

# TWITAIR

Technical catalog

*Aluminum*  
*air conditioning*  
*accessories*  
*technical*



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## Twitoplast Company Overview

Founded in 1989, Twitoplast is privately owned by Israel and Shoshana Twito. The Company focuses on developing and manufacturing accessories, primarily for the air conditioning market.

With the second generation of the Twito family joining the ranks, a new, young and creative spirit contributes greatly to the company in many different aspects.

In recent years we began manufacturing the state of the art, high quality TWITAIR aluminum products, and with to our development and engineering department and the service of our sophisticated lab, we are able to produce products of exceptional air performance.

Thanks to its superior quality and excellent reliable service, Twitoplast successfully put the company on a global scale.

Our large range of products include: return air grilles with or without filters, multiple ceiling diffusers, supply grilles, strip line, slots, and much more.

Whatever the application, project or need may be, Twitoplast aluminum grilles and diffusers will meet your requirements.

All products are under **ISO, CE & Rosh**.





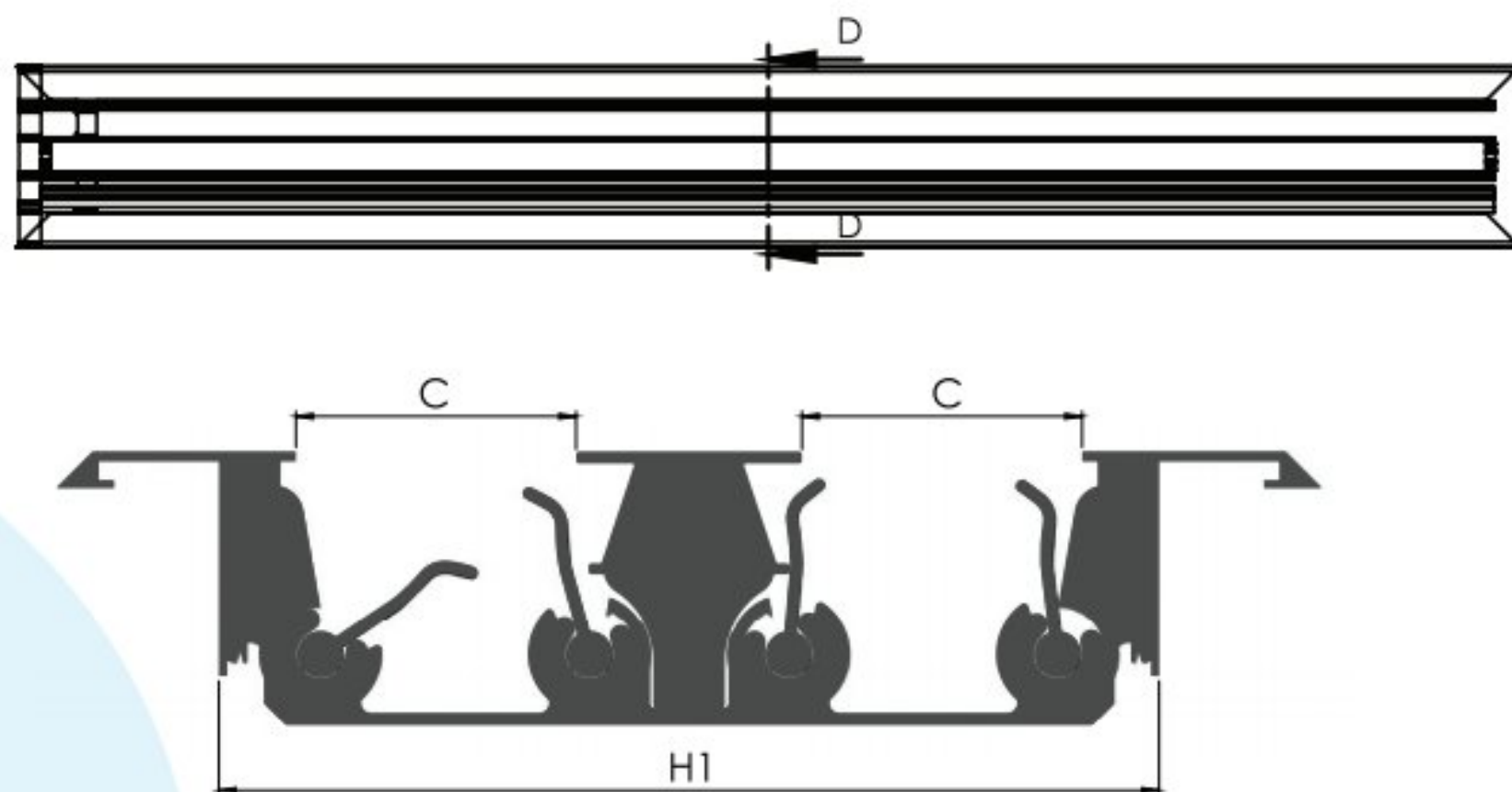


# Linear Slot Diffuser

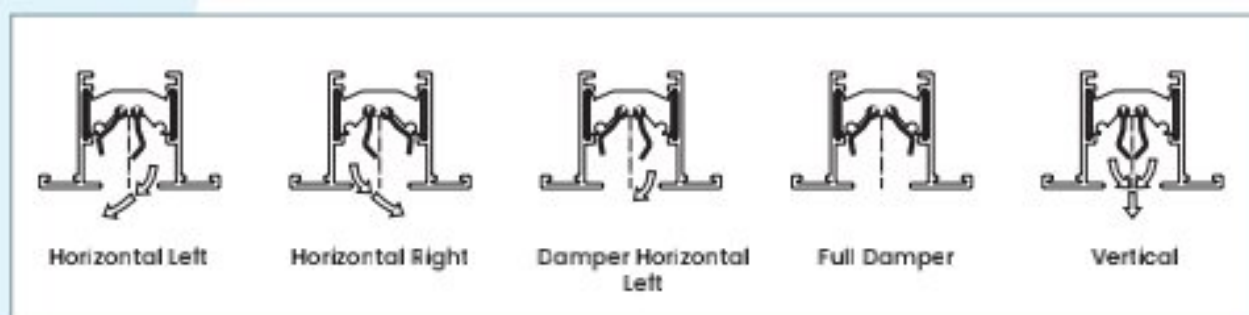
## Product Description *//////////*

- Linear slot diffusers provide a combination of engineering excellence and architectural appeal in a single product. Blade profile is horizontal without affecting air distribution performance.
- Fitted for ceiling or high wall installation, these diffusers feature an adjustable air supply pattern and are intended for pre-installation for optimum airflow performance.
- It can also serve as a return air grille.
- Made of aluminum extruded powder and coated with white RAL 9016.
- The product can be ordered to any length, width and color and is packed in plastic film.

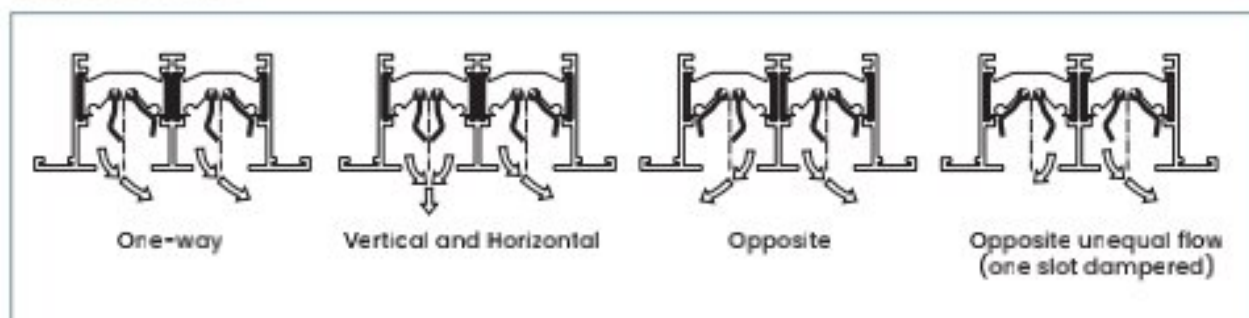




ONE SLOT

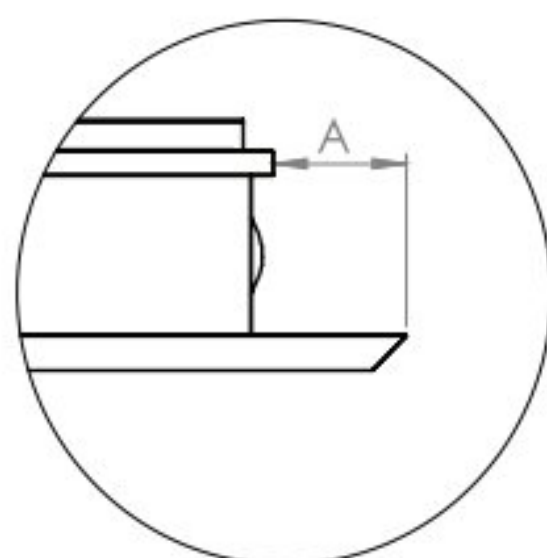


TWO SLOT



No. of slots	Dimensions mm					
	External size mm		Neck size mm		Depth size mm	Opening size mm
	L	H	L1	H1	D	C
1	L1+2(A)   H1+2(A)		L1	51	22	24.8
2			L1	97		24.8X2
3			L1	146		24.8X3
4			L1	193		24.8X4
5			L1	241		24.8X5
6			L1	289		24.8X6
7			L1	337		24.8X7
8			L1	385		24.8X8

Frame size options (A)
0.7 mm
10 mm
20 mm
27 mm



• All products listed below are in stock and can be ordered to any length or color.



## Performance Data

No. of slots	Neck width [mm]	Effective area [m²]	effective area [ft²]	Flow [CFM/m]	Neck velocity [FPM/m]	Static pressure drop [Pa]	NC [dB]	Throw [m] *Vt=0.5 m/s	Throw [m] *Vt=0.2 m/s
1	51	0.0248	0.267	75	281		-	1.2	1.7
1	51	0.0248	0.267	100	375		20	1.8	2.9
1	51	0.0248	0.267	125	468	17	22	2.6	3.9
1	51	0.0248	0.267	150	562	21	25	2.9	4.2
1	51	0.0248	0.267	175	656	23	27	3.1	4.6
1	51	0.0248	0.267	200	749	25	28	3.3	4.9
1	51	0.0248	0.267	225	843	28	31	3.6	5.3
1	51	0.0248	0.267	250	937	31	33	3.8	5.6
1	51	0.0248	0.267	275	1030	32	35	4.3	6.9
1	51	0.0248	0.267	300	1124	34	36	4.9	7.8
1	51	0.0248	0.267	325	1217				
2	96	0.0496	0.534	75	140		-	1.3	2.2
2	96	0.0496	0.534	100	187		-	1.6	2.4
2	96	0.0496	0.534	125	234		-	2.1	3.3
2	96	0.0496	0.534	150	281		-	2.4	3.6
2	96	0.0496	0.534	175	328		-	2.5	3.9
2	96	0.0496	0.534	200	375	16	-	2.6	4.1
2	96	0.0496	0.534	225	421	18	-	2.8	4.4
2	96	0.0496	0.534	250	468	21	-	3.1	4.9
2	96	0.0496	0.534	275	515	22	16	3.3	5.3
2	96	0.0496	0.534	300	562	23	18	3.5	5.5
2	96	0.0496	0.534	325	609	25	21	3.7	6.0
2	96	0.0496	0.534	350	656	27	23	3.8	6.2
2	96	0.0496	0.534	375	702	29	24	4.0	6.5
2	96	0.0496	0.534	400	749	30	26	4.1	6.7
2	96	0.0496	0.534	425	796	31	28	4.2	6.8
2	96	0.0496	0.534	450	843	33	30	4.6	7.4
2	96	0.0496	0.534	475	890	34	32	5.0	8.2
2	96	0.0496	0.534	500	937	35	34	5.8	9.3
3	146	0.0744	0.801	300	375		-	1.3	2.1
3	146	0.0744	0.801	325	406		-	1.5	2.5
3	146	0.0744	0.801	350	437		-	2.0	3.3
3	146	0.0744	0.801	375	468		-	2.3	3.7
3	146	0.0744	0.801	400	499	14	-	2.6	4.1
3	146	0.0744	0.801	425	531	16	-	2.8	4.4
3	146	0.0744	0.801	450	562	17	-	3.0	4.7
3	146	0.0744	0.801	475	593	19	-	3.3	5.2
3	146	0.0744	0.801	500	624	22	19	3.4	5.5
3	146	0.0744	0.801	525	656	15	20	3.6	5.8
3	146	0.0744	0.801	550	687	17	22	3.8	6.2
3	146	0.0744	0.801	575	718	21	24	4.1	6.7
3	146	0.0744	0.801	600	749	23	26	4.5	7.2
3	146	0.0744	0.801	625	780	25	28	4.8	7.7
3	146	0.0744	0.801	650	812	26	29	5.4	8.5
3	146	0.0744	0.801	675	843	28	31	6.2	9.9
3	146	0.0744	0.801	700	874	31	33	6.8	10.9
3	146	0.0744	0.801	725	905	33	35	7.5	12.0
4	193	0.096	1.033	325	315		-	1.8	2.7
4	193	0.096	1.033	350	339		-	2.1	3.3
4	193	0.096	1.033	375	363		-	2.3	3.6
4	193	0.096	1.033	400	387		-	2.6	4.1
4	193	0.096	1.033	425	411		-	2.8	4.4
4	193	0.096	1.033	450	435		-	3.1	4.9
4	193	0.096	1.033	475	460	8	-	3.3	5.4
4	193	0.096	1.033	500	484	10	-	3.6	5.8
4	193	0.096	1.033	525	508	11	17	3.9	6.2
4	193	0.096	1.033	550	532	13	19	4.3	6.9
4	193	0.096	1.033	575	556	15	21	4.6	7.4
4	193	0.096	1.033	600	581	19	22	4.9	7.9
4	193	0.096	1.033	625	605	20	26	5.7	9.1
4	193	0.096	1.033	650	629	23	28	6.4	10.2
4	193	0.096	1.033	675	653	28	29	6.9	11.1
4	193	0.096	1.033	700	677	31	31	7.4	11.8
4	193	0.096	1.033	725	702	32	33	7.7	12.4
4	193	0.096	1.033	750	726	34	35	8.4	13.5



# Jet Nozzle Chameleon Eye

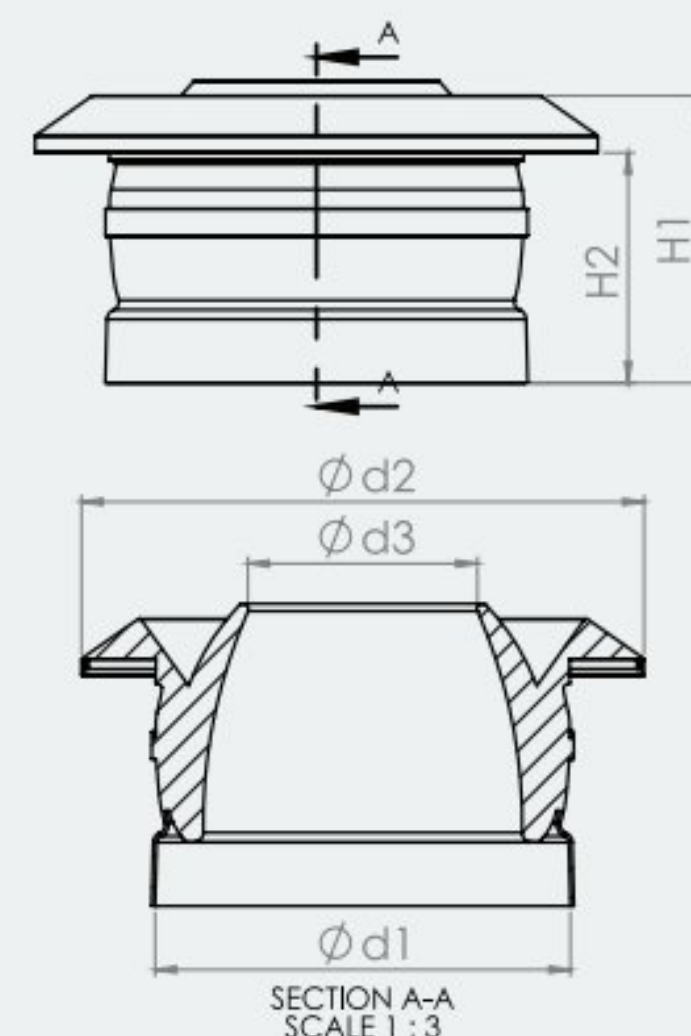


## Product Description // // // // //

- Used when long distance of air distribution is required so that the direction of the air stream can be adjusted.
- Spherical discharge nozzle mounting housing.
- Aerodynamically efficient design & low noise characteristics, direction of the air can be adjusted manually on site.
- Usually mounted in the wall.
- Made of aluminum extrusion powder coated with white RAL 9016.
- Special colors available per request.
- Packed in plastic film.
- Sizes: 4", 6", 8", 10", 12", 14", 16"

### Technical information

Description	Dimensions mm				
	D1	D2	D3	H1	H2
Jet Nozzle Eye 4"	100	140	45	85	65
Jet Nozzle Eye 6"	150	200	76	110	85
Jet Nozzle Eye 8"	200	265	104	132	115
Jet Nozzle Eye 10"	250	314	127	170	145
Jet Nozzle Eye 12"	315	385	165	195	170
Jet Nozzle Eye 14"	350	435	185	220	185
Jet Nozzle Eye 16"	400	465	220	235	205





Neck Diameter [inch]	Neck Diameter [mm]	Parameter	Data									
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4"	100	Capacity [CFM]	25	40	60	80	100	125	150	175	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950			
		Pressure [Pa]	31	38	54	62	73	82	97	108	120	140	159	172	192	210	228	244	260	277	294	311	327	344	360	377	393	409	
		NC [dB]	-	17	21	24	33	38	33	33	34	38	34	34	32	32	34	31	31	31	31	34	34	30	30	34	34	37	37
6"	160	Throw [m]	3.0	3.7	4.9	6.6	7.3	8.2	8.9	9.7	10.2	11.1	12.1	13.1	14.1	15.1	16.1	17.1	18.1	19.1	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.1	
		Capacity [CFM]	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
		Pressure [Pa]	16	25	43	67	97	140	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
8"	200	NC [dB]	-	-	21	25	34	38	34	38	34	34	34	32	32	34	31	31	31	31	34	34	30	30	34	34	37	37	
		Throw [m]	3.1	6.1	7.8	10.2	12.1	14.4	15.1	15.9	17.2	18.4	19.2	20.0	20.8	21.6	22.4	23.2	24.0	24.8	25.6	26.4	27.2	28.0	28.8	29.6	30.4	31.2	32.0
		Capacity [CFM]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350
10"	250	Pressure [Pa]	-	-	-	22	27	29	27	27	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
		NC	-	-	-	-	20	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
		Throw [m]	4.7	7.2	9.3	11.1	11.9	13.1	15.1	15.9	17.2	18.4	19.2	20.0	20.8	21.6	22.4	23.2	24.0	24.8	25.6	26.4	27.2	28.0	28.8	29.6	30.4	31.2	32.0
12"	315	Capacity [CFM]	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450
		Pressure [Pa]	12	12	15	17	22	26	33	42	49	55	60	67	72	77	82	87	92	97	102	107	112	117	122	127	132	137	142
		NC	-	-	-	-	20	22	25	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
14"	350	Throw [m]	4.1	5.8	7.0	8.2	9.8	11.9	13.1	14.2	14.9	16.1	17.2	18.4	19.2	20.0	20.8	21.6	22.4	23.2	24.0	24.8	25.6	26.4	27.2	28.0	28.8	29.6	30.4
		Capacity [CFM]	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
		Pressure [Pa]	-	-	-	-	12	15	19	25	30	33	36	39	44	48	51	54	57	60	63	66	69	72	75	78	81	84	87
16"	400	NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Throw [m]	4.6	5.8	6.9	8.1	8.9	10.3	11.1	11.8	13.1	14.2	14.9	16.1	17.2	18.4	19.2	20.0	20.8	21.6	22.4	23.2	24.0	24.8	25.6	26.4	27.2	28.0	
		Capacity [CFM]	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550



## Performance Data





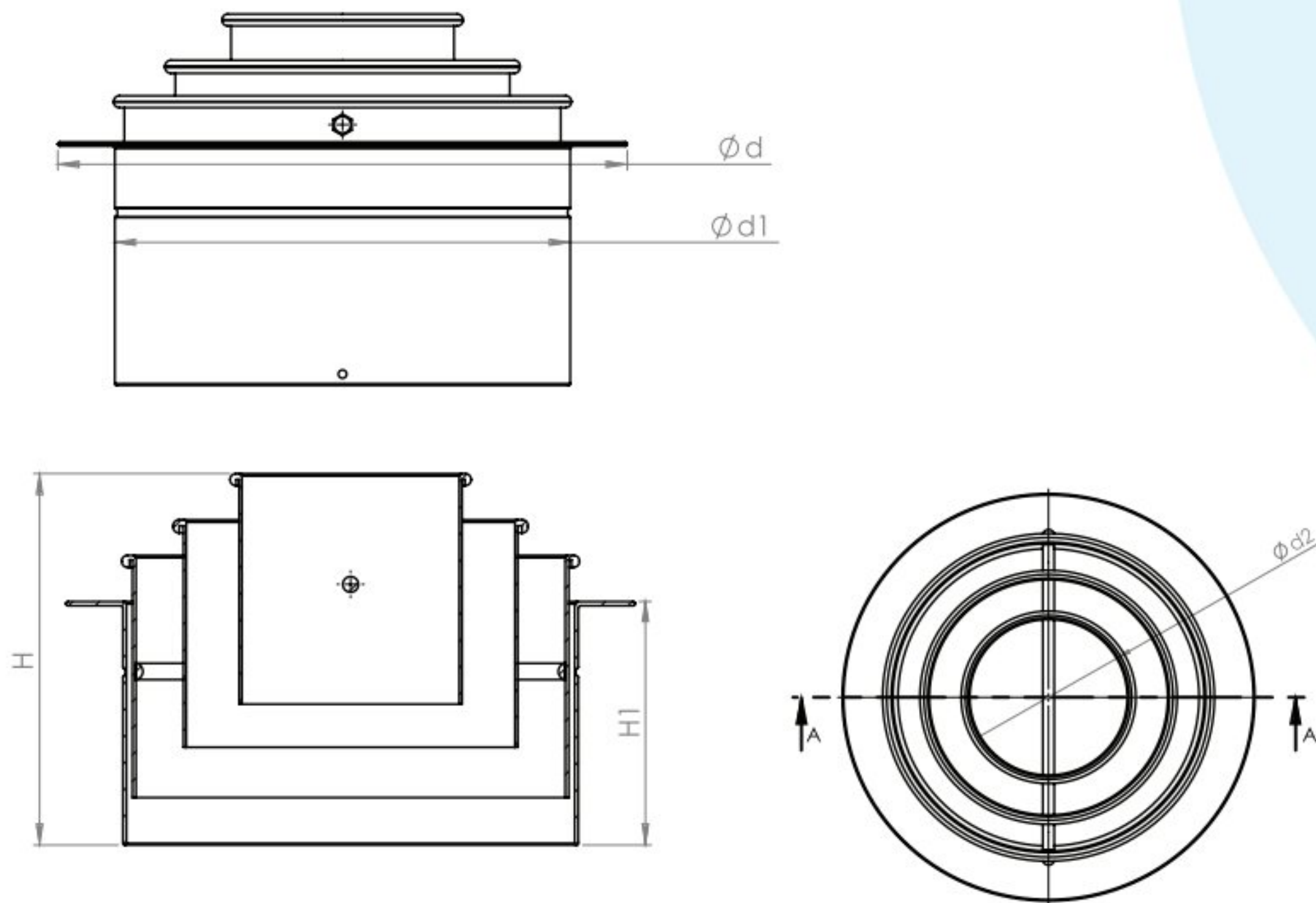
# Jet Nozzle Rings

## Product Description // // // // //

- Used when long distance of air distribution is required so that the direction of the air stream can be adjusted.
- Aerodynamically efficient design & low noise characteristics, direction of the air can be adjusted manually on site.
- Usually mounted in the wall
- Made of aluminum extrusion powder
- Coated with white RAL 9016
- Special colors available per request
- Packed in plastic film
- Sizes: 8", 10", 12", 14", 16"



## Technical information



## Performance Data

Neck Diameter [mm]	"Neck Diameter [mm]"	"Eff. Area [ft <sup>2</sup> ]"	Neck Velocity [fpm]							
				400	600	800	1000	1200	1400	1600
8	200	0.3316	CFM	130	200	260	325	400	460	<b>525</b>
			Throw [m]	3.7	5.5	7.3	9.0	10.8	12.8	<b>14.4</b>
			NC	*	20	24	27	31	34	<b>37</b>
10	250	0.5185	CFM	200	300	400	510	610	715	<b>815</b>
			Throw [m]	4.5	6.9	9.3	11.4	13.5	15.9	<b>18.1</b>
			NC	*	20	24	28	30	33	<b>36</b>
12	300	0.7465	CFM	300	440	590	735	880	1020	<b>1175</b>
			Throw [m]	5.5	8.2	11.0	13.7	16.5	19.1	<b>21.8</b>
			NC	*	19	24	28	31	34	<b>36</b>
14	350	1.0158	CFM	400	600	800	1000	1200	<b>1400</b>	
			Throw [m]	6.4	9.4	12.8	16.0	19.1	<b>22.2</b>	
			NC	*	22	25	29	34	<b>38</b>	
16	400	1.3273	CFM	525	785	1045	1300	1570	<b>1830</b>	
			Throw [m]	7.3	10.6	14.9	18.4	22.0	<b>25.9</b>	
			NC	*	21	25	29	33	<b>37</b>	





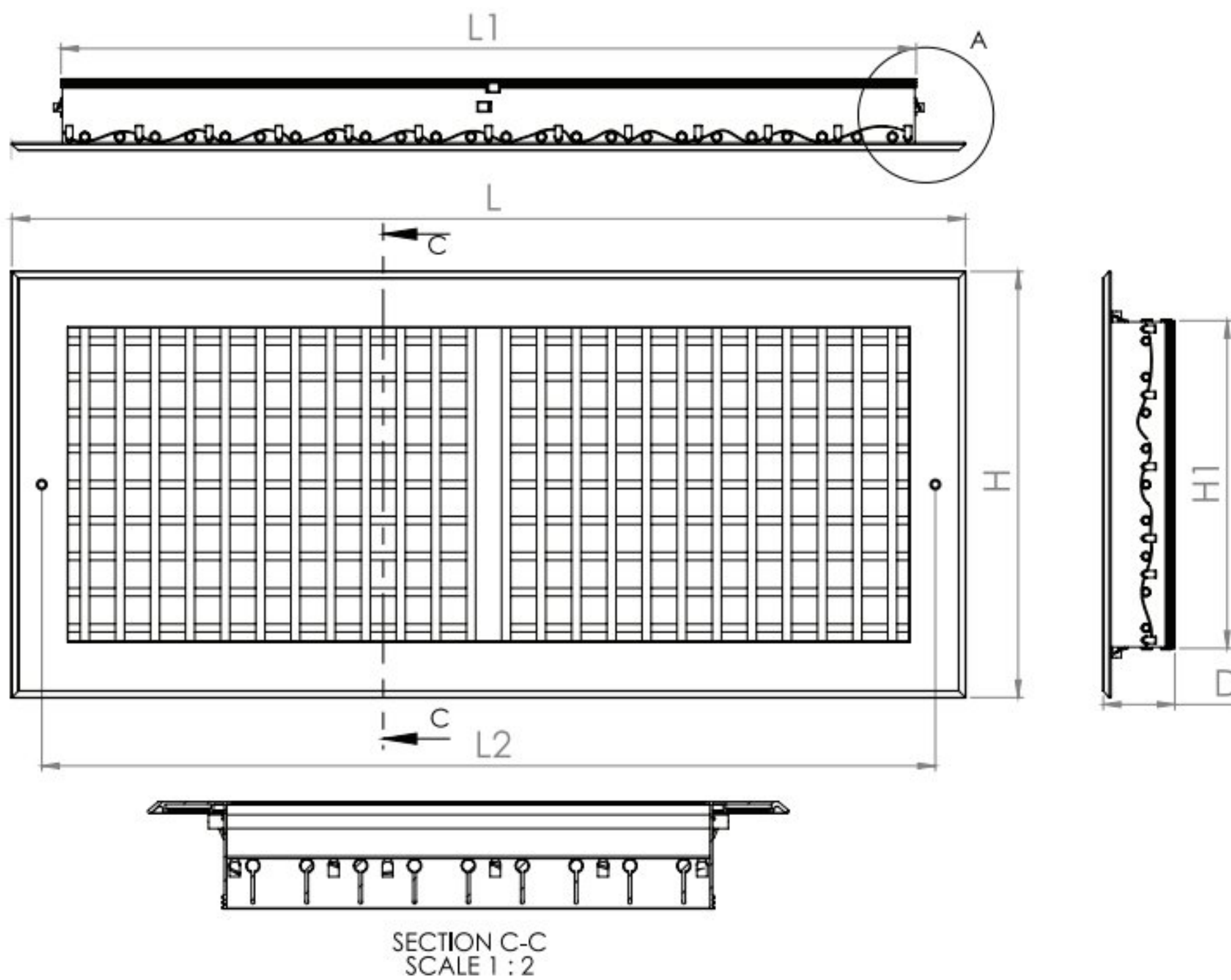
# Double Deflection

## Product Description // // // // //

- The double deflection is mounted on the wall.
- The blades are made of vertical and horizontal profile.
- Made of aluminum extruded powder coated with white RAL 9010.
- Other colors can be supplied for large quantities.
- The airflow can be adjustable by mounting an O.B.D on the D.D supply grille.
- Packed in plastic film.

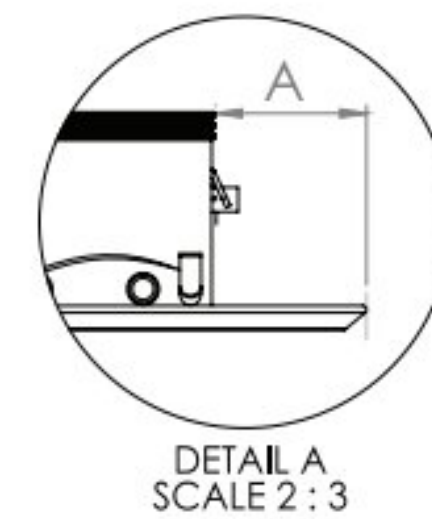


## Technical information



Product	Dimensions mm						
	Module size		Neck size		Frame size	Depth size	
	L	H	L1	H1		L2	A
D. D 100*1000	1064	165	1000	100	1022	39	40
D. D. 150*1000	1070	215	1006	151	1028	39	40
D.D 150*300	370	215	306	151	328	39	40
D.D 150*301	470	215	406	151	428	39	40
D.D 150*302	570	215	506	151	528	39	40
D.D 150*303	670	215	606	151	628	39	40
D.D 150*304	670	215	606	151	628	39	40
D.D 150*305	770	215	706	151	728	39	40
D.D 150*306	870	215	806	151	828	39	40
D.D 150*307	970	215	906	151	928	39	40
D.D 150*308	1070	265	1006	201	1028	39	40
D.D 150*309	370	265	306	201	328	39	40
D.D 150*310	470	265	406	201	428	39	40
D.D 150*311	570	265	506	201	528	39	40
D.D 150*312	670	265	606	201	628	39	40
D.D 150*313	670	265	606	201	628	39	40
D.D 150*314	770	265	706	201	728	39	40
D.D 150*315	870	265	806	201	828	39	40
D.D 150*316	870	265	806	201	828	39	40
D.D 150*317	970	265	906	201	928	39	40
D.D 150*318	289	289	225	225	247	39	40
D.D 150*319	370	370	306	306	328	39	40

Other sizes available upon request



Frame size options (A)
22 mm
39 mm



Performance Data

Neck size [cm]	Average effective Area [ft²]	Effective velocity																			
		300		400		500		600		700		800		900		1000		1200			
		Blade Set	CFM	Blade Set	CFM	Blade Set	CFM	Blade Set	CFM	Blade Set	CFM	Blade Set	CFM	Blade Set	CFM	Blade Set	CFM	Blade Set	CFM		
15/15, 20/10	0.165	NC [dBi]	50	66	80	100	115	130	150	180	210	230	260	280	310	30	160	30	200	30	
		Throw [m]	1.2-1.8	0.7-1.15	1.6-2.6	1-1.5	2.2-3.1	1.4-1.8	2.7-3.9	1.6-2.2	3.3-4.2	1.9-2.5	3.5-4.5	2.1-2.8	3.9-4.9	2.2-3	4.3-5.5	2.5-3.3	4.6-5.8	2.7-3.4	66.4
20/20, 25/15, 30/12, 40/10	0.307	CFM	90	120	150	180	210	230	260	280	310	30	160	30	200	30	160	30	200	30	200
		Throw [m]	1.5-2.7	0.9-1.6	2.4-3.3	1.3-2.0	2.7-4.2	1.6-2.5	3.3-5.1	2.0-3.2	3.9-5.7	2.2-3.4	4.7-6.0	2.7-3.6	5.1-6.7	3.0-4.0	5.7-7.3	3.4-4.3	6.0-7.3	3.6-4.5	560
25/25, 30/20, 40/15, 60/10	0.477	NC [dBi]	140	190	240	290	340	390	430	480	520	560	600	640	680	720	760	800	840	880	920
		Throw [m]	2.1-3.0	1.3-1.8	2.7-4.2	1.6-2.5	3.6-5.1	2.2-3.2	4.5-6.7	2.7-4.1	5.1-7.3	3.2-4.3	6.0-7.6	3.4-4.5	6.7-7.9	3.8-4.8	7.1-8.5	4.2-5.1	7.6-9.4	4.5-5.7	840
30/30, 35/25, 40/20, 45/20, 60/15, 90/10	0.694	CFM	210	280	350	420	490	560	630	700	770	840	910	980	1050	1120	1190	1260	1330	1400	1470
		Throw [m]	2.4-3.9	1.3-2.2	3.6-5.1	2.2-3.2	4.5-6.7	2.7-4.1	5.4-7.9	3.2-4.8	6.4-8.8	3.8-5.2	7.3-9.4	4.3-5.7	7.9-9.9	4.6-5.9	8.5-10.1	5.0-6.1	9.1-11.1	5.4-6.8	970
35/35, 50/25, 80/15, 40/30, 60/20, 85/15, 120/10	0.965	NC [dBi]	280	380	480	580	680	780	880	980	1080	1180	1280	1380	1480	1580	1680	1780	1880	1980	2080
		Throw [m]	2.7-4.5	1.6-2.7	4.2-6.0	2.5-3.6	5.1-7.6	3.2-4.5	6.4-9.1	3.8-5.4	7.4-10.2	4.4-6.0	8.5-10.9	5.2-6.6	9.7-11.8	5.9-7.0	10.3-12.8	6.1-7.54	10.3-12.8	6.1-7.54	1270
40/40, 55/30, 80/20, 105/15, 45/35, 65/25	1.272	CFM	380	500	640	760	890	1020	1150	1280	1410	1540	1670	1800	1930	2060	2190	2320	2450	2580	2710
		Throw [m]	3.0-5.1	1.8-3.2	4.5-7.0	2.7-4.1	5.7-8.5	3.4-5.0	7.0-10.6	4.1-6.4	8.2-11.5	5.0-6.8	9.4-13.1	5.7-7.7	10.6-14.9	6.4-8.4	11.5-15.8	7.0-8.45	11.5-15.8	7.0-8.45	1690
45/45, 60/35, 75/30, 50/40, 70/30, 90/25, 100/20	1.672	NC [dBi]	500	670	840	1010	1180	1350	1520	1690	1860	2030	2200	2370	2540	2710	2880	3050	3220	3390	3560
		Throw [m]	3.9-6.0	2.2-3.6	5.3-7.9	3.2-4.8	6.7-9.7	4.1-5.9	8.2-11.8	5.0-7.0	9.4-13.1	5.7-7.7	10.6-14.9	6.4-8.4	11.5-15.8	7.0-8.9	12.8-15.9	7.7-9.3	12.8-15.9	7.7-9.3	36
50/50, 60/40, 85/30, 55/45, 70/35, 100/25, 120/20	1.961	CFM	670	900	1130	1360	1590	1820	2050	2280	2510	2740	2970	3200	3430	3660	3890	4120	4350	4580	4810
		Throw [m]	3.9-6.4	2.2-3.8	5.7-8.5	3.4-5.0	7.3-10.6	4.3-6.4	8.8-13.1	5.2-7.7	9.7-14.0	5.9-8.4	11.2-14.9	6.8-8.9	12.1-15.8	7.5-9.6	12.1-15.8	7.5-9.6	2020	2020	35
55/55, 70/45, 90/35, 60/50, 75/40, 100/30, 60/25	2.253	NC [dBi]	820	1100	1380	1660	1940	2220	2500	2780	3060	3340	3620	3900	4180	4460	4740	5020	5300	5580	5860
		Throw [m]	4.2-7.0	2.5-4.1	6.0-9.1	3.6-5.4	7.9-11.5	4.8-6.8	9.1-13.4	5.4-8.2	10.6-14.9	6.4-8.9	12.1-16.1	7.3-9.6	13.4-17.0	5.9-10.1	13.4-17.0	5.9-10.1	2480	2480	36
60/60, 70/50, 90/40, 65/55, 75/45, 100/30, 120/30	2.757	CFM	860	1150	1440	1730	2020	2310	2600	2890	3180	3470	3760	4050	4340	4630	4920	5210	5500	5790	6080
		Throw [m]	4.5-7.6	2.7-4.5	6.7-10.0	4.1-5.9	8.2-12.1	5.0-7.3	9.7-14.6	5.9-8.6	11.5-16.4	6.8-9.8	13.1-17.3	7.7-10.5	14.3-18.5	9.1-11.2	14.3-18.5	9.1-11.2	2600	2600	36
65/65, 80/55, 90/45, 70/60, 85/50, 105/40, 110/45, 120/40	2.878	NC [dBi]	1140	1520	1900	2280	2660	3040	3420	3800	4180	4560	4940	5320	5700	6080	6460	6840	7220	7600	7980
		Throw [m]	4.8-7.9	2.9-4.8	7.0-10.3	4.1-6.1	8.8-12.8	5.2-7.7	10.6-15.2	6.4-9.1	12.1-17.3	7.3-10.9	13.7-18.5	8.2-11.2	15.2-19.6	9.1-11.7	15.2-19.6	9.1-11.7	3400	3400	37
70/70, 85/60, 100/50, 75/60, 90/50, 110/45, 120/40	3.806	CFM	1330	1770	2210	2650	3090	3530	3970	4410	4850	5290	5730	6170	6610	7050	7490	7930	8370	8810	9250
		Throw [m]	5.4-8.8	3.2-5.2	7.9-11.5	4.8-6.8	9.7-14.3	5.9-8.6	11.5-17.0	6.8-5.4	13.4-19.8	8.0-11.8	15.5-21.0	9.3-12.5	17.3-21.9	10.5-13.2	17.3-21.9	10.5-13.2	3950	3950	37
75/75, 90/60, 110/50, 80/70, 105/55, 120/45	4.423	NC [dBi]	1540	2050	2560	3070	3580	4090	4600	5110	5620	6130	6640	7150	7660	8170	8680	9190	9700	10210	10720
		Throw [m]	5.7-9.4	3.4-5.7	8.5-12.4	5.0-7.5	10.6-15.2	6.4-9.1	12.8-18.2	7.7-10.9	14.9-21.6	8.9-13.0	17.0-23.1	10.2-15.5	18.8-24.1	11.4-17.1	18.8-24.1	11.4-17.1	4650	4650	37
80/80, 95/70, 105/60, 85/75, 100/65	5.139	CFM	1710	2270	2830	3390	3950	4510	5070	5630	6190	6750	7310	7870	8430	8990	9550	10110	10670	11230	11790
		Throw [m]	6.0-10.0	3.6-5.9	8.8-10.3	5.2-7.7	10.9-16.4	6.6-9.8	13.4-19.8	8.0-11.8	15.5-22.5	9.3-13.4	17.6-24.0	10.5-14.4	20.4-26.8	11.8-15.3	20.4-26.8	11.8-15.3	4510	4510	37
85/85, 95/75, 110/65, 90/75, 105/70, 120/60	5.691	NC [dBi]	1940	2580	3220	3860	4500	5140	5780	6420	7060	7700	8340	8980	9620	10260	10900	11540	12180	12820	13460
		Throw [m]	6.7-10.9	4.1-6.6	9.4-14.3	5.7-8.6	12.1-17.9	7.3-10.7	14.3-21.9	8.6-13.2	16.7-24.6	10.0-14.8	19.2-26.5	11.4-16.0	26.5-34.0	14.0-16.0	26.5-34.0	14.0-16.0	5140	5140	35
90/90, 100/80, 95/85, 110/75, 115/70	6.456	CFM	21	27	31	35	39	43	47	51	55	59	63	67	71	75	79	83	87	91	95
		Throw [m]	7.0-11.2	4.1-6.8	10.0-14.9	5.9-8.9	12.8-18.8	7.7-11.4	15.2-22.8	9.1-13.7	17.6-26.2	10.5-15.7	20.4-28.3	12.3-16.9	28.3-36.9	16.9	28.3-36.9	16.9	36.9	36.9	35

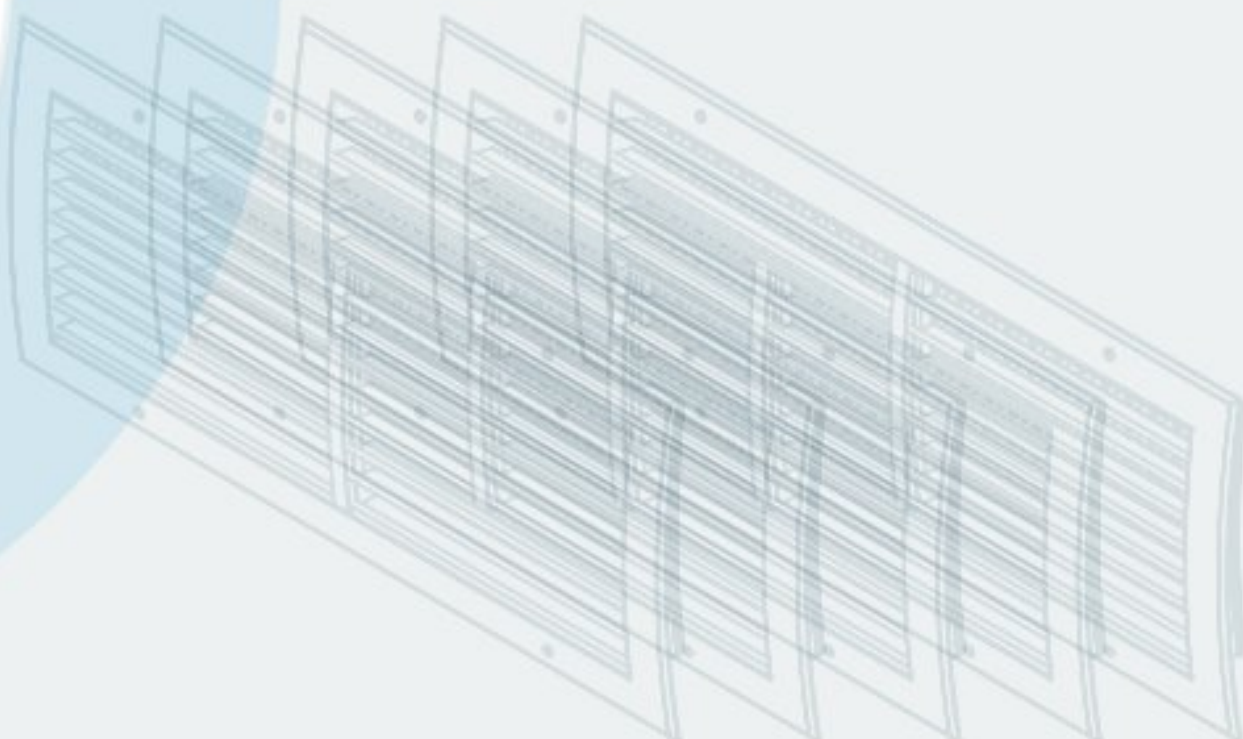




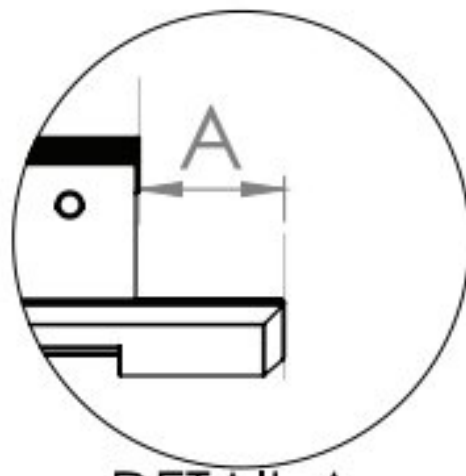
# Double Deflection for round tunnels

## Product Description // // // // //

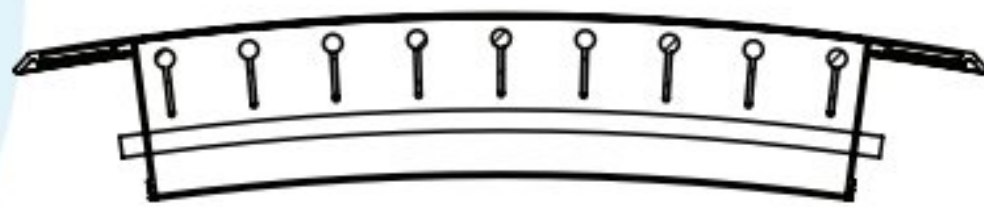
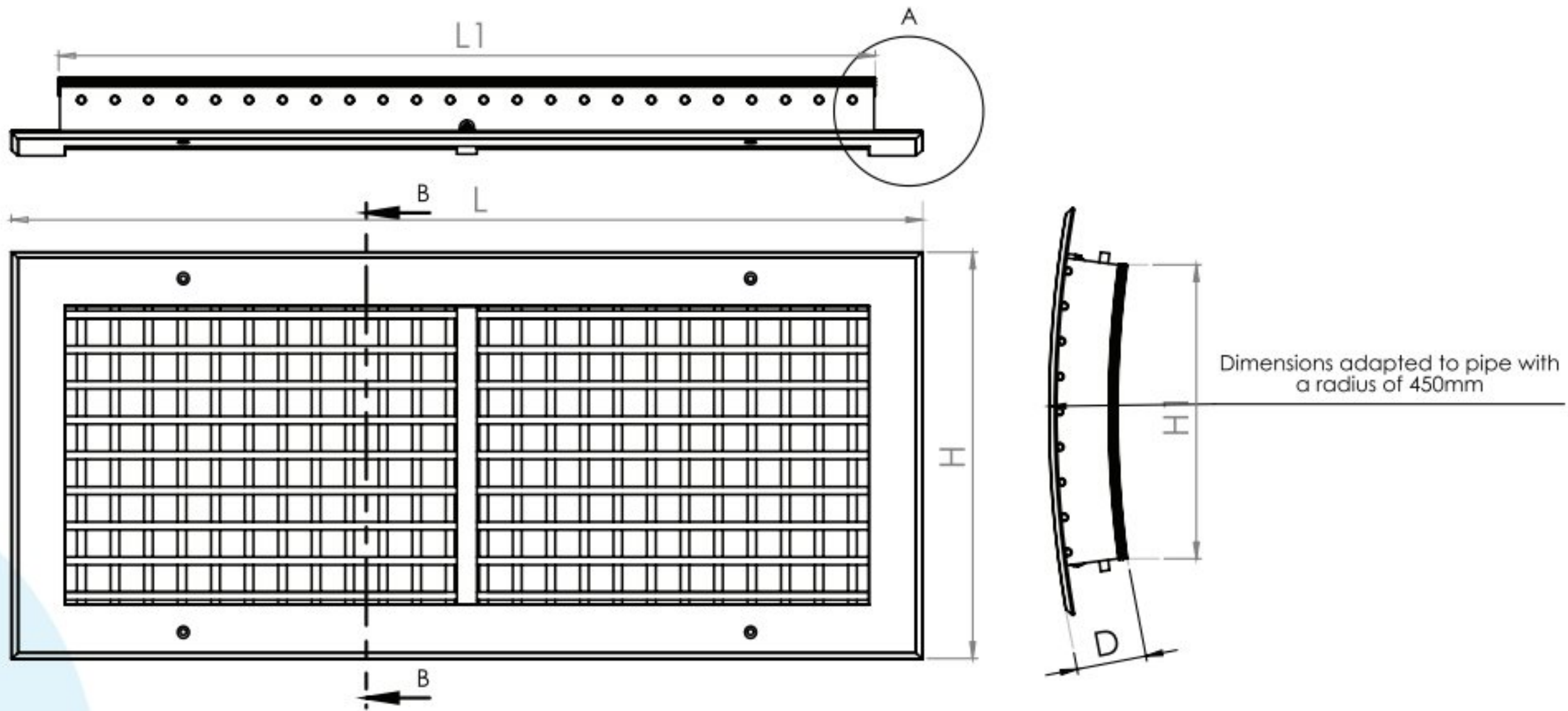
- The double deflection is mounted on the wall.
- The vertical & horizontal profile blades control the air pattern in both directions
- The horizontal blades should be in the front.
- The blades are vertical and control the spread of the air and horizontal profile control the rise & drop of the airstream.
- The curve of the grille is designed according to the diameter of the provided tunnels.
- Made of aluminum extruded powder coated with white RAL 9016.
- Other colors can be supplied for large quantities.
- The airflow can be adjustable by mounting an **O.B.D** on the D.D supply grille
- Packed in plastic film.







DETAIL A  
SCALE 2 : 5



SECTION B-B  
SCALE 1 : 2

Product	Dimensions mm					
	External size		Neck size		Frame size	Depth size
Name of part	L	L1	H	H1	A	D
DUSR curved DDG 45 150*400	440	185	410	140	25	35
DUSR curved DDG 90 150*400	440	195	400	150	25	35
DUSR curved DDG 45 150*500	540	185	510	140	25	35
DUSR curved DDG 90 150*500	540	195	500	150	25	35
DUSR curved DDG 45 150*600	660	185	610	140	25	35
DUSR curved DDG 90 150*600	660	195	600	150	25	35
DUSR curved DDG 45 200*400	440	235	410	200	25	35
DUSR curved DDG 90 200*400	440	245	400	210	25	35
DUSR curved DDG 45 200*500	550	235	510	200	25	35
DUSR curved DDG 90 200*500	540	245	500	210	25	35
DUSR curved DDG 45 200*600	640	235	610	200	25	35
DUSR curved DDG 90 200*600	640	245	600	210	25	35



Performance Data

Neck size [cm]	Average effective Area [ft²]	Effective velocity [FPM]	300		400		500		600		700		800		900		1000		1200			
			Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]	Blade Set	Total pressure [Pa]
15/15, 20/10	0.165	NC [dBI]	0	2.27	0	5.02	0	8.0	0	10.0	0	13.0	0	16.3	0	24.0	30	160	0	30	200	
		CFM	50	66	80	100	115	130	130	130	130	130	130	130	150	150	26	26	30	30	35	35
20/20, 25/15, 30/12, 40/10	0.307	Throw [m]	1.2 - 1.8	0.7 - 1.15	1.6 - 2.6	1 - 1.5	2.2 - 3.1	1.4 - 1.8	2.7 - 3.9	1.6 - 2.2	3.3 - 4.2	1.9 - 2.5	3.5 - 4.5	2.1 - 2.8	3.9 - 4.9	2.2 - 3	4.3 - 5.5	2.5 - 3.3	4.6 - 5.8	2.7 - 3.4	360	360
		CFM	90	120	150	180	210	210	250	250	250	250	250	250	250	280	280	30	310	310	35	35
25/25, 30/20, 40/15, 60/10	0.477	Throw [m]	1.5 - 2.7	0.9 - 1.6	2.4 - 3.3	1.3 - 2.0	2.7 - 4.2	1.6 - 2.5	3.3 - 5.1	2.0 - 3.2	3.9 - 5.7	2.2 - 3.4	4.7 - 6.0	2.7 - 3.6	5.1 - 6.7	3.0 - 4.0	5.7 - 7.3	3.4 - 4.3	6.0 - 7.3	3.6 - 4.5	560	560
		CFM	140	190	240	290	340	340	390	390	390	390	390	390	430	430	480	480	480	480	37	37
30/30, 35/25, 40/20, 45/20, 60/15, 90/10	0.694	Throw [m]	2.1 - 3.0	1.3 - 1.8	2.7 - 4.2	1.6 - 2.5	3.6 - 5.1	2.2 - 3.2	4.5 - 6.7	2.7 - 4.1	5.1 - 7.3	3.2 - 4.3	6.0 - 7.6	3.4 - 4.5	6.7 - 7.9	3.8 - 4.8	7.1 - 8.5	4.2 - 5.1	7.6 - 9.4	4.5 - 5.7	840	840
		CFM	210	280	350	420	490	490	560	560	560	560	560	560	610	610	680	680	680	680	32	32
35/35, 50/25, 80/15, 40/30, 60/20, 85/15, 120/10	0.965	Throw [m]	2.4 - 3.9	1.3 - 2.2	3.6 - 5.1	2.2 - 3.2	4.5 - 6.7	2.7 - 4.1	5.4 - 7.9	3.2 - 4.8	6.4 - 8.8	3.8 - 5.2	7.3 - 9.4	4.3 - 5.7	7.9 - 9.9	4.6 - 5.9	8.5 - 10.1	5.0 - 6.1	9.1 - 11.1	5.4 - 6.8	970	970
		CFM	280	380	480	580	680	680	780	780	800	800	800	800	800	800	800	800	800	800	38	38
40/40, 55/30, 80/20, 105/15, 45/35, 65/25	1.272	Throw [m]	2.7 - 4.5	1.6 - 2.7	4.2 - 6.0	2.5 - 3.6	5.1 - 7.6	3.2 - 4.5	6.4 - 9.1	3.8 - 5.4	7.4 - 10.2	4.4 - 6.0	8.5 - 10.9	5.2 - 6.6	9.7 - 11.8	5.9 - 7.0	10.3 - 12.8	6.1 - 7.54	12.8 - 15.9	7.7 - 9.3	1270	1270
		CFM	380	500	640	840	970	1180	1350	1350	1350	1520	1520	1520	1520	1520	1520	1520	1520	1520	34	34
45/45, 60/35, 75/30, 50/40, 70/30, 90/25, 100/20	1.672	Throw [m]	3.0 - 5.1	1.8 - 3.2	4.5 - 7.0	2.7 - 4.1	5.7 - 8.5	3.4 - 5.0	7.0 - 10.6	4.1 - 6.4	8.2 - 11.5	5.0 - 6.8	9.4 - 12.1	5.7 - 7.3	10.9 - 13.7	6.6 - 8.00	11.5 - 14.3	7.0 - 8.45	16.90	16.90	1690	1690
		CFM	500	670	840	970	1130	1380	1650	210	210	250	250	290	290	330	330	330	330	330	330	330
50/50, 60/40, 85/30, 55/45, 70/35, 100/25, 120/20	1.961	Throw [m]	3.9 - 6.4	2.2 - 3.8	5.7 - 8.5	3.4 - 5.0	7.3 - 10.6	4.3 - 6.4	8.8 - 13.1	5.2 - 7.7	9.7 - 14.0	5.9 - 8.4	11.2 - 14.9	6.8 - 8.9	12.1 - 15.8	7.5 - 9.6	12.1 - 15.8	7.5 - 9.6	2020	2020	2020	2020
		CFM	670	900	1130	1380	1650	210	210	250	250	290	290	330	330	360	360	360	360	360	360	360
55/55, 70/45, 90/35, 60/50, 75/40, 100/30, 60/25	2.253	Throw [m]	4.2 - 7.0	2.5 - 4.1	6.0 - 9.1	3.6 - 5.4	7.9 - 11.5	4.8 - 6.8	9.1 - 13.4	5.4 - 8.2	10.6 - 14.9	6.4 - 8.9	12.1 - 16.1	7.3 - 9.6	13.4 - 17.0	5.9 - 10.1	18.8 - 24.0	11.4 - 17.1	24.0	24.0	2480	2480
		CFM	820	1100	1400	1730	220	220	260	260	300	300	340	340	340	340	340	340	340	340	340	340
60/60, 70/50, 90/40, 65/55, 75/45, 100/30, 120/30	2.757	Throw [m]	4.5 - 7.6	2.7 - 4.5	6.7 - 10.0	4.1 - 5.9	8.2 - 12.1	5.0 - 7.3	9.7 - 14.6	5.9 - 8.6	11.5 - 16.4	6.8 - 9.8	13.1 - 17.3	7.7 - 10.5	14.3 - 18.5	9.1 - 11.2	18.8 - 24.0	11.4 - 17.1	26.0	26.0	2600	2600
		CFM	860	1150	1440	1730	230	230	270	270	310	310	350	350	350	350	350	350	350	350	350	350
65/65, 80/55, 90/45, 70/60, 85/50, 105/40, 70/70, 85/60, 100/50, 75/60, 90/50, 110/45, 120/40, 110/45, 120/40, 110/45, 120/40, 110/45, 120/40	2.878	Throw [m]	4.8 - 7.9	2.9 - 4.8	7.0 - 10.3	4.1 - 6.1	8.8 - 12.8	5.2 - 7.7	10.6 - 15.2	6.4 - 9.1	12.1 - 17.3	7.3 - 10.9	13.7 - 18.5	8.2 - 11.2	15.2 - 19.6	9.1 - 11.7	18.8 - 24.0	11.8 - 15.3	28.0	28.0	2800	2800
		CFM	970	1280	1580	1900	240	240	280	280	320	320	360	360	360	360	360	360	360	360	360	360
75/75, 90/60, 110/50, 80/70, 105/55, 120/45	4.423	Throw [m]	5.7 - 9.4	3.4 - 5.7	8.5 - 12.4	5.0 - 7.5	10.6 - 15.2	6.4 - 9.1	12.8 - 18.2	7.7 - 10.9	14.9 - 21.8	8.9 - 13.0	17.0 - 23.1	10.2 - 15.5	18.8 - 24.0	11.8 - 15.3	24.0	24.0	28.0	28.0	37	37
		CFM	1540	2050	2560	3070	3580	3580	4090	4090	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510
80/80, 95/70, 105/60, 85/75, 100/65	5.139	Throw [m]	6.0 - 10.0	3.6 - 5.9	8.8 - 10.3	5.2 - 7.7	10.9 - 16.4	6.6 - 9.8	13.4 - 19.8	8.0 - 11.8	15.5 - 22.5	9.3 - 13.4	17.6 - 24.0	10.5 - 14.4	20.4 - 26.8	11.8 - 15.3	26.0	26.0	26.0	26.0	37	37
		CFM	1710	2270	2830	3390	3950	3950	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510	4510
85/85, 95/75, 110/65, 90/75, 105/70, 120/60	5.691	Throw [m]	6.7 - 10.9	4.1 - 6.6	9.4 - 14.3	5.7 - 8.6	12.1 - 17.9	7.3 - 10.7	14.3 - 21.9	8.6 - 13.2	16.7 - 24.8	10.0 - 14.8	19.2 - 26.5	11.4 - 16.0	26.0	26.0	26.0	26.0	26.0	26.0	35	35
		CFM	1940	2580	3220	3880	4500	4500	5140	5140	5140	5140	5140	5140	5140	5140	5140	5140	5140	5140	5140	5140
90/90, 100/80, 95/85, 110/75, 115/70,	6.456	Throw [m]	7.0 - 11.2	4.1 - 6.8	10.0 - 14.9	5.9 - 8.9	12.8 - 18.8	7.7 - 11.4	15.2 - 22.8	9.1 - 13.7	17.6 - 26.2	10.5 - 15.7	20.4 - 28.3	12.3 - 16.9	28.0	28.0	28.0	28.0	28.0	28.0	35	35
		CFM	2100	2800	3500	4200	4900	5600	6300	7000	7700	8400	9100	9800	10500	11200	11900	12600	13300	14000	14700	15400





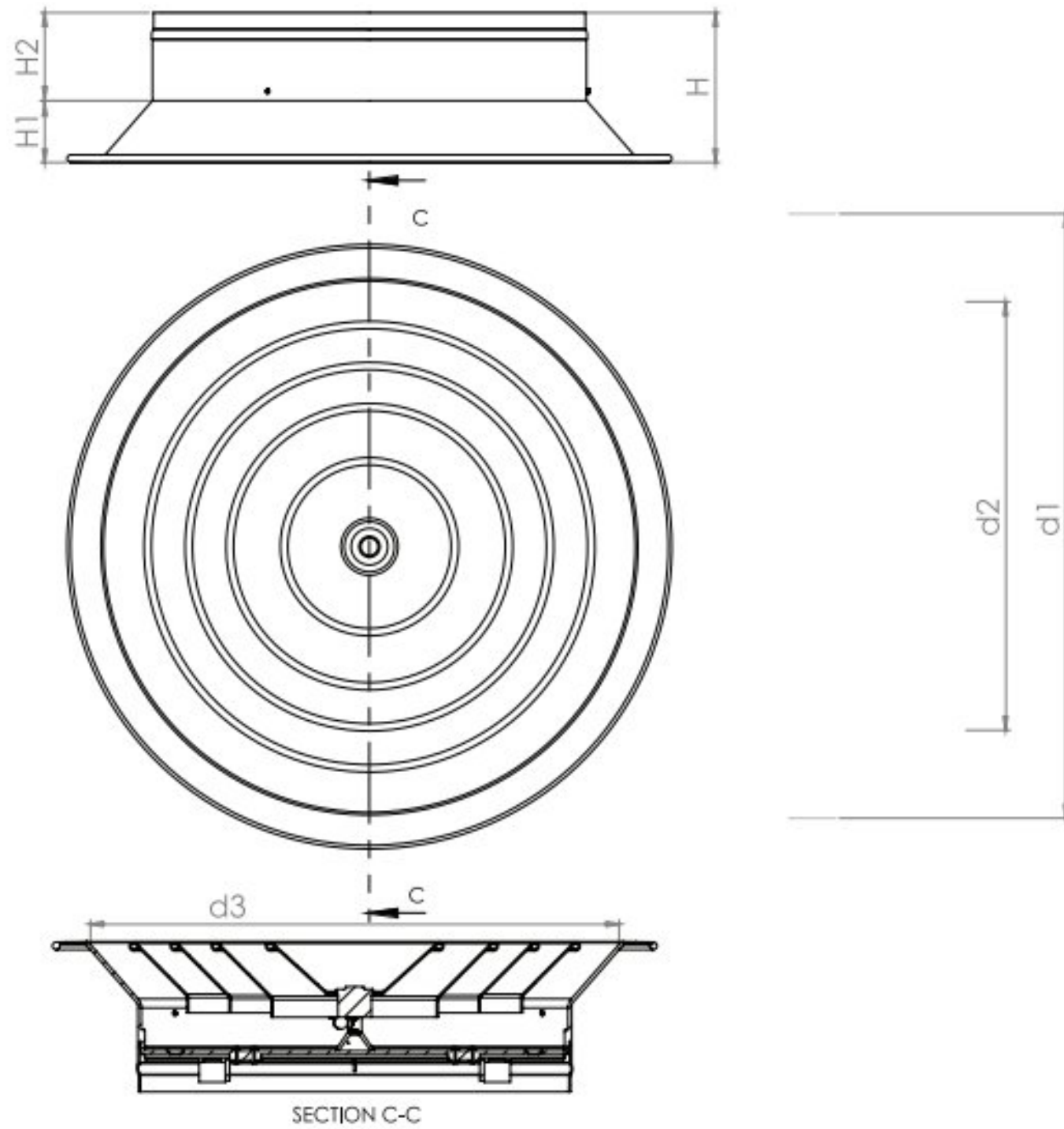
# Round Low Ceiling Diffuser

## Product Description *////////*

- The rings are made at precise intervals to create airflow for a long air distance. used in low ceiling.
- Installed in the ceiling and intended for low ceilings
- Made of aluminum extrusion powder and coated with white RAL 9016
- Special colors available per request
- Packed in plastic film



## Technical information



SCALE 1 : 2.5

Round low ceiling diffuser		Dimensions mm							
Name of part	Code #	d1	d2	d3	H	H1	H2	Number of blades	Distance between blades
ROUND CEILING DIFFUSER LC 6"	ST1160106	245	150	200	88	38	50	2	30
ROUND CEILING DIFFUSER LC 8"	ST1160108	300	200	250	88	38	50	3	30
ROUND CEILING DIFFUSER LC 10"	ST1160110	345	250	300	88	38	50	4	30
ROUND CEILING DIFFUSER LC 12"	ST1160112	395	300	350	88	38	50	5	30
ROUND CEILING DIFFUSER LC 14"	ST1160114	445	350	400	88	38	50	6	30
ROUND CEILING DIFFUSER LC 16"	ST1160116	495	400	450	88	38	50	7	30

## Performance Data

"Size [inches]"	"Effective area [m <sup>2</sup> ]"	Flow [CFM] neck velocity = 2 m/s	Flow [CFM] neck velocity = 5 m/s	Maximum NC [dB]
8"	0.016	70	170	33
10"	0.026	120	285	34
12"	0.038	170	420	33
14"	0.054	240	600	39
16"	0.073	320	770	45

Dimensions according to customer requirements



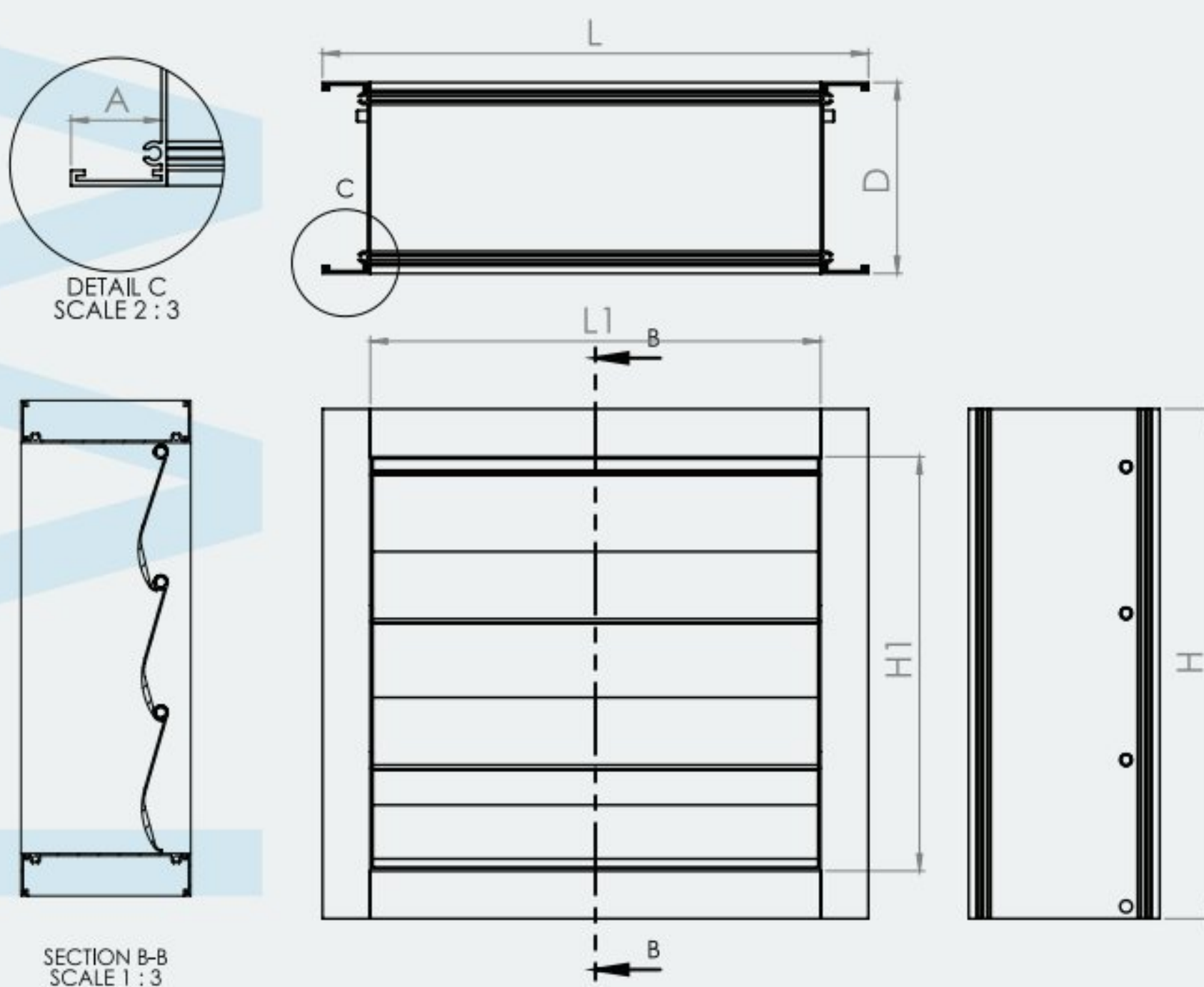
# Pressure relief Damper



## Product Description // // // // //

- This Damper is designed for high-pressure applications and is resistant to high temperatures.
- The frame and blades are made of mill finished aluminum.
- Packed in plastic film.

## Technical information





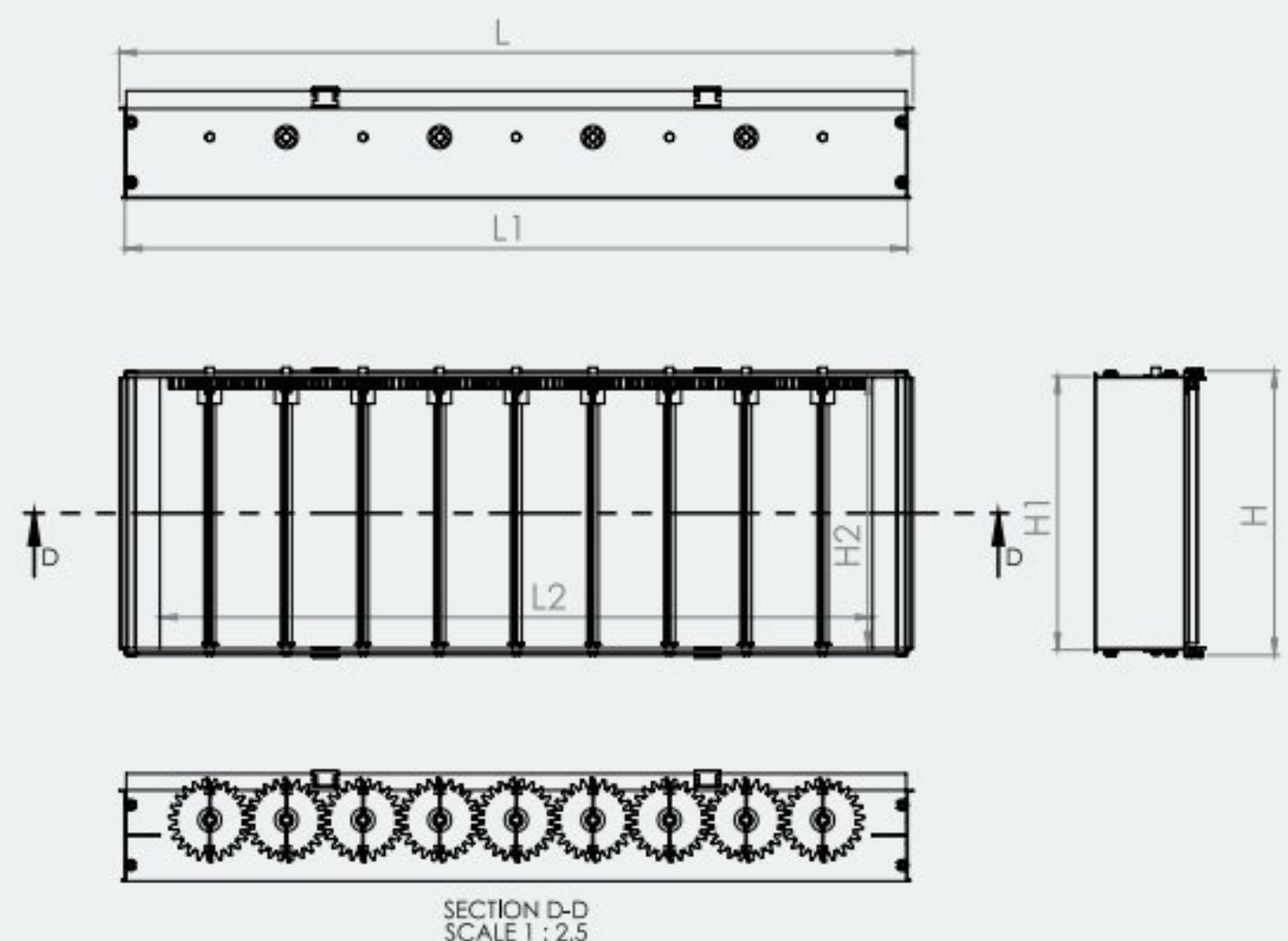
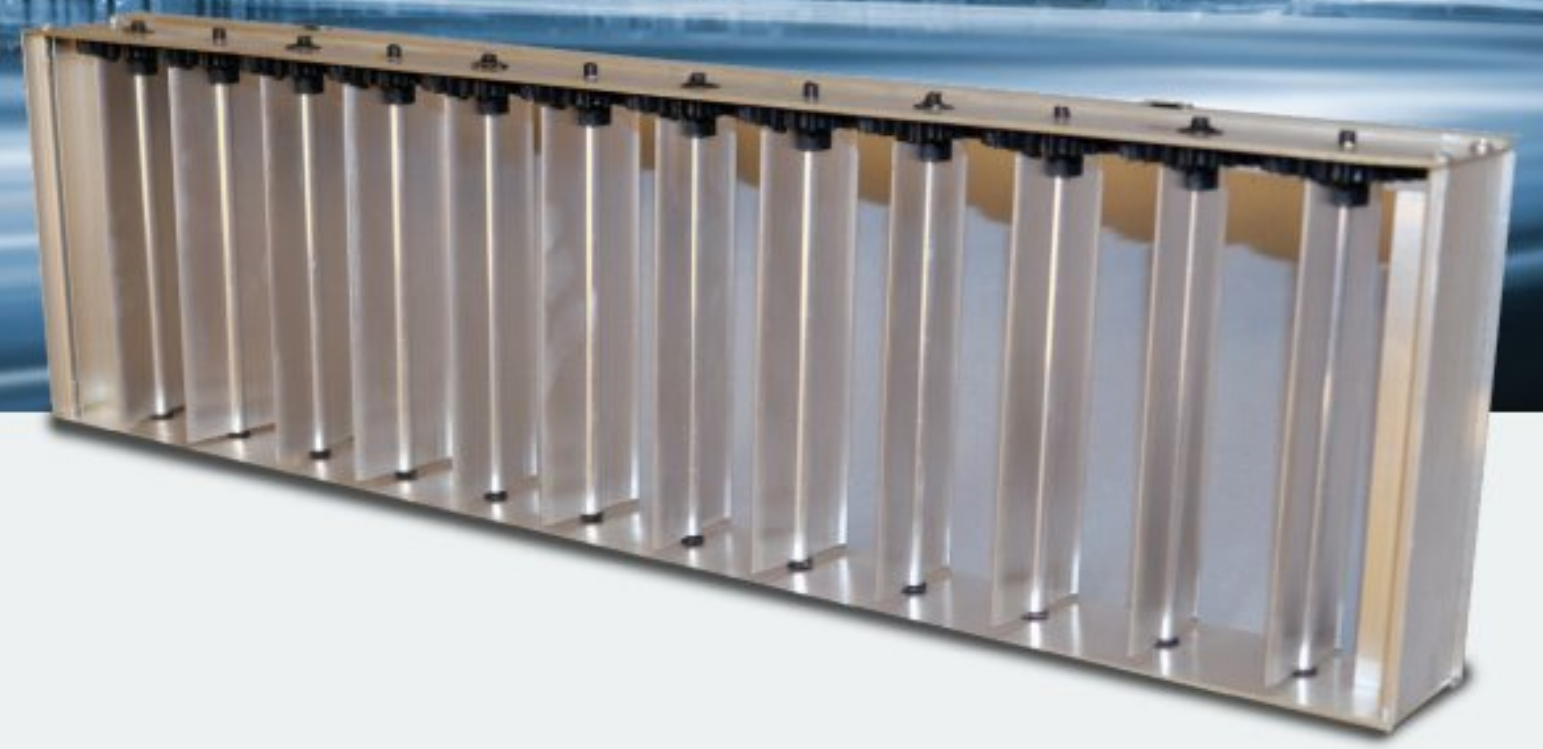
# Rectangular O.B.D

## Product Description // // // // //

- Opposite blade damper designed for use with square diffusers or D. D. rectangular grilles.
- The blades move simultaneously in the opposite direction.
- With the help of the O.B.D you can balance the amount of airflow.
- Made of aluminum.

### Technical information

O.B.D. sizes	Dimensions mm					
	L	L1	L2	H	H1	H2
O.B.D 150*150	145	185	100	144	140	135
O.B.D 200*150	195	195	150	140	135	135
O.B.D 300*150	290	185	255	142	145	135
O.B.D 400*150	395	195	350	142	140	135
O.B.D 500*150	490	185	450	145	140	135
O.B.D 200*200	195	195	150	195	190	185
O.B.D 300*200	295	235	250	195	190	185
O.B.D 400*200	395	245	360	195	190	185
O.B.D 500*200	492	235	450	193	188	185
O.B.D 225*225	215	235	205	215	210	210
O.B.D 300*300	290	245	255	290	288	255
O.B.D 375*375	365	235	135	360	358	354
O.B.D 455*455	435	245	385	435	430	425



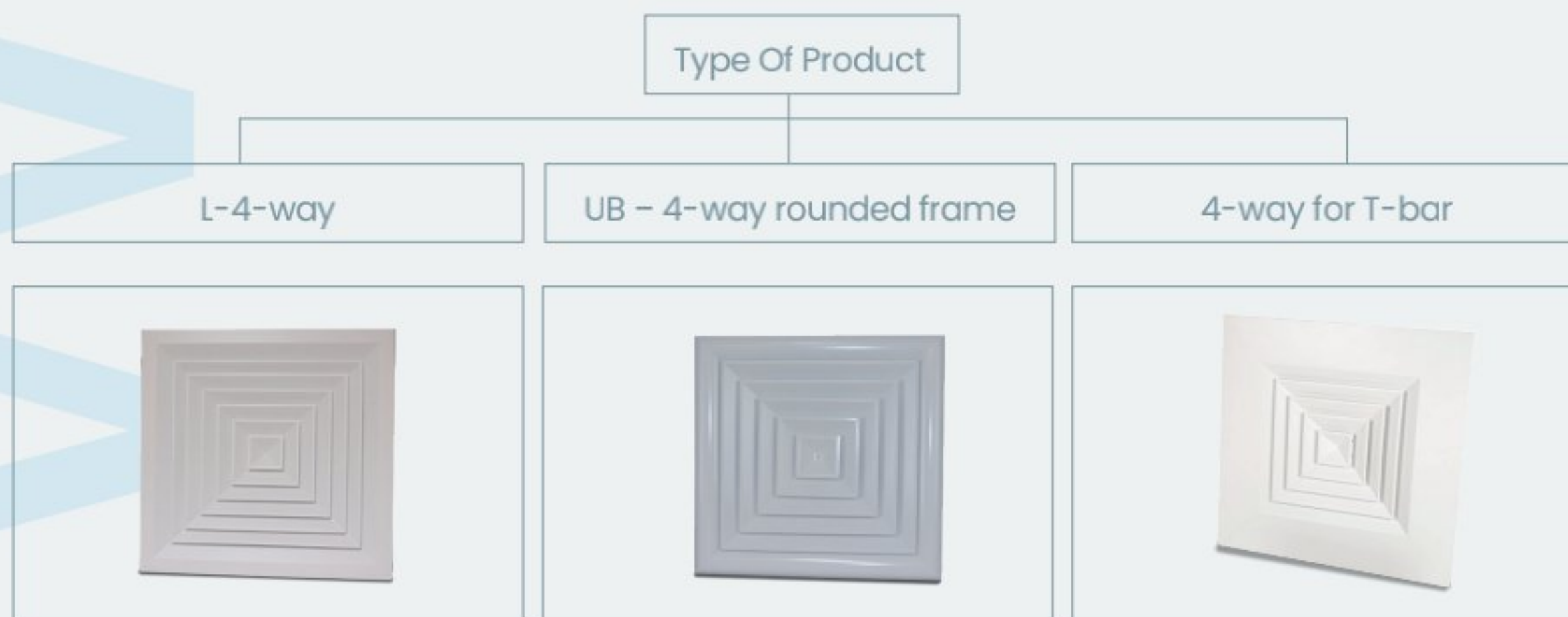




# 4-way Diffuser

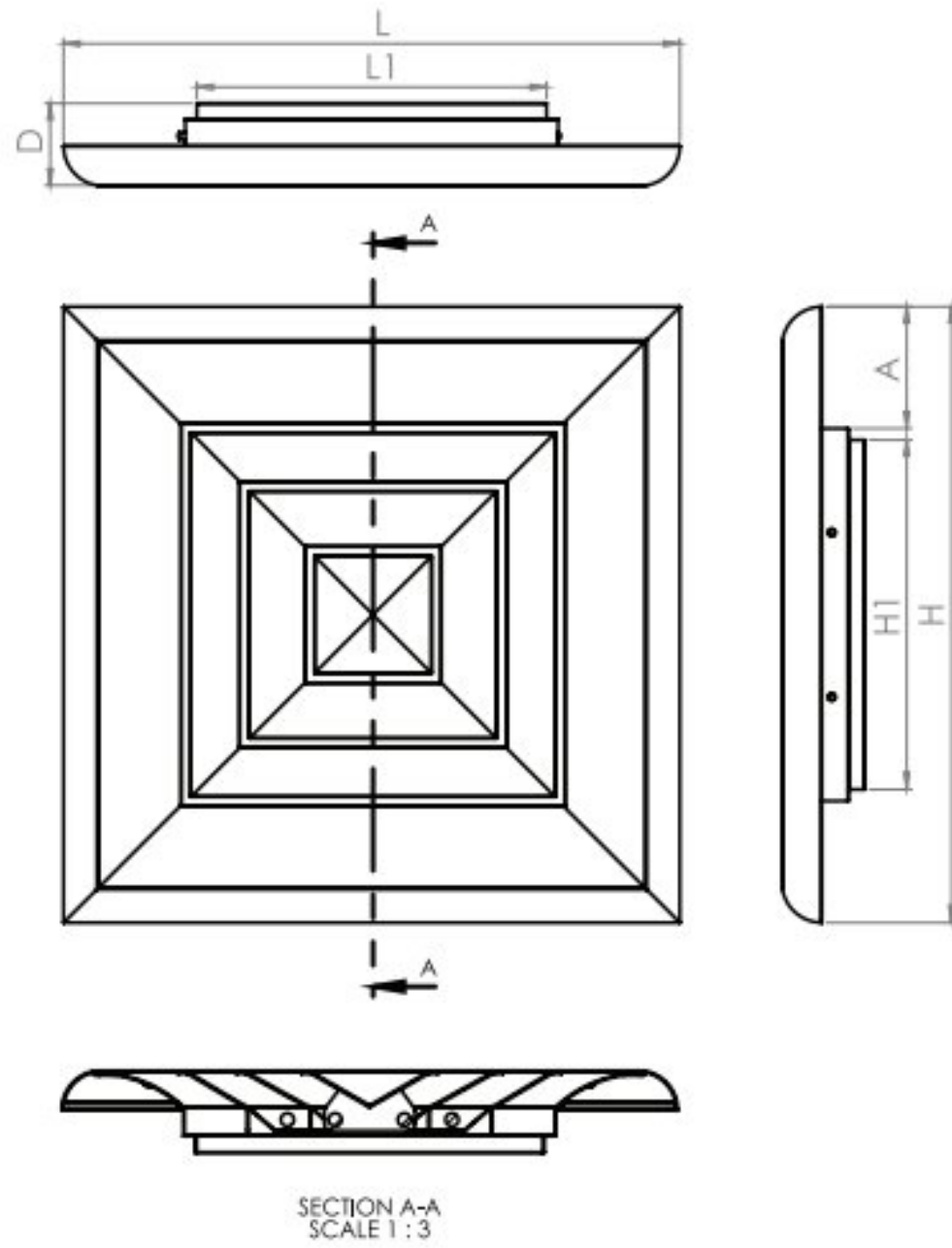
## Product Description // // // // //

- The 4-way diffuser is for flush mounting in the ceiling, up to 4 meters high.
- Primarily suitable for horizontal discharge.
- Made of aluminum extruded powder coated with white RAL 9010.
- Special colors available per request.
- The center core is removable for easy mounting.
- Models range in size from 120 to 2000 m<sup>3</sup>/h or 3000 m<sup>3</sup>/h
- The airflow can be adjusted by mounting an O.B.D (Opposed Blade Damper) on the diffuser inlet.
- Packed in plastic film.

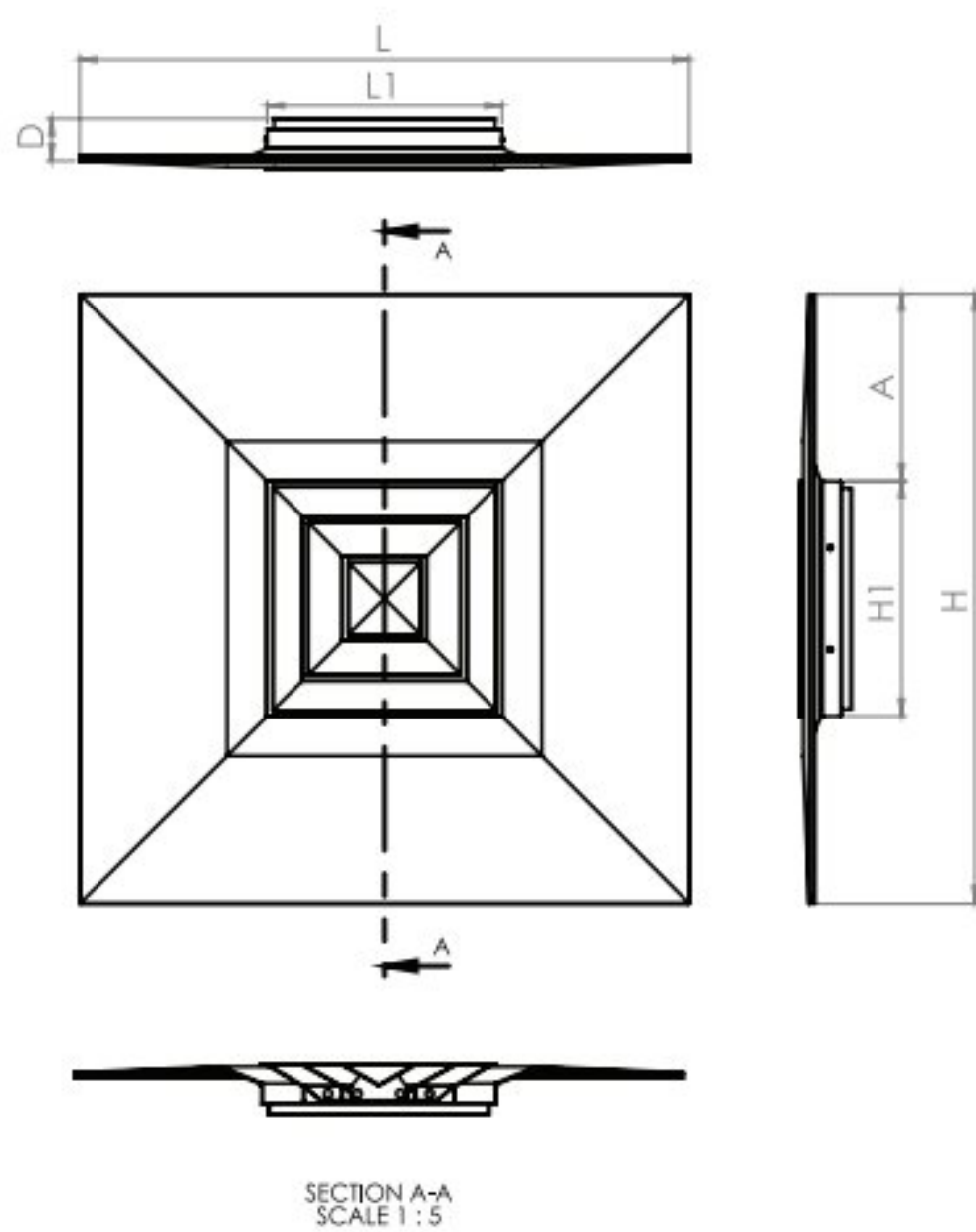




UB - 4-WAY ROUNDED FOAME

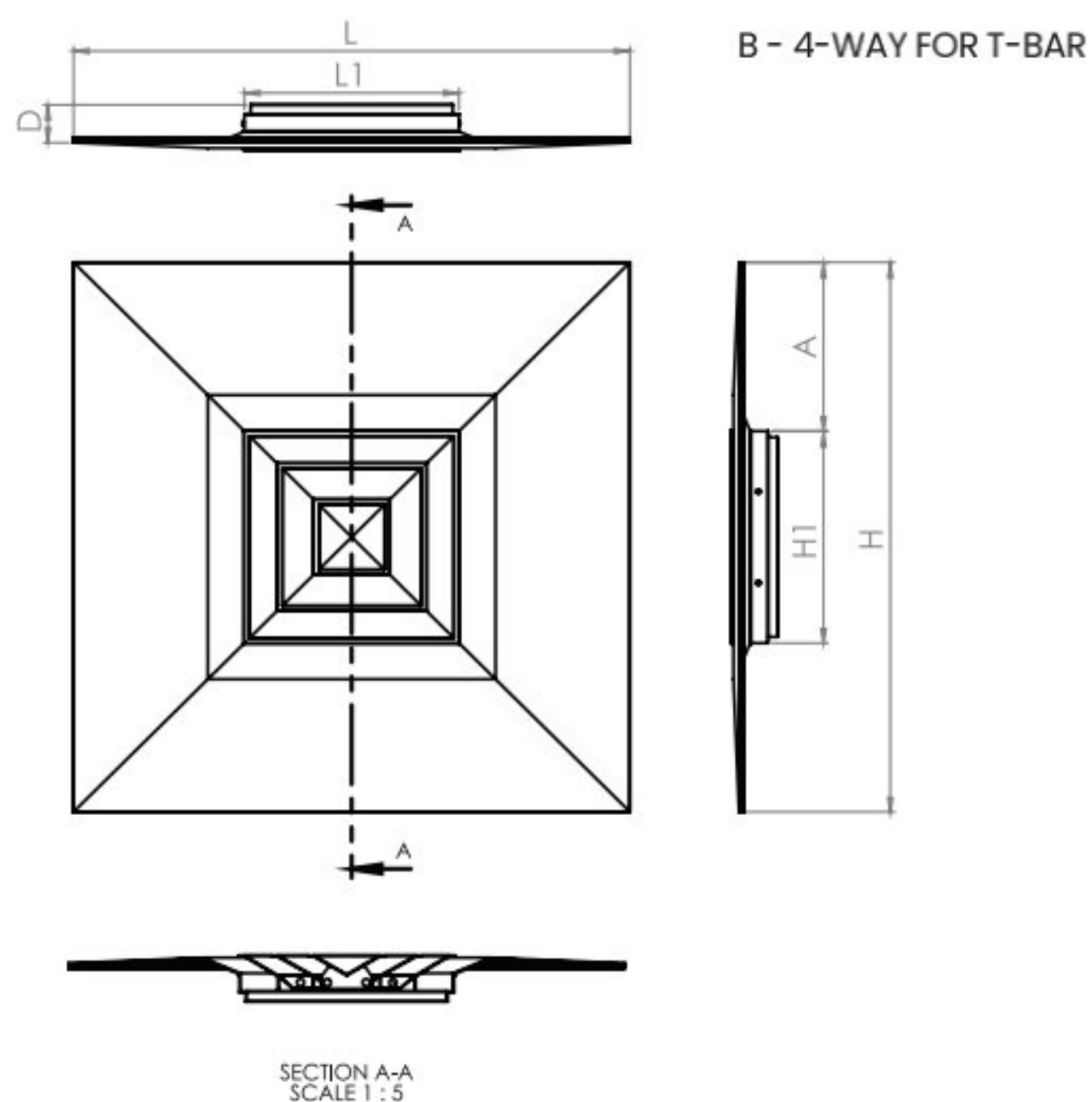


L - 4-WAY



Name of part	Dimensions mm					
	External size		Neck size		Frame size	Depth size
	L	H	LI	HI	A	D
CEILING DIFFUSER DD 290-6" L	300	300	150	160	75	45
CEILING DIFFUSER DD365-9" L	375	375	235	225	75	45
CEILING DIFFUSER DD440-12" L	450	450	310	300	75	45
CEILING DIFFUSER DD515-15" L	515	515	385	375	75	45
4-WAY CEILING DIFFUSER 6" face 290 L	300	300	150	160	75	45
4-WAY CEILING DIFFUSER 9" FACE 365 L	275	375	235	225	75	45
4-WAY CEILING DIFFUSER 9"+OBD Natu L	375	375	235	225	75	45
4-WAY CEILING DIFFUSER 12" FACE 4 L	450	450	310	300	75	45
4-WAY CEILING DIFFUSER 12"+OBD Nat L	450	450	310	300	75	45
4-WAY CEILING DIFFUSER 15" face 515 L	515	515	385	375	75	45
4-WAY CEILING DIFFUSER 15"+OBD Nat L	515	515	385	375	75	45





Product description	Dimensions mm					
	L	LI	H	H1	D	A
4-way CEILING DIFFUSER 6" FACE 595	595	160	595	160	45	220
CEILING DIFFUSER DD 595-6"	595	160	595	160	45	220
4-way CEILING DIFFUSER 6" FACE 595 FL	595	160	595	160	45	220
4-way CEILING DIFFUSER 6" FACE 602	602	160	602	160	43	220
CEILING DIFFUSER DD 602-6"	602	165	602	165	40	220
4-way CEILING DIFFUSER 9" FACE 595	595	235	595	235	40	185
CEILING DIFFUSER DD 595-9"	595	235	595	235	40	185
4-way CEILING DIFFUSER 9" FACE 595 FL	595	220	595	220	48	195
4-way CEILING DIFFUSER 9" FACE 602	602	238	602	238	43	185
CEILING DIFFUSER DD 602-9"	602	238	602	338	43	185
4-way CEILING DIFFUSER 12" FACE 602	595	305	595	305	45	150
CEILING DIFFUSER DD 595-12"	595	305	595	305	45	150
4-way CEILING DIFFUSER 12" FACE 595 FL	595	305	595	305	45	150
CEILING DIFFUSER DD 595-12" FL	595	305	595	305	45	150
4-way CEILING DIFFUSER 12" FACE 602	602	305	602	305	45	150
CEILING DIFFUSER DD 602-12"	602	305	602	305	45	150
4-way CEILING DIFFUSER 15" FACE 595	595	375	595	375	40	110
CEILING DIFFUSER DD 595-15"	595	375	595	375	40	110
4-way CEILING DIFFUSER 15" FACE 595 FL	595	375	595	375	40	110
4-way CEILING DIFFUSER 15" FACE 602	602	385	602	385	45	110
CEILING DIFFUSER DD 602-15"	602	385	602	385	45	110
4-way CEILING DIFFUSER 18" FACE 595	595	445	595	445	48	75
CEILING DIFFUSER DD 595-18"	595	450	595	450	45	75
4-way CEILING DIFFUSER 18" FACE 595 FL	595	450	595	450	45	75
4-way CEILING DIFFUSER 18" FACE 602	602	450	602	450	45	80
CEILING DIFFUSER DD 602-18"	602	450	602	405	45	80
	L	Q	H	Q	D	A
Ceiling diffuser with round self - moduling 12" FACE 595	595	305	595	305	93	145
Ceiling diffuser with round self - moduling 12" FACE 595FL	595	305	595	305	93	145
Ceiling diffuser with round self - moduling 12" FACE 602	602	305	602	305	93	150



## Performance Data

Opening size [Inch]	Opening size [Inch]	Eff. Area [ft <sup>2</sup> ]	Neck velocity [FPM]	200	300	400	450	500	550	600	650	700	750	800	1000
6	150 X 150	0.24	CFM	48	73	97	109	121	133	145	157	170	182	194	242
			Throw [m]	0.9-1.7	1.2-2.1	1.5-2.4	1.7-2.7	1.8-2.7	2.1-3	2.4-3.4	2.6-3.7	2.8-3.9	3-4.1	3.2-4.2	3.3-4.4
			Pressure [Pa]		5	8	10	13	14	17	20	23	26	29	32
			NC [dB]	*	*	15	18	20	22	24	26	28	30	33	37
9	225 X 225	0.54	CFM	109	163	218	245	272	300	327	354	381	408		
			Throw [m]	1.5-2.4	1.9-3.1	2.4-3.7	2.7-4	3-4.3	3.4-4.6	3.6-4.9	3.9-5.2	4.2-5.4	4.4-5.6		
			Pressure [Pa]		6	9	13	15	18	21	22	27	32		
			NC [dB]	*	16	19	21	23	25	27	29	33	35		
12	300 X 300	0.97	CFM	194	291	388	436	484	533	581					
			Throw [m]	2.4-3.6	3-4.2	3.4-4.9	3.7-5.5	4-5.8	4.3-6.1	4.3-6.4					
			Pressure [Pa]		7	10	12	16	19	23					
			NC [dB]	*	17	22	25	29	33	36					
15	380 X 380	1.51	CFM	303	454	605	681	757							
			Throw [m]	2.8-5	3.5-5.8	4.3-6.4	4.9-6.7	5.2-7							
			Pressure [Pa]		6	11	15	19							
			NC [dB]	18	24	30	33								
18	450 X 450	2.17	CFM	435	652	870	978								
			Throw [m]	3.2-5.4	4.1-6.3	4.9-6.9	5.5-7.6								
			Pressure [Pa]		7	12	15								
			NC [dB]	20	27	33	35								

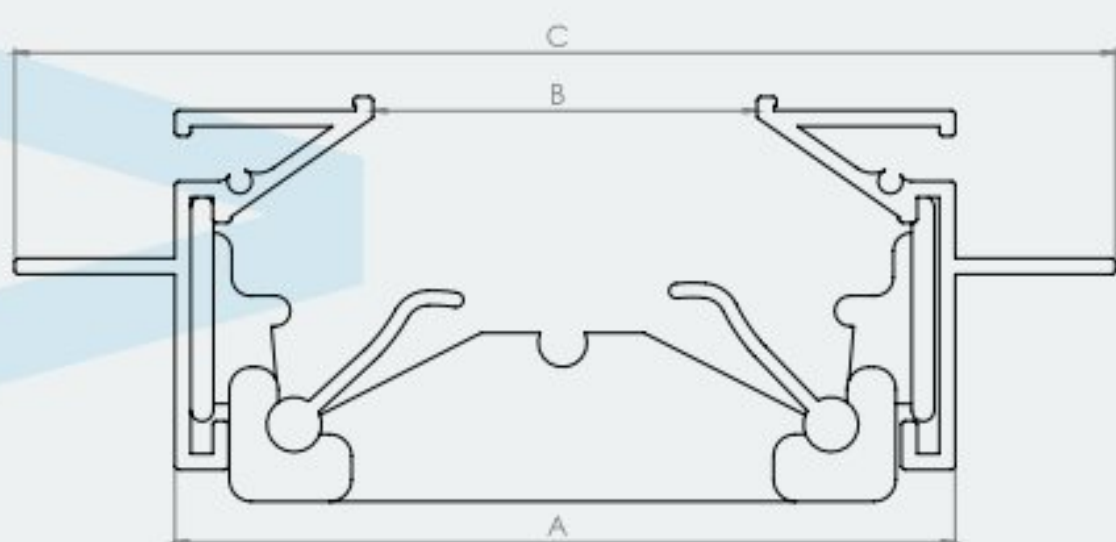


# Concealed Slot diffuser

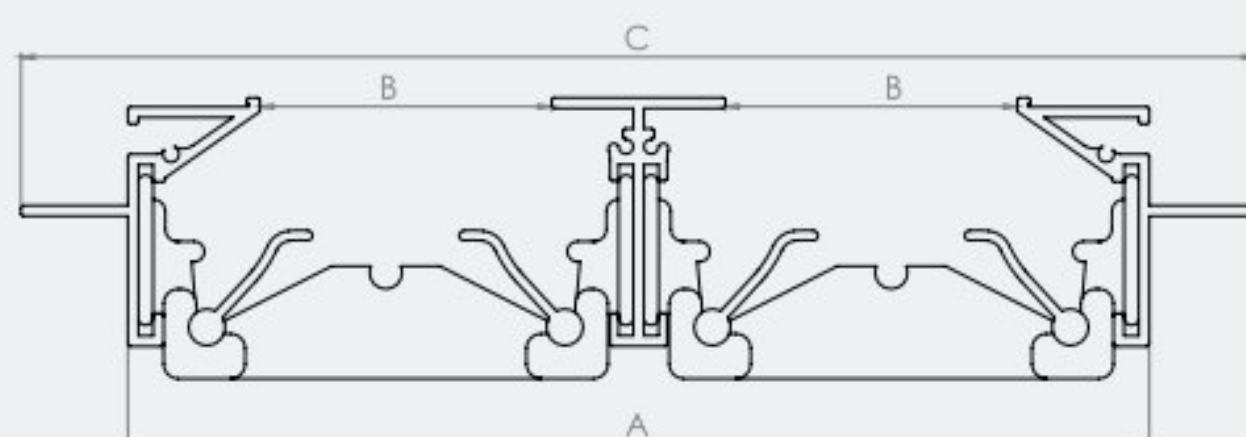
## Product Description // // // // //

- Twitoplast's special concealed slot diffuser provides performance and can be installed on the wall or ceiling.
- Frame and blades are made of extruded aluminum made with Thanks to airflow.
- Fits and accommodated the architect's design for the modern home, apartment or office.
- Available with 1, 2 or more slots in any length.
- The slot diffuser is concealed and only a small strip if visible.
- Comes in black

### Technical information



Dimensions mm			
Type	A mm	B mm	C mm
1 slot	51	19	76
	64	34	91



Dimensions mm			
Type	A mm	B mm	C mm
2 slot	96	46	125
	126	70	152



## Performance Data

No. of slots	"Neck width [mm]"	Effective area [m <sup>2</sup> ]	Effective area [m <sup>2</sup> ]	"Flow [CFM/m]"	"Neck velocity [FPM/m]"	"Static pressure drop [Pa]"	NC [dB]	"Throw [m] *Vt=0.5 m/s"	"Throw [m] *Vt=0.2 m/s"
1	51	0.018	0.194	50	251		19	0.9	1.2
1	51	0.018	0.194	55	280		22	1.3	1.9
1	51	0.018	0.194	75	371		26	2.0	3.1
1	51	0.018	0.194	95	462	23	29	2.7	4.2
1	51	0.018	0.194	110	557	27	33	3.1	4.5
1	51	0.018	0.194	130	651	30	36	3.3	4.9
1	51	0.018	0.194	150	742	33	37	3.5	5.3
1	64	0.033	0.36	80	225		9	0.67	0.96
1	64	0.033	0.36	120	338		12	1.54	1.54
1	64	0.033	0.36	150	422	4	17	2.30	2.30
1	64	0.033	0.36	180	507	6	21	2.59	3.84
1	64	0.033	0.36	220	619	8	23	2.88	4.22
1	64	0.033	0.36	250	704	10	24	3.17	4.70
1	64	0.033	0.36	280	788	14	25	3.55	5.18
1	64	0.033	0.36	310	873	18	28	3.94	5.66
1	64	0.033	0.36	350	985	22	33	4.20	6.10
1	64	0.033	0.36	390	1098	23	35	4.55	6.43

No. of slots	"Neck width [mm]"	Effective area [m <sup>2</sup> ]	Effective area [m <sup>2</sup> ]	"Flow [CFM/m]"	"Neck velocity [FPM/m]"	"Static pressure drop [Pa]"	NC [dB]	"Throw [m] *Vt=0.5 m/s"	"Throw [m] *Vt=0.2 m/s"
2	96	0.046	0.495	70	140		-	1.4	2.3
2	96	0.046	0.495	90	186		-	1.7	2.5
2	96	0.046	0.495	110	231		-	2.2	3.4
2	96	0.046	0.495	135	279		-	2.5	3.8
2	96	0.046	0.495	160	325		-	2.6	4.1
2	96	0.046	0.495	180	371	18	-	2.7	4.3
2	96	0.046	0.495	200	418	20	-	2.9	4.6
2	96	0.046	0.495	225	464	23	-	3.2	5.2
2	96	0.046	0.495	250	511	24	19	3.4	5.6
2	96	0.046	0.495	270	557	25	21	3.7	5.8
2	96	0.046	0.495	290	602	27	24	3.9	6.2
2	96	0.046	0.495	315	650	29	26	4.0	6.5
2	96	0.046	0.495	340	695	32	27	4.2	6.8
2	96	0.046	0.495	360	742	33	30	4.3	7.0
2	96	0.046	0.495	380	788	34	32	4.4	7.1
2	96	0.046	0.495	400	835	36	34	4.8	7.8
2	96	0.044	0.495	430	881	37	37	5.3	8.6
2	126	0.072	0.78	160	206		9	0.60	0.93
2	126	0.072	0.78	190	245		12	1.31	2.06
2	126	0.072	0.78	250	323	2	18	2.06	2.99
2	126	0.072	0.78	300	387	5	21	2.43	3.64
2	126	0.072	0.78	350	452	6	23	2.71	4.02
2	126	0.072	0.78	400	516	9	26	2.99	4.39
2	126	0.072	0.78	450	581	12	27	3.36	4.86
2	126	0.072	0.78	500	645	15	29	3.55	5.32
2	126	0.072	0.78	600	774	17	31	3.92	5.79
2	126	0.072	0.78	650	839	21	32	4.48	6.26
2	126	0.072	0.78	700	903	23	34	4.76	6.73
2	126	0.072	0.78	750	968	25	37	5.04	7.19





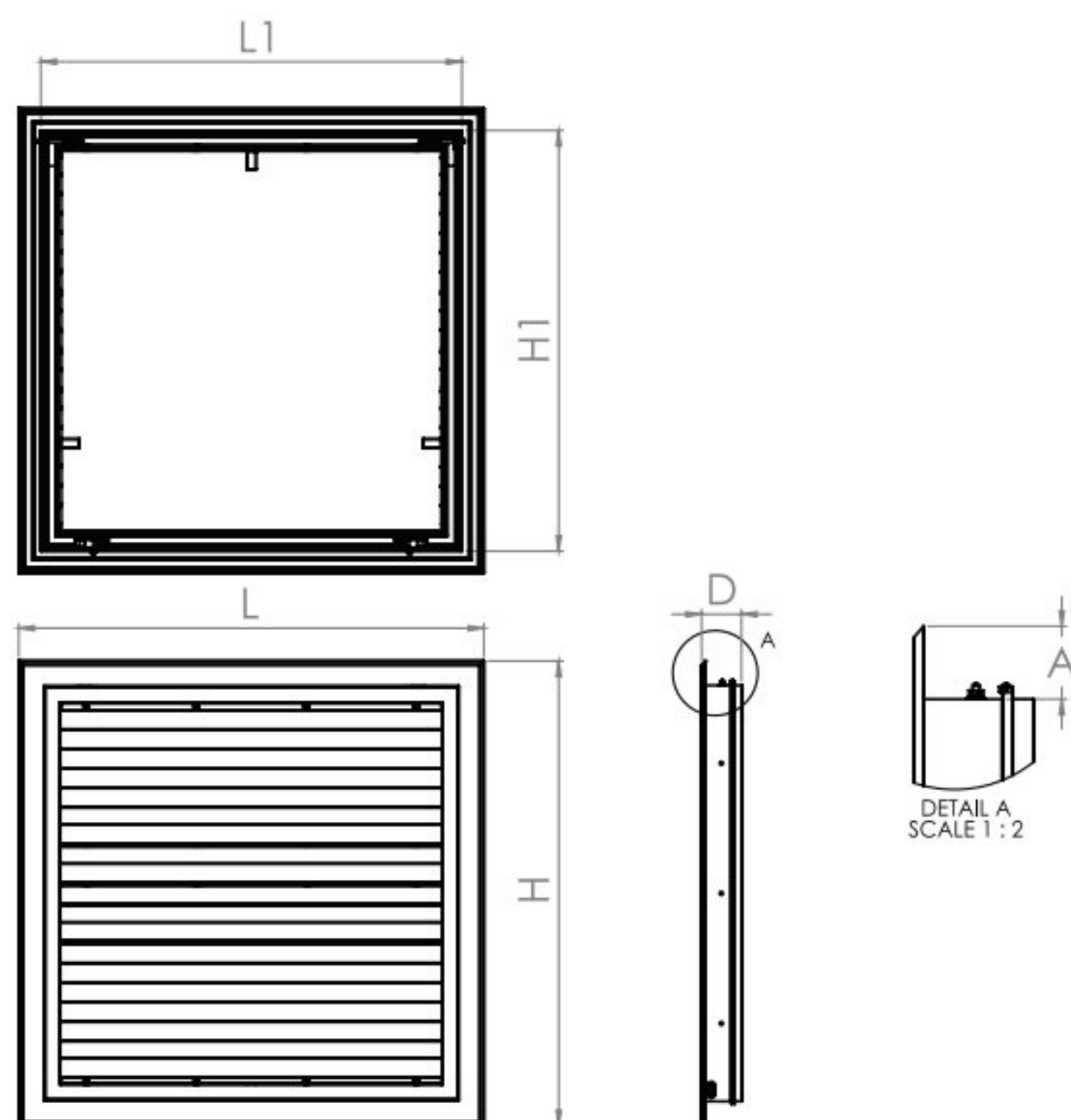
# Return Air Grille with or without a filter

## Product Description // // // // //

- Return air grille with or without a filter, fixed with 45 ° inclined blades, vertical or horizontal profile. Can be mounted on the wall or ceiling.
- The filter has high resistance and is easy to clean (washable).
- Made of aluminum extrusion powder coated with white RAL 9016.
- Special colors and sizes are available per request.
- The slot diffuser is concealed and only a small stripe is visible.
- Packed in plastic film.



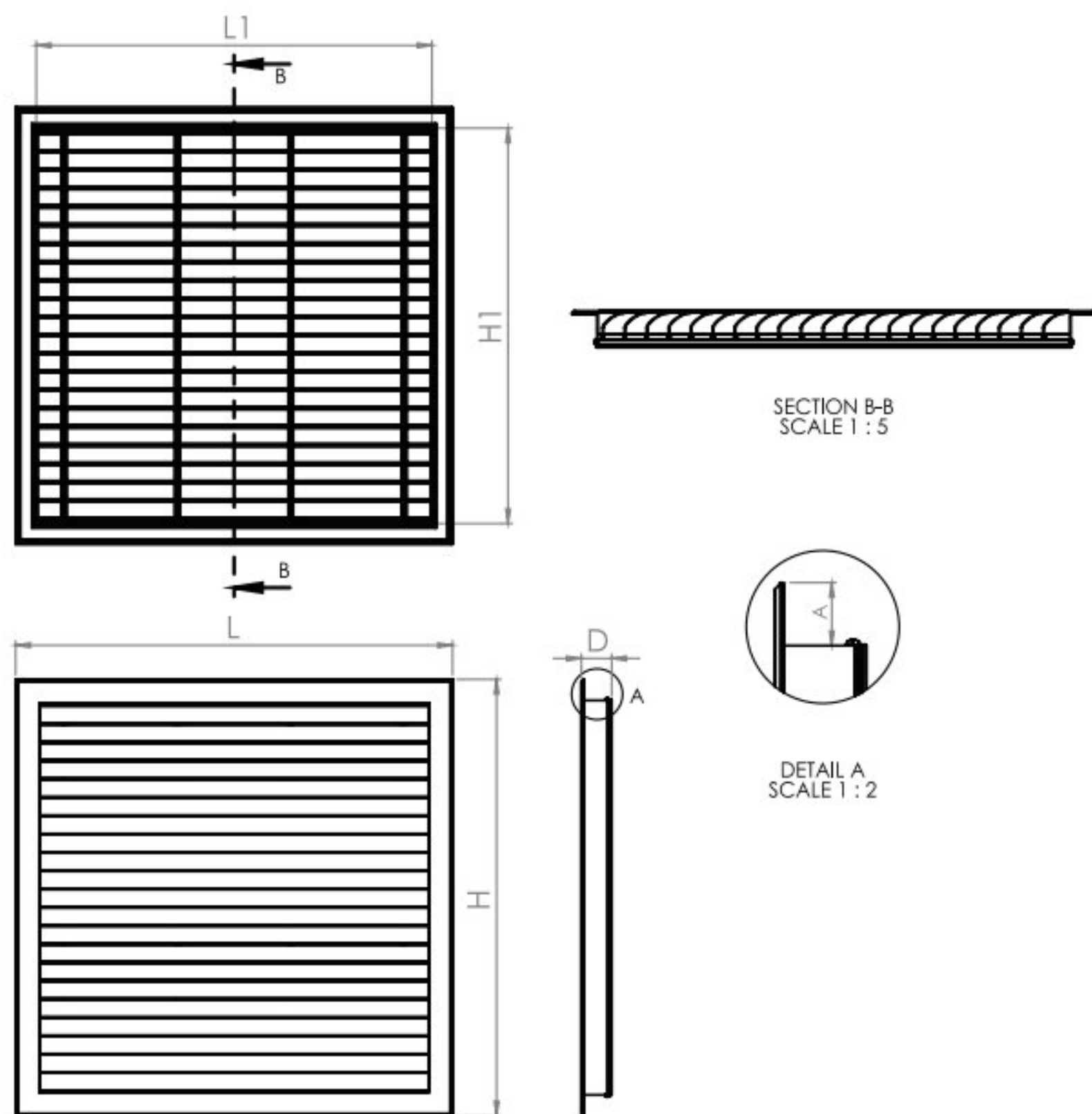
# With filter



Product description	Dimensions mm					
	External size		Neck size		Frame size	Depth size
	L	H	L1	H1	A	D
Return air grille and filter hinge 300*300	357	357	300	300	30	47
Return air grille and filter with holes hinge 300*300	357	357	300	300	30	47
Return air grille and filter hinge 400*400	457	457	400	400	30	47
Return air grille and filter hinge with holes 400*400	457	457	400	400	30	47
Return air grille and filter hinge 600*400	657	457	600	400	30	47
Return air grille and filter hinge with holes 600*400	657	457	600	400	30	47
Return air grille and filter hinge 800*400	857	457	800	400	30	47
Return air grille and filter hinge with holes 800*400	857	457	800	400	30	47
Return air grille and filter hinge with holes 540*540	597	597	540	540	30	47
Return air grille and filter hinge face dim 540*540 ext dim 595	595	597	540	540	30	47
Return air grille and filter hinge with holes face dim 540*540 ext dim 595	595	597	540	540	30	47
Return air grille and filter hinge face dim 540*540 ext dim 602	604	604	545	545	30	47
Return air grille and filter hinge face dim 600*600 ext dim 657	657	657	600	600	30	47



# Without filter



Product description	Dimensions mm					
	External size		Neck size		Frame size	Depth size
	L	H	L1	H1	A	D
Return air grille without filter with holes 300*300	357	357	300	300	30	30
Return air grille without filter with holes 400*400	457	457	400	400	30	30
Return air grille without filter 600*400	657	457	600	400	30	30
Return air grille without filter with holes 600*400	657	457	600	400	30	30
Return air grille without filter with holes 800*400	857	457	800	400	30	30
Return air grille without filter with holes 540*540	602	602	540	540	30	30
Return air grille without filter face dim 540*540 ext dim 595	595	595	540	540	30	30
Return air grille without filter face dim 540*540 ext dim 602	602	602	545	545	30	30
Return air grille FL without filter face dim 540*540 ext dim 595	595	595	540	540	30	30
Return air grille without filter with holes 600*600	657	657	600	600	30	30

Other sizes available upon request.



Performance Data

Neck Diameter [mm]	Area [ft <sup>2</sup> ]	Core Velocity [FPM]	200	300	400	500	600	700	800	900	1000
		Velocity Pressure [Pa]	0.6	1.4	2.5	3.8	5.5	7.5	0.9	12.4	15.3
25/15	0.325	Flow [cfm]	65	100	130	165	195	230	260	295	325
		NC [dB]	-	-	17	21	25	27	30	33	34
30/15	0.394	Flow [cfm]	80	120	155	195	235	275	315	355	395
		NC [dB]	-	-	17	21	25	27	30	32	34
25/25	0.557	Flow [cfm]	110	165	225	280	335	390	445	500	555
		NC [dB]	-	15	18	22	26	27	31	33	35
45/15	0.598	Flow [cfm]	120	180	240	300	360	420	480	540	600
		NC [dB]	-	15	18	22	26	28	31	33	35
30/25	0.673	Flow [cfm]	135	200	270	335	405	470	540	605	675
		NC [dB]	-	15	19	24	26	28	32	33	36
30/30	0.813	Flow [cfm]	165	245	325	405	490	570	650	730	815
		NC [dB]	-	15	20	24	26	28	32	33	36
45/30	1.236	Flow [cfm]	245	370	495	620	740	865	990	1110	1235
		NC [dB]	-	16	20	24	26	29	32	34	36
40/40	1.472	Flow [cfm]	295	440	590	735	885	1030	1175	1325	1470
		NC [dB]	-	16	21	24	26	29	32	34	36
60/30	1.658	Flow [cfm]	330	495	665	830	995	1160	1325	1490	1660
		NC [dB]	-	17	22	24	27	29	32	35	37
45/45	1.885	Flow [cfm]	375	565	755	945	1130	1320	1510	1695	1885
		NC [dB]	-	17	22	25	27	30	33	35	37
75/30	2.080	Flow [cfm]	415	625	830	1040	1250	1455	1665	1870	2080
		NC [dB]	-	18	22	25	28	30	34	36	38
40/60	2.228	Flow [cfm]	445	670	890	1115	1335	1560	1785	2005	2230
		NC [dB]	-	18	22	25	28	30	34	36	38
50/50	2.337	Flow [cfm]	465	700	935	1170	1400	1635	1870	2105	2335
		NC [dB]	-	19	22	26	28	31	34	36	38
54/54	2.727	Flow [cfm]	545	820	1090	1365	1635	1910	2180	2455	2725
		NC [dB]	-	19	23	26	29	31	33	35	38
60/50	2.815	Flow [cfm]	565	845	1125	1405	1690	1970	2250	2535	2815
		NC [dB]	15	19	23	26	29	31	33	36	38
75/45	3.174	Flow [cfm]	635	950	1270	1585	1905	2220	2540	2855	3175
		NC [dB]	15	19	23	27	29	31	33	35	38
60/60	3.386	Flow [cfm]	675	1015	1355	1695	2030	2370	2710	3045	3385
		NC [dB]	15	20	23	27	29	31	33	35	38
90/45	3.818	Flow [cfm]	765	1145	1525	1910	2290	2675	3055	3435	3820
		NC [dB]	16	20	24	27	30	32	33	35	39
75/60	4.248	Flow [cfm]	850	1274	1699	2124	2549	2973	3398	3823	4248
		NC [dB]	16	20	24	28	30	32	33	36	40
90/60	5.110	Flow [cfm]	1022	1533	2044	2555	3066	3577	4088	4599	5110
		NC [dB]	17	21	25	29	31	33	33	36	40
90/75	6.402	Flow [cfm]	1280	1921	2561	3201	3841	4481	5121	5762	6402
		NC [dB]	18	22	26	30	32	33	35	38	41
120/60	6.834	Flow [cfm]	1367	2050	2734	3417	4101	4784	5467	6151	6834
		NC [dB]	18	23	26	28	31	33	35	38	41
120/75	8.562	Flow [cfm]	1712	2569	3425	4281	5137	5993	6850	7706	8562
		NC [dB]	19	24	27	29	31	33	35	39	43
100/100	9.517	Flow [cfm]	1903	2855	3807	4759	5710	6662	7614	8565	9517
		NC [dB]	20	24	27	29	31	33	35	39	43
120/90	10.290	Flow [cfm]	2058	3087	4116	5145	6174	7203	8232	9261	10290
		NC [dB]	20	25	27	29	31	33	35	39	44
120/120	13.745	Flow [cfm]	2749	4124	5498	6873	8247	9622	10996	12371	13745
		NC [dB]	21	25	27	29	31	33	35	39	44

With filter 30% of the total performance must be reduced

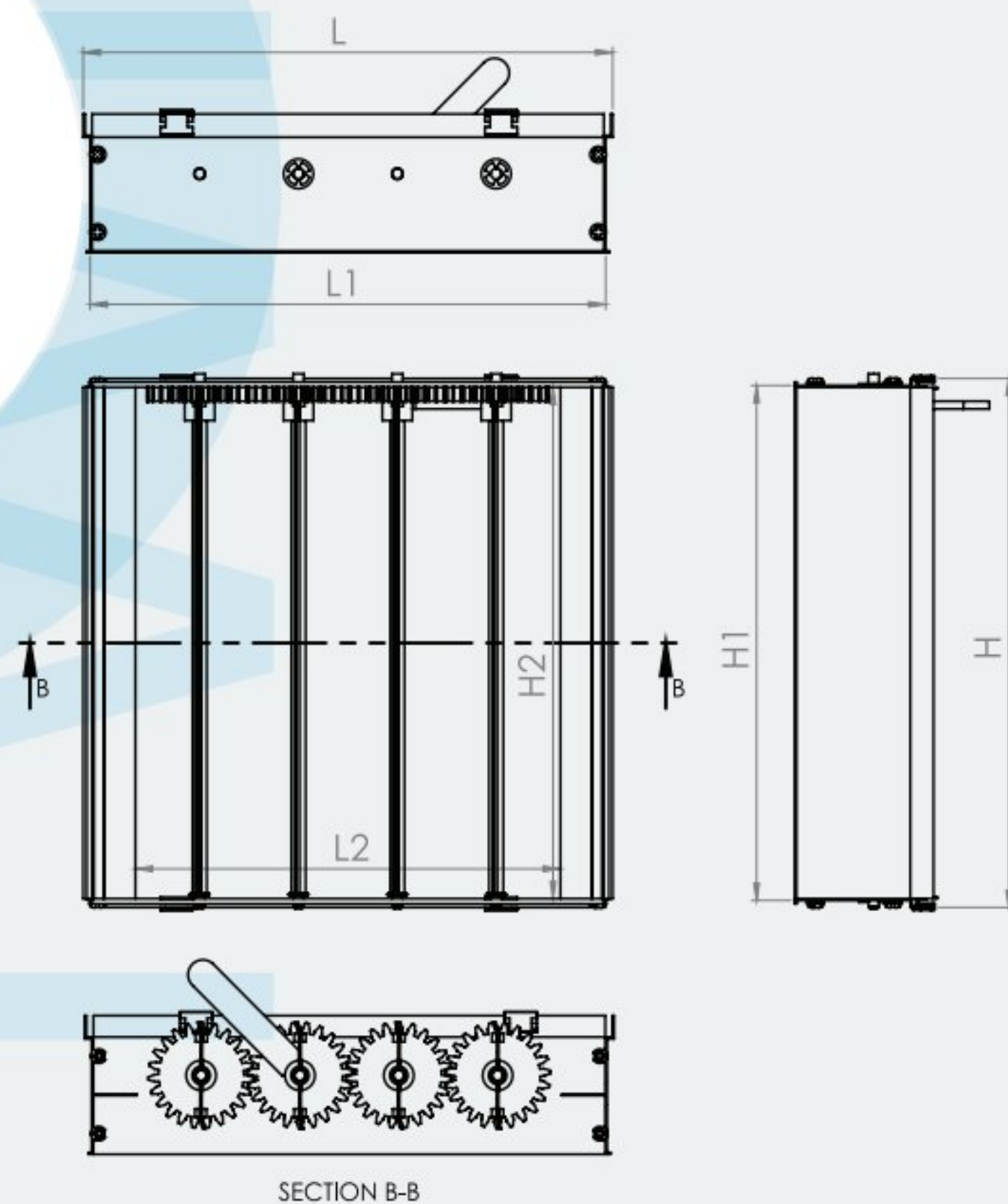


# Heavy Duty Volume Damper

## Product Description // // // // //

- This Damper is designed for high-pressure applications and is resistant to high temperatures.
- The frame and blades are made of aluminum.
- The gear is made of strong plastic for easy volume control.
- Gaskets are made of vinyl for airtight seal.
- Natural color.
- Packed in plastic film
- Dimensions can be made to accommodate designer's requirement

### Technical information







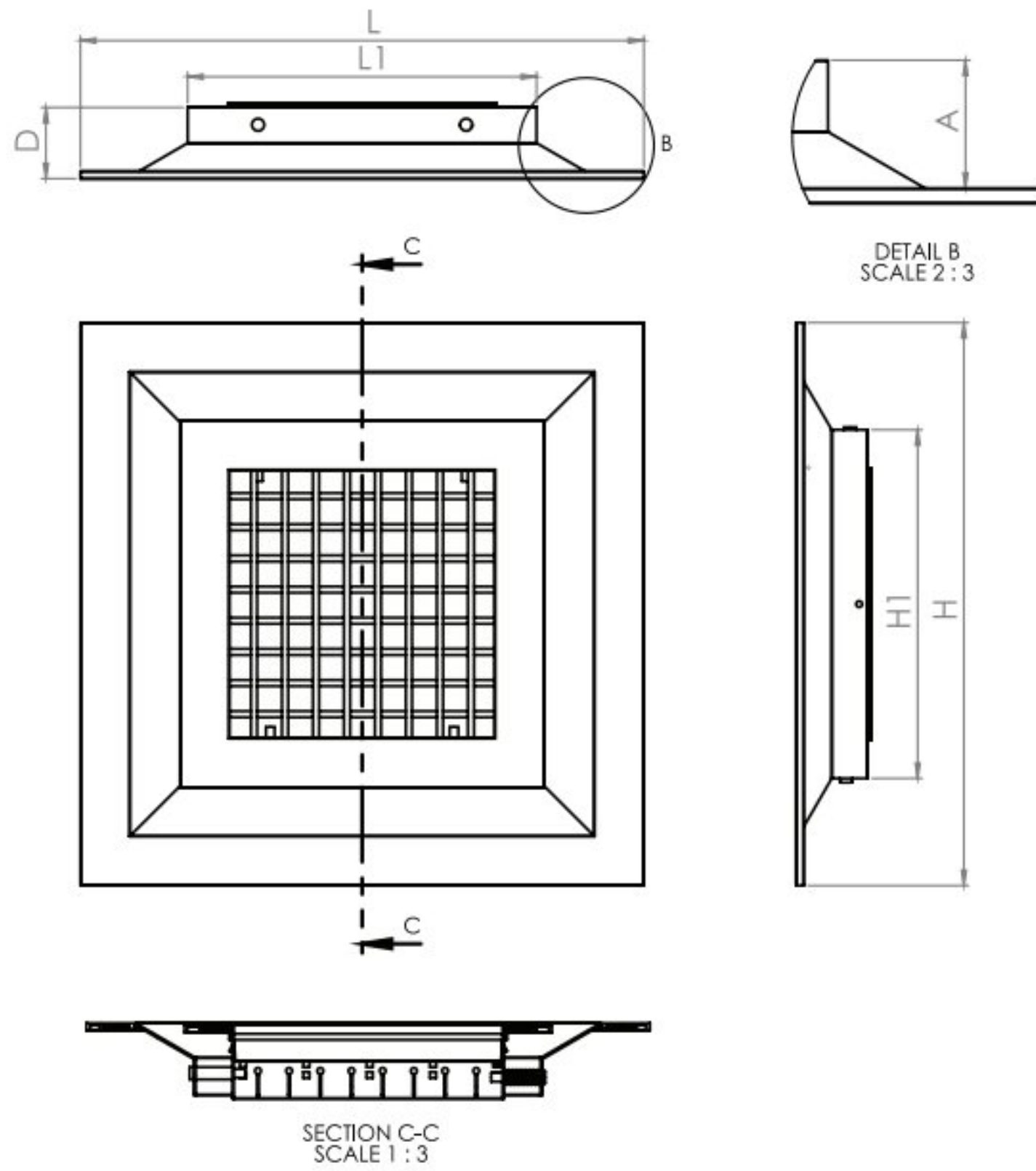
# 4-way Diffuser with double deflection

## Product Description //

- The 4-way diffuser with DD core is for flush mounting in the ceiling.
- Primarily suitable for horizontal discharge.
- The center core includes vertical and horizontal blades allowing to regulate the airflow.
- Designed to supply large volumes of air at low sound levels.
- The core is removable for easy mounting.
- It can be supplied with a rounded frame.
- Made of aluminum extrusion powder coated with white RAL 9016.
- Special colors available per request.
- Packed in plastic film.



## Technical information



Product	Dimensions mm					
	External size		Neck size		Frame size	Depth size
	L	H	LI	HI	A	D
CEILING DIFFUSER DD 290-6" UB	300	300	160	150	75	50
CEILING DIFFUSER DD 365-9" UB	375	375	235	225	75	50
CEILING DIFFUSER DD 440-12" UB	450	450	300	310	75	50
CEILING DIFFUSER DD 515*15" UB	528	528	385	375	75	50



Performance Data

Opening size [inch]	Neck size [mm]	"Effective velocity [FPM]" Total pressure [Pa]	300	400	500	600	700	800	900	1000	1200
			1.51	2.96	4.14	5.22	7.29	10.05	24.03	42.55	59.10
6	150 X 150	CFM	45	60	75	90	105	120	135	145	180
		NC [dB]	*	*	*	*	18	23	26	30	37
		Throw [m]	1.2 - 1.8	1.6 - 2.6	2.2 - 3.1	2.7 - 3.9	3.3 - 4.2	3.5 - 4.5	3.9-4.9	4.3 - 5.5	7.6 - 9.4
9	225 X 225	CFM	125	175	220	265	310	355	390	435	515
		NC [dB]	*	*	15	17	22	26	29	32	36
		Throw [m]	2.1 - 3.0	2.7 - 4.2	3.6 - 5.1	4.5 - 6.7	5.1 - 7.3	6.0 - 7.6	6.7 - 7.9	7.1 - 8.5	9.1 - 11.5
12	300 X 300	CFM	175	230	290	345	405	465	505	565	695
		NC [dB]	*	*	*	17	22	26	29	32	38
		Throw [m]	2.4 - 3.9	3.6 - 5.1	4.5 - 6.7	5.4 - 7.9	6.4 - 8.8	7.3 - 9.4	7.9 - 9.9	8.5 - 10.3	9.1 - 11.5
15	375 X 375	CFM	280	380	480	580	680	780	880	970	
		NC [dB]	*	*	*	20	25	29	24	38	
		Throw [m]	2.7 - 4.5	4.2 - 6.0	5.1 - 7.6	6.4 - 9.1	7.4 - 10.2	8.5 - 10.9	9.7 - 11.8	10.3 - 12.8	
18	450 X 450	CFM	380	500	640	760	890	1020	1150	1270	
		NC [dB]	*	*	*	19	24	28	34	38	
		Throw [m]	3.0 - 5.1	4.5 - 7.0	5.7 - 8.5	7.0 - 10.6	8.2 - 11.5	9.4 - 12.1	10.9 - 13.7	11.5 - 14.3	