

## ADJUSTABLE VANE SWIRL DIFFUSER







Suitable for ceiling mounting and can be manufactured to suit most ceiling tile arrangements.

The steel blades can be easily adjusted from the face of the diffuser to give either a Horizontal or Vertical air pattern.

This diffuser offers high induction of room air and the rapid decay of supply air velocities and temperature differentials.

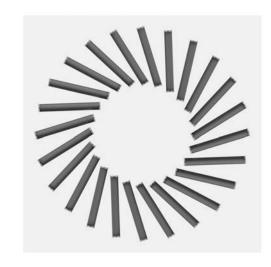
ADSW Circular Exposed Ceiling Type



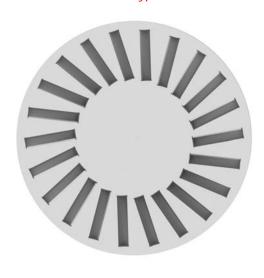
Tegular frame options are available to suit most ceiling systems



ADSW-24-L Lay-in Ceiling Type



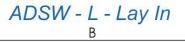
ADSW-24-C Circular Type







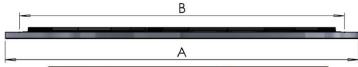
#### Dimensional Data





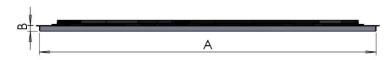
Blades	Α	В	
48-HC	795 x 795	785 x 785	
48	595 x 595	580 x 580	
32	595 x 595	580 x 580	
24	595 x 595	580 x 580	
16	595 x 595, 495 x 495, 395 x 395	380 x 380	
14	595 x 595, 495 x 495	470 x 470	
8	595 x 595, 495 x 495, 395 x 395, 295 x 295	280 x 280	
24 Small	595 x 595, 495 x 495	465 x 465	

### ADSW - C - Circular



Blades	А	В		
48-HC	800 Dia	785 Dia		
48	600 Dia	580 Dia		
32	600 Dia	580 Dia		
24	600 Dia	580 Dia		
16	600, 500, 400 Dia	380 Dia		
14	600, 500 Dia	470 Dia		
8 600, 500, 400, 300 Dia		280 Dia		
24 Small	600, 500 Dia	465 Dia		

### ADSW - T - Tegular



Blades	Α	В	
48	574 / 584	Drop Size	
32	574 / 584	Drop Size	
24	574 / 584	Drop Size	
16	574 / 584	Drop Size	
14	574 / 584	Drop Size	
8	574 / 584	Drop Size	
24 Small	574 / 584	Drop Size	

### ADSW - M - Clip In



Blades	А
48	599 x 599
32	599 x 599
24	599 x 599
16	599 x 599
14	599 x 599
8	599 x 599
24 Small	599 x 599

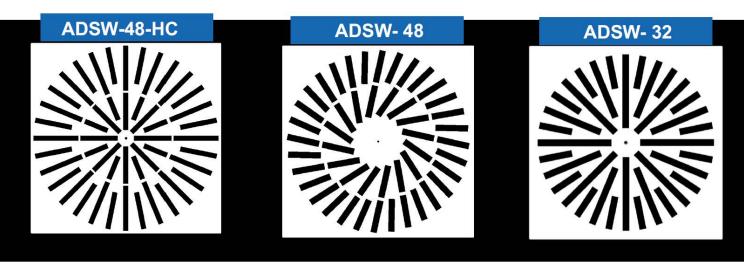
### How to order

Type	No of Blades	Edge Detail	Tegular Depth	Size	Overall Size	RAL Colour
ADSW	24	L - Lay-In Grid T15 - Tegular 584 x 584 T24 - Tegular 574 x 574 M - Clip-In Metal Tile C - Circular	e.g. 8mm		e.g. 595 x 595 599 x 599 600 Dia 500 Dia 400 Dia 300 Dia	e.g. RAL 9010

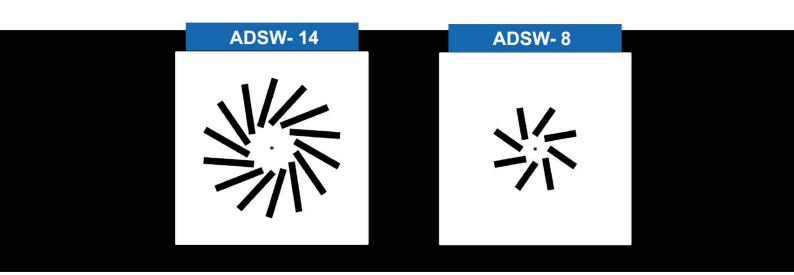




Faceplate Patterns



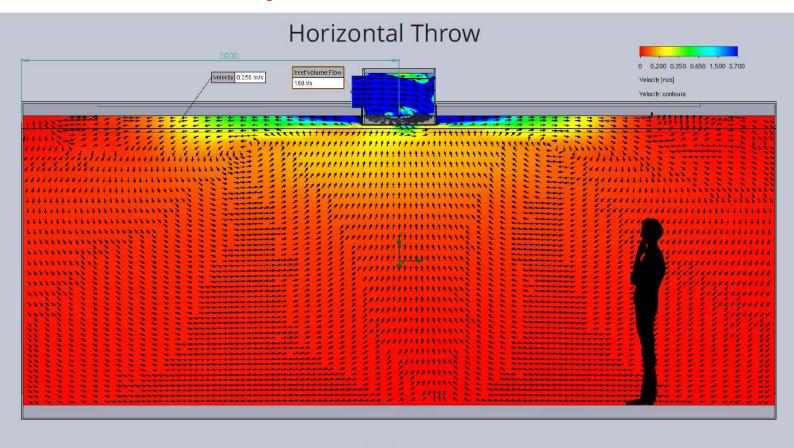




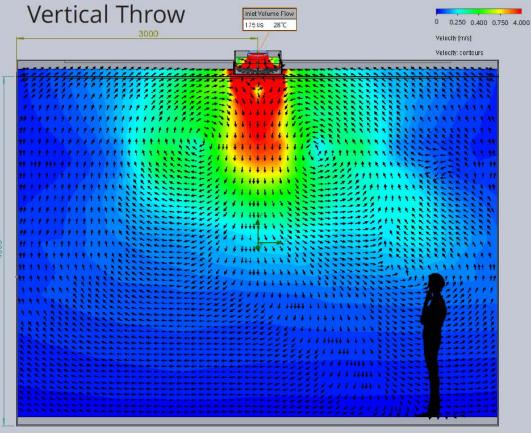




### CFD Performance Modelling



Our specially designed blades can be adjusted from the face to offer either a horizontal or vertical throw.







### Performance Data

Size								
	L/s	150	160	170	180	190	200	220
ADSW-48-HC	Throw m 0.25 - 0.5 m/s	1.6 - 0.8	1.7 - 0.9	1.8 - 0.9	2.0 - 1.0	2.1 - 1	2.2 - 1.1	2.4 - 1.2
	Pa	7	7	8	9	11	12	14
	NR	13	14	16	18	19	21	23
	L/s	240	260	280	300	320	340	350
	Throw m 0.25 - 0.5 m/s	2.6 - 1.3	2.8 - 1.5	3 - 1.5	3.2 - 1.6	3.5 - 1.7	3.7 - 1.8	3.8 - 1.9
	Pa	17	20	23	26	30	34	36
	NR	26	28	30	32	34	36	37
	L/s	100	110	120	130	140	150	160
	Throw m 0.25 - 0.5 m/s	1.5 - 0.8	1.7 - 0.8	1.8 - 0.9	2.0 - 1.0	2.1 - 1.1	2.3 - 1.2	2.5 - 1.2
	Pa	4	4	8	6	7	8	9
ADSW-48	NR	7	10	12	15	17	19	20
AD3W-40	L/s	170	180	190	200	220	240	260
	Throw m 0.25 - 0.5 m/s	2.6 - 1.3	2.8 - 1.4	3.1 - 1.5	3.1 - 1.5	3.4 - 1.7	3.7 - 1.8	4.0 - 2.0
	Pa	12	12	13	15	18	21	25
	NR	24	24	25	27	29	32	34
	L/s	100	110	120	130	140	150	160
	Throw m 0.25 - 0.5 m/s	1.4 - 0.7	1.5 - 0.8	1.7 - 0.8	1.8 - 0.9	2.0 - 1.0	2.1 - 1.1	2.2 - 1.1
	Pa	6	7	9	10	12	14	16
	NR	12	15	17	20	22	24	25
ADSW-32	L/s	170	180	190	200	220	240	260
	Throw m 0.25 - 0.5 m/s	2.4 - 1.2	2.5	2.7 - 1.3	2.8 - 1.4	2.9	3.1 - 1.5	3.4 - 1.7
	Pa	18	20	22	25	27	30	35
	NR	27	29	30	32	33	34	37
	L/s	75	90	100	110	120	130	140
	Throw m 0.25 - 0.5 m/s	1.1 - 0.5	1.3 - 0.6	1.4 - 0.7	1.5 - 0.8	1.7 - 0.8	1.8 - 0.9	2 - 1.0
	Pa	5	7	9	10	12	15	17
	NR NR	<15 - 9	14	17	20	22	25	27
ADSW-24	L/s	150	160	170	180	190	200	
	Throw m 0.25 - 0.5 m/s	2.1 - 1.1	2.2 - 1.1	2.4 - 1.2	2.5 - 1.3	2.7 - 1.3	2.8 - 1.4	
	Pa	19	22	25	28	31	34	
	NR	29	30	32	34	35	37	
	L/s	40	50	60	70	80	90	100
	Throw m 0.25 - 0.5 m/s	0.9 - 0.4	1.2 - 0.6	1.3 - 0.6	1.6 - 0.8	1.8 - 0.9	2.0 - 1.0	2.2 - 1.1
	Pa	6	9	13	18	23	29	36
	NR	7	14	19	23	27	30	33
ADSW-16	L/s	70.543				2000		33
AD2W-16		110	120	130	140	150	160	
	Throw m 0.25 - 0.5 m/s	2.5 - 1.2	2.7 - 1.3			ř		
	Pa	44	52					
	NR	36	38	100				
	L/s	40	50	60	70	80	90	100
	Throw m 0.25 - 0.5 m/s	0.7 - 0.4	0.9 - 0.5	1.1 - 0.6	1.3	1.5 - 0.7	1.7 - 0.8	1.9 - 0.9
ADSW-14	Pa	4	7	10	13	17	22	27
	NR	1	8	13	17	21	24	27
	L/s	110	120		e		6	
	Throw m 0.25 - 0.5 m/s	2.1 - 1.0	2.2 - 1.1					
	Pa	33	39					
	NR	30	32	.,,				
	L/s	20	30	40	50	60	70	80
	Throw m 0.25 - 0.5 m/s	0.4 - 0.2	0.7 - 0.3	0.9 - 0.4	1.1 - 0.6	1.3 - 0.7	1.6 - 0.8	1.8 - 0.9
	Pa	5	11	19	30	44	59	78
		2	14	22	29	34	38	42
ADSW/-8	NR	3						
ADSW-8	NR L/s	3						
ADSW-8		3						
ADSW-8	L/s	3						





#### Plenum Box Dimensions & Standards

All plenum boxes are manufactured from galvanized sheet steel and are available with 6mm or 12mm Class 'O' foam lining.

#### Circular Plenums

Circular plenum boxes are available to suit either ceiling or exposed services installations with either side or top entry spigot spigot connections (side entry shown).



Ceiling Installation



**Exposed Installation** 

#### Square Plenums

Square plenum boxes are available to suit either ceiling or exposed services installations with either side or top entry spigot spigot connections (side entry shown). Tapered boxes are supplied for ceilings and parallel for exposed.



Ceiling Installation



**Exposed Installation** 

Additional spigots and other bespoke plenums are available. please contact the Sales Office to discuss your requirements.

