	250	500	1K	2K	4K	8K	Hz
ALI	5	5	7	12	18	21	16	16	dB
AL2	8	9	12	21	32	34	32	32	dB

Ordering Key:

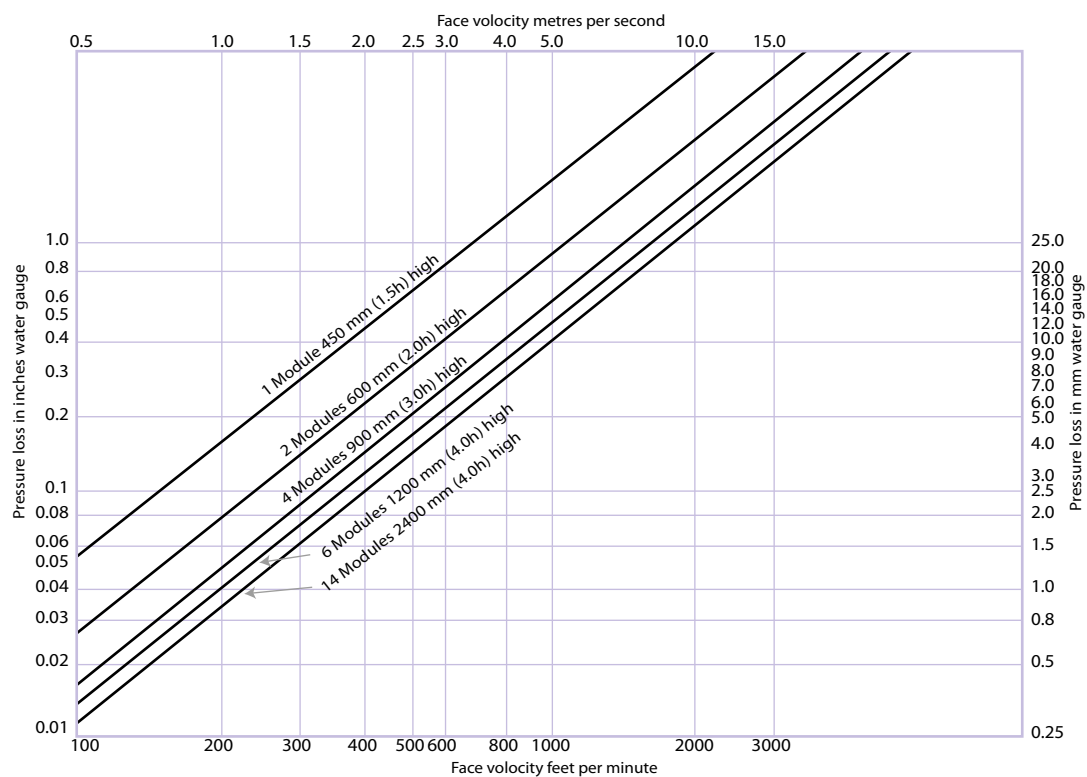
A	L	I	W	X	H
ACOUSTIC LOUVER					
1: SINGLE SET OF LOUVER BLADES					
2: DOUBLE SET OF LOUVER BLADES FIXED BACK TO BACK					
SIZE: WIDTH X HEIGHT					



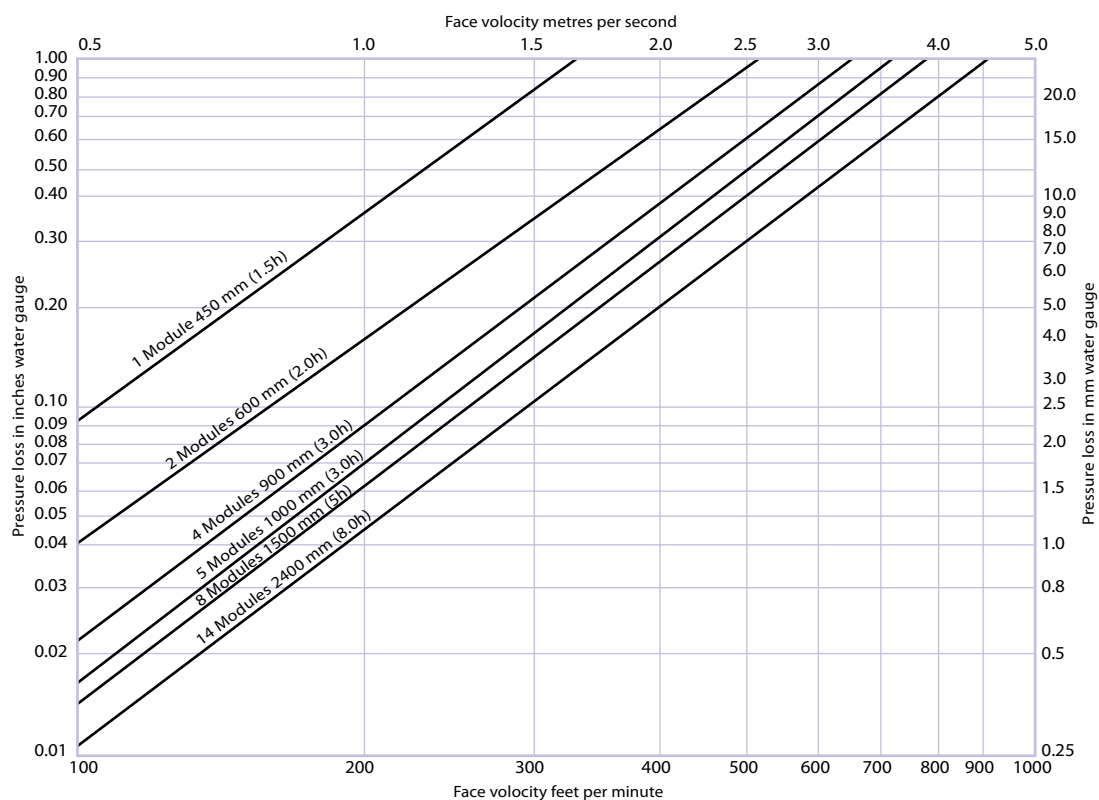


PRESSURE LOSS CHART

AL1 & AL1A Louvres (Ducted from Atmosphere)



AL2 & AL2A Louvres (Ducted from Atmosphere)



**Installation details**

The nominal size of the louvre H x W refers to the builders work aperture, but it should be noted that on types AL1 and AL2 the actual unit size is W-15mm and H-15mm.

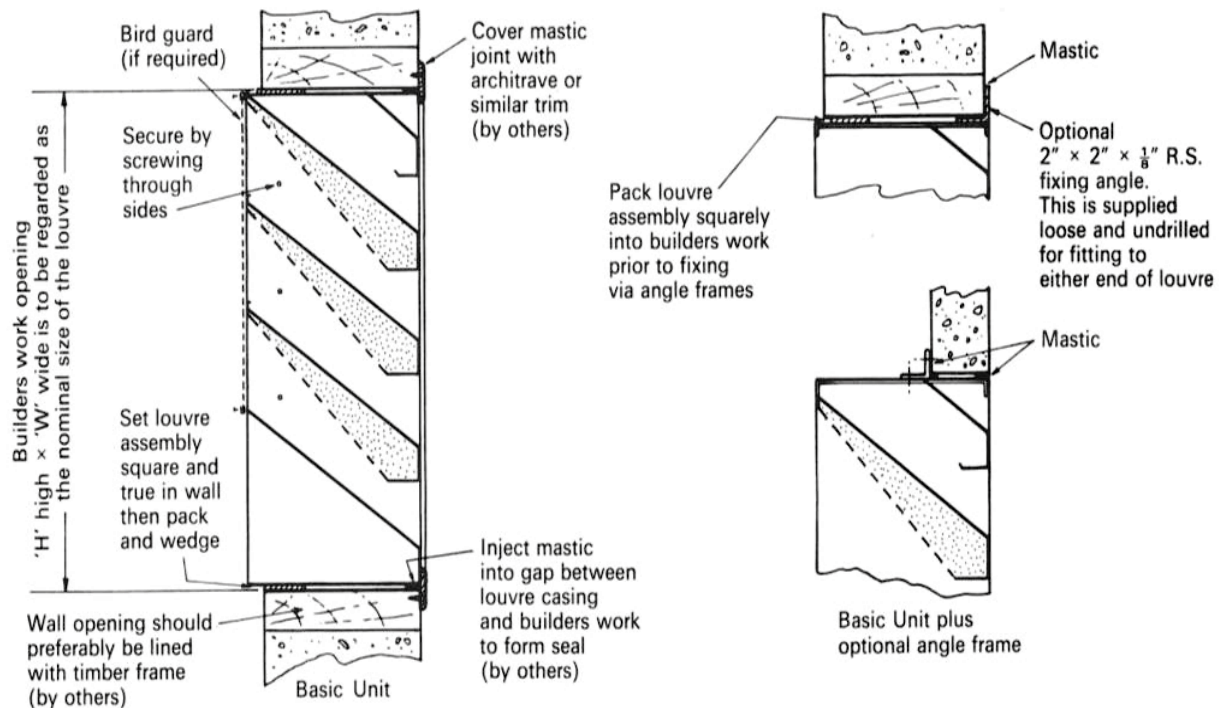
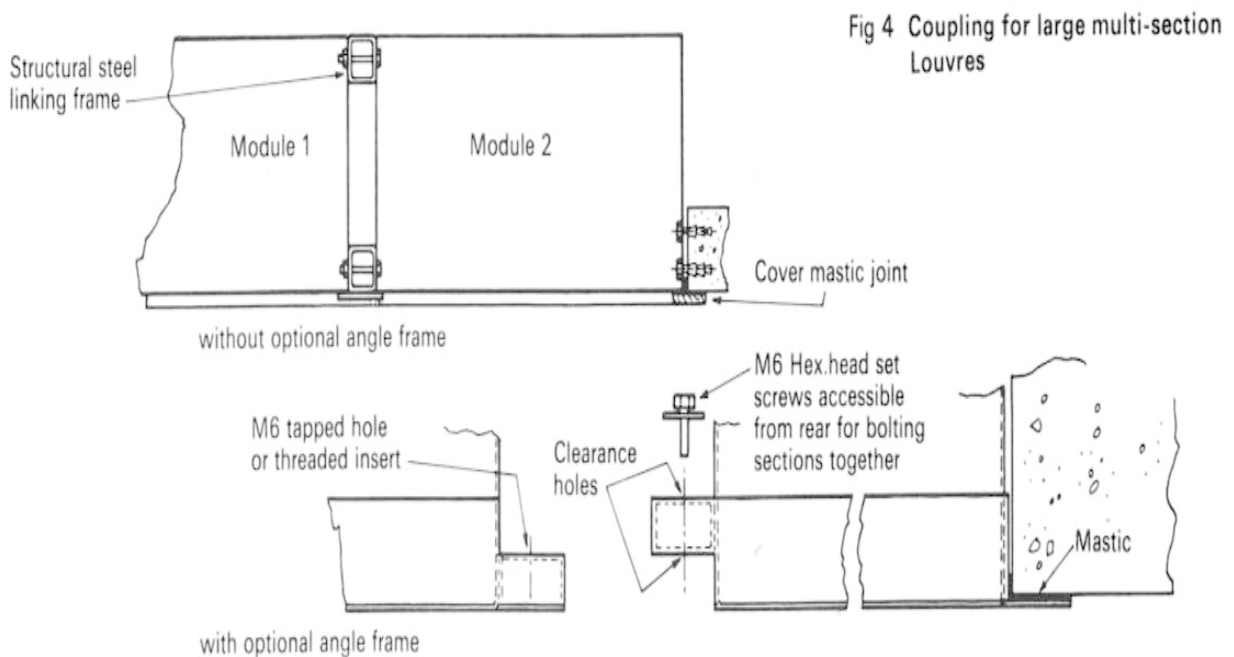
Suggested method of Installation**Multi-Section Louvres**

Fig 4 Coupling for large multi-section Louvres





NOTES

Handwriting practice area with 20 sets of horizontal dashed lines.





BETA
i n d u s t r i a l

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