

# OUR COMPANY

SHINKO AIRCON is one of the leading Manufacturing, Import & Export of HVAC (Heating, Ventilation and Air Conditioning) equipments in INDIA. It was founded with a single-minded objective; to meet the growing needs of indoor environment quality in some of the world's harshest climates. Driven by its mission "Total Customer Satisfaction".

Shinko Aircon manufactures a wide range of air units, such as air diffuser, air grille, air louver, air damper and other HVAC products. Capable of providing excellent air distribution and fit in ac unit system and modular HVAC ceiling systems. Shinko air outlets has superior architectural appearance and is excellent for applications

































#### SQUARE CEILING DIFFUSER

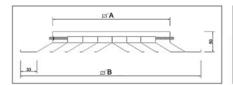


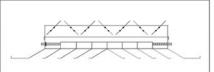




(Ceiling replacement type)

- \* The directions of discharge air can be selected to meet the requirements of room with 1 to 4 way.
- \* Supply air can be oriented to vertically be blades of 1,2,3,4 directions.
- \* They can be used both for supply and return applications.
- \* Depending an architectural demands the face can be square or rectangular.
- \* They are suitable for using in rooms with heights up to 4m.
- \* Material: They can be made of extruded aluminum profiles, or aluminum sheet.
- \* Accessories: Damper, Plenum box.
- \* Mount: by screws, by clips.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.





#### Selection Tables

Standard sizes AxA(mm)	BxB(mm)	Effective area(m2)	Air volume(m3/h)	Throw Max. (m)
150x150	295x295	0.014	119	0.90
225x225	370x370	0.028	240	1.40
300x300	445x445	0.049	400	1.70
375x375	520x520	0.069	600	2.00
450x450	595x595	0.097	840	2.40
525x525	670x670	0.130	1120	2.55
600x600	745x745	0.169	1460	2.70

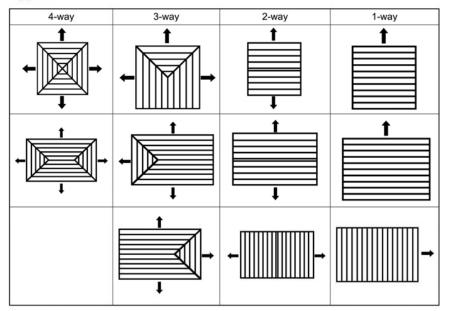
Data were chosen when the air velocity is 2.4m/s and the velocity at throw distance is 0.5m/s





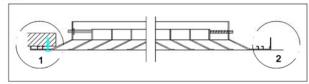
#### **SQUARE CEILING DIFFUSER**

#### **Types**

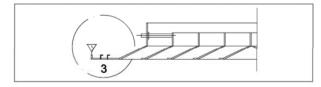


#### Mounting

- 1. Screw mounting
- 2. Lay-on mounting



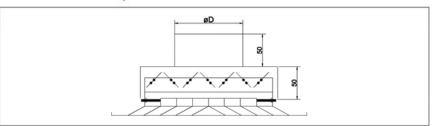
3. Clip-in mounting





#### SQUARE CEILING DIFFUSER

#### Plenum box / Adaptor



D=95, 145, 195, 245, 295, 345

#### Technical data

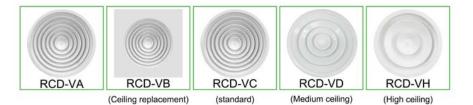
S	SCD-VA / V	В				105	Α	IR V	OLUI	ME(n	13/h)	22			
Size (mm)	Effective Area(m2)		100	200	300	400	500	600	700	800	900	1000	2000	3000	4000
		Vk(m/s)	2	4	6.4	102	2	-	41	2.5	:2:	-	-	2	926
450-450	0.0400	Pt(pa)	3.4	9.6	24.7	-	-	-	-		-	-	-	-	-
150x150	0.0138	Lt(m)	-	1.6	2.4	-	-	-	-	-	-	-	-	-	-
		NR	-	23	33	-	-	-	-	-	-	-	-	-	-
		Vk(m/s)	-	2	2.9	4	4.8	-	-	-	-	-	-	-	-
225x225	0.0277	Pt(pa)	-	2.4	4.7	9.6	13.9	-	-	-	-	-	-	-	-
223,223	0.0211	Lt(m)	-	1.1	1.7	2.3	2.5	-	-	-	-	-	-	-	-
		NR	-	-	20	25	30	-	-	-	-	-	-	-	-
		Vk(m/s)	-	-	1.8	2.4	2.8	3.5	4	4.7	5.4	6	-	-	-
300x300	0.0486	Pt(pa)	-	-	2	3.5	4.7	7.5	9.6	13	17.6	21.7	-	-	-
3002300	0.0400	Lt(m)	-	-	1.3	1.7	2	2.45	2.5	3.1	3.4	4	-	-	-
		NR	-	-	-	16	21	25	28	31	34	36	-	-	-
		Vk(m/s)	-	-	-	1.6	2	2.4	2.7	3	3.4	4	-	-	-
375x375	0.0694	Pt(pa)	-	-	-	1.5	2.4	3.5	4.7	5.4	7	9.6	-	-	-
0700070	0.0034	Lt(m)	-	-	-	1.5	1.7	2.1	2.4	2.5	2.7	3.2	-	-	-
		NR	-	-	-	-	15	1.8	22	24	26	37	-	-	-
		Vk(m/s)	-	-	-	-	-	1.7	2	2.3	2.1	2.7	5.5	-	-
450x450	0.0972	Pt(pa)	-	-	-	-	-	1.5	2.4	3.2	3.5	4.7	19	-	-
4503450	0.0972	Lt(m)	-	-	-	-	-	1.7	2.3	2.3	2.5	2.6	5	-	-
		NR	-	-	-	-	-	-	16	18	21	24	37	-	-
		Vk(m/s)	-	-	-	-	-	-	-	1.8	2	2.2	4.2	6.4	-
525x525	0.1296	Pt(pa)	-	-	-	-	-	-	-	2	2.4	2.9	10.6	24.7	-
323,323	0.1290	Lt(m)	-	-	-	-	-	-	-	2	2.3	2.5	4.3	7	-
		NR	-	-	-	-	-	-	-	14	16	18	33	42	-
		Vk(m/s)	-	-		-	-	-		-	-	1.6	3	4.7	-
600x600	0.1692	Pt(pa)	-	-	-	-	-	-	-	-	-	1.5	5.4	13	-
000000	0.1002	Lt(m)	-	-		-	-	-	-	-	-	2.3	4	6.5	-
		NR	-			-	-	-	-	-	-	15	28	36	



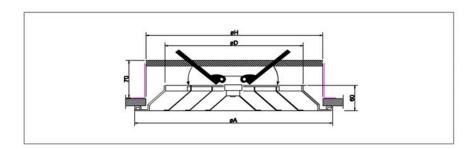


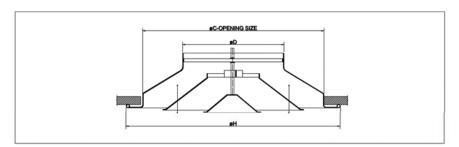


#### **ROUND CEILING DIFFUSER**



- \* The circular design guarantees an uniform radial discharge in supply air applications.
- \* They can be used both for supply and return applications.
- \* They are suitable for using in rooms with heights up to 4m(A,B,C designs), 6m(D design). 8M(H design)
- \* Material: They are made of aluminum sheet.
- \* Accessories: Damper ( butterfly damper in plastic or steel manual control; radial-shape damper screw control.)
- \* Mounting: Screw type.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.







#### **ROUND CEILING DIFFUSER**

#### **Selection Tables**

Size(mm)	SCD-VA, VC ØD(mm)	SCD-VA, VC ØA(mm)	SCD-VB ØA(mm)	Air volume (m3/h)	Throw Max. (m)
150	145	250	595x595	135	0.8
200	195	300	595x595	240	1.3
250	245	350	595x595	360	1.55
300	295	400	595x595	500	1.8
350	345	450	595x595	666	2.2
400	395	500	595x595	810	2.4
450	445	550	595x595	1050	2.7
500	495	600	595x595	1215	2.9

Size(mm)	SCD-VD ØD(mm)	SCD-VD ØA(mm)	Air volume (m3/h)	Throw Max. (m)
150	145	300	148	0.9
200	195	350	260	1.5
250	245	400	395	1.8
300	295	450	560	2.3
350	345	500	750	2.8

Size(mm)	SCD-VH ØD(mm)	SCD-VH ØA(mm)	Air volume (m3/h)	Throw Max. (m)
150	145	325	160	1.4
200	195	430	285	2.3
250	245	530	445	2.7
300	295	640	640	3.1
350	345	720	865	3.6

Data were chosen when the air velocity is 2.5m/s and the velocity at throw distance is 0.25m/s.







### Round Ceiling Diffuser Data

RC	D-VA, VB,	VC	AIR VOLUME(m3/h)												
Size (mm)	Effective Area(m2)		150	200	300	400	500	600	700	800	900	1000	1400	2000	2500
		Vk(m/s)	3.8	5.2	7.8	-	-	-	-	-	-	-	-	-	-
450	0.011	Pt(pa)	15	24	65	-	-	-	-	-	-	-	-	-	-
150	0.011	Lt(m)	2.2	2.8	4.5	-	-	-	-	-	-	-	-	-	-
		NR	-	28	48	-	-	-	-	-	-	-	-	-	-
		Vk(m/s)	2.3	2.8	4.5	6.0	7.4	-	-	-	-	-	-	-	-
200	0.000	Pt(pa)	5.4	7.9	20	30	60	-	-	-	-	-	-	-	-
200	0.020	Lt(m)	1.6	2.2	3.4	4.5	4.5	-	-	-	-	-	-	-	-
		NR	-	-	27	36	48	-	-	-	-	-	-	-	-
		Vk(m/s)	-	-	2.8	3.8	4.6	5.5	6.5	7.5	-	-	-	-	-
250	0.031	Pt(pa)	-	-	7.9	16	21	26	41	62	-	-	-	-	-
250	0.031	Lt(m)	-	-	2.7	3.1	4.5	5.4	6.2	4.5	-	-	-	-	-
		NR	-	-	-	-	30	36	42	48	-	-	-	-	-
		Vk(m/s)	-	-	-	2.5	3.1	3.7	4.3	5.0	5.5	6.2	-	-	-
300	0.046	Pt(pa)	-	-	-	6.5	9	15	19	22	26	34	-	-	-
300	0.046	Lt(m)	-	-	-	2.8	3.6	4.7	5.3	6	7	6.2	-	-	-
		NR	-	-	-	-	-	25	30	35	38	42	-	-	-
		Vk(m/s)	-	-	-	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7.0	-	-
250	0.055	Pt(pa)	-	-	-	4.2	6.5	8	13	17	20	22	51	-	-
350	0.055	Lt(m)	-	-	-	2.6	3.2	3.7	4.7	5.2	6	7	9.8	-	-
		NR	-	-	-	-	-	-	24	27	33	36	47	-	-
		Vk(m/s)	-	-	-	-	2.0	2.4	2.8	3.3	3.6	4.0	5.5	-	-
400	0.070	Pt(pa)	-	-	-	-	4.2	6.1	7.9	11	14	17	26	-	-
400	0.070	Lt(m)	-	-	-	-	2.8	3.4	4.2	4.7	5.2	6	9	-	-
		NR	-	-	-	-	-	-	-	23	26	30	42	-	-
		Vk(m/s)	-	-	-	-	-	-	2.3	-	2.8	3.1	4.2	6.0	-
450	0.089	Pt(pa)	-	-	-	-	-	-	5.4	2.4	7.9	9	18	30	7.8
450	0.003	Lt(m)	-	-	-	-	-	-	3.4	6.1	4.6	5.1	8	10.5	65
		NR	-	-	-	-	-	-	-	4.2	-	23	34	46	13
		Vk(m/s)	-	-	-	-	-	-	-	2.0	-	2.5	3.6	5.0	6.2
500	0.108	Pt(pa)	-	-	-	-	-	-	-	4.2	2.3	6.5	14	22	34
500	0.108	Lt(m)	-	-	-	-	-	-	-	3.6	5.2	4.6	7	10	12
		NR	-	-	-	-	-	-	-	-	4.2	-	28	41	48



### **Round Ceiling Diffuser Data**

	RCD-VD							AIF	OV S	LUM	E(m3/	h)			
Size (mm)	Effective Area(m2)		200	300	400	500	600	700	800	900	1000	1400	2000	2500	3000
		Vk(m/s)	3.7	5.8	7.8	-	-	-	-	-	-	-	-	-	-
450	0.044	Pt(pa)	15	36	63	-	-	-	-	-	-	-	-	-	-
150	0.011	Lt(m)	0.7	1.15	1.4	-	-	-	-	-	-	-	-	-	-
		NR	25	38	48	-	-	-	-	-	-	-	-	-	-
		Vk(m/s)	2.1	3.2	4.2	5.2	6.1	7.3	-	-	-	-	-	-	-
200	0.000	Pt(pa)	4.7	10	19	29	40	56	-	-	-	-	-	-	-
200	0.020	Lt(m)	-	0.8	1.15	1.35	1.7	1.9	-	-	-	-	-	-	-
		NR	-	22	31	38	45	52	-	-	-	-	-	-	-
		Vk(m/s)	-	2.2	2.8	3.5	4.2	4.9	5.6	6.2	7.2	-	-	-	-
250	0.031	Pt(pa)	-	5.1	7.9	13	19	26	25	43	53	-	-	-	-
250	0.031	Lt(m)	-	0.65	0.85	1.15	1.4	1.6	1.8	2.1	2.4	-	-	-	-
		NR	-	-	21	27	33	38	44	47	50	-	-	-	-
		Vk(m/s)	-	-	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7.0	-	-	-
200	0.040	Pt(pa)	-	-	4.2	6.5	9	13	1.7	22	26	51	-	-	-
300	0.046	Lt(m)	-	-	0.72	0.92	1.1	1.35	1.5	1.7	1.8	2.7	-	-	-
		NR	-	-	-	-	24	29	34	37	42	-	-	-	-
		Vk(m/s)	-	-	-		2.2	2.6	3.0	3.4	3.7	5.2	-	-	-
350	0.055	Pt(pa)	-	-	-		5.1	7.3	9	12	15	29	7.5	-	-
330	0.055	Lt(m)	-	-	-		0.9	0.9	1.4	1.5	1.6	2.4	59	-	-
		NR	-	-	-		-		26	30	37	45	3.5	-	-

	RCD-VH							AIF	≀ VO	LUM	E(m3/	/h)			
Size (mm)	Effective Area(m2)		200	300	400	500	600	700	800	900	1000	1400	2000	2500	3000
		Vk(m/s)	3.3	4.6	6.3	-	-	-	-	-	-	-	-	-	-
150	0.011	Pt(pa)	30	49	85	-	-	-	-	-	-	-	-	-	-
150	0.011	Lt(m)	3.4	4.5	6.0	-	-	-	-	-	-	-	-	-	-
		NR	30	41	52	-	-	-	-	-	-	-	-	-	-
		Vk(m/s)	-	2.6	3.5	4.4	5.6	-	-	-	-	-	-	-	-
200	0.020	Pt(pa)	-	17	31	49	68	-	-	-	-	-	-	-	-
200	0.020	Lt(m)	-	1.8	2.9	3.8	4.7	-	-	-	-	-	-	-	-
		NR	-	22	31	45	67	-	-	-	-	-	-	-	-
		Vk(m/s)	-	-	2.3	2.9	3.4	4.0	4.5	5.1	5.9	-	-	-	-
250	0.031	Pt(pa)	-	-	13	20	25	31	37	46	64	-	-	-	-
230	0.031	Lt(m)	-	-	1.3	2.1	2.6	3.1	3.6	3.9	4.7	-	-	-	-
		NR	-	-	14	23	27	31	36	40	46	-	-	-	-
		Vk(m/s)	-	-	-	2.0	2.4	2.6	2.8	3.5	4.0	4.8	-	-	-
300	0.046	Pt(pa)	-	-	-	11	14	16	18	25	34	68	-	-	-
300	0.040	Lt(m)	-	-	-	0.8	1.4	1.7	2.1	2.3	2.8	4.2	-	-	-
		NR	-	-	-	15	20	24	27	30	35	45	-	-	-
		Vk(m/s)	0	2	2	-	T.	2.0	2.3	2.7	3.1	4.0	5.9	2	2
350	0.055	Pt(pa)	~	7-	1-	-	1-	11	14	18	22	38	80	-	-
330	0.055	Lt(m)	-	-	-	-	-	0.8	0.9	1.1	1.7	2.9	3.8	-	-
,		NR	12	2	-		12	16	2	24	27	35	48	-	2





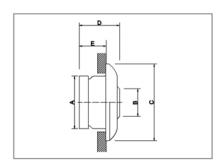


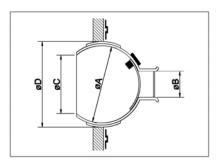
#### JET NOZZLE





- \* Jet nozzles are developed for large and high area, such as airports, shopping centers, show centers, theaters etc.
- \* It ensures a long throw(25m) at high outlet velocities.
- \* The ball can be oriented 30° angle.
- \* They are used for cooling or heating with the characteristic of orientation.
- \* Rotated by manual or motor control.
- \* Material: They are made of aluminum sheet.
- \* Accessories: Damper ( butterfly damper in plastic or steel manual control; radial-shape damper screw control.)
- \* Mounting: Ceiling or wall mounting by screws, or collected into a circular duct.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.







#### Jet Nozzle Size Data

JD-VA			_	D	_
size(mm)	Α	В	С	D	E
125	120	61	172	96	72
150	145	75	200	113	83
160	155	75	200	113	83
200	195	105	265	142	107
250	245	128	314	179	135
315	310	165	390	230	174
350	345	185	433	251	186
400	395	210	495	285	218
450	445	235	559	316	235
500	495	256	618	350	259
630	625	323	779	440	335

JD-VB	Δ.	В		Б
size(mm)	_ A	В	С	D
160	145	80	115	160
200	195	100	160	220
250	245	125	215	260
315	310	162	255	320
400	395	200	345	410

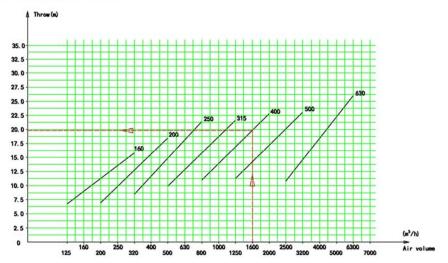
JD-VA			Cuitable	round duct	diameter		
size(mm)			Sullable	round duct	diameter		
125	200	250	315	500	630	800	1000
150	•	•					
160			•	•	•	•	
200			•	•	•	•	
250				•	•	•	
315				•	•	•	
350					•	•	
400					•	•	
450						•	
500						•	•
630							•

JD-VB	Suitable round duct diameter							
size(mm)	315	500	630	800				
160	•	•	•	•				
200		•	•	•				
250		•	•	•				
315		•	•	•				
400			•	•				

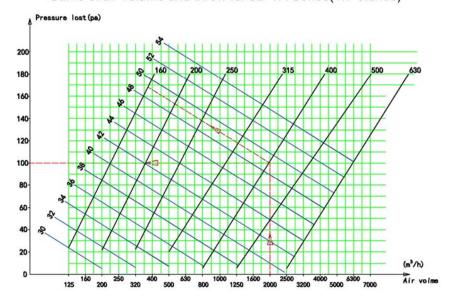




#### **Jet Nozzle Data**



Curve of air volume and throw for JD-VA Series(Vx=0.5m/s)



Curve of air volume ,pressure lost and noise for JD-VA Series(Vx=0.5m/s)



#### Jet Nozzle Spec. data (JD-VA)

Size(mm)	Effective area(m2)	Air volume(m3/h)	Pressure lost (Pa)	Noise dB(A)	Throw (m)
		100	18.5	26	10.8
		125	22.8	30	13.5
160	0.005	160	56	34	17.4
		200	82	39	22.2
		250	116	43	27.3
		160	10	30	12.7
		200	21	33	16
200	0.009	250	54	38	20
		320	82	41	25.7
		400	116	45	32.2
		250	11	29	12.9
		320	22	34	16.9
250	0.0145	400	55	39	25.2
		500 81 4		42	31.5
		630	116	46	37.5
		400	12.8	26	16
		500	21	34	20
315	0.023	630	46	38	25
		800	68	42	30.2
		1000	94	46	37
		630	8	32	17.6
		800	17	36	22.2
400	0.0415	1000	31	39	28.4
		1250	58	43	34
		1600	80	46	40
		1000	5	30	18.3
		1250	12	36	22.8
500	0.0642	1600	28.8	41	28.9
		2000	51	44	34.8
		2500	70	50	41.2
		2000	6	36	17.5
		2500	12.5	41	21.8
630	0.127	3200	29.4	43	27.6
		4000	52	46	35.4
		5000	78	49	44.3

Data were chosen when the air velocity is 2.5m/s and the velocity at throw distance is 0.25m/s.







### Jet Nozzle Spec. data (JD-VB)

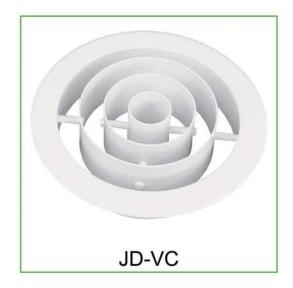
Size(mm)	Effective area(m2)	Air volume(m3/h)	Pressure lost (Pa)	Noise dB(A)	Throw (m)
		100	19	26	10.8
		125	23	30	13.5
160	0.0033	160	58	34	17.4
		200	85	39	22.2
		250	119	43	27.3
		160	12	30	12.7
		200	23	33	16
200	0.0079	250	56	38	20
		320	84	41	25.7
		400	117	45	32.2
		250	11	29	12.9
		320	22	34	16.9
250	0.0122	400	55	39	25.2
		500	81	42	31.5
		630	116	46	37.5
		400	12.8	26	16
		500	21	34	20
315	0.0214	630	46	38	25
		800	68	42	30.2
		1000	94	46	37
		630	8	32	17.6
		800	17	36	22.2
400	0.0415	1000	31	39	28.4
		1250	58	43	34
		1600	80	46	40

Data were chosen when the air velocity is 2.5m/s and the velocity at throw distance is 0.25m/s.



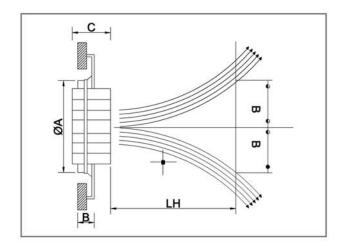


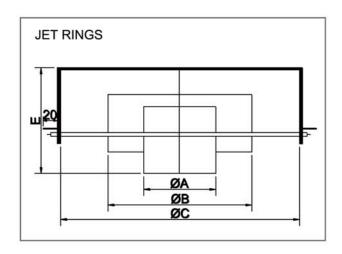
### **JET NOZZLE**





- \* They are used for long throw conditions with a 60° rotation angle.
- \* They ensure a high air current in reduced pressure loss.
- \* JD-VF has an inner core with a 360°horizontal rotation angle.
- \* They can be multi design with a panel.
- \* Material: They are made of aluminum sheet.
- \* Mounting: Ceiling or wall mounting by screws, or collected into a circular duct.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.





JD-VC Selection Table (JD-VC1/JD-VC2)

10.75			
Α	В	C(JD-VC1)	C(JD-VC2)
150	50	60	140
200	50	60	140
250	50	60	140
300	50	60	140
350	50	60	140
400	50	60	140



### RING JET DIFFUSER

### **JD-VF Size Data**

Sizw	Α	В	С	D	Е
150	95	-	150	155	145
200	95	150	190	205	155
250	95	180	250	260	155
315	100	200	285	295	155
350	100	225	335	340	155

Selection Table(JD-VC,JD-VF)

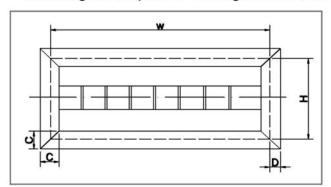
Selec	tion i	able	1D-4C	,JD-V	r)					
Neck Size (mm)	Effective Area(m2)	Neck Vel .(m/s)	2	3	4	5	6	7	8	10
		МЗН	127	191	254	318	382	445	509	636
150	150 0.018	Throw(m)	2.6	4	5.5	6.8	8.2	9.6	11	15.2
		NC	12	20	24	30	37	43	47	50
		МЗН	226	339	452	565	679	792	905	1131
200	0.031	Throw(m)	3.8	5.6	7.4	9.2	11	13	14.7	20.5
		NC	1.6	20	24	30	37	43	47	50
	МЗН	353	530	707	884	1060	1237	1414	1767	
250	0.049	Throw(m)	4.6	7	9.5	11.6	13.8	16.2	18.5	25.4
		NC	-	:=:	22	27	32	36	40	44
		МЗН	509	763	1018	1272	1527	1781	2036	2545
300	0.071	Throw(m)	5.6	8.4	11.2	14	16.8	19.5	22.2	31
		NC	:=		23	27	32	36	40	44
		МЗН	693	1039	1385	1732	2078	2425	2771	3464
350	0.096	Throw(m)	6.5	9.6	13	16.3	19.5	22.6	25.6	35.5
		NC	s <del>.</del>		24	28	34	37	41	45
		МЗН	905	1358	1810	2260	2715	3168	3619	4525
400	0.126	Throw(m)	7.4	10.8	15.2	18.8	22.4	26.4	29.4	33.1
		NC	20	22	25	35	39	44	51	60

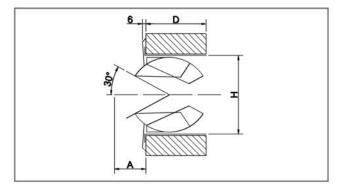


### **DRUM JET DIFFUSER**



- \* Drum jet diffuser is designed to meet the requirements of low pressure drop, quiet operations, long distance throw and good air spread in large areas.
- \* The air flow direction can be oriented up and down by rotating the cylindrical inner casing in a 60°angle.
- \* The air flow direction can be oriented left and right by adjusting the blades on the inner casing.
- \* Material: They are made of aluminum sheet.
- \* Mounting: wall mounting by screws, or collected into a rectangular or circular duct.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.





### Slection table

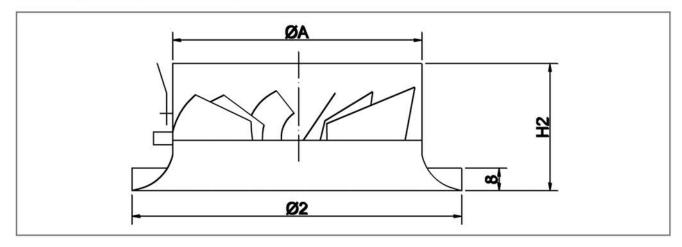
Standard size (mm)	Air Volume(m3)	Throw(m)
300x150	350 ~ 800	6 ~ 16
375x150	450 ~ 1100	6 ~ 17
450x150	500 ~ 1300	6 ~ 17
600x150	600 ~ 1900	6 ~ 20
750x150	750 ~ 2300	6 ~ 21
900x150	800 ~ 2800	6 ~ 23
600x250	1700 ~ 3500	18 ~ 33
750x250	2000 ~ 4500	18 ~ 35
900x250	2200 ~ 5000	18 ~ 38
1050x250	2500 ~ 6000	18 ~ 40
1200x250	3000 ~ 7000	18 ~ 43
1350x250	3200 ~ 7500	18 ~ 43
1500x250	3400 ~ 8500	18 ~ 43



### **ROUND SWIRL DIFFUSER**



- \* They are used as supply diffuser on air duct systems
- \* They are ideal for the place with large space needs high air volume
- \* The blades distance is adjustable for cooling and heating.
- \* Accessories: slide damper
- \* Material: Made of aluminium sheet.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.



### Selection table:

MOTEL	Α	Q2	H2	Air Flow Volume(m3/h)	Throw (m)
200	200	300	145	450	3.5 ~ 17.1
250	250	360	166	750	3.6 ~ 17.9
315	315	465	200	2000	3.7 ~ 18.7
400	400	568	236	2500	3.8 ~ 19.2
500	500	718	260	3000	3.9 ~ 19.6
630	600	878	304	3500	4.0 ~ 19.8



# Spec. Data (SD-VC)

Model			Technic	cal data	for heati	ng, blade	es with e	qual dist	ance				
	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	555	830	1107	1384	1660	1938	2210	2491	2780		
	Pressure	Pa	13	27	43	62	83	108	135	163	192		
	Noise level	Db(A)	35	38	41	44	47	50	53	56	59		
000	Technical d	ata for co	for cooling, blades with max opening										
200	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	555	830	1107	1384	1660	1938	2210	2491	2780		
	Pressure	Pa	25	53	88	130	182	239	303	375	451		
	Noise level	Db(A)	36	39	42	45	49	53	56	60	63		
	Max Throw	m	3.5	4.9	6.6	8.1	9.8	11.9	13.6	15.3	17.1		
	Technical data for heating, blades with equal distance												
	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	348	520	65	869	1043	1216	1389	1563	1738		
	Pressure	Pa	12	23	37	53	71	91	112	135	160		
	Noise level	Db(A)	36	39	42	45	48	51	54	57	60		
250	Technical d	ata for c	ooling, bla	ades with	max ope	ening			3				
	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	348	520	65	869	1043	1216	1389	1563	1738		
	Pressure	Pa	20	42	70	104	143	187	237	292	351		
	Noise level	Db(A)	37	40	43	46	50	53	56	59	63		
	Max Throw	m	3.6	5.4	7.2	9.0	10.8	12.6	14.4	16.2	17.9		
		, , , , , , , , , , , , , , , , , , ,	Technic	cal data	for heati	ng, blade	es with e	qual dist	ance				
	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	555	830	1107	1384	1660	1938	2210	2491	2780		
	Pressure	Pa	13	27	43	62	83	108	135	163	192		
	Noise level	Db(A)	35	38	41	44	47	50	53	56	59		
315	Technical d	ata for c	ooling, bla	ades with	max ope	ening							
0.0	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	555	830	1107	1384	1660	1938	2210	2491	2780		
	Pressure	Pa	25	53	88	130	182	239	303	375	451		
	Noise level	Db(A)	36	39	42	45	49	53	56	60	63		
	Max Throw	m	3.7	5.6	7.5	9.3	11.2	13.1	14.9	16.8	18.7		
			Technic	cal data	for heati	ng, blade	es with e	qual dist	ance				
	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	895	1343	1791	2238	2686	3581	3529	4029	4476		
	Pressure	Pa	16	31	50	73	99	128	160	195	231		
	Noise level	Db(A)	33	37	41	46	51	56	61	66	71		
400	Technical d	ata for co	ooling, bla	ades with	max ope	ening		U 93					
	Velocity	m/s	2	3	4	5	6	7	8	9	10		
	Air Flow	m3/h	895	1343	1791	2238	2686	3581	3529	4029	4476		
	Pressure	Pa	32	66	111	165	229	302	384	474	573		
	Noise level		34	38	43	48	53	58	63	68	73		
	Max Throw	m	3.8	5.8	7.7	9.6	11.5	13.5	15.4	17.3	19.2		



# Spec. Data (SD-VC)

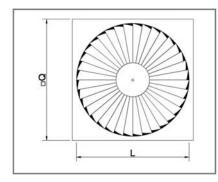
Model			Techni	cal data	for heati	ng, blade	es with e	qual dist	ance			
	Velocity	m/s	2	3	4	5	6	7	8	9	10	
	Air Flow	m3/h	1402	2103	2803	3503	4205	4906	5607	6308	7006	
	Pressure	Pa	18	35	58	84	115	149	186	227	270	
	Noise level	Db(A)	32	36	40	45	50	55	60	65	70	
500	Technical d	echnical data for cooling, blades with max opening										
300	Velocity	m/s	2	3	4	5	6	7	8	9	10	
	Air Flow	m3/h	1402	2103	2803	3503	4205	4906	5607	6308	7006	
	Pressure	Pa	39	81	136	203	282	372	473	585	707	
	Noise level	Db(A)	33	37	42	47	52	57	62	67	72	
	Max Throw	m	3.9	5.9	7.8	9.8	11.7	13.7	15.7	17.6	19.6	
			Techni	cal data	for heati	ng, blade	es with e	qual dist	ance			
	Velocity	m/s	2	3	4	5	6	7	8	9	10	
	Air Flow	m3/h	2229	3344	4458	5573	6687	7801	8916	10031	11145	
	Pressure	Pa	20	40	66	97	132	172	216	263	314	
	Noise level	Db(A)	38	42	46	51	56	61	66	71	76	
630	Technical d	lata for co	ooling, bla	ades with	max ope	ening			0			
	Velocity	m/s	2	3	4	5	6	7	8	9	10	
	Air Flow	m3/h	2229	3344	4458	5573	6687	7801	8916	10031	11145	
	Pressure	Pa	47	98	166	249	346	457	582	720	871	
	Noise level	Db(A)	39	43	48	53	58	63	68	73	78	
	Max Throw	m	4.0	5.9	7.9	9.9	11.9	13.9	15.9	17.8	19.8	

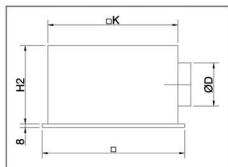


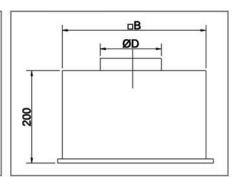
# **Square Swirl Diffuser**



- \* They are used as supply diffuser on the ceiling.
- \* They are ideal for the place needs high air volume.
- \* They can be used between 2.6m and 4m height.
- \* Accessories: Plenum box, round slide damper.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.





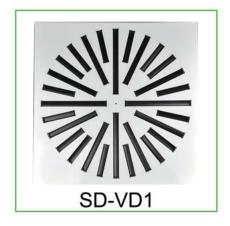


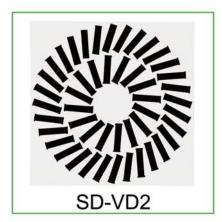
### **Selection Tables**

Standard size	Effective Area (m2)	В	D	L	Q	H2	К	Air volume(m3/h)
300x300	0.009	280	148	250	295	250	290	145-200
400x400	0.018	364	198	350	395	295	372	180-400
500x500	0.025	462	198	450	495	295	476	215-520
595x595	0.030	559	248	538	595	345	567	290-600
600x600	0.030	559	248	538	598	345	567	290-600
625x625	0.030	559	248	538	623	345	567	290-600



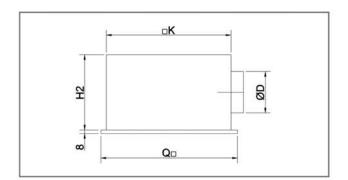
# **Square Swirl Diffuser**

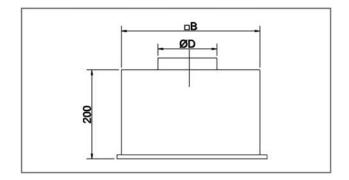






- \* They are used as supply and return diffuser on the ceiling.
- \* They are with adjustable black plastic blades
- \* They can be used between 2.6m and 4m height.
- \* Accessories: Plenum box, round slide damper.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.



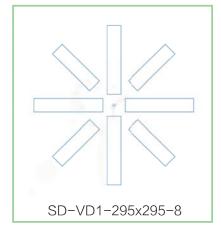


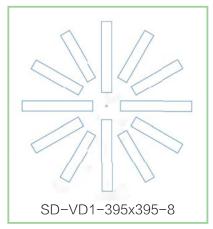
### **Selection Tables**

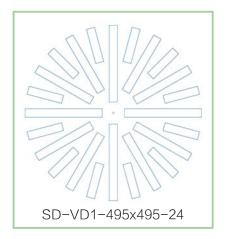
Model	Standard size	В	D	L	Q	H2	К	Air volume(m3/h)
SD-VD1	295x295-8	280	148	250	295	250	290	55-250
SD-VD1	395x395-12	364	198	350	395	295	372	100-400
SD-VD1	495x495-24	462	198	450	495	295	476	140-470
SD-VD1	595x595-28	559	248	538	595	345	567	250-730
SD-VD2	295x295-10	280	148	250	295	250	290	150-410
SD-VD2	395x395-12	364	198	350	395	295	372	170-490
SD-VD2	495x495-24	462	198	450	495	295	476	300-980
SD-VD2	595x595-48	559	248	538	595	345	567	360-1380
SD-VD5	595x595-32	559	248	538	595	345	567	420-1600

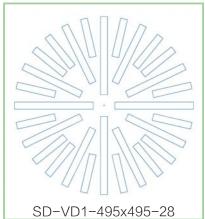


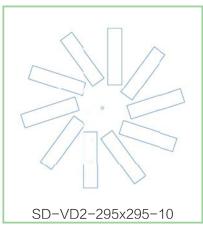
### **SLOT DIFFUSER**

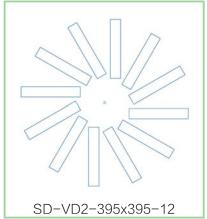


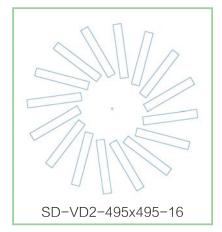


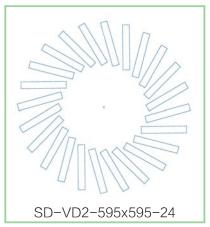


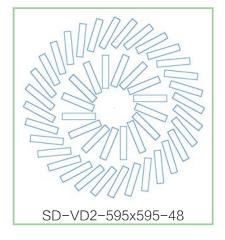


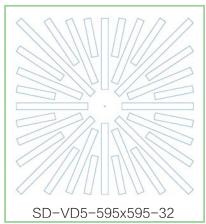






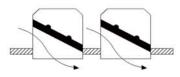


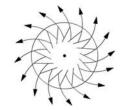






#### Inwards swirl

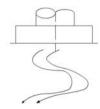




All air control blades set to external swirl

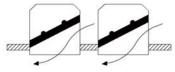
Biade position 1

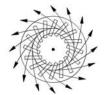
Biade position 2





#### Outwards swirl

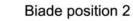




Air control blades set to external and haif internal to swirl



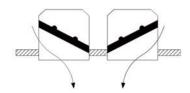
Biade position 1







#### Vertical supply



Air flow is orientated in two direction by biades

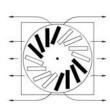


Biade position 1



Biade position 2

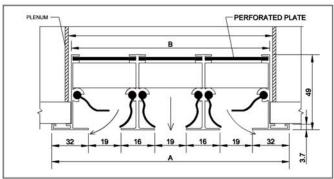




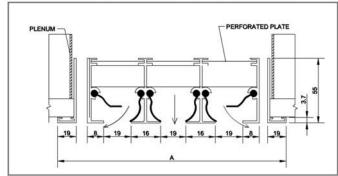


### Slot Diffuser

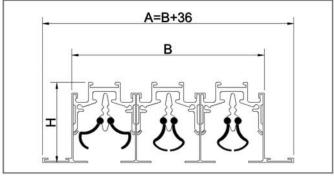




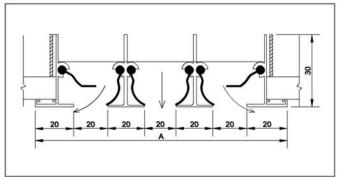








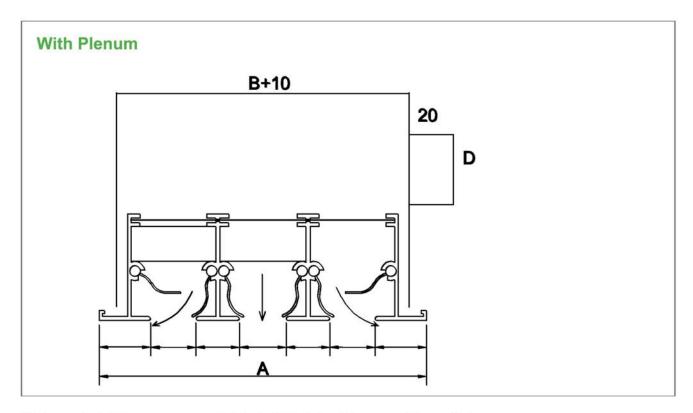








### **SLOT DIFFUSER**



- \* These slot diffusers are available in 1-6 slots. 19mm or 25mm slot size.
- \* They can be mounted on wall or ceiling.
- \* They can be used in rooms with ceiling heights from approx. 2.6 m to 4.0 m
- \* The direction of the air discharge can be adjusted by rotating the air control blades.
- \* Accessories: Plenum box.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.

### LSD-VA

Slot Distance	Slots	Α	В	Н
	1	84	40	49
	2	120	76	49
20	3	155	111	49
20	4	191	147	49
	5	226	182	49
	6	262	218	49
	1	89	45	49
	2	130	86	49
25	3	170	126	49
25	4	211	167	49
	5	251	207	49
	6	292	248	49



# Size Table

## LSD-VB

Slots	Slot Distance	Α	В	Н
2	20	144	94	55
2	25	154	104	55

## LSD-VC

Slot Distance	Slots	Α	В	Н
	1	75	40	45
	2	114	79	45
20	3	153	118	45
20	4	192	157	45
	5	231	196	45
	6	270	235	45
	1	80	45	45
	2	124	89	45
25	3	168	133	45
25	4	212	177	45
	5	256	221	45
	6	300	265	45

### LSD-VD

Slat Distance	Slats	Α	В	Н
	1	60	36	30
	2	100	76	30
20	3	140	116	30
20	4	180	156	30
	5	220	196	30
	6	260	226	30
	1	65	41	30
	2	110	86	30
25	3	155	131	30
25	4	200	176	30
	5	245	221	30
	6	290	266	30



# SLOT DIFFUSER

# Performance Data (20mm slot)

				W						
	Airflow(m3/h)	33	66	106	140	173	206	240	279	312
1 slot	Static pressure	0.10	0.41	0.94	1.65	2.58	3.71	5.05	6.60	8.38
1 3100	NC			14	20	26	30	34	37	40
	Throw(m)	1	2	3	4	4	5	5	5	5
	Airflow(m3/h)	67	139	205	278	348	413	485	552	625
Coloto	Static pressure	0.10	0.41	0.94	1.65	2.58	3.71	5.05	6.60	8.38
2slots	NC			17	23	29	33	37	40	43
	Throw(m)	1	3	4	5	6	6	7	7	8
	Airflow(m3/h)	105	205	312	415	520	625	725	830	932
Coloto	Static pressure	0.10	0.41	0.94	1.65	2.58	3.71	5.05	6.60	8.38
3slots	NC			18	25	31	35	39	42	45
	Throw(m)	2	3	5	6	7	8	9	9	10
	Airflow(m3/h)	140	278	413	550	692	830	970	1105	1239
4slots	Static pressure	0.10	0.41	0.94	1.65	2.58	3.71	5.05	6.60	8.38
451015	NC			20	26	32	36	40	43	46
	Throw(m)	2	4	6	7	8	9	10	10	11
	Airflow(m3/h)	173	345	520	692	865	1038	1211	1385	1558
5slots	Static pressure	0.10	0.41	0.94	1.65	2.58	3.71	5.05	6.60	8.38
351015	NC			21	27	33	37	41	44	47
	Throw(m)	2	4	6	8	9	10	11	12	12
	Airflow(m3/h)	206	413	625	831	1038	1244	1451	1663	1869
6slots	Static pressure	0.10	0.41	0.94	1.65	2.58	3.71	5.05	6.60	8.38
OSIOIS	NC			21	28	34	38	42	45	48
	Throw(m)	2	5	7	9	10	11	12	13	14



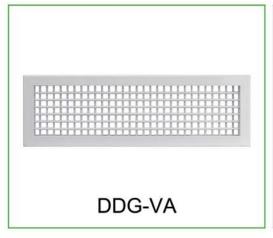
## SLOT DIFFUSER

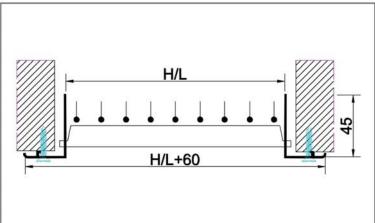
# Performance Data (25mm slot)

	Airflow(m3/h)	39	73	112	145	183	222	256	296	329
1 slot	Static pressure	0.10	0.36	0.81	1.45	2.26	3.25	4.42	5.79	7.32
1 3101	NC			13	20	26	30	34	37	40
	Throw(m)	1	2	4	4	5	5	5	6	6
	Airflow(m3/h)	73	145	223	296	368	441	513	590	665
Ooloto	Static pressure	0.10	0.36	0.81	1.45	2.26	3.25	4.42	5.79	7.32
2slots	NC			16	23	29	33	37	40	43
	Throw(m)	2	3	5	6	7	7	8	9	9
	Airflow(m3/h)	112	223	329	440	550	664	776	881	990
Coloto	Static pressure	0.10	0.36	0.81	1.45	2.26	3.25	4.42	5.79	7.32
3slots	NC			18	25	30	35	39	42	45
	Throw(m)	2	4	6	7	8	9	10	10	11
	Airflow(m3/h)	145	296	440	590	738	881	1032	1177	1328
4slots	Static pressure	0.10	0.36	0.81	1.45	2.26	3.25	4.42	5.79	7.32
451015	NC			19	26	32	36	40	43	46
	Throw(m)	2	5	7	9	9	10	11	12	13
	Airflow(m3/h)	183	368	551	736	920	1105	1289	1473	1658
5slots	Static pressure	0.10	0.36	0.81	1.45	2.26	3.25	4.42	5.79	7.32
381018	NC			20	27	33	37	41	44	47
	Throw(m)	3	5	8	9	10	12	12	13	14
	Airflow(m3/h)	222	440	663	881	1105	1328	1546	1768	1986
6slots	Static pressure	0.10	0.36	0.81	1.45	2.26	3.25	4.42	5.79	7.32
051015	NC			21	28	33	38	42	45	48
	Throw(m)	3	6	9	10	12	12	14	15	16

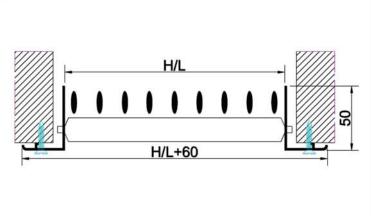


### **Double Deflection Grille**

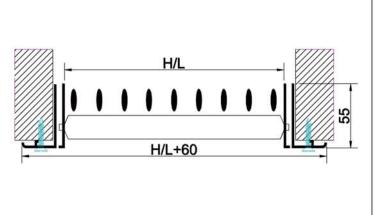












- \* They are used as a supply grille
- \* Their blades are adjustable horizontally and vertically.
- \* Accessories: Damper, Plenum box
- \* Mounting: Screw fixing is standard, concealed clip fixing as optional.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.



LxH	100x		200		7	250			300			350			400	
M3/H	Deflection.	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45
	Vel	2.36	2.62	3.31	1.85	2.06	2.60	1.52	1.69	2.14	1.40	1.44	1.82	1.13	1.26	1.58
400	Р	0.33	0.41	0.66	0.21	0.25	0.41	0.14	0.17	0.28	0.11	0.12	0.20	0.08	0.09	0.15
100	Т	3.45	2.86	2.46	3.05	2.52	2.18	2.77	2.30	1.97	2.56	2.12	1.82	2.38	1.97	1.70
8	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	4.72	5.24	6.63	3.70	4.12	5.20	3.05	3.39	4.28	2.59	2.88	3.64	2.25	2.50	3.16
200	Р	1.34	1.65	2.63	0.82	1.02	1.62	0.56	0.69	1.10	0.40	0.50	0.79	0.30	0.38	0.60
200	Т	6.90	5.71	4.91	6.11	5.06	4.35	5.55	4.59	3.95	5.11	4.23	3.64	4.77	3.95	3.39
	dbA	18	19	20	16	17	18	15	15	15	17	15	15	15	15	15
	Vel	7.08	7.87	9.94	5.56	6.18	7.80	4.57	5.08	6.42	3.89	4.32	5.46	3.38	3.76	4.75
200	Р	3.00	3.71	5.93	1.85	2.29	3.65	1.26	1.55	2.48	0.91	1.12	1.79	0.69	0.85	1.35
300	Т	10.35	8.75	7.37	9.17	7.59	6.53	8.32	6.89	5.92	7.67	6.35	5.46	7.15	5.92	5.09
	dbA	25	26	28	23	24	26	22	23	25	20	21	23	19	20	22
	Vel	9.44	10.49	13.25	7.41	8.23	10.40	6.10	6.78	8.57	5.18	5.76	7.28	4.51	5.01	6.33
400	Р	5.34	6.60	10.53	3.29	4.07	6.49	2.22	2.78	4.40	1.60	1.99	3.19	1.22	1.51	2.41
400	Т	13.78	11.43	9.83	12.22	10.12	8.71	11.09	9.18	7.90	10.22	8.46	7.28	9.53	7.98	6.78
	dbA	31	32	33	29	30	32	27	28	30	26	27	29	24	25	28
	Vel	11.79	13.11	16.56	9.26	10.29	13.01	7.62	8.47	10.71	6.48	7.20	9.10	5.63	6.26	7.91
500	Р	8.35	10.31	16.46	5.15	6.36	10.15	3.49	4.31	6.88	2.52	3.11	4.97	1.90	2.35	3.75
500	Т	17.24	14.28	12.28	15.29	12.66	10.89	13.86	11.48	9.87	12.78	10.58	9.10	11.92	9.86	8.49
	dbA	36	36	38	34	35	36	32	33	35	30	31	34	29	30	32
	Vel	14.15	15.73	19.88	11.11	12.35	15.61	9.15	10.17	12.85	7.77	8.64	10.92	6.76	7.51	9.49
600	Р	12.02	14.85	23.70	7.41	9.15	14.62	5.02	6.20	9.90	3.63	4.48	7.15	2.74	3.39	5.40
600	Т	20.69	17.13	14.74	18.34	15.18	13.06	16.65	13.77	11.85	15.34	12.70	10.92	14.31	11.85	10.18
	dbA	40	40	42	38	39	40	36	37	39	34	35	37	33	34	36
	Vel	16.51	18.35	23.19	12.97	14.41	18.21	10.67	11.86	14.99	9.07	10.08	12.74	7.89	8.76	11.07
700	Р	16.36	20.21	32.26	10.09	12.46	19.89	6.84	8.44	13.48	4.94	6.10	9.73	3.73	4.61	7.36
700	T	24.14	19.99	17.19	21.39	17.71	15.24	19.41	16.07	13.82	17.89	14.81	12.74	16.68	13.81	11.88
	dbA	43	44	45	41	42	44	39	40	42	38	39	41	36	37	40
	Vel	18.87	20.98	26.50	14.82	16.47	20.81	12.20	13.56	17.13	10.37	11.52	14.56	9.01	10.02	12.66
800	Р	21.37	26.39	41.15	13.18	16.28	25.98	8.93	11.03	17.61	6.45	7.96	12.71	4.87	6.02	9.61
000	Т										20.45	18.93	14.56	19.06	15.78	13.58
	dbA										41	42	44	39	40	43
	Vel										11.66	12.96	16.38	10.15	11.27	14.25
900	Р										8.16	10.08	16.09	6.17	7.62	12.16
900	Т										23.00	19.04	16.38	21.45	17.76	15.28
	dbA										43	44	47	42	43	45
	Vel										12.96	14.40	18.20	11.26	12.52	15.83
1000	Р										10.07	12.44	19.87	7.61	9.40	15.01
1000	T										25.56	21.16	18.20	23.83	19.73	16.97
	dbA										46	47	49	44	45	48



LxH M3/H	150x Deflection.	0	200	45	0	250 22.5	45	0	300 22.5	45	0	350 22.5	45	0	400 22.5	45
IVI3/ITI	Vel	1.47	1.63	2.07	1.15	1.28	1.62	0.95	1.06	1.34	0.81	0.90	1.13	0.7	0.78	0.99
	P	25 192,417		0.26	0.08	0.10	0.16	0.95	0.07	0.11	0.04	0.90	0.08	0.7	0.78	0.99
100		0.13	0.16	20000000	2.41	10 0000	1.72	2.19	1.81			1.67	1.44	70 000	00 10 10 10	1.34
	T	2.72	2.25	1.94		2.00	235750	-	2007-00	1.56	2.02	7 201507		1.88	1.56	
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	2.94	3.27	4.13	2.31	2.57	3.24	1.90	2.11	2.67	1.62	1.80	2.27	1.40	1.56	1.97
200	P	0.52	0.64	1.02	0.32	0.40	0.63	0.22	0.27	0.43	0.16	0.19	0.31	0.12	0.15	0.23
	T	5.45	4.51	3.88	4.83	4.00	3.44	4.38	3.62	3.12	4.04	3.34	2.87	3.76	3.12	2.68
	dbA	15	15	17	15	15	15	15	15	15	15	15	15	15	15 2.34	15
	Vel	4.41	4.90	6.20	3.46	3.85	4.87	2.85	3.17	4.01	2.42	2.69	3.40	2.11		2.96
300	P	1.17	1.44	2.30	0.72	0.89	1.42	0.49	0.60	0.96	0.35	0.44	0.70	0.27	0.33	0.53
	Т	8.17	6.76	5.82	7.24	5.99	5.16	6.57	5.44	4.68	6.05	5.01	4.31	5.56	4.67	4.02
	dbA	21	22	24	19	20	22	17	18	20	15	16	16	15	15	17
	Vel	5.88	6.54	8.26	4.62	5.13	6.49	3.80	4.23	5.34	3.23	3.59	4.55	2.80	3.12	3.95
400	Р	2.08	2.57	3.10	1.28	1.58	2.53	0.87	1.07	1.71	0.63	0.77	1.24	0.47	0.58	0.93
	Т	10.89	9.02	7.76	9.65	7.99	6.87	8.76	7.25	6.24	8.07	6.68	5.75	7.53	6.23	5.36
	dbA	27	28	30	25	26	28	22	24	26	20	22	24	18	20	23
	Vel	7.35	8.17	10.33	5.77	6.42	8.11	4.75	5.28	6.68	4.04	4.49	5.66	3.50	3.90	4.92
500	Р	3.24	4.00	6.40	2.01	2.47	3.95	1.36	1.67	2.67	0.98	1.21	1.93	0.74	0.91	1.46
	Т	13.62	11.27	9.70	12.06	9.99	8.59	10.95	9.06	7.80	10.09	8.35	7.19	9.41	7.79	6.70
	dbA	32	33	35	29	30	33	27	28	31	25	26	29	23	25	27
	Vel	8.82	9.81	12.39	6.93	7.70	9.73	5.70	6.34	8.01	4.85	5.39	6.81	4.20	4.68	5.92
600	Р	4.67	5.77	9.21	2.88	3.56	5.68	1.95	2.41	3.85	1.41	1.74	2.78	1.07	1.32	2.10
000	T	14.34	13.53	11.64	14.48	11.99	10.31	13.14	10.87	9.36	13.11	10.02	8.62	11.29	9.35	8.04
	dbA	36	37	39	33	34	36	31	32	35	29	30	33	27	28	31
	Vel	10.30	11.44	14.46	8.08	8.89	11.35	6.65	7.40	9.35	5.66	6.29	7.94	4.92	5.46	6.90
700	Р	6.36	7.86	12.54	3.92	4.84	7.73	2.66	3.28	5.24	1.92	2.37	3.78	1.45	1.79	2.86
100	Т	19.06	15.78	13.58	16.89	13.98	12.03	15.32	12.69	10.92	14.13	11.70	10.06	13.17	10.91	9.38
	dbA	39	40	42	36	38	40	34	36	38	32	34	36	30	32	35
	Vel	11.77	13.08	16.52	9.24	10.27	12.97	7.61	8.45	10.68	6.46	7.18	9.08	5.62	6.24	7.89
800	Р	8.31	10.26	16.38	5.12	6.33	10.10	3.47	4.29	6.83	2.51	3.10	4.92	1.89	2.33	3.75
000	Т	21.78	18.03	15.52	19.30	15.98	13.75	17.51	14.50	12.47	16.15	13.37	11.50	13.05	12.46	10.72
	dbA	42	43	45	39	41	43	37	39	41	35	37	39	33	35	38
	Vel	13.24	14.71	18.59	10.39	11.55	14.60	8.56	9.51	10.02	7.27	8.08	10.21	6.32	7.03	8.88
900	Р	10.51	12.99	20.73	6.48	8.01	12.78	4.39	5.43	8.55	3.17	3.92	6.26	2.40	2.96	4.73
900	Т	24.51	20.29	17.46	21.27	17.98	15.47	19.70	16.31	14.03	18.16	15.03	12.94	16.95	14.02	12.06
	dbA	45	46	48	42	43	46	40	41	44	38	39	42	36	38	40
	Vel					12.84	16.22	9.51	10.57	13.35	8.08	8.98	11.35	7.02	7.81	9.86
1000	Р					9.98	15.78	5.43	6.70	10.69	3.92	4.48	7.72	2.96	3.66	5.84
1000	Т		6			19.98	17.19	21.89	18.12	15.59	20.18	16.71	14.37	18.82	15.58	13.40
	dbA					46	48	42	44	46	40	42	44	39	40	43
	Vel										9.69	10.77	13.61	8.43	9.37	11.83
4000	Р										5.63	6.98	11.12	4.26	5.26	8.41
1200	Т												0	-	- 1000 N 200	16.08
	dbA										45	46	49	43	44	47
-																



LxH	200x		200			250			300			350			400	
M3/H		0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45
WIOTT	Vel	1.07	1.19	1.50	0.84	0.93	1.18	0.69	0.77	0.97	0.59	0.65	0.82	0.51	0.57	0.72
97#9#Z-r	P	0.07	0.08	0.14	0.04	0.05	0.08	0.03	0.04	0.06	0.02	0.03	0.04	0.02	0.02	0.03
100	T	2.32	1.92	1.65	2.06	1.70	1.46	1.87	1.54	1.33	1.72	1.42	1.23	1.60	1.33	1.14
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	2.14	2.38	3.00	1.68	1.86	2.36	1.38	1.54	1.94	1.17	1.30	1.65	1.03	1.13	1.43
	P	0.27	0.34	0.54	0.17	0.21	0.33	0.11	0.14	0.23	0.08	0.10	0.16	0.06	0.08	0.12
200	T	4.64	3.84	3.31	4.11	3.41	2.93	3.73	3.09	2.66	3.44	2.85	2.45	3.21	2.66	2.28
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	3.21	3.56	3.50	2.52	2.81	3.53	2.07	2.30	2.91	1.76	1.96	2.47	1.53	1.70	2.15
	Р	0.62	0.76	1.22	0.38	0.47	0.75	0.26	0.32	0.51	0.19	0.23	0.37	0.14	0.17	0.28
300	Т	6.96	5.76	4.96	6.18	5.11	4.39	5.60	4.63	3.99	5.16	4.27	3.68	4.81	3.98	3.43
	dbA	18	19	22	15	16	19	15	15	17	15	15	15	15	15	15
	Vel	4.27	4.75	6.00	3.36	3.73	4.71	2.76	3.07	3.88	2.35	2.61	3.30	2.03	2.28	2.87
	Р	1.10	1.35	2.16	0.68	0.83	1.33	0.46	0.57	0.90	0.33	0.41	0.65	0.25	0.31	0.49
400	Т	9.28	7.69	6.61	8.23	6.81	5.86	7.46	6.18	5.32	6.88	5.70	4.90	6.42	5.33	4.57
	dbA	24	25	27	21	22	25	18	20	23	16	17	21	15	15	19
	Vel	5.34	5.93	7.50	4.19	4.66	5.89	3.45	3.84	4.85	2.93	3.26	4.12	2.55	2.83	3.58
	Р	1.17	2.12	3.38	1.06	1.30	2.08	0.72	0.88	1.41	0.53	0.64	1.02	0.39	0.48	0.77
500	Т	11.60	9.61	8.27	10.28	8.51	7.32	9.33	7.72	6.65	8.60	7.12	6.13	8.02	6.64	5.71
	dbA	28	30	32	25	27	29	23	24	27	21	22	25	18	20	23
	Vel	6.41	7.13	9.00	5.03	5.59	7.08	4.14	4.61	5.82	3.53	3.91	4.95	3.06	3.40	4.30
	Р	2.48	3.05	4.86	1.52	1.88	3.00	1.03	1.28	2.03	0.74	0.92	1.47	0.56	0.69	1.11
600	Т	13.93	11.53	9.92	12.33	10.22	8.79	1.20	9.27	7.97	10.32	8.54	7.35	9.62	7.97	6.85
	dbA	32	33	36	29	31	33	27	28	31	24	26	29	22	24	27
	Vel	7.48	8.31	10.50	5.87	6.53	8.25	4.83	5.37	6.79	4.11	4.57	5.57	3.58	3.98	5.02
700	Р	3.36	4.15	6.62	2.08	2.56	4.08	1.40	1.73	2.77	1.01	1.25	2.00	0.77	0.95	1.51
700	Т	16.25	13.45	11.58	14.40	11.93	10.25	3.06	10.81	9.30	12.05	9.98	8.58	11.23	9.29	8.00
	dbA	36	37	39	33	34	37	30	32	35	28	29	33	26	27	31
	Vel	8.55	9.50	12.00	6.71	7.46	9.43	5.53	6.14	7.76	4.70	5.22	6.59	4.08	5.54	5.73
800	Р	4.38	5.42	8.65	2.70	3.33	5.33	1.84	2.26	3.61	1.32	1.63	2.61	1.00	1.23	1.97
000	Т	18.57	15.37	13.22	16.45	13.62	11.72	4.93	12.36	10.63	13.76	11.39	9.80	12.83	10.62	9.14
	dbA	39	40	42	36	37	40	33	35	38	31	32	36	29	30	34
	Vel	9.62	10.69	13.50	7.55	8.39	10.60	6.22	6.90	8.74	5.38	5.88	7.42	4.59	5.10	6.46
900	Р	5.55	6.85	10.95	3.43	4.23	6.75	3.32	2.86	4.57	1.68	2.08	3.30	1.28	1.56	2.50
300	T	20.89	17.29	14.88	18.51	15.32	13.18	6.79	12.70	11.96	15.48	12.833	11.03	14.43	11.95	10.28
	dbA	41	42	45	38	40	42	36	37	40	34	35	38	31	33	36
	Vel	10.68	11.88	15.00	8.39	9.32	11.78	6.91	7.68	9.70	5.88	6.52	8.25	5.10	5.68	7.18
1000	Р	6.85	8.46	13.51	4.22	5.22	8.33	2.87	3.55	5.65	2.08	2.55	4.08	1.56	1.94	3.08
1000	Т	23.21	19.21	16.53	20.57	17.05	14.65	8.66	15.45	13.29	17.20	14.25	12.25	16.05	13.28	11.43
	dbA	44	45	47	41	42	45	38	40	43	36	38	41	34	35	39
	Vel				10.08	11.19	14.15	8.29	9.21	11.64	7.05	7.83	9.89	6.12	6.81	8.60
1200	Р				6.08	7.51	11.99	4.12	5.09	8.13	2.98	3.68	5.88	2.25	2.78	4.44
1200	T			r.	24.68	20.43	17.58	12.39	19.54	15.95	20.64	17.09	14.70	19.25	15.94	13.71
	dbA				45	47	49	43	44	47	40	42	45	38	41	43



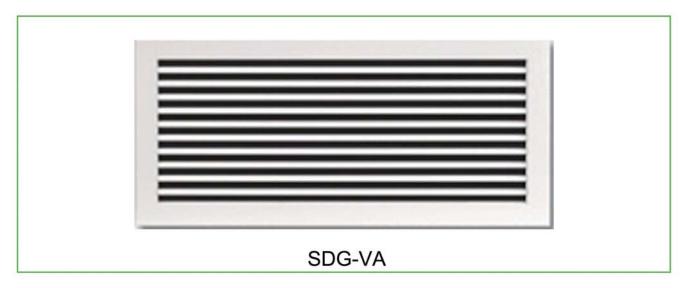
LxH M3/H	250x Deflection.	0	200	45	0	250 22.5	45	0	300 22.5	45	0	350 22.5	45	0	400 22.5	45
IVI3/ITI	Vel	0.66	0.73	0.93	0.54	0.60	0.76	0.46	0.51	0.65	0.40	0.45	0.56	0.35	0.39	0.50
	P	0.03	0.73	0.95	0.02	0.00	0.76	0.40	0.02	0.03	0.40	0.45	0.02	0.01	0.01	0.01
100	T	1.82	1.51	1.30	1.65	1.38	1.18	1.52	1.26	1.09	1.42	1.18	1.01	1.35	1.11	0.01
	1017 101	277.5	3 2 2 7 7 7 7	200000			2157501	1.52	1.20	72777	11.71	A 1.010	1.01		15	15
	dbA Vel	15 1.32	15 1.46	15 1.85	15 1.08	15 1.21	15 1.52	0.92	1.02	15 1.92	15 0.80	15 0.89	1.13	15 0.71	0.79	1.00
	P	0.10	0.13	0.21	0.07	0.09	0.14	0.92	0.06	0.10	0.04	0.05	0.08	0.03	0.79	0.06
200	T	3.64	3.02	2.60	3.31	3.75	2.36	3.05	2.52	2.18	2.84	2.35	2.03	2.68	2.21	1.90
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	1.90
	Vel	1.98	2.20	2.78	1.63	1.81	2.28	1.38	1.55	1.95	1.20	1.33	1.69	1.06	1.18	1.49
	P	0.23	0.29	0.46	0.16	0.20	0.31	0.11	0.14	0.23	0.09	0.11	0.17	0.07	0.08	0.13
300	T	5.47	4.53	3.89	4.96	4.11	3.53	4.58	3.79	3.26	4.26	3.53	3.05	4.01	3.32	2.86
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	2.64	2.93	3.70	2.17	2.41	3.05	1.85	2.05	2.59	1.60	1.78	2.25	1.43	1.58	1.99
	P	0.42	0.51	0.82	0.28	0.35	0.56	0.20	0.25	0.40	0.15	0.19	0.30	0.13	0.15	0.24
400	T	7.29	6.05	5.19	6.61	5.48	4.72	6.10	5.05	4.35	5.68	4.71	4.05	5.35	4.43	3.82
	dbA	18	19	22	15	16	20	15	15	17	15	15	15	15	15	15
	Vel	3.29	3.66	4.63	2.71	3.01	3.81	2.30	2.56	3.25	2.00	2.23	2.81	1.77	1.98	2.48
	P	0.65	0.80	1.28	0.44	0.55	0.87	0.32	0.39	0.63	0.25	0.30	0.47	0.19	0.23	0.38
500	Т	9.11	7.55	6.49	8.28	6.85	5.89	7.63	6.31	5.42	7.11	5.88	5.06	6.68	5.53	4.76
	dbA	22	24	27	19	21	24	17	18	22	15	16	20	15	15	18
-	Vel	3.95	4.39	55	3.35	3.62	4.57	2.77	3.07	3.88	2.40	2.67	3.38	2.13	2.36	2.99
	P	0.95	1.16	1.85	0.64	0.78	1.25	0.46	0.57	0.90	0.35	0.43	0.68	0.27	0.34	0.53
600	T	10.93	9.05	7.79	9.92	8.21	7.07	9.15	7.57	6.51	8.53	7.06	6.08	8.02	6.65	5.71
	dbA	26	28	31	23	25	28	21	22	26	18	20	24	16	18	22
	Vel	4.61	5.13	6.48	3.80	4.22	5.33	3.23	3.59	4.53	2.81	3.12	3.95	2.48	2.76	3.48
	P	1.28	1.58	2.52	0.86	1.07	1.71	0.62	0.77	1.23	0.47	0.58	0.93	0.38	0.46	0.73
700	T	12.76	10.56	9.09	11.58	9.58	8.25	10.67	8.83	7.60	9.95	8.25	7.09	9.36	7.75	6.66
	dbA	30	31	34	37	28	32	24	26	29	21	23	27	19	21	25
	200 0	5.27	5.86	7.40	4.34	4.82	6.09	3.69	4.10	5.18	20 2000	3.56	4.50	2.83	3.15	3.98
	Vel P	1.67	2.06	3.29	1.13	1.40	2.23	0.82	1.01	1.61	3.21 0.62	0.76	1.22	0.48	0.60	0.95
800	T	14.58	TOWN AND HOUSE		13.23		1000000000	12.19	10 0000	8.69	11.38	1100 000	8.10	10.69	8.85	7.62
	dbA	33	34	37	30	31	35	27	29	32	24	26	30	22	24	28
	Vel	5.93	6.59	8.33	4.88	5.43	6.85	4.15	4.61	5.82	3.61	4.01	5.06	3.19	3.54	4.48
	P	2.11	2.61	4.16	1.43	1.77	2.82	1.03	1.27	2.05	0.78	0.96	1.55	0.61	0.75	1.20
900	T		7	2 22 22 22 22	14.88		100000000000000000000000000000000000000		- Kuranus		200.000.0000	10.59	2	12.03	9.96	8.57
	dbA	35	37	40	32	34	37	30	31	35	27	29	33	25	27	31
	Vel	6.59	7.32	9.25	5.42	6.03	7.62	4.61	5.12	6.48	4.01	4.45	5.63	3.55	3.95	4.98
	P	2.60	3.22	5.13		2.18	3.48	1.28	1.58	2.51	0.96	1.19	1.90	0.75	0.93	1.49
1000	T	18.22	100000		1.76 16.54							11.77		13.37		9.52
	dbA	38	39	42	35	36	40	32	34	37	30	31	35	27	29	33
	Vel	7.91	8.79	11.10		7.23	9.14	5.53	6.15	7.77	4.81	5.34	6.75	4.25	4.73	5.98
	P	3.75	4.63	7.40	2.55	3.14	5.01	1.83	2.27	3.62	1.39	1.71	2.74	1.08	1.34	2.15
1200	T	200 500	18.11	No. of the last	19.84		10000 00000		1317901 2000		1000 0000	Thron product			21000	11.42
	75.5 35	21.87	43	46	39	41	44	36	38	42	34	36	40	32	7.11 227	55.00
	dbA	42	43	40	39	41	44	30	30	42	34	30	40	32	34	38



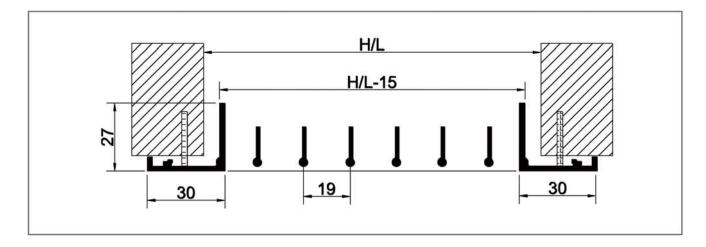
LxH	300x		200			250	-		300			350			400	$\neg$
M3/H		0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45
10711	Vel	0.45	0.50	0.63	0.38	0.42	0.53	0.33	0.37	0.46	0.29	0.32	0.41	0.26	0.29	0.37
9799747	P	0.01	0.01	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
100	T	1.50	1.24	1.07	1.38	1.14	0.99	1.29	1.07	0.92	1.21	1.00	0.86	1.15	0.95	0.82
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	0.89	0.99	1.25	0.76	0.84	1.07	0.66	0.73	0.93	0.58	0.65	0.82	0.52	0.58	0.73
	P	0.05	0.06	0.09	0.03	0.04	0.07	0.03	0.03	0.05	0.02	0.03	0.04	0.02	0.02	0.03
200	T	3.00	2.48	2.14	2.77	2.29	1.97	2.58	2.14	1.84	2.43	2.01	1.73	2.30	1.90	1.64
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	1.34	1.49	1.88	1.14	1.26	1.60	0.99	1.10	1.39	0.88	0.97	1.23	0.78	0.87	1.10
	P	0.11	0.13	0.21	0.08	0.10	0.15	0.06	0.07	0.13	0.05	0.06	0.09	0.04	0.05	0.07
300	Т	4.50	3.73	3.21	4.15	3.43	2.96	3.87	3.20	2.76	3.64	3.01	2.59	3.44	2.85	2.45
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
-	Vel	1.79	1.98	2.51	1.52	1.69	2.13	1.32	1.47	1.85	1.17	1.30	1.64	1.05	1.16	1.47
233.35	P	0.19	0.24	0.38	0.14	0.17	0.27	0.10	0.13	0.21	0.08	0.10	0.16	0.07	0.08	0.13
400	Т	6.00	4.97	4.27	5.53	4.58	3.94	5.16	4.27	3.67	4.85	4.02	3.46	4.59	3.80	3.27
	dbA	15	15	17	15	15	15	15	15	15	15	15	15	15	15	15
-	Vel	2.23	2.48	3.13	1.90	2.11	2.66	1.65	1.83	2.32	1.46	1.62	2.05	1.31	1.45	1.84
TV SOMEN	P	0.30	0.37	0.59	0.22	0.27	0.43	0.16	0.20	0.32	0.13	0.16	0.25	0.10	0.13	0.20
500	T	7.50	6.21	5.34	6.91	5.72	4.93	6.45	5.34	4.59	6.06	5.02	4.32	5.74	4.75	4.09
	dbA	16	18	22	15	15	19	15	15	17	15	15	15	15	15	15
	Vel	2.68	2.98	3.36	2.28	2.53	3.20	1.98	2.20	2.78	1.75	1.95	2.46	1.57	1.74	2.20
	P	0.43	0.53	0.85	0.31	0.38	0.61	0.23	0.29	0.46	0.18	0.23	0.36	0.15	0.18	0.29
600	Т	9.00	7.45	6.41	8.30	6.87	5.91	7.74	6.41	5.51	7.28	6.02	5.18	6.89	5.70	4.91
	dbA	20	22	25	17	19	23	15	16	21	15	15	18	15	15	16
	Vel	3.31	3.47	4.39	2.66	2.95	3.73	2.31	2.57	3.24	2.04	2.27	2.87	1.83	2.03	2.57
	P	0.59	0.72	1.16	0.42	0.52	0.83	0.32	0.40	0.63	0.25	0.31	0.49	0.20	0.25	0.40
700	т	10.50	8.69	7.48	9.68	8.01	6.90	9.03	7.47	6.43	8.49	7.03	6.05	8.04	6.65	5.74
	dbA	23	25	29	20	22	26	18	20	24	15	17	22	15	15	20
	Vel	3.57	3.97	5.02	3.03	3.37	4.06	2.63	2.93	3.71	2.33	2.59	3.28	2.09	2.33	2.94
	P	0.77	0.95	1.15	0.55	0.68	1.09	0.42	0.52	0.82	0.33	0.40	0.64	0.26	0.32	0.52
800	T	12	9.94	8.55	11.06	THE STREET	7.88	10.32	8.54	7.35	9.70	8.03	6.91	9.19	7.60	6.54
	dbA	26	28	32	23	25	29	21	23	27	18	20	25	16	18	23
_	Vel	4.02	4.47	5.64	3.41	3.79	4.79	2.97	3.30	4.17	2.63	2.92	3.69	2.35	2.62	3.31
	Р	0.97	1.20	1.91	0.70	0.86	1.38	0.53	0.65	1.04	0.41	0.51	0.82	0.33	0.41	0.66
900	T		11.18	9.62		10.30	-	11.61	9.61	8.27	10.91	9.04	7.77	10.33		7.36
	dbA	29	31	34	26	28	32	23	25	30	21	23	28	18	21	26
	Vel	4.46	4.96	6.27	3.79	4.22	5.33	3.30	3.67	4.63	2.92	3.24	4.10	2.61	2.91	3.67
	P	1.20	1.48	2.36	0.86	1.07	1.70	0.65	0.81	1.29	0.51	0.63	1.01	0.41	0.51	0.81
1000	Т	15.00			13.83				10.68			10.04		11.48		8.18
	dbA	32	33	37	29	31	34	26	28	32	23	26	30	21	23	28
	Vel	5.36	5.95	7.52	4.55	5.06	6.39	3.96	4.40	5.56	3.50	3.89	4.92	3.14	3.49	4.41
ng automobien i	P	1.72	2.13	3.40	1.24	1.54	2.45	0.94	1.16	1.85	0.74	0.91	1.45	0.59	0.73	1.17
1200	T	18.00	1 5 5 5 5 1 He S 1 H	3000 0000	16.60		20000 AP 80	100000000000000000000000000000000000000		11.02		170.00 0.00.00	V-01 -07551	13.78	3 10 700	9.81
	dbA	36	38	41	33	35	39	30	32	36	28	30	34	25	28	32
	ub/\	-00	-00	71	00	00	00	00	UL	00	20	00	U-T	20	20	02

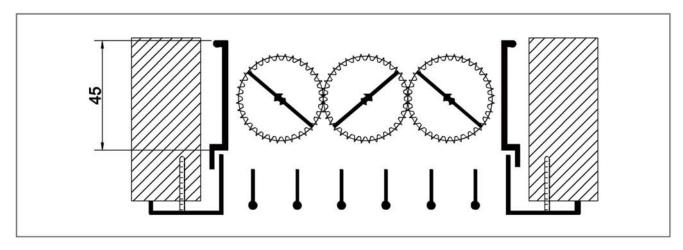


### SINGLE DEFLECTION GRILLE



- \* They are used as a supply grille
- \* Their blades are adjustable horizontally and vertically.
- \* Accessories: Damper, Plenum box
- \*Mounting: Screw fixing is standard, concealed clip fixing as optional.
- \*Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.







LxH	100x		200			250			300			350			400	
МЗ/Н	Deflection.	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45
	Vel	2.16	2.37	3.16	1.70	1.86	2.48	1.40	1.53	2.05	1.18	1.29	1.73	1.03	1.13	1.51
100	P	0.28	0.34	0.60	0.17	0.22	0.37	0.12	0.14	0.25	0.08	0.10	0.18	0.06	0.08	0.14
100	Т	2.70	2.22	1.96	2.39	1.97	1.73	2.17	1.79	1.58	2.00	1.65	1.46	1.86	1.53	1.36
8	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	4.32	4.75	6.33	3.39	3.73	4.97	2.79	3.08	4.10	2.37	2.61	3.48	2.06	2.28	3.02
200	Р	1.12	1.35	2.40	0.69	0.83	1.48	0.48	0.58	1.00	0.34	0.41	0.72	0.26	0.31	0.55
200	T	5.40	4.44	3.93	4.78	3.94	3.48	4.34	3.57	3.16	4.00	3.29	2.91	3.73	3.07	2.71
	dbA	17	18	20	15	16	18	15	15	17	15	15	15	15	15	15
	Vel	6.48	7.12	9.49	5.09	5.59	7.45	4.19	4.60	6.13	3.55	3.91	5.21	3.09	3.40	4.53
300	Р	2.52	3.04	5.41	1.55	1.88	3.33	1.05	1.38	2.26	0.76	0.92	1.63	0.58	0.69	1.23
300	Т	8.10	6.68	5.89	7.17	5.91	5.22	6.51	5.36	4.73	6.00	4.93	4.37	5.59	4.61	4.08
	dbA	25	25	27	23	23	26	21	22	24	19	20	23	18	19	22
	Vel	8.64	9.50	12.66	6.78	7.46	9.94	5.58	6.13	8.18	4.73	5.22	6.95	4.12	4.53	6.03
400	Р	4.48	5.41	9.61	2.76	3.33	5.93	1.88	2.26	4.02	1.35	1.63	2.90	1.02	1.23	2.19
400	T	10.80	8.89	7.85	9.57	7.88	6.96	8.68	7.15	6.32	8.00	6.59	5.82	7.46	6.14	5.43
	dbA	30	31	33	38	29	31	27	27	30	25	26	29	23	24	27
	Vel	10.80	11.87	15.82	8.48	9.32	12.42	6.98	7.66	10.23	5.93	6.51	8.70	5.15	5.66	7.56
500	Р	6.99	8.46	15.02	4.31	5.21	9.26	2.92	3.53	6.28	2.11	2.55	4.53	1.59	1.93	3.42
300	Т	13.49	11.11	9.82	11.96	9.85	8.70	10.85	8.93	7.89	10.00	8.23	7.28	9.32	7.68	6.78
	dbA	35	36	38	33	34	36	31	32	35	29	30	33	28	29	32
	Vel	12.95	14.25	18.99	10.17	11.19	14.91	8.38	9.21	12.28	7.12	7.82	10.43	6.19	6.80	9.08
600	Р	10.08	12.18	21.63	6.31	7.51	13.33	4.21	5.06	9.03	3.05	3.68	6.53	2.21	2.78	4.94
000	T	16.19	13.33	11.79	14.36	11.83	10.45	13.02	10.73	9.48	12.01	9.89	8.74	11.20	9.22	8.15
	dbA	39	40	42	37	38	40	35	36	38	33	34	37	32	33	36
	Vel	15.11	16.62	22.15	11.88	13.06	17.39	9.77	10.75	14.32	8.31	9.13	12.17	7.22	9.95	10.58
700	Р	13.72	16.58	29.45	8.46	10.22	18.15	5.74	6.92	12.31	4.15	5.01	8.88	3.13	3.79	6.72
700	T	18.89	15.56	13.75	16.75	13.79	12.18	15.19	12.51	11.05	14.00	11.53	10.19	13.05	10.75	9.50
	dbA	42	43	45	40	41	43	38	39	42	37	38	40	35	36	39
	Vel	17.27	18.99	25.31	13.58	14.91	19.88	11.18	12.28	16.36	9.49	10.44	13.90	8.25	9.08	12.10
800	Р	17.90	21.65	38.45	11.04	13.36	23.72	7.48	9.05	16.06	5.41	6.53	11.61	4.08	4.95	8.77
800	Т	21.59	17.78	15.72	19.13	15.75	13.92	17.36	14.29	12.63	16.01	13.18	11.65	14.92	12.30	10.86
0	dbA	45	46	48	43	44	46	41	42	45	40	41	43	38	39	42
	Vel										10.67	11.74	15.65	9.28	10.21	13.61
900	Р										6.85	8.28	14.68	5.18	6.25	11.11
900	T										18.01	14.82	13.11	16.78	13.82	12.22
	dbA										42	43	46	41	42	45
	Vel										11.86	13.05	17.38	10.32	11.35	15.12
1000	Р										8.44	10.19	18.11	6.38	7.71	13.59
1000	T									el e	20.10	16.58	14.55	18.66	15.38	13.58
	dbA										45	46	49	43	44	47



LxH	150x		200			250			300			350			400	
M3/H		0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45
	Vel	1.35	1.48	1.98	1.06	1.16	1.55	0.88	0.96	1.28	0.75	0.82	1.08	0.65	0.71	0.95
	Р	0.11	0.13	0.23	0.08	0.09	0.14	0.05	0.05	0.10	0.03	0.04	0.06	0.02	0.03	0.05
100	Т	2.13	1.76	1.55	1.89	1.56	1.38	1.72	1.42	1.25	1.58	1.31	1.15	1.48	1.22	1.08
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	2.69	2.96	3.95	2.11	2.32	3.10	1.75	1.91	2.55	1.49	1.63	2.18	1.39	1.41	1.88
	Р	0.43	0.53	0.93	0.27	0.32	0.58	0.18	0.22	0.39	0.13	0.16	0.28	0.10	0.12	0.22
200	Т	4.26	3.52	3.10	3.78	3.11	2.75	3.43	2.82	2.49	3.16	2.61	2.30	2.95	2.44	2.15
	dbA	15	15	16	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	4.04	4.45	5.93	3.18	3.49	4.65	3.62	2.88	3.83	2.22	2.45	3.25	1.93	2.12	2.84
	Р	0.98	1.18	2.11	0.61	0.73	1.30	0.42	0.49	0.88	0.30	0.36	0.63	0.22	0.28	0.48
300	Т	6.39	5.26	4.65	5.68	4.68	4.12	5.15	4.23	3.75	4.75	3.90	3.45	4.42	3.65	3.22
	dbA	20	21	24	18	19	22	16	17	20	15	15	18	15	15	17
	Vel	5.38	5.92	7.89	4.23	4.65	6.20	3.48	3.83	5.10	2.96	3.25	4.33	2.57	2.83	3.77
20.0	Р	1.74	2.10	3.74	1.07	1.30	2.30	0.73	0.88	1.55	0.52	0.63	1.13	0.41	0.49	0.85
400	Т	8.52	7.02	6.20	7.55	6.22	5.50	6.85	5.63	4.99	6.32	5.20	4.60	5.89	4.85	4.29
	dbA	8.52	27	30	24	25	28	21	22	26	19	20	24	17	19	22
	Vel	6.73	7.40	9.86	5.29	5.81	7.75	4.35	4.78	6.38	3.70	4.07	5.42	3.21	3.53	4.71
0.12020520	Р	2.72	3.29	5.83	1.68	2.03	3.60	1.14	1.38	2.44	0.82	0.99	1.76	0.62	0.75	1.33
500	Т	10.65	8.77	7.75	9.44	7.78	6.87	8.57	7.05	6.23	7.90	6.50	5.75	7.36	6.06	5.36
	dbA	31	32	34	28	29	32	26	27	30	24	25	29	22	23	27
	Vel	8.08	8.88	11.83	6.33	6.98	9.29	5.22	5.75	7.65	4.44	4.88	6.50	3.86	4.24	5.65
	Р	3.91	4.73	8.41	2.41	2.92	5.18	1.64	1.98	3.51	1.18	1.43	2.54	0.89	1.08	1.92
600	Т	12.79	10.53	9.30	11.33	9.33	8.24	10.28	8.47	7.48	9.48	7.80	6.89	8.85	7.28	6.43
	dbA	35	36	38	32	33	36	30	31	34	28	29	32	26	27	31
	Vel	9.42	10.36	13.81	7.40	8.14	10.84	6.09	6.70	8.93	5.18	5.69	7.59	4.50	4.95	6.59
	Р	5.33	6.44	11.44	3.29	3.97	7.06	2.23	2.69	4.78	1.61	1.94	3.45	1.21	1.47	2.61
700	Т	14.92	12.28	10.85	13.22	10.89	9.62	11.99	9.88	8.73	11.06	9.10	8.04	10.31	8.49	7.50
	dbA	38	39	42	36	37	39	33	34	38	31	32	36	29	30	34
	Vel	-		15.78		5 55	12.39		7.65	10.20	10 10 10 10 10	6.50	8.67	5.14	5.66	7.54
	Р	6.96	14.04	14.95	4.29	5.19			3.52	6.24	200 00000000	2.54	4.51	1.59	1.92	3.41
800	Т	17.05	13.30	12.40	15.11	12.44	10.99	13.71	11.29	9.98	12.63	10.40	9.19	11.78	9.70	8.57
	dbA	41	42	45	39	40	42	36	37	41	34	35	39	32	33	37
	Vel	12.12	10.65	17.76	9.51	10.46	13.94	7.83	8.61	11.48	6.65	7.32	9.75	5.79	6.36	8.48
	Р	8.81	15.79	18.92	5.43	6.57	11.66	3.68	4.45	7.90	2.66	3.21	5.71	2.01	2.43	4.31
900	Т		0.00 20.00000			1,020,0724079		11/21/12/2015	7	11.22		SOMH CALLS	277072			9.64
	dbA	44	45	47	41	42	45	39	40	43	37	38	41	35	36	40
	Vel	28.85	1125.04	2000	10.57	ATT	1000000	1000000	77.00	12.75	577	8.13	10.83	- 200,000	7.07	9.42
	Р	100000000000000000000000000000000000000	1/2/09/02/2005	23.35	200000000000000000000000000000000000000	161 N. C. 1995	14.40	5-	5.49	9.76	530565555	3.97	7.05	2.48	3.00	5.33
1000	Т									12.47						
	dbA	46	47	50	44	45	48	41	43	46	39	41	44	37	39	42
	Vel										8.87		13.00	_	8.48	11.31
12/48/8000	P										4.72		10.15		4.32	7.67
1200	T										FE 60, VI 2 3 5 5	2503 117 153	224 224	17.67	Ver avaluates	7/99 25991
	dbA										44	45	48	42	43	47
$\overline{}$	u., 1										0.000.000					0.00



Late	2004		200			250		N	200			250			400	
LxH M3/H	200x Deflection.	0	200	45	0	250 22.5	45	0	300 22.5	45	0	350 22.5	45	0	400 22.5	45
IVIO/TI	Vel	0.98	1.08	1.43	0.77	0.84	1.13	0.63	0.70	0.93	0.55	0.59	0.79	0.47	0.51	0.68
	P	0.06	0.07	0.12	0.04	0.04	0.08	0.02	0.03	0.05	0.02	0.02	0.04	0.01	0.02	0.03
100	T	1.82	1.50	1.32	1.61	1.33	1.17	1.46	1.20	1.06	1.35	1.11	0.98	1.26	1.03	0.91
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	1.96	2.15	2.87	1.54	1.69	2.25	1.26	1.39	1.85	1.07	1.18	1.57	0.93	1.03	1.37
	P	0.23	0.28	0.49	0.14	0.17	0.30	0.10	0.12	0.21	0.07	0.08	0.15	0.05	0.06	0.11
200	T	3.63	2.99	2.64	3.22	2.65	2.34	2.92	2.41	2.13	2.69	2.22	1.96	2.51	2.07	1.83
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	2.93	3.23	4.30	2.30	2.53	3.38	1.90	2.09	2.78	1.61	1.77	2.36	1.40	1.54	2.05
	Р	0.52	0.62	1.11	0.32	0.39	0.68	0.22	0.26	0.46	0.16	0.19	0.33	0.12	0.14	0.25
300	Т	5.45	4.49	3.96	4.83	3.98	3.51	4.38	3.61	3.19	4.04	3.33	2.94	3.77	3.10	2.74
	dbA	17	18	21	15	15	19	15	15	16	15	15	15	15	15	15
	Vel	3.91	4.30	5.73	3.07	3.38	4.50	2.53	2.78	3.71	2.15	2.36	3.15	1.87	2.05	2.74
	Р	0.92	1.11	1.97	0.57	0.68	1.22	0.38	0.46	0.82	0.28	0.33	0.59	0.21	0.25	0.45
400	Т	7.27	5.98	5.29	6.44	5.30	4.68	5.84	4.81	4.25	5.38	4.43	3.92	5.02	4.13	3.65
	dbA	23	24	27	20	21	24	17	18	22	15	16	20	15	15	18
	Vel	4.89	5.38	7.17	3.84	4.22	5.63	3.16	3.48	4.63	2.69	2.95	3.94	2.34	2.57	3.42
	Р	1.43	1.73	3.08	0.88	1.07	1.90	0.60	0.72	1.29	0.43	0.52	0.93	0.33	0.40	0.70
500	Т	9.08	7.48	6.61	8.05	6.63	5.86	7.30	6.01	5.31	6.73	5.54	4.90	6.28	5.17	4.57
	dbA	27	28	31	24	26	29	12	23	27	19	21	25	17	18	23
	Vel	5.87	6.45	8.60	4.61	5.07	6.75	3.79	4.17	5.56	3.22	3.54	4.72	2.80	3.08	4.11
	Р	2.07	2.50	4.44	1.27	1.54	2.74	0.86	1.04	1.85	0.62	0.75	1.34	0.47	0.57	1.01
600	Т	10.90	8.97	7.93	9.66	7.95	7.03	8.76	7.22	6.38	8.08	6.65	5.88	7.53	6.20	5.48
	dbA	31	32	35	28	29	33	26	27	31	23	25	29	21	22	27
	Vel	6.85	7.53	10.03	5.38	5.91	7.88	4.43	4.87	6.49	3.76	4.13	5.51	3.27	3.59	4.79
700	Р	2.81	3.40	6.04	1.73	2.10	3.72	1.17	1.42	5.52	0.85	1.03	1.82	0.64	0.78	1.38
700	Т	12.71	10.47	9.25	11.27	9.28	8.20	10.22	8.42	7.44	9.42	7.76	6.86	8.79	7.24	6.39
	dbA	35	36	39	32	33	36	29	30	34	26	28	32	24	26	30
	Vel	7.82	8.60	11.47	6.14	6.76	9.00	5.06	5.56	7.41	4.30	4.73	6.30	3.74	4.11	5.48
800	Р	3.67	4.44	7.89	2.26	2.74	4.86	1.53	1.86	3.30	1.11	1.34	2.38	0.84	1.01	1.80
000	Т	14.53	11.97	10.57	12.88	10.60	9.37	11.68	9.62	8.50	10.77	8.87	7.84	10.04	8.27	7.31
	dbA	38	39	42	35	36	39	32	33	37	29	31	35	27	29	33
	Vel	8.80	9.68	12.90	6.91	7.60	10.13	5.69	6.26	8.34	4.83	5.32	7.09	4.20	4.62	6.16
900	Р	4.65	5.62	9.98	2.87	3.48	6.16	1.94	2.35	4.18	1.41	1.70	3.02	1.06	1.28	2.28
900	T	16.35	13.46	11.89	14.49	11.93	10.54	13.14	10.82	9.56	12.12	9.98	8.82	11.30	9.30	8.22
	dbA	40	41	44	37	39	42	35	36	40	32	34	38	30	31	36
	Vel	9.78	10.75	14.33	7.68	8.44	11.25	6.32	6.95	9.26	5.37	5.91	7.87	4.67	5.14	6.85
1000	Р	5.74	6.95	12.32	3.55	4.28	7.60	2.40	2.90	5.15	1.73	2.09	7.87	1.31	1.58	2.81
1000	Т	18.16	14.96	13.22	16.09	13.25	11.71	4.60	12.03	10.63	13.46	11.09	9.79	12.55	10.34	9.13
	dbA	43	44	47	40	41	44	37	38	42	35	36	40	32	34	38
	Vel				9.22	10.13	13.50	7.59	8.35	11.12	6.45	7.09	9.45	5.60	6.16	8.21
1200	Р				5.10	6.16	10.95	3.45	4.17	7.42	2.49	3.01	5.35	1.88	2.28	4.05
1200	T				19.31	15.90	14.05	17.52	14.43	12.75	16.15	13.30	11.75	15.06	12.40	10.96
	dbA				44	45	49	41	43	45	39	40	44	37	38	43



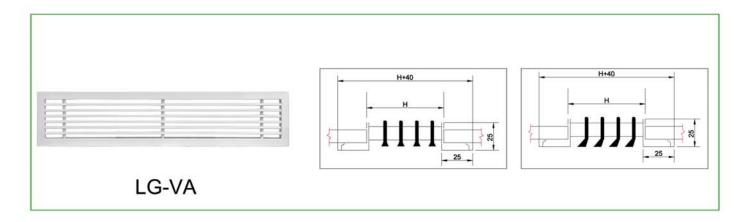
	0.00															
LxH M3/H	250x Deflection.	0	200	45	0	250 22.5	45	0	300 22.5	45	0	350 22.5	45	0	400 22.5	45
IVI3/II	Vel	0.60	0.66	0.88	0.50	0.55	0.73	0.42	0.46	0.62	0.37	0.40	0.54	0.32	0.36	0.48
	P	0.00	0.03	0.05	0.01	0.02	0.73	0.42	0.46	0.02	0.01	0.40	0.02	0.01	0.01	0.48
100	T	1.43	1.17	1.04	1.29	1.07	0.03	1.19	0.01	0.02	1.11	0.01	0.02	1.05	0.86	0.76
	1017 101	2.23	2 2 2 2 2 2	100000			15	1.19	15	-	11.75	7 / 1/1/2			15	15
	dbA Vel	15 1.21	15 1.33	15 1.77	15 0.99	1.09	1.45	0.84	0.93	15 1.24	15 0.73	15 0.81	15 1.07	15 0.65	0.71	0.95
	P	0.09	0.11	0.19	0.99	0.07	0.13	0.04	0.93	0.09	0.73	0.04	0.07	0.03	0.03	0.95
200	T	2.85	2.35	2.98	2.59	2.13	1.88	2.39	1.96	1.74	2.22	1.83	1.62	2.09	1.72	1.52
	dbA	15	15	15	15	15	1.00	15	1.90	1.74	15	1.63	1.02	15	1.72	1.52
	Vel	1.81	1.99	2.65	1.49	1.64	2.18	1.27	1.39	1.85	1.10	1.21	1.61	0.97	1.07	1.43
	P	0.20	0.24	0.42	0.13	0.16	0.29	0.10	0.12	0.21	0.07	0.09	0.16	0.06	0.07	0.12
300	T		100 Km (40)	25.52	55/20/55/		2002.000	10000000		533 523	2000000			200	80080	1200000
		4.28	3.52	3.11	3.88	3.20	2.82	3.58	2.95	2.60	3.34	2.75	2.43	3.14	2.58	2.28
	dbA	15	15	16	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	2.41	2.65	3.53	1.99	2.18	2.91	1.69	1.86	2.47	1.47	1.61	2.15	1.30	1.43	1.90
400	P	0.35	0.42	0.75	0.24	0.29	0.51	0.17	0.21	0.37	0.13	0.16	0.28	0.10	0.12	0.22
	T	5.70	4.70	4.15	5.18	4.26	3.77	4.77	3.93	3.47	4.45	3.66	3.24	4.18	3.45	3.04
	dbA	16	18	21	15	15	19	15	15	17	15	15	15	15	15	15
	Vel	3.01	3.32	4.42	2.48	2.73	3.64	2.11	2.32	3.09	1.83	2.02	2.69	1.62	1.78	2.38
500	P	0.55	0.66	1.17	0.37	0.45	0.79	0.27	0.32	0.57	0.20	0.24	0.43	0.16	0.19	0.34
	T	7.13	5.87	5.19	6.47	5.33	4.71	5.96	4.91	4.34	5.56	4.58	4.05	5.23	4.31	3.81
	dbA	21	22	26	18	19	24	15	17	21	15	15	19	15	15	17
	Vel	3.62	3.98	5.30	2.98	3.27	4.36	2.53	2.78	3.71	2.20	2.42	3.22	1.95	2.14	2.85
600	Р	0.79	0.95	1.69	0.53	0.64	1.14	0.38	0.46	0.83	0.29	0.35	0.62	0.23	0.27	0.49
2000000	Т	8.56	7.05	6.23	7.76	6.39	5.65	7.16	5.89	5.21	6.67	5.50	4.86	6.28	5.17	4.57
	dbA	25	26	30	22	23	28	19	21	25	16	18	23	15	16	21
	Vel	4.22	6.64	6.19	3.47	3.82	5.09	2.95	3.25	4.33	2.57	2.82	3.76	2.27	2.50	3.33
700	Р	1.07	1.29	2.30	72	0.88	1.56	0.52	0.63	1.12	0.40	0.48	0.85	0.31	0.37	0.66
	T	9.98	8.22	7.26	9.06	7.46	6.59	8.35	6.88	6.08	7.79	6.41	5.66	7.32	6.03	5.33
	dbA	28	30	33	25	27	31	22	24	29	20	22	26	17	19	24
	Vel	4.82	5.30	7.07	3.97	4.37	5.82	3.37	3.71	4.95	2.93	3.23	4.30	2.59	2.85	3.80
800	Р	1.40	1.69	3.00	0.95	1.14	2.03	0.68	0.83	1.47	0.52	0.62	1.11	0.40	0.49	0.87
	Т	11.41	9.40	8.30	10.35	8.52	7.53	9.54	7.87	6.94	8.90	7.33	6.47	8.37	6.89	6.09
	dbA	31	33	36	28	30	34	25	27	32	23	25	29	20	22	27
	Vel	5.43	5.97	7.95	4.47	4.91	6.55	3.80	4.17	5.56	3.30	3.63	4.84	2.92	3.21	4.28
900	Р	1.77	2.14	3.80	1.20	1.45	2.57	0.86	1.05	1.86	0.65	0.79	1.40	0.51	0.62	1.10
300	T	12.84	10.57	9.34	11.65	9.95	8.47	10.74	8.84	7.81	10.01	8.24	7.28	9.41	7.75	6.85
	dbA	34	35	39	31	32	37	28	30	34	25	27	32	23	25	30
	Vel	6.03	6.63	8.84	4.96	5.46	7.27	4.22	4.64	6.18	3.67	4.03	5.37	3.24	3.57	4.75
1000	Р	2.18	2.64	4.69	1.48	1.79	3.18	1.07	1.29	2.29	0.81	0.98	1.73	0.63	0.76	1.36
1000	Т	14.26	11.74	10.38	12.94	10.66	9.42	11.93	9.82	6.68	11.12	9.16	8.09	10.56	8.61	7.61
	dbA	36	38	42	33	35	39	31	32	37	28	30	35	26	27	33
	Vel	7.24	7.96	10.60	5.96	6.55	8.73	5.06	5.57	7.42	4.40	4.84	6.45	3.89	4.28	5.70
4000	Р	3.14	3.80	6.75	2.13	2.57	4.57	1.54	1.86	3.30	1.16	1.40	2.50	0.91	1.10	1.95
1200	Т	1000	100000000000000000000000000000000000000		15.53		100000 100000	The same of the sa	110 100 100				Carrier Street	12.55	2010 S 140S	9.13
	dbA	41	42	46	38	39	43	35	37	41	32	34	39	30	32	37
$\overline{}$								-								-

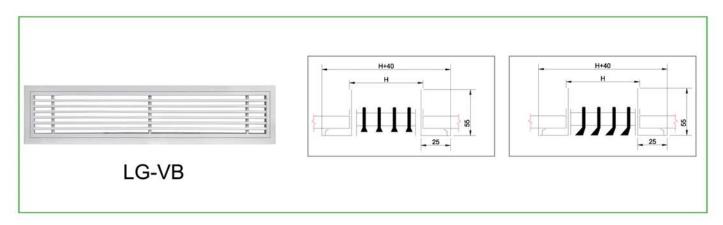


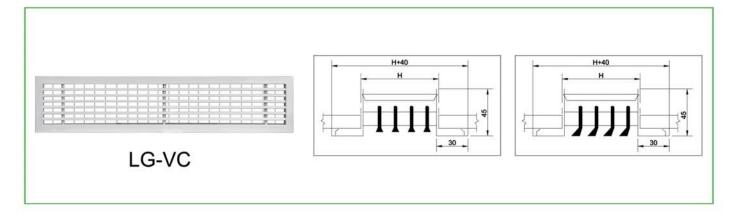
LxH	300x	200		250		300		350			400					
M3/H		0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45	0	22.5	45
IVIO/II	Vel	0.41	0.45	0.60	0.35	0.38	0.51	0.30	0.33	0.44	0.27	0.29	0.39	0.24	0.26	0.35
9799747	P	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.2.	0.01	0.01	0.2.	0.20	0.01
100	T	1.17	0.97	0.85	1.08	0.89	0.79	1.01	0.83	0.73	0.95	0.78	0.69	0.90	0.74	0.65
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Vel	0.82	0.90	1.20	0.69	0.76	1.02	0.60	0.66	0.88	0.53	0.59	0.78	0.48	0.53	0.70
	P	0.04	0.05	0.09	0.03	0.03	0.06	0.02	0.03	0.05	0.02	0.02	0.04	0.01	0.02	0.03
200	T	2.35	1.93	1.71	2.16	1.78	1.57	2.02	1.66	1.47	1.90	1.56	1.38	1.80	1.48	1.31
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
_	Vel	1.23	1.35	1.80	1.04	1.15	1.53	0.91	1.00	1.33	0.80	0.88	1.17	0.72	0.79	1.05
	P	0.09	0.11	0.19	0.07	0.08	0.14	0.05	0.06	0.11	0.04	0.05	0.08	0.03	0.04	0.07
300	Т	3.52	2.90	2.56	3.25	2.67	2.36	3.03	2.49	2.20	2.85	2.34	2.07	2.70	2.22	1.96
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
-	Vel	1.63	1.80	2.40	1.39	1.53	2.04	1.21	1.33	1.77	1.07	1.17	1.57	0.96	1.05	1.40
233.35	P	0.16	0.19	0.34	0.12	0.14	0.25	0.09	0.11	0.19	0.07	0.08	0.15	0.05	0.07	0.12
400	Т	4.70	3.87	3.42	4.33	3.56	3.15	4.04	3.32	2.94	3.80	3.13	2.76	3.95	2.96	2.62
	dbA	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
-	Vel	2.04	2.25	2.99	1.74	1.91	2.54	1.51	1.66	2.21	1.34	1.47	1.96	1.20	1.32	1.75
	P	0.25	0.30	0.54	0.18	0.22	0.39	0.14	0.17	0.29	0.11	0.13	0.23	0.09	0.10	0.18
500	T	5.87	4.83	4.27	5.41	4.46	3.94	5.05	4.15	3.67	4.75	3.91	3.45	4.49	3.70	3.27
	dbA	15	16	21	15	15	18	15	15	16	15	15	15	15	15	15
	Vel	2.45	2.70	3.59	2.08	2.29	3.05	1.81	1.99	2.65	1.60	1.76	2.35	1.44	1.58	2.10
	P	0.36	0.44	0.77	0.26	0.31	0.56	0.20	0.24	0.42	0.15	0.19	0.33	0.12	0.15	0.27
600	T	7.04	5.80	5.13	6.49	5.35	4.72	6.05	4.99	4.41	5.59	4.69	4.14	5.39	4.44	3.92
	dbA	18	20	24	15	17	22	15	15	20	15	15	18	15	15	16
	Vel	2.86	3.15	4.19	2.43	2.67	3.56	2.11	2.32	3.10	1.87	2.06	2.74	1.68	1.84	2.46
	P	0.49	0.59	1.05	0.35	0.43	0.76	0.27	0.32	0.58	0.21	0.25	0.45	0.17	0.20	0.36
700	Т	8.22	6.77	5.98	7.58	6.24	5.51	7.06	5.82	5.14	6.64	5.47	4.83	6.29	5.18	4.58
	dbA	22	23	28	19	21	26	16	18	23	15	15	21	15	15	19
	Vel	3.27	3.59	4.79	2.78	3.05	4.07	2.42	2.66	3.54	2.14	2.35	3.13	1.91	2.11	2.81
0.0000000000	P	0.64	0.78	1.38	0.46	0.56	0.99	0.35	0.42	0.75	0.27	0.33	0.59	0.22	0.27	0.47
800	T	9.39	7.73	6.83	8.66	7.13	6.30	8.07	6.65	5.87	7.59	6.25	5.52	7.19	5.92	5.23
	dbA	25	26	31	22	24	29	19	21	26	16	18	24	15	16	22
	Vel	3.68	4.04	5.39	3.13	3.44	4.58	2.72	2.99	3.98	2.40	2.64	3.52	2.15	2.37	3.16
	Р	0.81	0.98	1.74	0.59	0.71	1.26	0.44	0.54	0.95	0.35	0.42	0.74	0.28	0.34	0.60
900	T	10.57	8.70	7.69	9.74	8.02	7.09	9.08	7.48	6.61	8.54	7.03	6.21	8.09	6.66	5.88
	dbA	28	29	34	24	26	31	22	24	29	19	21	27	16	19	25
	Vel	4.09	4.49	5.99	3.47	3.82	5.09	3.02	3.32	4.42	2.67	2.94	3.91	2.39	2.63	3.51
	P	1.00	1.21	2.15	0.72	0.87	1.55	0.55	0.66	1.17	0.43	0.52	0.92	0.34	0.42	0.74
1000	Т	11.74	9.67	8.54	10.82	8.91	7.87	10.09	8.31	7.34	9.49	7.82	6.91	8.99	7.40	6.54
	dbA	30	32	36	27	29	34	24	26	31	21	23	29	19	21	27
	Vel	4.90	5.39	7.19	4.17	4.58	6.11	3.62	3.98	5.31	3.20	3.52	4.70	2.87	3.16	4.21
ng automobien i	P	1.94	1.74	3.10	1.04	1.26	2.24	0.79	0.95	1.69	0.62	0.74	1.32	0.49	0.60	1.06
1200	T	14.09	F 55003 - Harden	200	100000000000000000000000000000000000000	10.68	N 5.792	12.11	9.98	8.81	11.39	9.38	8.29	10.78		7.86
	dbA	34	36	41	31	33	38	28	30	36	26	28	33	23	25	31
	ub/\	U-T	-00	71	U	- 00	- 00	20	-00	- 00	20	20	-00	20	20	U 1



### **Linear Bar Grille**







- \* They can be used as supply or return grilles.
- \* They can be with different width of frames, narrow or wide, to be used at different applications.
- \* They get different type of blades: 0°, 15°, 30°
- \* Mounting: Screw system is standard, concealed clip fixing as optional.
- \* Accessories: opposite blade damper.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.



### **Performance Data LG**

The data of this table are for 0°.

Regarding 15°, you have to add 10% to the Throw.

And regarding 30°, you have to add 20% to the Throw.

Size(mm)	Velocity(m/s)	2	3	4	5	6	7	8
, ,	M3/H	121	180	241	301	360	422	481
300x100	dbA					30	34	38
	Throw	1.9-2.8	3.2-4.3	4.1-5.6	4.9-7.2	4.8-8.3	6.8-9.9	8.0-11.1
	M3/H	226	338	452	564	677	791	903
600x100	dbA				28	33	37	40
	Throw	2.5-3.5	3.5-4.9	4.7-6.8	5.9-8.3	7.1-10.2	8.0-11.7	9.5-13.5
	M3/H	348	519	692	865	1039	1210	1385
900x100	dbA				30	35	39	42
	Throw	2.8-4.1	4.4-5.9	5.6-7.7	6.8-9.9	7.9-11.7	422 34 6.8-9.9 791 37 8.0-11.7 1210	10.8-15.5
	M3/H	466	700	933	1166	1399	1632	1867
1200x100	dbA				31	36	40	43
	Throw	3.2-5.3	4.7-6.5	5.9-8.3	7.4-10.5	8.9-12.6	10.2-14.7	12.0-16.9
	M3/H	587	881	1173	1467	1761	2055	2348
1500x100	dbA				32	37	41	44
	Throw	3.2-4.7	4.7-6.8	6.5-9.2	8.0-11.4	9.5-13.5	11.1-15.9	12.6-18.1
	M3/H	707	1061	1414	1768	2122	2475	2829
1800x100	dbA			27	33	38	42	45
	Throw	4.0-5.1	5.3-7.4	7.1-9.9	8.6-12.3	10.5-14.4	12.0-16.9	13.5-19.3

Size(mm)	Velocity(m/s)	2	3	4	5	6	7	8
300x125	M3/H	141	213	282	354	425	495	566
	dbA					30	34	38
	Throw	2.2-3.2	3.2-4.4	4.1-5.9	5.3-7.4	6.5-8.9	7.0-7.2	8.0-11.7
	M3/H	266	399	531	664	797	929	1062
600x125	dbA				28	3	37	40
	Throw	2.5-3.8	3.8-5.3	5.0-7.1	6.5-8.9	7.7-10.8	8.6-12.3	10.2-14.2
900x125	M3/H	406	610	812	1018	1221	1423	1625
	dbA				30	35	39	42
	Throw	2.8-4.1	4.4-6.2	5.6-7.9	7.1-10.1	8.2-11.9	7 929 37 10.8 8.6-12.3 21 1423 5 39 11.9 10.1-14.0 14 1918 6 40 13.4 10.8-15.5 69 2415 7 41	11.4-16.3
	M3/H	547	823	1098	1370	1644	1918	2193
1200x125	dbA				31	36	40	43
	Throw	3.1-4.3	4.6-6.7	6.1-8.8	7.9-11.1	9.5-13.4	495 34 7.0-7.2 929 37 8.6-12.3 1423 39 10.1-14.0 1918 40 10.8-15.5 2415	12.2-17.8
	M3/H	690	1034	1379	1725	2069	2415	2758
1500x125	dbA				32	37	41	44
	Throw	3.4-4.6	4.9-7.0	7.0-9.4	8.3-11.9	10.2-14.1	11.7-16.6	13.5-18.9
	M3/H	829	1244	1659	2075	2488	2965	3318
1800x125	dbA			27	33	38	42	45
	Throw	3.7-5.2	5.5-7.6	7.0-10.2	8.8-12.5	10.7-15.2	495 34 7.0-7.2 929 37 8.6-12.3 1423 39 10.1-14.0 1918 40 10.8-15.5 2415 41 11.7-16.6 2965 42	14.3-20.1



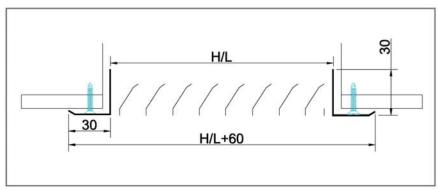
### Performance Data LG

Size(mm)	Velocity(m/s)	2	3	4	5	6	7	8
	M3/H	226	338	452	563	677	791	903
300x150	dbA				27	32	36	40
	Throw	2.4-3.4	3.5-4.9	4.6-6.7	5.8-8.2	7.0-10.1	7.9-11.6	9.2-13.4
	M3/H	423	636	847	1059	1272	1482	1695
600x150	dbA				30	35	39	42
	Throw	2.7-4.0	4.3-6.1	5.8-8.2	7.3-10.4	8.5-12.2	10.4-14.3	11.6-16.5
	M3/H	649	974	1299	1624	1948	2273	2598
900x150	dbA				32	37	41	44
	Throw	3.4-4.6	4.6-6.7	6.4-8.8	7.9-11.0	9.4-13.4	11.0-15.5	12.2-17.7
	M3/H	876	1312	1751	2188	2625	3063	3502
1200x150	dbA			27	33	38	42	45
	Throw	3.4-4.9	5.5-7.6	7.6-10.1	8.8-12.5	10.4-14.9	12.2-17.7	14.3-20.1
	M3/H	1102	1651	2202	2752	3303	3854	4403
1500x150	dbA			28	34	39	43	46
,	Throw	4.0-5.5	5.8-8.2	7.9-11.0	9.8-13.8	11.6-16.5	13.1-19.2	15.5-22.3
	M3/H	1326	1989	2652	3315	3978	4641	5304
1800x150	dbA			29	35	40	44	47
	Throw	4.0-5.8	6.4-8.8	7.9-11.6	10.7-14.6	11.9-17.4	14.6-20.4	16.5-23.2

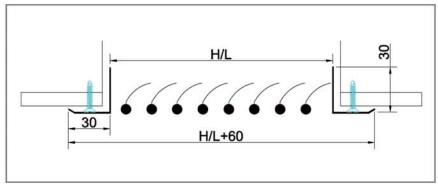


### **Return Grille**

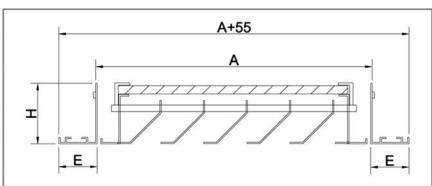












- \* They are used as return grille.
- \* Blades are fixed at 45°
- \* Accessories: Damper, Plenum box.
- \*Mounting: Screw mounting is standard, concealed clips mounting as additional
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.

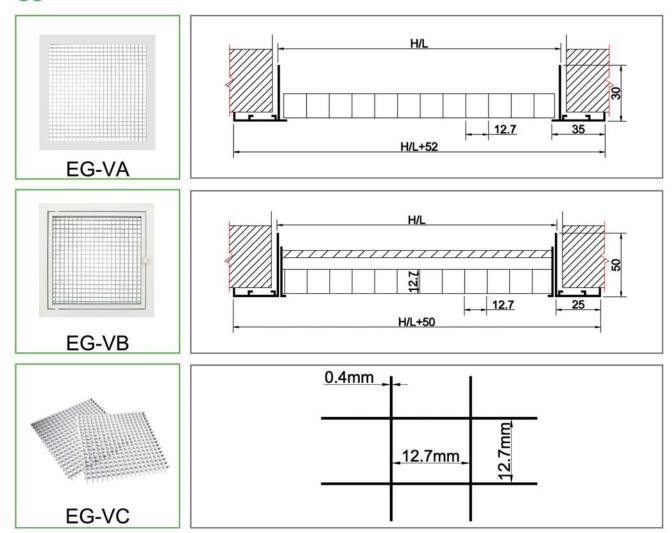


### **Return Grille Selection Table**

Velocity(m/s)	1	1.5	2	2.5	3	3.5	4	5	6	7
Static Pressure	0.1	0.2	0.4	0.6	0.8	1.1	1.5	2.2	3.3	4.6
Size(mm)					Air Flov	v(M3/H)				
200x100	51	77	102	138	153	179	205	255	306	358
250x100	68	102	136	170	204	238	272	340	408	476
250x150	102	153	204	255	306	357	408	510	612	714
250x200	143	214	286	357	428	500	571	714	857	1000
300x100	88	133	177	221	265	309	354	442	530	619
300x150	126	189	252	315	377	440	503	629	755	881
300x200	177	265	354	443	530	619	707	884	1061	1238
300x300	279	418	558	698	836	976	1115	1395	1673	1952
350x150	146	219	292	366	429	512	585	731	877	1023
350x200	207	311	415	519	622	726	830	1037	1244	1452
400x200	241	362	483	604	724	845	966	1207	1448	1690
400x250	313	469	626	782	938	1095	1251	1565	1877	2190
400x300	381	571	762	952	1142	1333	1523	1904	2285	2666
400x400	524	785	1047	1309	1571	1833	2093	2618	3143	3665
450x200	272	408	544	680	816	952	1088	1360	1632	1904
450x300	432	648	864	1080	1295	1511	1727	2159	2591	3023
450x450	673	1010	1346	1683	2020	2356	2693	3366	4039	4712
500x100	221	332	442	553	663	774	884	1105	1326	1547
500x200	306	459	612	765	918	1071	1224	1530	1836	2142
500x300	483	724	699	1207	1448	1690	1931	2414	2897	3380
600x150	265	398	530	663	796	928	1061	1326	1591	1856
600x300	588	882	1176	1471	1765	2059	2353	2941	3529	4117
600x450	911	1367	1822	2278	2734	3189	3645	4556	5467	6378
600x600	1238	1856	2475	3094	3713	4332	4950	6188	7426	8663
750x200	469	704	938	1173	1408	1642	1877	2346	2815	3284
750x300	728	1091	1455	1819	2183	2547	2910	3638	4366	5093
750x450	1149	1724	2298	2873	3448	4022	4597	5746	6895	8044
750x600	1561	2341	3121	3902	4682	5463	6242	7803	9365	10925
900x300	898	1346	1795	2244	2693	3142	3590	4488	5386	6283
900x450	1387	2081	2774	3468	4162	4855	5549	6936	8323	9710
900x600	1887	2831	3775	4718	5661	6605	7548	9435	11322	13209
900x750	2186	3279	4372	5466	6559	7652	8745	10931	13117	15303
900x900	2485	3728	4971	6214	7456	8699	9942	12427	14912	17400
1200x600	2530	3794	5059	6324	7589	8854	10118	12648	15178	17707
1200x750	2829	4243	5658	7072	8486	9901	11315	14144	16973	19802
1200x900	3584	5375	7167	8959	10751	12543	14334	17918	21502	25085
1200x1200	4743	7115	9486	11568	14229	16601	18972	23715	28458	33201



### **Egg crate Grille**



- \* They are used as return grille
- \* They egg crate size is 12.7x12.7mm, vertical or 45°fixed.
- \* The A type is a fixed grille, and the B type is a removable hinged grille with filter.
- \* Accessories: Damper, Plenum box.
- \* Mounting: screw mounting is standard, and concealed clip fixing is optional.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.

#### Selection Table:

Standard Size (mm)	Effective Area(m2)	Air Volume (m3/h)
200x200	0.031	300
250x250	0.049	450
300x300	0.076	735
350x350	0.103	900
400x400	0.134	1300
450x450	0.177	1750
500x500	0.212	2050
600x600	0.326	3000
700x700	0.449	4000
800x800	0.590	6000
900x900	0.751	7000



# **Egg Crate Grille Selection Table**

LxH	250x	250	300	350	400	450	500	600	700	800
M3/H										
	Vel	0.63	0.51	0.43	0.37	0.33	0.29	0.24	0.21	0.18
100	Р	0.02	0.01	0.01	0.01	0.01	0	0	0	0
	dbA	15	15	15	15	15	15	15	15	15
	Vel	1.26	1.02	0.86	0.75	0.66	0.59	0.48	0.43	0.36
200	Р	0.08	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01
	dbA	15	15	15	15	15	15	15	15	15
	Vel	1.89	1.54	1.29	1.12	0.99	0.88	0.73	0.62	0.54
300	Р	0.18	0.12	0.09	0.06	0.05	0.04	0.03	0.02	0.01
	dbA	19	15	15	15	15	15	15	15	15
	Vel	2.51	2.05	1.73	1.49	1.31	1.17	0.97	0.82	0.72
400	Р	0.32	0.21	0.15	0.11	0.09	0.07	0.05	0.03	0.03
	dbA	26	22	18	15	15	15	15	15	15
	Vel	3.14	2.56	2.16	1.87	1.64	1.47	1.21	1.03	0.90
500	Р	0.50	0.33	0.24	0.18	0.14	0.11	0.07	0.05	0.04
	dbA	31	27	23	15	17	15	15	15	15
	Vel	3.77	3.07	2.59	2.24	1.97	1.76	1.45	1.23	1.07
600	Р	0.73	0.48	0.34	0.26	0.20	0.16	0.11	0.08	0.06
	dbA	35	31	27	24	21	18	15	15	15
	Vel	4.40	3.58	3.02	2.61	2.30	2.05	1.69	1.44	1.25
700	Р	0.99	0.65	0.47	0.35	0.27	0.22	0.15	0.11	0.08
	dbA	39	35	31	28	25	22	16	15	15
	Vel	5.03	4.09	3.45	2.98	2.63	2.35	1.94	1.65	1.43
800	Р	1.29	0.85	0.61	0.45	0.35	0.28	0.19	0.14	0.10
	dbA	42	38	34	31	28	25	20	15	15
	Vel	5.66	4.61	3.88	3.36	2.96	2.64	2.18	1.85	1.61
900	Р	1.63	1.08	0.77	0.57	0.45	0.36	0.24	0.17	0.13
	dbA	45	41	37	34	31	28	22	17	15
	Vel	6.29	5.12	4.32	3.73	3.29	2.94	2.42	2.06	1.79
1000	Р	2.20	1.34	0.95	0.71	0.55	0.44	0.30	0.22	0.16
	dbA	48	44	40	37	34	31	25	20	16
	Vel		5.63	4.75	4.10	3.61	3.23	2.66	2.26	1.97
1100	Р		16.2	1.15	0.86	0.67	0.53	0.36	0.26	0.20
	dbA		46	43	39	36	33	28	23	18
	Vel		6.14	5.18	4.48	3.94	3.52	2.90	2.47	2.15
1200	Р		1.92	1.37	1.02	0.79	0.63	0.43	0.31	0.24
	dbA		49	45	42	38	35	30	25	20



# Egg Crate Grille Grille Selection Table

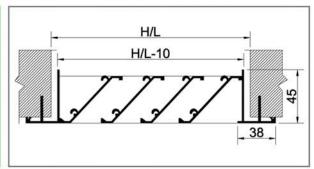
LxH	300x	250	300	350	400	450	500	600	700	800
M3/H			99				3	200		
	Vel	0.42	0.35	0.30	0.27	0.24	0.20	0.17	0.15	0.13
100	Р	0.01	0.01	0	0	0	0	0	0	0
	dbA	15	15	15	15	15	15	15	15	15
	Vel	0.83	0.70	0.61	0.53	0.48	0.39	0.34	0.29	0.26
200	Р	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0
	dbA	15	15	15	15	15	15	15	15	15
	Vel	1.25	1.05	0.91	0.80	0.72	0.59	0.50	0.44	0.39
300	Р	0.08	0.06	0.04	0.03	0.02	0.01	0.01	0.01	0.01
	dbA	15	15	15	15	15	15	15	15	15
	Vel	1.67	1.41	1.21	1.07	0.96	0.79	0.67	0.58	0.52
400	Р	0.14	0.10	0.08	0.06	0.05	0.03	0.02	0.02	0.01
	dbA	17	15	15	15	15	15	15	15	15
	Vel	2.08	1.76	1.52	1.34	1.19	0.98	0.84	0.73	0.64
500	Р	0.22	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02
	dbA	22	18	15	15	15	15	15	15	15
	Vel	2.50	2.11	1.82	1.60	1.43	1.18	1.01	0.87	0.77
600	Р	0.32	0.23	0.17	0.13	0.10	0.07	0.05	0.04	0.03
	dbA	27	23	19	15	15	15	15	15	15
	Vel	2.92	2.46	2.13	1.87	1.67	1.38	1.17	1.03	0.90
700	Р	0.43	0.31	0.23	0.18	0.14	0.10	0.07	0.05	0.04
	dbA	30	26	23	19	16	15	15	15	15
	Vel	3033	2.81	2.43	2.14	1.91	1.58	1.34	1.17	1.03
800	Р	0.57	0.40	0.30	0.23	0.19	0.13	0.09	0.07	0.05
	dbA	34	30	26	22	19	15	15	15	15
	Vel	3.75	3.16	2.73	2.41	2.15	1.77	1.51	1.31	1.16
900	Р	0.72	0.51	0.38	0.30	0.24	0.16	0.12	0.09	0.07
	dbA	37	33	29	25	22	16	15	15	15
	Vel	4.17	3.51	3.04	2.67	2.39	1.97	1.68	1.46	1.29
1000	Р	0.89	0.63	0.47	0.36	0.29	0.20	0.14	0.11	0.08
	dbA	39	35	32	28	25	19	15	15	15
	Vel	4.58	3.86	3.35	2.95	2.63	2.17	1.84	1.60	1.42
1100	Р	1.07	0.76	0.57	0.44	0.35	0.24	0.17	0.13	0.10
	dbA	42	38	34	31	27	21	16	15	15
	Vel	5.00	4.22	3.64	3.21	2.97	2.36	2.01	1.75	1.55
	10eU1	4 =0	4.00	0.00	0.00	0.40	0.22	0.24	0.10	0.44
1200	Р	1.50	1.06	0.80	0.62	0.49	0.33	0.24	0.18	0.14

## 5 SHINKO

### WEATHER LOUVER







- \* They are used as fresh air intake louver usually mounted on the outside wall.
- \* Blades are rainproof designed 45° fixed to prevent rain goes into the inside room.
- \* Accessories: Damper, Plenum box.
- \* Mounting: screw mounting is standard, and concealed clip fixing is optional.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.

#### **Selection Table**

#### WL-VA

		Air Flow M3/H (V=1m/s)											
HT	200	200	300	350	400	450	500	600	700	800	900	1000	
100	37	48	58	68	78	88	98	118	138	158	178	198	
150	58	74	90	106	122	138	154	185	216	247	278	309	
200	80	101	123	145	167	189	211	253	295	337	379	421	
250	101	129	156	184	212	240	268	321	374	427	480	533	
300	122	156	189	223	257	291	325	389	453	517	581	645	
350	144	183	222	262	302	342	382	457	532	607	682	757	
400	165	210	255	301	347	393	439	526	611	697	783	869	
500	208	265	322	379	437	495	553	662	769	877	985	1093	
600	251	319	388	457	527	597	667	798	927	1057	1187	1317	

### **Velocity / Pressure Drop (intake)**

Velocity	1	2	3	4	5	6	8
Р	9.31	1.23	2.76	4.90	7.65	11.0	19.58

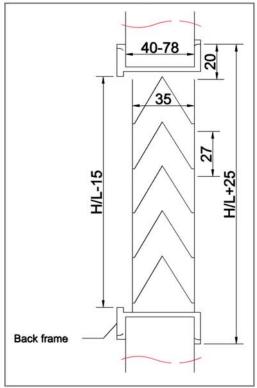
### **WL-VB**

Standard size (mm)	Airflow (m3/h) (V=1M/S)
150	40
200	83
250	131
300	191
350	265
400	349



### **Door Grille / Transfer Grille**





- \* They are used as transfer grille on doors or walls for natural air ventilation.
- \* Mounting: screw mounting is standard, and concealed clip fixing is optional.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized.

Standard Size H/L(mm)	Effective Area(m2)	Air Volume (m3/h)
300x150	0.029	139
500x150	0.050	244
500x250	0.088	429
750x250	0.131	670
750x350	0.183	950
900x300	0.203	1050
900x500	0.338	1750
1000x250	0.188	1000
1000x350	0.263	1360
1000x500	0.400	2070
	Assumed velocity is 2.5m/s	-



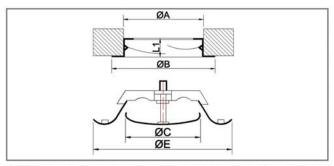
### **METAL DISC VALVE**

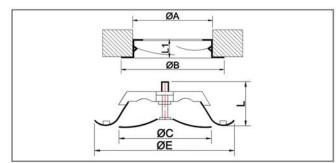


DV-VS

**Exhaust Valve** 

Supply Disc Valve





- \* They are used mainly in bath rooms for exhaust or supply air.
- \* They are suitable for both ventilation and air conditioning.
- \* They get a low noise level even at relatively high velocities.
- \* They are made of galvanized steel.
- \* Mounting: by screw.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color.

#### Size Table

#### DV-VE

Size	Α	С	E
100	98	75	138
125	123	100	164
150	148	120	202
160	158	130	211
200	198	158	248

#### DV-VS

Size	Α	С	E
100	98	75	138
125	123	100	164
150	148	120	202
160	158	130	211
200	198	158	248



# Specifications data DV-VE

		Nomir	nal Size	e (mm)					Air I	Flow, M	13/H				
	80	100	125	150/160	200	МЗ/Н	20	40	60	80	100	150	200	300	
	-9					Ра	90								
	-9					NR									
	-6	-9				Pa	45	170							
	-0	-9				NR	:-	20							
	-3	-6	-12			Pa	20	80	200	300					
			12			NR	8=	12	25	28					
	0	-3			-20	Pa	10	50	120	200					
						NR	(+	-	17	26					
peni	6		-6			Pa		30	70	120	200				
ing [						NR		-	12	20	28				
)ista	9	6				Pa		20	40	80	130				
nce (		9 6				NR		-	-:	15	22				
Opening Distance (mm)			0		15	Pa		15	30	60	80	200			
						NR		-	-	11	18	30			
		12	6	6			Pa		10	20	40	60	150		
						NR		-	-	-	13	27			
				0		Pa			15	25	40	90	170		
						NR			-	-	9	21	30		
			12	6		Pa				15	25	60	100	220	
			12			NR				:=	740	15	25	31	
				12	0	Pa					15	30	60	150	
				12	0	NR					-	10	18	30	



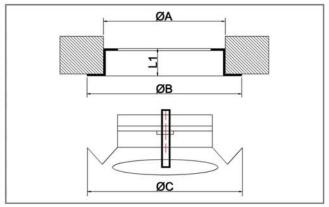
# Specifications data DV-VS

	Nominal Size (mm)					Air Flow, M3/H								
	80	100	125	150/160	200	МЗ/Н	20	40	60	80	100	150	200	300
	3					Pa	90	200						
	3					NR	30	40						
						Pa	50	120	200					
		0				NR	23	35	42					
	6		-3	-6	-6	Pa	30	75	130	200				
	0		-3	-0	-0	NR	17	30	37	43				
		3				Pa	20	45	80	130				
		3				NR	-	25	32	138				
			0	-3	-3	Pa	13	30	60	85	200			
			U	-5	-3	NR	-	20	28	33	45			
Opening Distance (mm)		12	6			Pa	18	22	40	60	150			
ing I		12	0			NR	-	15	24	30	42			
Dista				0	0	Ра		15	30	45	100	200		
nce					U U	NR		-	20	27	39	46		
mm)		12				Pa		12	22	35	80	150		
		12				NR		-	18	23	35	43		
			6	6		Pa			15	25	60	100		
			0	0		NR			-	20	31	38		
			12		6	Pa				13	35	60	130	
			12			NR				-	23	32	43	
				12	12	Pa				5	20	35	80	150
				12	12	NR				-	17	25	35	48
					15	Pa					12	22	45	90
					13	NR						21	32	49
					20	Ра						13	29	45
					20	NR						15	25	33



### **Plastic Disc Valve**



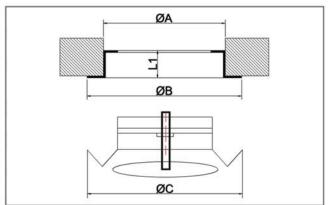


		_
	Standard Size(mm)	
	100	
	125	
	150	
Г	200	

#### Features:

- \* Made of pp.
- \* Adjust the air volume by rotating the valve disc .In plus or minus direction.





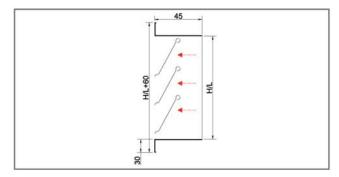
Standard Size(mm)
75
100
125
150
200

- \* Made of ABS.
- \* Adjust the air volume by rotating the valve disc .In plus or minus direction.



### **GRAVITY LOUVER**





- \* They are used for air extraction and automatic closing of duct when the fan is switched off.
- \* They consist of a frame and movable plates mounted horizontally one above the other.
- \* They are installed only vertically with blades downwards.
- \* Finishing: White powder coating Ral9016, Ral9010, or customized color. Anodized color.

#### Selection table

#### 1. Effective Area (m2)

H (mm)	L (mm)											
H (mm)	150	200	259	300	350	400	450	500	550	600		
150	0.018	0.024	0.030	0.037	0.043	0.049	0.063	0.073	0.085	0.098		
200	0.024	0.032	0.041	0.049	0.058	0.067	0.084	0.098	0.115	0.132		
250	0.030	0.041	0.051	0.062	0.073	0.084	0.105	0.124	0.145	0.167		
300	0.037	0.050	0.063	0.077	0.090	0.103	0.130	0.152	0.179	0.205		
350	0.043	0.058	0.074	0.089	0.105	0.121	0.152	0.178	0.209	0.240		
350	0.049	0.067	0.085	0.102	0.120	0.138	0.173	0.203	0.239	0.274		
350	0.055	0.067	0.095	0.115	0.135	0.155	0.195	0.229	0.269	0.309		
350	0.062	0.085	0.107	0.130	0.152	0.175	0.219	0.257	0.302	0.347		
350	0.068	0.093	0.118	0.142	0.167	0.192	0.241	0.283	0.332	0.382		
350	0.074	0.101	0.128	0.155	0.182	0.209	0.263	0.308	0.362	0.416		

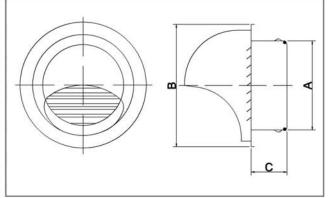
#### 2. Air Volume (m3/h) with 3m/s velocity

LI (mm)	L (mm)											
H (mm)	150	200	259	300	350	400	450	500	550	600		
150	194	259	324	400	464	529	670	788	918	1058		
200	259	346	443	529	626	724	907	1058	1242	1426		
250	324	443	551	670	788	907	1134	1339	1566	1804		
300	400	540	680	832	972	1112	1404	1642	1933	2214		
350	464	626	799	961	1134	1307	1642	1922	2257	2592		
400	529	724	918	1102	1296	1490	1868	2192	2581	2959		
450	594	810	1026	1242	1458	1674	2106	2473	2905	3337		
500	670	918	1156	1404	1642	1890	2365	2776	3262	3748		
550	734	1004	1274	1534	1804	2074	2603	3056	3586	4126		
550	799	1091	1382	1674	1966	2257	2840	3326	3910	4493		



### **BALL WEATHER LOUVER**



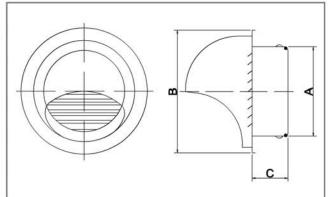


Size(mm)	
100	
125	
150	
200	

#### Features:

- \* Made of high quality stainless steel.
- \* With insect wire mesh



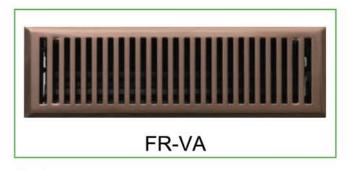


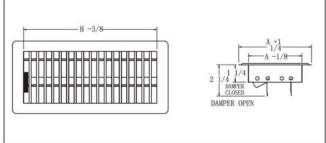
Size(mm)	
100	
125	
150	
200	

- \* Made of high quality aluminium sheet.
- \* Color RAL9010.RAL9016



### **FLOOR GRILLE**

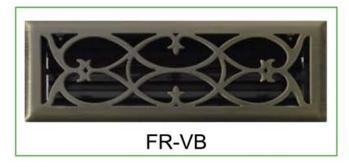


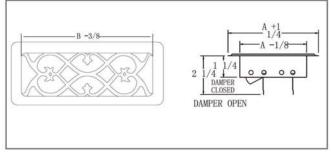


#### Features:

- \* Made of iron sheet.
- \* Color Nickel,rRed Copper,Black,Antique,Bronze,White.

	Size(inch)	
2x10	2x12	2x14
4x10	4x12	4x14
6x10	6x12	6x14





- \* Made of iron sheet.
- \* Color Nickel,rRed Copper,Black,Antique,Bronze,White.

Size(inch)							
2x10	2x12	2x14					
4x10	4x12	4x14					
6x10	6x12	6x14					



### **Opposed Blades Damper**





#### Features:

- \* Made of high quality extruded aluminium profile.
- \* used as damper for square diffuser.
- \* Accurate gear wheel control.



#### Features:

- \* Made of high quality extruded aluminium profile.
- \* Used as damper for grilles.
- \* Mechanical control operated by screw driver.

### **Butterfly damper**



#### Features:

- \* Made of high quality GI sheet.
- \* Damper for round diffusers.
- \* Standard sizes:150,200,250,300,350,400,450,500

### Slide Damper

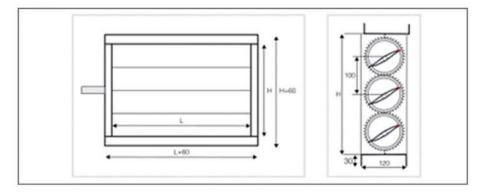


- \* Made of high quality GI sheet.
- \* Damper for round diffusers.
- \* Standard sizes:150,200,250,300,350,400,450,500



### **Volume Control Damper**





- \* They are made of extruded aluminum profile.
- \* They are used to adjust air volume on duct systems.
- \* Control: manually or by electrical actuator.
- \* Sizes are according to customers' needs.
- \* Color: Anodized.



Standard sizes	D1	D2
100	98	104
125	123	129
150	148	154
160	158	164
200	198	204
250	248	254
315	313	319

- \* They are used to adjust air volume on round duct systems
- \* They are made of galvanized steel sheet material.
- \* Control: manually or by electrical actuator.



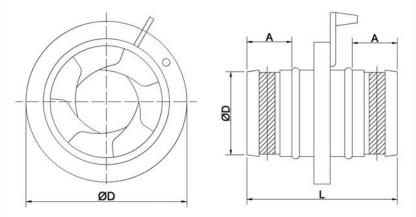
Standard sizes	D1	D2
100	98	104
125	123	129
150	148	154
160	158	164
200	198	204
250	248	254
315	313	319

- \* Frame made of high quality GI sheet 0.6mm.and blades made of aluminium sheet 0.3mm.
- \* It's used to break the supply and return air.after turn off the air equipments.



### **Iris Damper**





- \* They are ideal air flow regulator and measuring device for circular ducts.
- \* The diaphragm valve ensures a perfect accordance between the diameter indication on the handle and the opening of the valve.
- \* They provides a 100% free area when in fully open position.
- \* They are made of galvanized steel sheet, with EPDM seal rings.
- \* They are with selection graph, mentioning the air volume and pressure level at different opening.
- \* They are available in range from 80mm to 800mm

### Size Table:

Size	d(mm)	D(mm)	L(mm)	A(mm)	Material Thickness(mm)
80	79	125	115	33	0.6
100	99	165	115	27	0.6
125	124	188	115	27	0.6
150	149	230	115	27	0.6
160	159	230	115	27	0.6
200	199	285	120	27	0.6
250	249	335	135	33	0.6
300	299	405	140	33	0.6
315	314	405	140	33	0.6
400	398	525	150	46	1.0
500	498	655	150	46	1.0
630	628	815	155	46	1.0
800	798	1015	285	110	1.0



# Flexible Duct



Diameter		Length
mm	Inch	m/pcs
100	4	10
125	5	10
150	6	10
200	8	10
250	10	10
300	12	10
350	14	10
400	16	10

NON - INSULATED	Description: Non-insulated aluminum flexible ducts are produced from two layer aluminum strengthened with high tension hard steel spring wire.  Standard Length: 10 Meters Packaging: Individual Carton Boxes Fire Resistance: Difficult-Flammability Diameter Range: 100 ~ 610mm Temperature Range: -30 ~ +140 °C Max Air Velocity: 30m/s Max Working Pressure: 2500Pa
WITH INSULATION	Description: Insulated flexible duct made of a thermal flex inner wall, supporting a 25 thickness 18kg/m3 fiberglass insulation, sheathed in a reinforced aluminum/polyester laminated jacket acting as a vapor barrier  Standard Length: 10 Meters  Packaging: Individual Carton Boxes  Fire Resistance: Difficult-Flammability  Diameter Range: 100 ~ 610mm  Temperature Range: -30 ~ +140 °C  Max Air Velocity: 30m/s  Max Working Pressure: 2500Pa  Density: 18kg/m3  Thickness: 25 ~ 50mm  Conductivity Factor: 0.034W/mK















#### SHINKO AIRCON PRIVATE LIMITED

D. NO: 3-159 / 7, First floor, Sri Nidhi complex, Near Bus stand, Bajpe Mangalore Taluk, Dakshina Kannada, Karnataka State, INDIA- 574142 Mob: +91-9632194409 info@shinkoind.com,

www.shinkoind.com

#### SHINKO AIRCON TRADING & MAINTENANCE LLC

Add.: Office No: 203, Burj Nahar Views building 166-Omar Bin Khattab Street, Naif- Deira, Dubai- UNITED ARAB EMIRATES Mob: +971-552596321 info@shinkoaircon.com

www.shinkoaircon.com



