

SPANNE GRILLES 700 SERIES

GRILLES & REGISTERS

**MODEL: RAG701 (RETURN GRILLE)
SAG701 (SUPPLY REGISTER WITH OPPOSED BLADE VCD)**

A **grille** is an air terminal device with multiple passages of airflow.
A **register** is a combination of grille and damper assembly.

SALIENT FEATURES OF GEO GLOBAL GRILLES AND REGISTERS

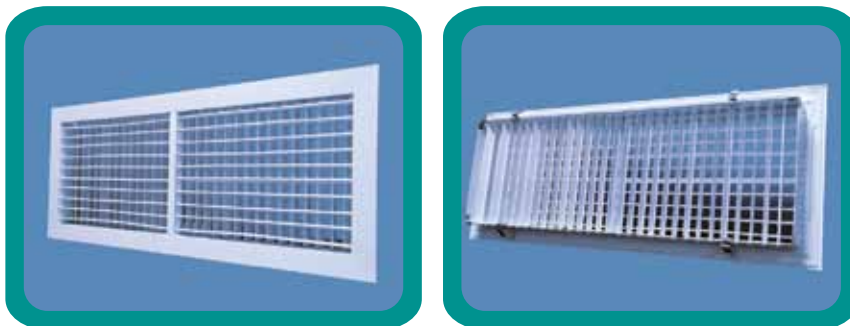
Material and construction:

- Outer frame is extruded aluminium section(6063 alloy-T6 temper)cut to length and joined at corners.
- Blades are made of extruded aluminium section(6063 alloy-T6 temper) with aerofoil cross section to minimise air turbulence.
- The vertical and horizontal blades are provided with nylon bushes for rattle free operation.
- Registers have opposed blade volume control dampers to ensure controlled and uniform airflow.

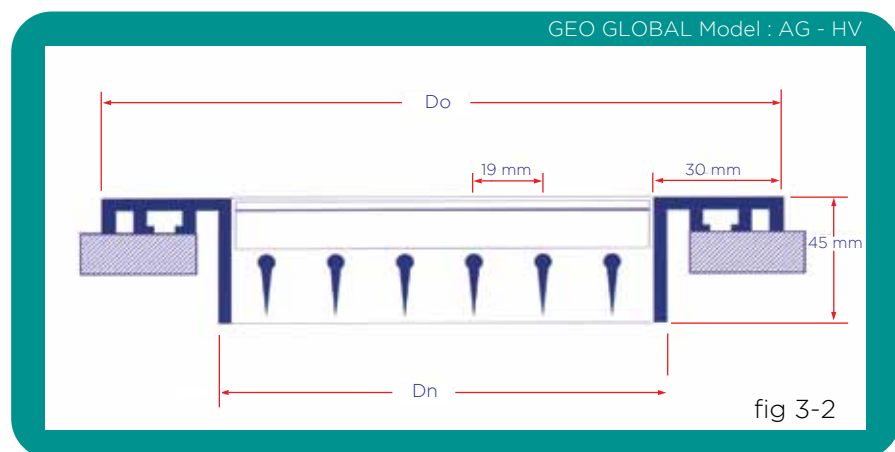
Types of Grilles

AIR GRILLE - DOUBLE DEFLECTION

- A double deflection air grille may have front horizontal and rear vertical aerofoil blades.
- All the aerofoil blades are individually adjustable to suit the design application.



Do - Outer Dimension of Grille in mm or inches
Dn - Neck Dimension of Grille in mm or inches



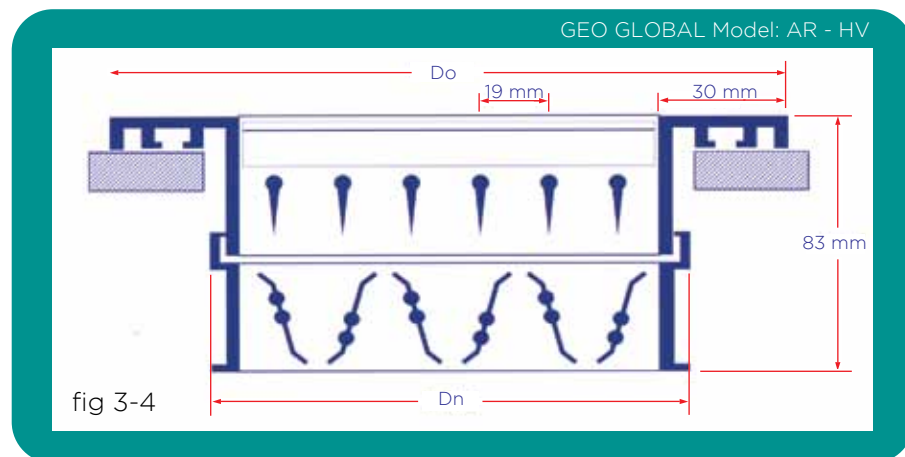
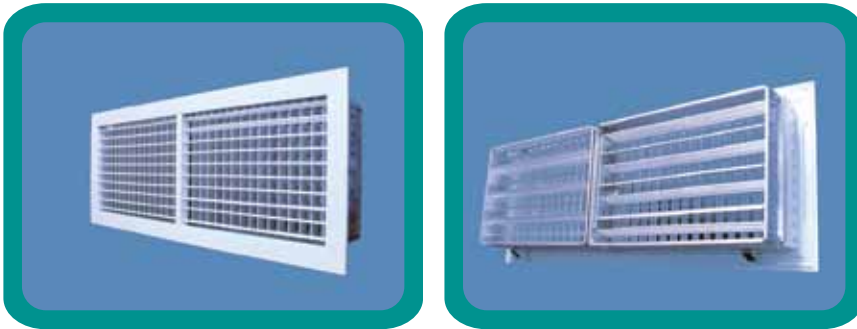
A double deflection air grille may have front vertical and rear horizontal aerofoil blades.
All the aerofoil blades are individually adjustable to suit the design application.

SPANNE GRILLES 700 SERIES

GRILLES & REGISTERS

AIR REGISTER - DOUBLE DEFLECTION

A double deflection air register is same AIR GRILLE SAG TDI DDV supplied with opposed blade Volume Control Damper.



All the above 4 models of air grilles and air registers may be used in supply air stream or return air stream.

If the air grille / air register is used in supply air stream it is called as supply air grille or supply air register. It is normal practice to use supply air register in supply air stream.

If the air grille / air register is used in return air stream it is called as return air grille or return air register. It is normal practice to use supply air register in supply air stream.

It is normal practice to use air register in supply air stream called as SUPPLY AIR REGISTER and air grille in return air stream called as RETURN AIR GRILLE.

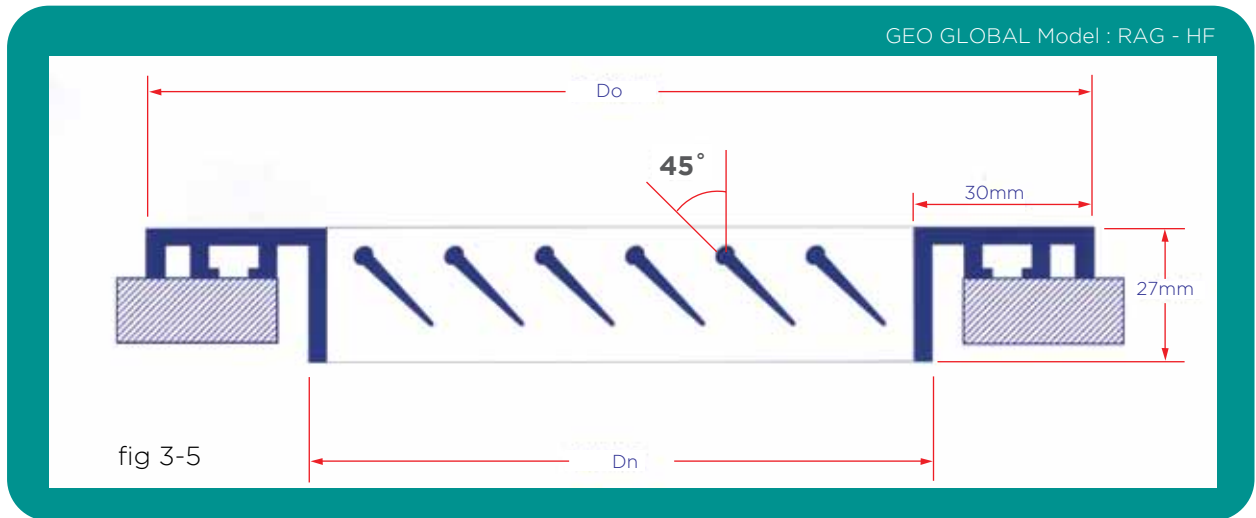
SPANNE GRILLES 700 SERIES

GRILLES & REGISTERS

GEO GLOBAL RETURN AIR GRILLES WITH SPECIFIC APPLICATION

Two different types of single deflection air grilles are available on customer's request.

(a) Return air grilles with fixed horizontal aerofoil blades (RAG701 45°)

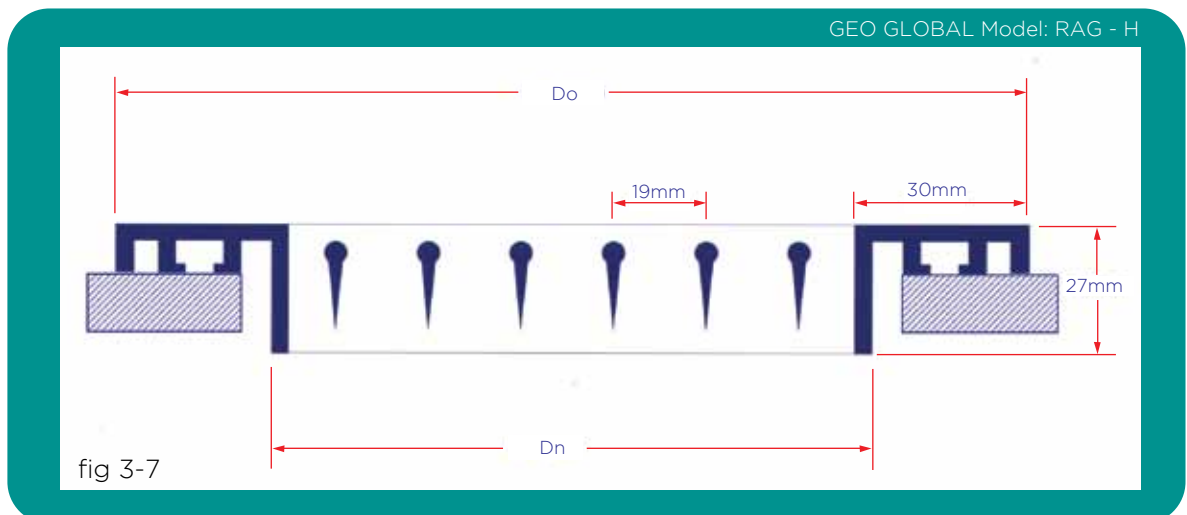


(b) Return air grilles with individually adjustable horizontal aerofoil blades.



D_o - Outer Dimension of Grille in mm or inches

D_n - Neck Dimension of Grille in mm or inches



SPANNE GRILLES 700 SERIES

GRILLES & REGISTERS

SINGLE DEFLECTION RETURN AIR REGISTERS

Return air register with fixed horizontal aerofoil blades at 45° angle.



Return air register with individually adjustable horizontal aerofoil blades.



FRESH AIR GRILL AND REGISTER

FRESH AIR GRILLE is same as GEO GLOBAL RAG - HF but supplied with 12mm thick filter.



FOR MORE TECHNICAL DETAILS AND SELECTION OF PRODUCTS GEO GLOBAL TECHNICAL DEPARTMENT MAY BE CONTACTED

TABLE RD1 SELECTION TABLES FOR RECTANGULAR CEILING DIFFUSERS

GRILLE SIZE	Air volume		for 0° blades deflection						for 45° blades deflection						Noise criteria	
			effective area	Total pressure		Throw at terminal velocity of		Noise criteria	effective area	Total pressure		Throw at terminal velocity of		Noise criteria		
				m²	Pascals	mm of water	0.75 m/s			0.5 m/s	0.25 m/s	m	m			m
mm	LPS	CFM	m²	Pascals	mm of water	m	m	m	m	m	m	m	m	m	m	m
300 x 150 (12" x 6")	94	199	0.023	11	1.1	3.4	4.0	6.1	16	0.019	18	1.80	1.8	2.7	4.3	22
	118	250		18	1.8	3.7	4.9	6.7	23		28	2.87	2.1	3.6	4.9	29
	142	301		26	2.6	4.3	5.2	7.3	29		41	4.17	2.7	4.0	5.2	35
	165	350		35	3.6	4.6	5.8	7.9	34		55	5.64	3.0	4.3	5.8	40
	189	400		45	4.6	4.9	6.1	8.5	38		72	7.32	3.7	4.6	6.1	45
	212	449		56	5.7	5.2	6.4	8.8	42		90	9.19	4.0	5.2	6.7	48
450 x 150 (18" x 6")	94	199	0.033	5	0.5	2.8	3.4	5.8	<15	0.028	7	0.70	1.2	2.1	3.7	<15
	118	250		7	0.7	3.7	4.3	6.4	<15		11	1.10	2.1	3.4	4.9	<15
	142	301		10	1.0	4.0	4.9	7.0	<15		15	1.55	2.4	3.7	5.2	20
	165	350		15	1.5	4.3	5.5	7.6	19		22	2.26	2.7	4.0	5.5	25
	189	400		18	1.8	4.6	5.8	7.2	23		27	2.79	3.4	4.3	5.8	29
	212	449		24	2.4	4.9	6.1	8.5	27		36	3.66	3.7	4.9	6.4	33
500 x 150 (20" x 6")	236	500		26	2.7	5.5	6.7	9.4	30		43	4.34	4.0	5.2	6.4	37
	260	551		33	3.4	5.8	7.0	9.8	33		53	5.36	4.3	5.5	7.0	40
	283	600		43	4.4	6.1	7.3	10.1	36		63	6.43	4.6	5.5	7.3	42
	330	699		53	5.4	6.4	7.6	10.4	41		84	8.56	4.9	6.1	7.6	47
	94	199	0.036	2	0.23	2.5	3.1	5.2	<15	0.03	3	0.35	0.9	1.8	3.4	<15
	118	250		3	0.35	3.6	4.2	6.4	<15		5	0.54	2.0	3.1	4.6	<15
300 x 250 (12" x 10")	142	301		5	0.46	3.8	4.7	6.8	<15		7	0.74	2.2	3.5	5.0	<15
	165	350		10	1.00	4.3	5.5	7.6	16		16	1.65	2.7	4.0	5.2	22
	189	400		15	1.50	4.6	5.8	7.9	20		23	2.31	3.1	4.3	5.8	26
	212	449		18	1.80	4.9	6.1	8.5	24		27	2.79	3.4	4.6	6.1	30
	236	500		23	2.30	5.2	6.4	9.1	27		35	3.58	3.9	4.3	6.2	33
	260	551		25	2.60	5.5	6.7	9.8	30		41	4.19	4.3	5.2	6.7	36
283	600			32	3.25	5.8	7.0	10.1	33		50	5.08	4.6	5.5	7.0	39
	330	699		45	4.62	6.4	7.3	10.1	38		67	6.81	4.9	5.8	7.3	44
	378	801		54	5.50	6.4	7.6	10.7	42		86	8.76	5.2	6.1	7.9	48

TABLE GR3 SELECTION TABLES FOR AIR GRILLES / REGISTERS

GRILLE SIZE	Air volume		for 0° blades deflection						for 45° blades deflection						Noise criteria	
			effective area	Total pressure		Throw at terminal velocity of		Noise criteria	effective area	Total pressure	Throw at terminal velocity of		Noise criteria			
				Pascals	mm of water	m	m				0.75 m/s	0.5 m/s		0.25 m/s		0.75 m/s
mm	LPS	CFM	m ²	Pascals	mm of water	m	m	m	m	Pascals	mm of water	m	m	m	m	m
600 x 200 (24" x 8")	94	199	0.073	1	0.06	2.0	2.6	4.6	<15	0.061	1	0.077	0.6	1.3	2.9	<15
	118	250		1	0.08	2.9	3.7	6.2	<15		1	0.119	1.5	2.8	4.1	<15
	142	301		1	0.09	3.4	4.3	6.3	<15		1	0.115	1.8	3.1	4.6	<15
	165	350		2	0.18	4.0	5.2	7.3	<15		3	0.270	2.4	3.7	4.9	<15
	189	400		2	0.20	4.3	5.5	7.6	<15		3	0.296	2.8	4.0	5.5	<15
	212	449		1	0.08	4.5	5.7	8.3	<15		1	0.126	2.9	4.3	5.8	<15
	236	500		2	0.18	4.5	6.1	8.8	<15		2	0.240	3.6	4.4	6.0	<15
	260	551		0	0.05	4.9	6.3	9.2	<15		1	0.074	3.9	5.0	6.4	<15
	283	600		0	0.04	5.4	6.6	9.4	<15		1	0.056	4.2	5.3	6.8	<15
	330	699		10	1.07	5.5	6.7	9.7	<15		15	1.520	4.6	5.5	7.0	17
	378	801		12	1.24	5.8	7.3	10.0	15		18	1.830	4.9	5.8	7.3	22
	425	900		17	1.70	6.4	7.6	11.0	19		24	2.440	5.2	6.1	7.8	25
	472	1000		21	2.10	7.0	8.5	11.6	23		30	3.100	5.5	6.4	7.9	29
	566	1199		31	3.18	7.9	9.4	12.8	28		44	4.520	5.8	7.0	8.2	35
661	1400		42	4.30	9.1	11.0	14.9	33		60	6.120	6.4	7.6	9.1	40	
755	1600		54	5.50	9.8	11.9	15.5	37		77	7.870	6.7	8.2	9.4	44	
850	1801		66	6.70	10.4	12.8	16.5	41		97	9.870	7.3	8.1	10.4	48	
750 x 200 (30" x 8")	260	551	0.097	0	0.01	4.6	6.0	9.0	<15	0.081	0	0.016	3.9	4.9	6.2	<15
	283	600		0	0.01	5.2	6.4	9.1	<15		0	0.01	4.1	5.2	6.7	<15
	330	699		2	0.17	5.2	6.3	9.3	<15		2	0.205	4.4	5.3	6.9	<15
	378	801		3	0.26	5.5	6.7	9.3	<15		3	0.332	4.6	5.6	7.0	<15
600 x 250 (24" x 10")	425	900		10	0.99	6.1	7.0	10.7	<15		13	1.370	4.9	6.1	7.3	<15
	472	1000		11	1.12	6.7	7.9	11.3	<15		15	1.570	5.2	6.4	7.9	18
	566	1199		18	1.88	7.6	8.8	12.2	18		25	2.540	5.5	6.7	8.2	24
	661	1400		24	2.44	8.8	10.1	13.4	23		33	3.350	5.8	7.0	8.5	29
500 x 300 (20" x 12")	755	1600		30	3.05	9.4	11.6	15.2	27		42	4.240	6.4	7.6	8.8	33
	850	1801		39	3.96	10.1	12.2	15.8	31		54	5.460	7.0	8.2	9.4	37
	944	2000		37	3.78	10.7	12.8	16.8	34		66	6.780	7.5	8.5	9.8	40
	1133	2400		60	6.10	11.3	14.0	18.0	40		95	9.680	8.5	9.8	11.0	46

TABLE GR4 SELECTION TABLES FOR AIR GRILLES / REGISTERS

GRILLE SIZE	Air volume		for 0° blades deflection						for 45° blades deflection						Noise criteria		
			effective area	Total pressure		Throw at terminal velocity of		Noise criteria	effective area	Total pressure		Throw at terminal velocity of		Noise criteria			
				m ²	Pascals	mm of water	m			m/s	m	m/s	m			m/s	m
mm	LPS	CFM	m ²	Pascals	mm of water	m	0.75 m/s	0.5 m/s	0.25 m/s	m	0.75 m/s	0.5 m/s	0.25 m/s	m	0.75 m/s	0.5 m/s	0.25 m/s
600 x 150 (24" x 6")	94	199	0.049	1	0.13	2.3	2.9	5.0	<15	0.040	2	0.19	0.8	1.7	3.2	<15	
	118	250		2	0.20	3.4	4.0	6.3	<15		3	0.30	1.9	3.0	4.4	<15	
	142	301		2	0.25	3.6	4.5	6.6	<15		4	0.40	2.0	3.3	4.8	<15	
450 x 200 (18" x 8")	165	350		4	0.44	4.2	5.4	7.5	<15		6	0.65	2.5	3.8	5.2	19	
	189	400		5	0.49	4.5	5.7	7.9	<15		7	0.75	3.0	4.1	5.7	16	
	212	449		8	0.84	4.6	5.8	8.5	<15		13	1.32	3.1	0.6	6.1	18	
300 x 300 (12" x 12")	236	500		12	1.24	4.9	6.4	9.1	16		18	1.83	3.7	4.9	6.4	22	
	260	551		14	1.40	5.2	6.7	9.5	19		21	2.11	4.0	5.2	6.7	25	
	283	600		18	1.80	5.8	7.0	9.8	22		26	2.67	4.3	5.5	7.0	28	
750 x 150 (30" x 6")	330	699		24	2.44	10.1	7.3	6.1	26		35	3.61	4.6	5.8	7.3	33	
	378	801		31	3.15	6.4	7.6	10.7	31		46	4.65	5.2	6.1	7.6	37	
	425	900		38	3.89	7.0	8.2	11.6	34		57	5.82	5.5	6.7	8.2	41	
450 x 250 (18" x 10")	472	1000		46	4.70	7.6	9.2	12.5	38		69	7.06	5.8	7.0	8.5	44	
	566	1199		66	6.73	8.2	11.3	14.0	43		98	10.00	6.4	7.6	9.2	50	
	142	301	0.067	1	0.12	3.4	4.3	6.4	<15	0.056	2	0.19	1.9	3.1	4.6	<15	
450 x 250 (18" x 10")	165	350		2	0.23	4.1	5.3	7.4	<15		3	0.33	2.4	3.7	4.9	<15	
	189	400		2	0.24	4.4	5.6	7.6	<15		4	0.37	2.8	4.0	5.6	<15	
	212	449		1	0.11	4.5	5.7	8.3	<15		2	0.17	2.9	4.4	5.9	<15	
450 x 250 (18" x 10")	236	500		2	0.24	4.6	6.2	8.9	<15		3	0.34	3.6	4.4	6.1	<15	
	260	551		1	0.09	5.0	6.3	9.3	<15		1	0.12	3.9	5.1	6.5	<15	
	283	600		10	1.02	5.5	6.7	9.4	<15		14	1.42	4.3	5.3	7.0	16	
450 x 250 (18" x 10")	330	699		12	1.20	5.8	7.0	9.7	<15		17	1.75	4.6	5.5	7.3	21	
	378	801		16	1.68	6.1	7.3	10.0	19		23	2.39	4.9	5.8	7.3	25	
	425	900		21	2.16	6.7	7.9	11.3	22		30	3.10	5.2	6.1	7.9	29	
450 x 250 (18" x 10")	472	1000		26	2.67	7.3	8.8	11.9	26		38	3.84	5.5	6.4	8.2	32	
	566	1199		35	3.56	8.2	9.8	13.4	32		51	5.21	5.8	7.0	8.5	38	
	661	1400		47	4.80	9.4	11.3	14.6	36		69	7.04	6.4	7.6	9.1	43	
450 x 250 (18" x 10")	755	1600		63	6.40	9.8	11.9	15.8	41		92	9.35	6.7	8.2	9.8	47	

TABLE GR5 SELECTION TABLES FOR AIR GRILLES / REGISTERS

GRILLE SIZE	Air volume		for 0° blades deflection						for 45° blades deflection						Noise criteria		
			effective area	Total pressure		Throw at terminal velocity of		Noise criteria	effective area	Total pressure		Throw at terminal velocity of		Noise criteria			
				m ²	Pascals	mm of water	m			0.75 m/s	0.5 m/s	0.25 m/s	m ²			Pascals	mm of water
mm	LPS	CFM	m ²	Pascals	mm of water	m	0.75 m/s	0.5 m/s	0.25 m/s	<15	m ²	Pascals	mm of water	m	0.75 m/s	0.5 m/s	0.25 m/s
600 x 200 (24" x 8")	94	199	0.073	1	0.06	2.0	2.6	4.6	<15	0.061	1	0.077	0.6	1.3	2.9	<15	
	118	250		1	0.08	2.9	3.7	6.2	<15		1	0.119	1.5	2.8	4.1	<15	
	142	301		1	0.09	3.4	4.3	6.3	<15		1	0.115	1.8	3.1	4.6	<15	
	165	350		2	0.18	4.0	5.2	7.3	<15		3	0.270	2.4	3.7	4.9	<15	
	189	400		2	0.20	4.3	5.5	7.6	<15		3	0.296	2.8	4.0	5.5	<15	
	212	449		1	0.08	4.5	5.7	8.3	<15		1	0.126	2.9	4.3	5.8	<15	
	236	500		2	0.18	4.5	6.1	8.8	<15		2	0.240	3.6	4.4	6.0	<15	
	260	551		0	0.05	4.9	6.3	9.2	<15		1	0.074	3.9	5.0	6.4	<15	
	283	600		0	0.04	5.4	6.6	9.4	<15		1	0.056	4.2	5.3	6.8	<15	
	330	699		10	1.07	5.5	6.7	9.7	<15		15	1.520	4.6	5.5	7.0	17	
	378	801		12	1.24	5.8	7.3	10.0	15		18	1.830	4.9	5.8	7.3	22	
	425	900		17	1.70	6.4	7.6	11.0	19		24	2.440	5.2	6.1	7.8	25	
	472	1000		21	2.10	7.0	8.5	11.6	23		30	3.100	5.5	6.4	7.9	29	
	566	1199		31	3.18	7.9	9.4	12.8	28		44	4.520	5.8	7.0	8.2	35	
661	1400		42	4.30	9.1	11.0	14.9	33		60	6.120	6.4	7.6	9.1	40		
755	1600		54	5.50	9.8	11.9	15.5	37		77	7.870	6.7	8.2	9.4	44		
850	1801		66	6.70	10.4	12.8	16.5	41		97	9.870	7.3	8.1	10.4	48		
750 x 200 (30" x 8")	260	551	0.097	0	0.01	4.6	6.0	9.0	<15	0.081	0	0.016	3.9	4.9	6.2	<15	
	283	600		0	0.01	5.2	6.4	9.1	<15		0	0.01	4.1	5.2	6.7	<15	
	330	699		2	0.17	5.2	6.3	9.3	<15		2	0.205	4.4	5.3	6.9	<15	
	378	801		3	0.26	5.5	6.7	9.3	<15		3	0.332	4.6	5.6	7.0	<15	
500 x 300 (20" x 12")	425	900		10	0.99	6.1	7.0	10.7	<15		13	1.370	4.9	6.1	7.3	<15	
	472	1000		11	1.12	6.7	7.9	11.3	<15		15	1.570	5.2	6.4	7.9	18	
	566	1199		18	1.88	7.6	8.8	12.2	18		25	2.540	5.5	6.7	8.2	24	
	661	1400		24	2.44	8.8	10.1	13.4	23		33	3.350	5.8	7.0	8.5	29	
850 x 200 (20" x 12")	755	1600		30	3.05	9.4	11.6	15.2	27		42	4.240	6.4	7.6	8.8	33	
	850	1801		39	3.96	10.1	12.2	15.8	31		54	5.460	7.0	8.2	9.4	37	
	944	2000		37	3.78	10.7	12.8	16.8	34		66	6.780	7.5	8.5	9.8	40	
	1133	2400		60	6.10	11.3	14.0	18.0	40		95	9.680	8.5	9.8	11.0	46	

TABLE GR6 SELECTION TABLES FOR AIR GRILLES / REGISTERS

GRILLE SIZE	Air volume		for 0° blades deflection						for 45° blades deflection						Noise criteria					
			effective area	Total pressure		Throw at terminal velocity of		Noise criteria	effective area	Total pressure		Throw at terminal velocity of								
				m ²	Pascals	mm of water	m			m/s	m	m	Pascals	mm of water		m	m/s			
300 x 200 (12" x 8")	LPS	CFM																		
	94	199	0.03	6	0.6	3.1	3.7	5.8	<15	0.025	10	0.97	1.5	2.4	4.0	<15				
	118	250		9	0.9	3.7	4.6	6.7	<15		14	1.47	2.1	3.0	4.9	19				
	142	301		15	1.5	4.3	4.9	7.3	19		22	2.26	2.4	3.7	5.5	25				
	165	350		18	1.8	4.6	5.8	7.9	24		28	2.90	2.7	4.0	5.8	30				
	189	400		25	2.5	4.9	6.1	8.5	28		38	3.90	3.4	4.3	6.1	34				
	212	449		29	3.0	5.2	6.4	8.8	31		46	4.72	3.7	4.9	6.4	38				
	236	500		36	3.7	5.5	6.7	9.4	35		58	5.89	4.0	5.2	6.7	41				
	260	551		44	4.5	5.8	7.0	10.1	38		70	7.16	4.3	5.5	7.3	44				
	94	199	0.057	1	0.06	2.2	2.8	4.9	<15	0.048	1	0.14	0.7	1.5	3.1	<15				
500 x 200 (20" x 8")	118	250		1	0.14	3.2	3.9	6.3	<15		2	0.21	1.8	2.9	4.3	<15				
	142	301		2	0.17	3.5	4.4	6.5	<15		3	0.28	2.0	3.2	4.7	<15				
	165	350		3	0.32	4.1	5.3	7.4	<15		5	0.47	2.5	3.8	5.1	<15				
	189	400		3	0.35	4.4	5.6	7.8	<15		5	0.53	2.9	4.1	5.6	<15				
	212	449		2	0.19	4.6	5.8	8.4	<15		3	0.28	3.1	4.5	6.0	<15				
	236	500		4	0.40	4.8	6.3	9.0	<15		6	0.57	3.7	4.5	6.2	<15				
	260	551		11	1.12	5.2	6.4	9.5	<15		16	1.63	4.0	5.2	6.7	19				
	283	600		12	1.24	5.5	6.7	9.8	16		18	1.83	4.3	5.5	7.0	22				
	330	699		17	1.75	5.8	7.0	10.1	20		25	2.57	4.6	5.8	7.3	27				
	378	801		23	2.31	6.1	7.3	10.4	25		33	3.38	4.9	6.1	7.6	31				
425	900		29	2.92	7.0	8.2	11.3	28		42	4.27	5.2	6.4	7.9	35					
472	1000		35	3.56	7.6	9.2	12.2	32		51	5.21	5.8	6.7	8.2	38					
566	1199		49	4.95	8.2	10.1	13.7	36		72	7.34	6.4	7.3	8.9	44					
661	1400		63	6.40	9.8	11.9	15.8	41		98	10.03	7.0	7.9	9.4	49					

TABLE GR7 SELECTION TABLES FOR AIR GRILLES / REGISTERS

GRILLE SIZE	Air volume		for 0° blades deflection						for 45° blades deflection						Noise criteria	
			effective area	Total pressure		Throw at terminal velocity of		Noise criteria	effective area	Total pressure		Throw at terminal velocity of		Noise criteria		
				Pascals	mm of water	m	m/s			m	m/s	Pascals	mm of water			m
900 x 200 (36" x 8")	LPS	CFM	0.121	1	0.08	5.0	6.1	9.1	<15	0.100	1	0.093	4.3	5.1	6.8	<15
				1	0.12	5.2	6.5	8.9	<15		1	0.145	4.4	5.5	6.8	<15
				2	0.17	5.6	6.6	10.4	<15		2	0.213	4.6	5.7	7.1	<15
				8	0.86	6.1	7.6	10.7	<15		11	1.170	4.9	5.8	7.3	<15
				10	1.02	7.3	8.5	11.6	<15		14	1.450	5.2	6.1	7.6	<15
				14	1.47	8.2	9.8	13.1	<15		20	2.060	5.8	6.7	7.9	20
				19	1.93	8.8	11.0	14.6	18		26	2.690	6.1	7.3	8.5	25
				26	2.70	9.8	11.9	15.5	22		36	3.660	6.7	7.9	9.1	29
				32	3.23	10.4	12.5	16.5	26		43	4.390	7.3	8.2	9.4	32
				42	4.32	11.0	13.7	17.4	31		62	6.32	7.9	9.1	10.4	38
600 x 300 (24" x 12")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15		11	1.14	5.2	6.1	7.3	<15
				10	1.00	7.9	9.4	12.5	<15		13	1.37	5.2	6.4	7.6	<15
				13	1.37	8.5	10.7	14.3	<15		18	1.88	5.8	7.0	8.2	18
				18	1.80	9.4	11.6	15.2	15		24	2.44	6.4	7.3	8.8	22
				22	2.24	10.1	12.5	16.5	19		30	3.02	7.0	7.9	9.1	25
				34	3.45	10.1	13.7	17.4	25		42	4.29	7.6	8.4	10.1	31
1050 x 200 (42" x 8")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15		11	1.14	5.2	6.1	7.3	<15
				10	1.00	7.9	9.4	12.5	<15		13	1.37	5.2	6.4	7.6	<15
				13	1.37	8.5	10.7	14.3	<15		18	1.88	5.8	7.0	8.2	18
				18	1.80	9.4	11.6	15.2	15		24	2.44	6.4	7.3	8.8	22
				22	2.24	10.1	12.5	16.5	19		30	3.02	7.0	7.9	9.1	25
				34	3.45	10.1	13.7	17.4	25		42	4.29	7.6	8.4	10.1	31
900 x 300 (36" x 12")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15		11	1.14	5.2	6.1	7.3	<15
				10	1.00	7.9	9.4	12.5	<15		13	1.37	5.2	6.4	7.6	<15
				13	1.37	8.5	10.7	14.3	<15		18	1.88	5.8	7.0	8.2	18
				18	1.80	9.4	11.6	15.2	15		24	2.44	6.4	7.3	8.8	22
				22	2.24	10.1	12.5	16.5	19		30	3.02	7.0	7.9	9.1	25
				34	3.45	10.1	13.7	17.4	25		42	4.29	7.6	8.4	10.1	31
1050 x 200 (42" x 8")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15		11	1.14	5.2	6.1	7.3	<15
				10	1.00	7.9	9.4	12.5	<15		13	1.37	5.2	6.4	7.6	<15
				13	1.37	8.5	10.7	14.3	<15		18	1.88	5.8	7.0	8.2	18
				18	1.80	9.4	11.6	15.2	15		24	2.44	6.4	7.3	8.8	22
				22	2.24	10.1	12.5	16.5	19		30	3.02	7.0	7.9	9.1	25
				34	3.45	10.1	13.7	17.4	25		42	4.29	7.6	8.4	10.1	31
1050 x 200 (42" x 8")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15		11	1.14	5.2	6.1	7.3	<15
				10	1.00	7.9	9.4	12.5	<15		13	1.37	5.2	6.4	7.6	<15
				13	1.37	8.5	10.7	14.3	<15		18	1.88	5.8	7.0	8.2	18
				18	1.80	9.4	11.6	15.2	15		24	2.44	6.4	7.3	8.8	22
				22	2.24	10.1	12.5	16.5	19		30	3.02	7.0	7.9	9.1	25
				34	3.45	10.1	13.7	17.4	25		42	4.29	7.6	8.4	10.1	31
1050 x 200 (42" x 8")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15		11	1.14	5.2	6.1	7.3	<15
				10	1.00	7.9	9.4	12.5	<15		13	1.37	5.2	6.4	7.6	<15
				13	1.37	8.5	10.7	14.3	<15		18	1.88	5.8	7.0	8.2	18
				18	1.80	9.4	11.6	15.2	15		24	2.44	6.4	7.3	8.8	22
				22	2.24	10.1	12.5	16.5	19		30	3.02	7.0	7.9	9.1	25
				34	3.45	10.1	13.7	17.4	25		42	4.29	7.6	8.4	10.1	31
1050 x 200 (42" x 8")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15		11	1.14	5.2	6.1	7.3	<15
				10	1.00	7.9	9.4	12.5	<15		13	1.37	5.2	6.4	7.6	<15
				13	1.37	8.5	10.7	14.3	<15		18	1.88	5.8	7.0	8.2	18
				18	1.80	9.4	11.6	15.2	15		24	2.44	6.4	7.3	8.8	22
				22	2.24	10.1	12.5	16.5	19		30	3.02	7.0	7.9	9.1	25
				34	3.45	10.1	13.7	17.4	25		42	4.29	7.6	8.4	10.1	31
1050 x 200 (42" x 8")	LPS	CFM	0.144	1	0.05	4.8	5.9	8.9	<15	0.120	0	0.05	4.2	5.0	6.7	<15
				1	0.06	5.0	6.3	8.7	<15		1	0.07	4.3	5.4	6.6	<15
				1	0.09	5.3	6.3	10.1	<15		1	0.11	4.4	5.5	6.9	<15
				1	0.08	5.9	7.2	10.4	<15		1	0.10	4.7	5.7	7.2	<15
				9	0.90	7.0	8.2	11.3	<15</							

TABLE GR8 SELECTION TABLES FOR AIR GRILLES / REGISTERS

GRILLE SIZE	Air volume		for 0° blades deflection						for 45° blades deflection						Noise criteria	
			effective area	Total pressure		Throw at terminal velocity of		Noise criteria	effective area	Total pressure		Throw at terminal velocity of				
				m ²	Pascals	mm of water	m			m/s	m	m/s	m	m/s		Pascals
900 x 250 (36" x 10")	LPS	CFM	0.156	0	0.05	4.9	6.2	8.5	<15	0.13	1	0.05	4.3	5.4	6.5	<15
	378	801		1	0.06	5.2	6.1	10.0	<15		1	0.07	4.3	5.5	6.7	<15
	425	900		1	0.05	5.7	7.0	10.2	<15		1	0.06	4.7	5.6	7.1	<15
	472	1000		1	0.06	6.8	7.8	10.9	<15		1	0.08	4.9	5.8	7.1	<15
	566	1199		9	0.91	7.9	9.4	12.5	<15		12	1.22	5.2	6.1	7.6	<15
	661	1400		12	1.27	8.5	10.7	14.0	<15		17	1.70	5.8	7.0	8.2	15
	755	1600		16	1.68	9.1	11.6	15.2	<15		22	2.21	6.4	7.3	8.5	19
	850	1801		20	2.08	9.8	12.2	15.2	16		27	2.74	6.7	7.9	8.8	22
	944	2000		26	2.69	10.4	13.4	17.1	22		36	3.63	7.3	8.5	9.8	28
	1133	2400		35	3.61	11.3	14.0	17.7	26		48	4.90	8.2	9.2	11.0	33
1050 x 250 (42" x 10")	LPS	CFM	0.190	0	0.03	4.9	6.2	8.4	<15	0.16	0	0.04	4.2	5.4	6.4	<15
	378	801		0	0.05	5.1	6.0	9.9	<15		1	0.06	4.3	5.4	6.7	<15
	425	900		0	0.04	5.6	6.9	10.0	<15		0	0.05	4.6	5.6	7.0	<15
	472	1000		0	0.05	6.7	7.6	10.7	<15		1	0.06	4.8	5.7	6.9	<15
	566	1199		1	0.09	7.8	9.0	11.9	<15		1	0.11	5.0	6.1	7.3	<15
	661	1400		1	0.07	8.3	10.5	13.9	<15		1	0.09	5.7	6.8	8.0	<15
	755	1600		9	0.94	9.1	11.3	14.9	<15		13	1.30	5.8	7.3	8.2	<15
	850	1801		13	1.30	9.8	12.2	15.8	<15		17	1.73	6.4	7.8	8.5	<15
	944	2000		17	1.78	10.4	13.1	17.1	<15		24	2.41	7.3	8.2	9.5	20
	1133	2400		25	2.57	11.3	14.0	17.7	19		33	3.40	7.9	9.1	10.7	25
900 x 300 (36" x 12")	LPS	CFM		33	3.40	11.9	14.9	18.3	23		44	4.50	8.8	10.1	11.6	30
	1511	3201		42	4.27	12.5	15.5	18.9	27		55	5.66	9.4	11.0	12.2	33
	1699	3600														

Noise criteria is based on 10dB room attenuation
Damper is fully open condition

Throw values are with ceiling effect (Throw values may be reduced by 15 to 20% for air flow without ceiling effect)

MODEL: RLBG711 (RETURN LINEAR BAR GRILLE) SLBG711 (SUPPLY LINEAR BAR GRILLE REGISTER)

SALIENT FEATURES OF GEO GLOBAL LINEAR BAR GRILLES AND REGISTERS

Material and construction:

- Outer frame is extruded aluminium section(6063 alloy-T6 temper) cut to length and joined at corners.
- Blades are made of extruded aluminium section(6063 alloy-T6 temper) with aerofoil cross section to minimise air turbulence. Front horizontal blades are fixed type and rigid constructed frame.
- The rear vertical blades are adjustable assembled with nylon bushes for rattle free operation.
- Registers have opposed blade volume control dampers to ensure controlled and uniform airflow.
- Linear bar grilles are architecturally beautiful and robust in construction.
- They are suitable for supply and return air distribution in all air handling applications.
- They are suitable for false ceiling, side wall, sill and floor mounting.

LINEAR BAR GRILLE MODELS

GEO GLOBAL- LBG 12 -straight
GEO GLOBAL- LBG 12 - one way
GEO GLOBAL- LBG 12 - two way

GEO GLOBAL- LBG 14 -straight
GEO GLOBAL- LBG 14 - one way
GEO GLOBAL- LBG 14 - two way

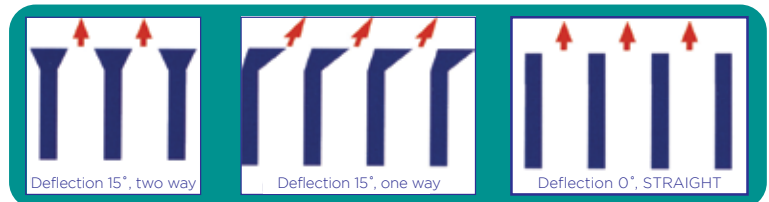
GEO GLOBAL- LBG 15 -straight
GEO GLOBAL- LBG 15 - one way
GEO GLOBAL- LBG 15 - two way

All above bar grilles are available in 24mm frame depth without rear vertical blades.



fig 4-1

fig 4-2



GEO GLOBAL- LBG 12 -V -straight
GEO GLOBAL- LBG 12 - V-one way
GEO GLOBAL- LBG 12 - V- two way

GEO GLOBAL- LBG 14 - V- straight
GEO GLOBAL- LBG 14 - V - one way
GEO GLOBAL- LBG 14 -V- two way

GEO GLOBAL- LBG 15 -V-straight
GEO GLOBAL- LBG 15 - V- one way
GEO GLOBAL- LBG 15 - V-two way

All above bar grilles are available in 45mm frame depth with rear vertical blades.



fig 4-3

Ds = Nominal grille size = Duct size

Dn = Neck size of grille = (Length-10) x (width-10) in millimetres

Do = Outer size of grille = (Length+60) x (width+60)

b = Blade pitch

t = Blade thickness

GEO GLOBAL LINEAR BAR REGISTERS MODELS

All GEO GLOBAL Linear bar registers are supplied with opposite blade volume control dampers.

GEO GLOBAL- LBR 12 - straight
GEO GLOBAL- LBR 12 - one way
GEO GLOBAL- LBR 12 - two way

GEO GLOBAL- LBR 14 - straight
GEO GLOBAL- LBR 14 - one way
GEO GLOBAL- LBR 14 - two way

GEO GLOBAL- LBR 15 - straight
GEO GLOBAL- LBR 15 - one way
GEO GLOBAL- LBR 15 - two way



fig 4-4

All above registers are available
in 24+40mm overall bar depth.

GEO GLOBAL- LBR 12 - V - straight
GEO GLOBAL- LBR 12 - V - one way
GEO GLOBAL- LBR 12 - V - two way

GEO GLOBAL- LBR 14 - V - straight
GEO GLOBAL- LBR 14 - V - one way
GEO GLOBAL- LBR 14 - V - two way

GEO GLOBAL- LBR 15 - V - straight
GEO GLOBAL- LBR 15 - V - one way
GEO GLOBAL- LBR 15 - V - two way

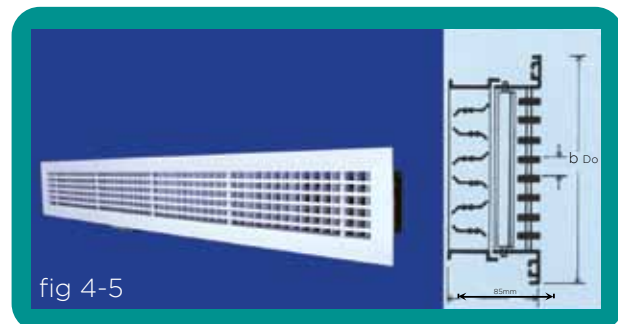


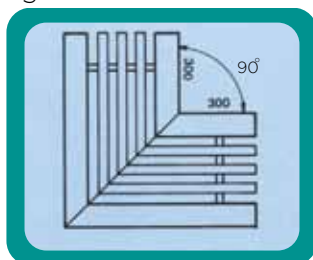
fig 4-5

All above registers are available
in 45+40mm overall bar depth.

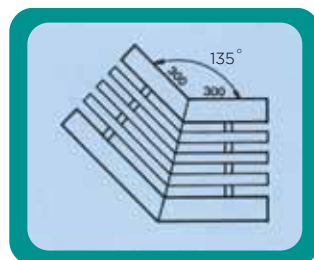
CORNERS FOR USE WITH LINEAR BAR GRILLES / REGISTERS

Ceiling mounted corners available in 90 deg and 135 deg as shown in fig. 4-6.

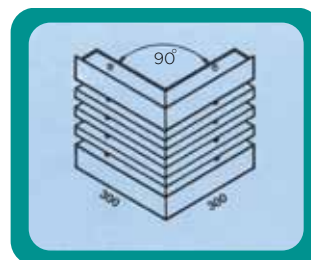
fig 4-6



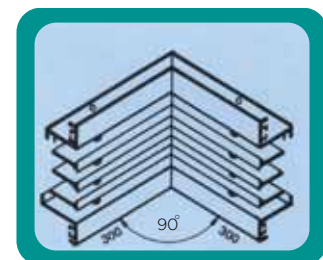
90° corner
ceiling mounted



135° corner
ceiling mounted



90° external corner
wall mounted



90° internal corner
wall mounted

SPANNE GRILLES 700 SERIES

LINEAR BAR GRILLES & REGISTERS

TABLE LBG1 SELECTION TABLE FOR LINEAR BAR GRILLES

LBG width mm	Air volume		Total pressure		Throw at terminal velocity of			Noise criteria
	LPS/m	CFM/ft	Pascals	mm of water	0.75 m/s m	0.5 m/s m	0.25 m/s m	
100	50	32	1.0	0.1	1.0	2.5	3.3	<15
	100	65	4.5	0.5	2.0	3.5	4.5	<15
	150	97	10.0	1.0	3.5	4.0	5.8	<15
	200	129	17.0	1.7	4.0	5.0	6.8	20
	250	162	27.0	2.8	4.5	5.5	7.8	29
	300	194	39.0	4.0	5.0	6.0	8.5	33
150	50	32	0.7	0.1	0.8	2.0	3.0	<15
	100	65	2.5	0.3	1.8	3.2	4.5	<15
	150	97	6.0	0.6	3.2	3.8	5.5	<15
	200	129	11.0	1.1	4.0	4.8	6.5	18
	250	162	17.0	1.7	4.3	5.2	7.5	23
	300	194	24.0	2.4	4.8	6.0	8.0	25
	350	226	32.0	3.3	6.0	7.5	9.0	30
	400	259	43.0	4.4	6.5	7.5	10.0	35
200	50	32	0.5	0.1	0.5	2.0	3.0	<15
	100	65	2.0	0.2	1.5	3.0	4.0	<15
	150	97	4.5	0.5	3.0	3.5	5.5	<15
	200	129	7.0	0.7	3.5	4.8	6.3	<15
	250	162	11.0	1.1	4.0	5.0	7.0	15
	300	194	15.0	1.5	4.5	5.5	7.8	20
	350	226	21.0	2.1	5.5	7.0	9.0	26
	400	259	25.0	2.6	6.0	7.0	9.5	30
	450	291	31.0	3.2	6.5	7.5	10.0	33
250	150	97	3.5	0.4	2.5	3.0	5.0	<15
	200	129	6.0	0.6	3.0	4.0	6.0	<15
	250	162	10.0	1.0	4.0	4.5	6.8	<15
	300	194	14.0	1.4	4.0	5.0	7.5	18
	350	226	19.0	1.9	5.5	6.5	8.8	24
	400	259	25.0	2.6	5.8	6.6	9.0	27
	450	291	31.0	3.2	6.5	7.2	9.8	30
	500	323	39.0	4.0	7.0	8.0	10.5	34
300	200	129	5.0	0.5	1.5	3.0	5.3	<15
	250	162	8.0	0.8	3.0	4.0	6.0	<15
	300	194	11.5	1.2	3.5	4.5	7.0	<15
	350	226	17.0	1.7	5.0	6.2	8.5	21
	400	259	23.0	2.3	5.5	6.5	8.8	23
	450	291	31.0	3.2	6.0	7.0	9.5	27
	500	323	39.0	4.0	6.5	7.8	10.0	32

Noise criteria is based on 10dB room attenuation
 Damper is fully open condition
 Vertical blades are at 0° deflection
 Data basis is 1000mm length of linear bar grill
 Correction on NOISE CRITERIA for 2000mm length is +3
 Correction on NOISE CRITERIA for 3000mm length is +5

SPANNE SLOT DIFFUSER 800 SERIES

LINEAR SLOT DIFFUSERS

SALIENT FEATURES OF GEO GLOBAL LINEAR SLOT DIFFUSER

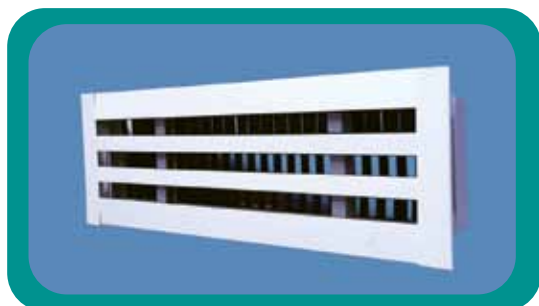
Material and construction:

- Outer frame and inner frame are extruded aluminium sections(6063 alloy-T6 temper) cut to length and joined.
- Slot blades are made of extruded aluminium section(6063 alloy-T6 temper)
- They are suitable for supply and return air distribution in all air handling applications.
- They are suitable for false ceiling
- GEO GLOBALbrand Linear slot diffusers are available in 1 to 6 slots and in slot widths of 16mm, 20mm and 25mm.
- These slot diffusers are generally used in room with heights approximately 2.5m to 4.0m for supply or return air.
- This slot diffuser provides a stable discharge and can be used for constant or variable volume air flows.
- Air flow rate control is provided by an integral flow straightener and hit and miss damper adjustable from diffuser face.
- Slot arrangement will provide 180 deg adjustable air diffusing patterns.

The table below give the dimensions of slot diffusers with reference to no of slots and slot width

GEO GLOBAL type "A"

No of Slots	16 mm slot width		20 mm slot width		25 mm slot width	
	Neck Dn mm	Frame Do mm	Neck Dn mm	Frame Do mm	Neck Dn mm	Frame Do mm
1	40	80	44	84	49	89
2	74	114	82	122	92	132
3	108	148	120	160	135	175
4	142	182	158	198	178	281
5	176	216	196	236	221	261
6	210	250	234	274	264	304



SPANNE SLOT DIFFUSER 800 SERIES

LINEAR SLOT DIFFUSERS

GEO GLOBAL type "B"

No of Slots	16mm slot width		20mm slot width		25mm slot width	
	Neck Dn mm	Frame Do mm	Neck Dn mm	Frame Do mm	Neck Dn mm	Frame Do mm
1	36	72	40	76	45	81
2	70	106	78	114	88	124
3	104	140	116	152	131	167
4	138	174	154	190	174	210
5	172	208	192	228	217	253
6	206	242	230	266	260	296

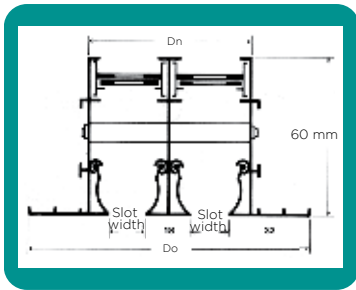


fig 5-2

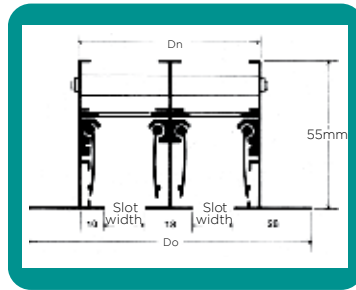


fig 5-3

Construction Details TYPE-A

Construction Details TYPE-B

CORNERS FOR USE WITH LINEAR SLOT DIFFUSER

Ceiling mounted corners available in 90 deg and 135 deg as shown in fig.

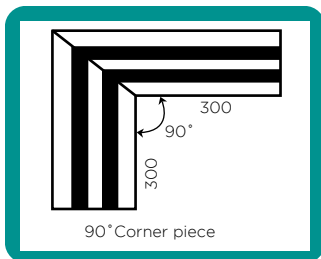


fig 5-4

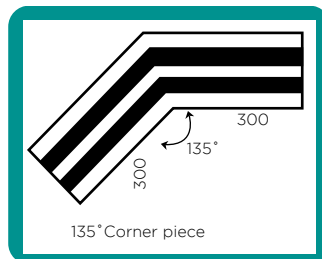


fig 5-5

90° corner ceiling mounted

135° corner ceiling mounted

CURVED SLOT DIFFUSER

GEO GLOBAL brand curved slot diffusers are available.

Curved diffusers are fabricated as per the customer specification.

Minimum radius of curvature is 1000mm.



fig 5-6



fig 5-7

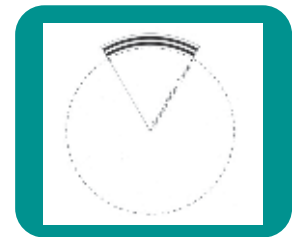


fig 5-8

SPANNE SLOT DIFFUSER 800 SERIES

LINEAR SLOT DIFFUSERS

TABLE S1 SELECTION TABLES FOR LINEAR SLOT DIFFUSER

SLOT WIDTH = 16mm									
NO OF SLOTS	Effective area	Air volume		Total pressure		Throw at terminal velocity of			Noise criteria
						0.75 m/s	0.5 m/s	0.25 m/s	
	m ²	LPS/m	CFM/ft	Pascals	mm of water	m	m	m	
1	0.0056	30	19	20.0	2.0	3.6	5.4	7.8	21
		40	26	36.0	3.7	5.4	6.0	9.6	26
		50	32	56.0	5.7	6.0	7.2	11.4	33
		75	48	127.0	13.0	7.2	9.0	14.4	46
2	0.012	40	26	10.0	1.0	3.6	4.8	8.4	<20
		50	32	16.0	1.6	4.8	6.6	10.2	21
		75	48	35.0	3.6	6.6	8.4	13.2	33
		100	65	62.0	6.3	7.8	10.2	15.6	42
3	0.0168	50	32	7.0	0.7	3.6	6.0	8.4	<20
		75	48	16.0	1.6	5.4	8.4	12.0	22
		100	65	29.0	3.0	7.2	9.6	15.0	30
		125	81	44.0	4.5	9.0	11.4	16.8	37
		150	97	62.0	6.3	10.2	12.6	19.2	43
4	0.0224	75	48	10.0	1.0	4.2	7.2	12.0	<20
		100	65	15.0	1.5	6.6	9.0	14.4	23
		125	81	27.0	2.8	7.8	11.4	16.2	31
		150	97	40.0	4.1	9.6	12.0	18.0	38
		200	129	70.0	7.1	12.0	14.4	20.4	44
5	0.028	100	65	11.0	1.1	4.8	7.2	13.8	<20
		125	81	19.0	1.9	6.6	10.8	16.2	23
		150	97	26.0	2.7	8.4	12.0	17.4	32
		200	129	46.0	4.7	11.4	14.4	20.4	39
		250	162	72.0	7.3	13.2	16.8	25.2	44
6	0.0336	125	81	12.0	1.2	5.4	9.6	16.2	<20
		150	97	19.0	1.9	7.8	11.4	17.4	25
		200	129	32.0	3.3	10.8	14.4	20.4	34
		250	162	51.0	5.2	12.6	16.2	24.0	41
		300	194	72.0	7.3	14.4	17.4	26.4	46

Conditions: Noise criteria is based on 10dB room attenuation Data basis is 1000mm length of linear slot diffuser.

SPANNE SLOT DIFFUSER 800 SERIES

LINEAR SLOT DIFFUSERS

TABLE S2 SELECTION TABLES FOR LINEAR SLOT DIFFUSER

SLOT WIDTH = 20mm									
NO OF SLOTS	Effective area	Air volume		Total pressure		Throw at terminal velocity of			Noise criteria
						0.75 m/s	0.5 m/s	0.25 m/s	
	m ²	LPS/m	CFM/ft	Pascals	mm of water	m	m	m	
1	0.007	30	19	16.0	1.6	3.0	4.5	6.5	17
		40	26	29.0	3.0	4.5	5.8	8.0	22
		50	32	45.0	4.6	5.0	6.0	9.5	29
		75	48	102.0	10.4	6.0	7.5	12.0	42
2	0.014	40	26	8.0	0.8	3.0	4.0	7.0	<15
		50	32	13.0	1.3	4.0	5.5	8.5	17
		75	48	28.0	2.9	5.5	7.0	11.0	29
		100	65	50.0	5.1	6.5	8.5	13.0	38
3	0.021	50	32	6.0	0.6	3.0	5.0	7.0	<15
		75	48	13.0	1.3	4.5	7.0	10.0	18
		100	65	23.0	2.3	6.0	8.0	12.5	26
		125	81	35.0	3.6	7.5	9.5	14.0	33
		150	97	50.0	5.1	8.5	10.5	16.0	39
4	0.029	75	48	8.0	0.8	3.5	6.0	10.0	<15
		100	65	14.0	1.4	5.5	7.5	12.0	19
		125	81	22.0	2.2	6.5	9.5	13.5	27
		150	97	32.0	3.3	8.0	10.0	15.0	39
		200	129	56.0	5.7	10.0	12.0	17.0	40
5	0.036	100	65	9.0	0.9	4.0	6.0	12.0	<15
		125	81	15.0	1.5	5.5	9.0	13.5	19
		150	97	21.0	2.1	7.0	10.0	14.5	28
		200	129	37.0	3.8	9.5	12.0	17.0	35
		250	162	58.0	5.9	11.0	14.0	21.0	40
6	0.042	125	81	10.0	1.0	4.5	8.0	13.5	<15
		150	97	15.0	1.5	6.5	9.5	14.5	21
		200	129	26.0	2.7	9.0	12.0	17.0	30
		250	162	41.0	4.2	10.5	13.5	20.0	37
		300	194	58.0	5.9	12.0	14.5	22.0	42

Conditions: Noise criteria is based on 10dB room attenuation. Data basis is 1000mm length of linear slot diffuser.

SPANNE SLOT DIFFUSER 800 SERIES

LINEAR SLOT DIFFUSERS

TABLE S3 SELECTION TABLES FOR LINEAR SLOT DIFFUSER

SLOT WIDTH = 25mm									
NO OF SLOTS	Effective area	Air volume		Total pressure		Throw at terminal velocity of			Noise criteria
						0.75 m/s	0.5 m/s	0.25 m/s	
	m ²	LPS/m	CFM/ft	Pascals	mm of water	m	m	m	
1	0.009	30	19	13.0	1.3	2.4	3.6	5.2	<15
		40	26	23.0	2.3	3.6	4.0	6.4	19
		50	32	36.0	3.7	4.0	4.8	7.6	26
		75	48	82.0	8.4	4.0	6.0	9.6	39
2	0.018	40	26	6.0	0.6	2.4	3.2	5.6	<15
		50	32	10.0	1.0	3.2	4.4	6.8	<15
		75	48	22.0	2.2	4.4	5.6	8.8	26
		100	65	40.0	4.1	5.2	6.8	10.4	35
3	0.027	50	32	5.0	0.5	2.4	4.0	5.6	<15
		75	48	10.0	1.0	3.6	5.6	8.0	15
		100	65	18.0	1.8	4.8	6.4	10.0	23
		125	81	28.0	2.9	6.0	7.6	11.2	30
		150	97	40.0	4.1	6.8	8.4	12.8	36
4	0.036	75	48	6.0	0.6	2.8	4.8	8.0	<15
		100	65	11.0	1.1	4.4	6.0	9.6	16
		125	81	18.0	1.8	5.2	7.6	10.8	24
		150	97	26.0	2.7	6.4	8.0	12.0	31
		200	129	45.0	4.6	8.0	9.6	13.6	37
5	0.045	100	65	7.0	0.7	3.2	4.8	9.6	<15
		125	81	12.0	1.2	4.4	7.2	10.8	16
		150	97	17.0	1.7	5.6	8.0	11.6	25
		200	129	30.0	3.1	7.6	9.6	13.6	32
		250	162	47.0	4.8	8.8	11.2	16.8	37
6	0.054	125	81	8.0	0.8	3.6	6.4	10.8	<15
		150	97	12.0	1.2	5.2	7.6	11.6	18
		200	129	21.0	2.1	7.2	9.6	13.6	27
		250	162	33.0	3.4	8.4	14.3	16.0	34
		300	194	46.0	4.7	9.6	11.6	17.6	39

Conditions: Noise criteria is based on 10dB room attenuation Data basis is 1000mm length of linear slot diffuser.

Suggested design levels for sound control in air - conditioning system

		Range of sound levels dBA	Range of NC curve NC
Large buildings	Radio and TV studios	25-30	20-25
	Concert and opera halls	25-35	20-30
	Churches	25-35	20-30
	Theaters, Multipurpose halls	25-35	20-30
	Libraries, Museums	25-35	20-30
	Schools, Classrooms	30-40	25-35
	Cinemas	35-45	30-40
	Banquet halls	40-50	35-45
Hospitals	Private rooms	30-40	25-35
	Operation Theaters	35-45	30-40
	Halls, Laboratories	35-45	30-40
	Waiting rooms	40-50	35-45
Offices	Board rooms	25-35	20-30
	Conference rooms	30-40	25-35
	Executive offices	35-45	30-40
	General open offices	35-45	30-40
	Typing pools	40-50	35-45
	Computer rooms	45-65	40-55
Hotels, Restaurants and stores	Rooms	30-40	25-35
	Restaurants	35-45	30-40
	Halls, lobbies	35-45	30-40
	Stores	40-50	35-45
	Supermarkets	45-55	40-50
Residential	Single Family homes (rural and suburban)	25-35	20-30
	Single Family homes (urban)	30-40	25-35
	Apartment buildings	35-45	30-40
Factories	Light machinery, assembly lines	50-70	45-65
	Foundaries, heavy machinery	60-80	55-75
Damage risk criteria		90	85

CONVERSION FACTORS REFERENCE TABLE

Parameter (1)	Imperial unit (2)	Metric unit (3)		Conversion from Imperial to Metric multiply by (4)	Conversion from Metric to Imperial multiply by (5)
Volume	cubic feet per minute(cfm)	litres per second	l/s	0.4719	2.119
	cubic feet per minute(cfm)	cubic metres per second	m ³ /s	0.0004719	2119
	gallons per minute (U S)	litres per second	l/s	0.06309	15.85
	cubic foot	litres	l	28.3168	0.03531
	cubic inch	cubic centimeter	cm ³	16.3871	0.06102
	gallon (U S)	litres	l	3.785	0.2642
	gallon (imperial)	litres	l	4.546	0.212
Velocity	feet per second	meters per second	m/s	0.3048	3.2808
	feet per minute	meters per second	m/s	0.00508	196.85
	miles per hour	meters per second	m/s	0.44704	2.2369
Pressure	Inch of water column	Kilopascal	Kpa	0.2486	4.0219
	foot of water column	Kilopascal	Kpa	2.9837	0.3352
	inch of mercury column	Kilopascal	Kpa	3.3741	0.2964
	Pounds per square inch	Kilopascal	Kpa	6.8948	0.145
Length	inch	millimeter	mm	25.4	0.0394
	foot	millimeter	mm	304.8	0.00328
	foot	meter	m	0.3048	3.2808
	yard	meter	m	0.9144	1.0936
Force	pound force	newton	N	4.4482	0.2248
	Kilogram force	newton	N	9.8067	0.102
Torque	pound-force inch	newton meter	N.m	0.113	8.8495
	pound-force foot	newton meter	N.m	1.3558	0.7376
Area	Square foot	Square meter	m ²	0.0929	10.764
	Square inch	Square millimeter	mm ²	645.16	0.00155