

**HIGH CAPACITY STRAIGHT VANE
SWIRL DIFFUSER**



Feb2025

STRAIGHT VANE SWIRL DIFFUSER

SSW Straight vane high capacity swirl diffusers are suitable for ceiling mounting and can be manufactured to suit most ceiling tile arrangements.

The SSW straight vane swirl diffuser offers excellent induction of room air and the rapid decay of supply air velocities and air temperature differentials.

Available in square or circular formats, the SSW-HC can be manufactured to suit standard lay-in, tegular and clip-in ceiling systems.

SSW-HC swirl diffusers are also suitable for exposed ceiling applications.

Bespoke plenum boxes can be supplied to suit and are available in either galvanized or painted finish and with acoustic & thermal foam lining.

Tegular frame options are available to suit most ceiling systems



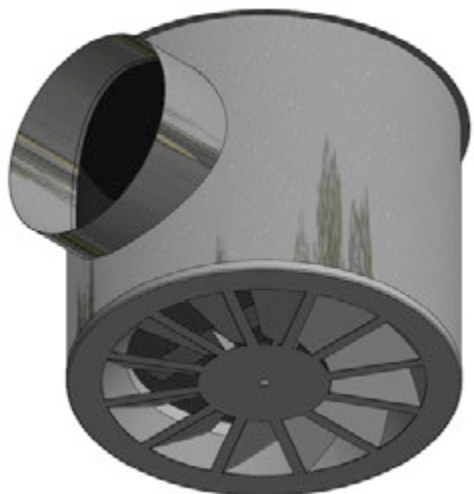
SSW-12-HC-L Lay-in Ceiling Type



SSW-12-HC-C Circular Type



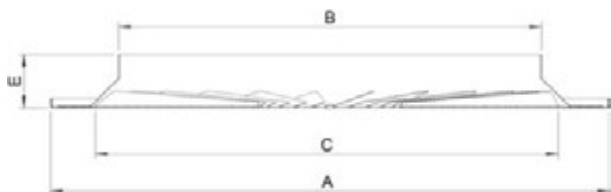
SSW-12-HC-C Circular Exposed Ceiling Type



Feb2025

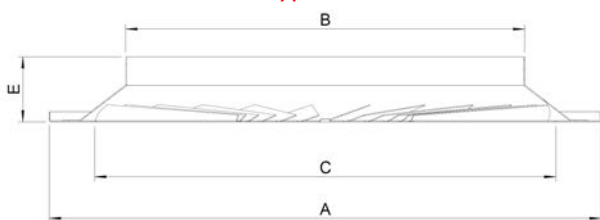
Frame Options, Dimensional Information & Ordering

SSW-12-HC-L Lay-in Ceiling Type



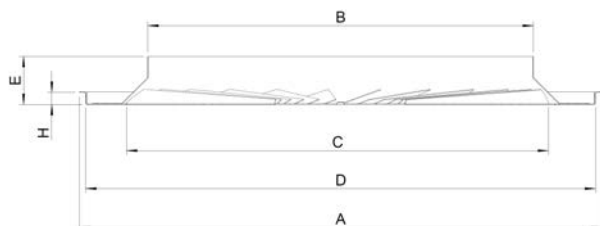
Nom Size	A	B \emptyset	C \emptyset	E
160	595	157	210	55
250	595	247	300	55
350	595	350	400	55
450	595	447	500	55

SSW-12-HC-C Circular Type



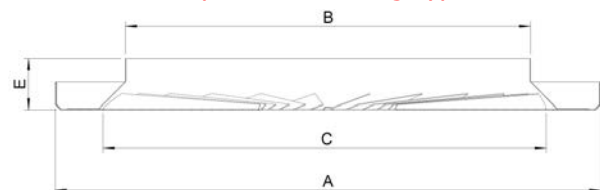
Nom Size	A \emptyset	B \emptyset	C \emptyset	E
160	300	157	218	55
250	380	247	300	55
350	480	347	400	55
450	600	447	500	55

SSW-12-HC-T Tegular Ceiling Type



Nom Size	A \emptyset	B \emptyset	C \emptyset	D 24T/15T	E
160	595	157	210	574 584	55
250	595	247	300	574 584	55
350	595	350	400	574 584	55
450	595	447	500	574 584	55

SSW-12-HC-M Clip-in Metal Ceiling Type



Nom Size	A	B \emptyset	C \emptyset	E
160	595	157	210	55
250	595	247	300	55
350	595	350	400	55
450	595	447	500	55

Ordering

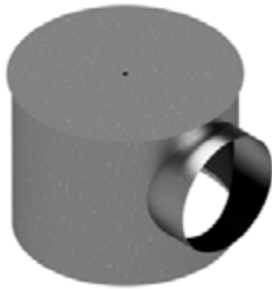
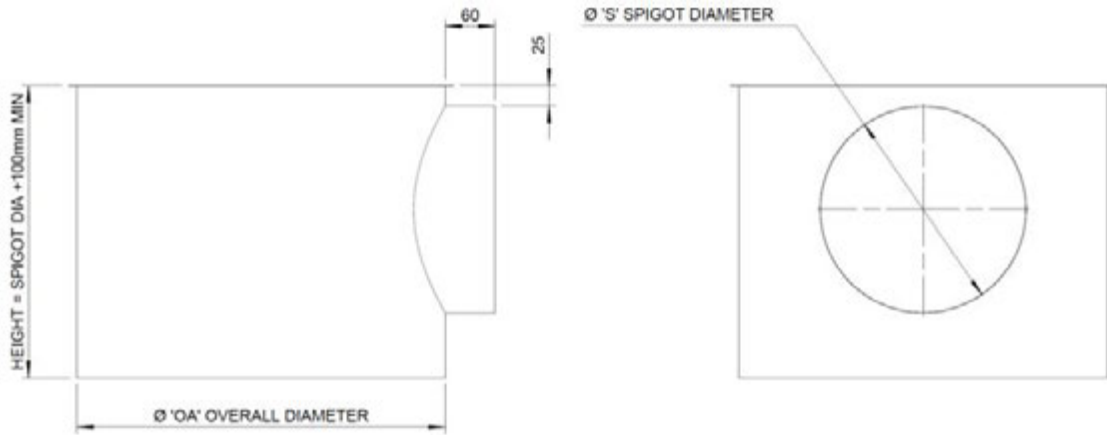
Type	No of Blades	Edge Detail	Tegular Depth	Size	Overall Size	RAL Colour
SSW	12-HC	L - Lay-in Grid		160	595x595	
		T15 - Tegular 584x584	e.g. 8mm	250	599x599	e.g. RAL9010
		T24 - Tegular 574x574		350		
		M - Clip-in Metal Tile		450		
		C - Circular				

e.g. 10no. SSW-12-HC-L-450-595x595-RAL9010

Plenum Box Dimensions & Standards

All plenum boxes are available with 6mm or 12mm Class 'O' foam lining. Additional spigots and bespoke boxes are available on request, please contact the Sales Office to discuss your requirements.

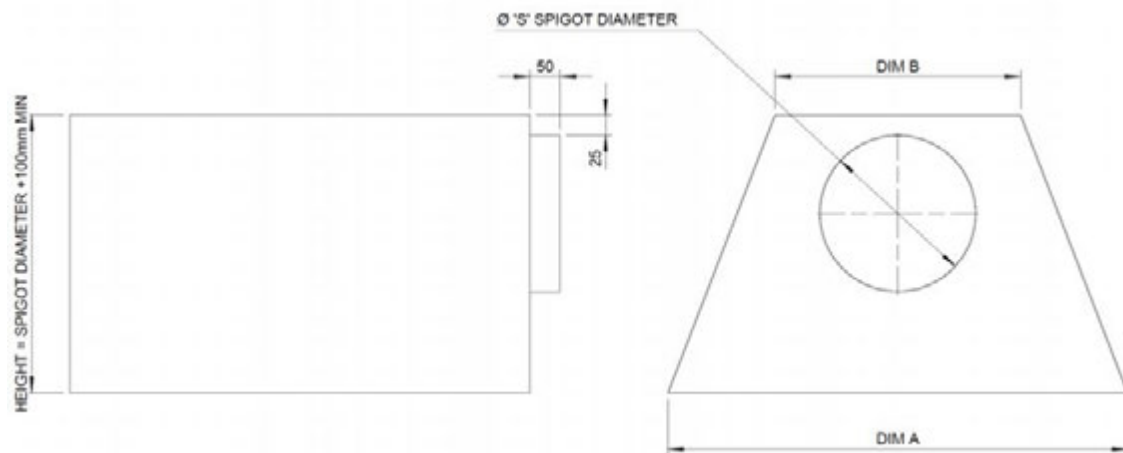
Circular Plenums



Nom Diffuser Size	OA Ceiling Type	OA Exposed Type
160	160	196
250	250	296
350	350	478
450	450	588

Square Plenums

Tapered boxes are supplied as standard, straight sided boxes are available on request.



Nom Diffuser Size	DIM A	DIM B
160	330	197
250	430	197
350	474	310
450	564	310
500	564	310

Performance Data

SIZE		Air Volume l/s	20	25	30	35	40	50	60	70
160 Dia	Throw m		0.5 - 1.0	0.6 - 1.3	0.8 - 1.6	0.8 - 1.8	1.0 - 2.1	1.2 - 2.6	1.5 - 3.1	1.9 - 3.9
	Pa		7	11	15	21	27	42	61	83
	NC		<20	<20	<20	21	24	31	36	40
	Air Volume l/s									

SIZE		Air Volume l/s	40	50	60	70	80	90	100	110
250 Dia	Throw m		0.6 - 1.2	0.7 - 1.5	0.9 - 1.8	1.0 - 2.1	1.2 - 2.4	1.2 - 2.6	1.4 - 2.9	1.5 - 3.2
	Pa		5	8	12	17	22	27	34	41
	NC		<20	<20	<20	<20	<20	22	25	28
	Air Volume l/s									

SIZE		Air Volume l/s	80	90	100	110	120	130	140	150
350 Dia	Throw m		0.8 - 1.6	0.9 - 1.9	1.0 - 2.0	1.1 - 2.1	1.2 - 2.4	1.3 - 2.7	1.4 - 2.9	1.5 - 3.0
	Pa		7	8	10	13	15	18	20	23
	NC		<20	<20	<20	<20	<20	<20	<20	21
	Air Volume l/s		170	180	200	210	220	230	240	250
	Throw m		1.7 - 3.5	1.8 - 3.7	2.0 - 4.2	2.1 - 4.4	2.2 - 4.6	2.3 - 4.8	2.4 - 4.9	2.5 - 5.2
	Pa		30	34	41	46	50	55	60	65
	NC		24	26	29	30	31	33	34	35
	Air Volume l/s									
	Throw m									
	Pa									

SIZE		Air Volume l/s	200	225	250	275	300	325	350	375
450 Dia	Throw m		1.3 - 2.7	1.5 - 3.1	1.6 - 3.4	1.9 - 3.8	2.0 - 4.1	2.2 - 4.5	2.4 - 4.8	2.5 - 5.1
	Pa		5	7	9	10	12	14	17	19
	NC		<20	<20	<20	<20	21	23	26	27
	Air Volume l/s		400	425	450	475	500	525	550	575
	Throw m		2.7 - 5.5	2.9 - 5.8	3.0 - 6.2	3.2 - 6.5	3.4 - 6.9	3.6 - 7.2	3.7 - 7.5	4.0 - 7.9
	Pa		22	25	28	31	34	38	41	45
	NC		29	31	33	34	36	37	38	40
	Air Volume l/s									

SIZE		Air Volume l/s	200	225	250	275	300	325	350	375
500 Dia	Throw m		1.0 - 2.2	1.1 - 2.4	1.3 - 2.7	1.4 - 3.0	1.7 - 3.3	1.7 - 3.5	2.0 - 3.8	2.0 - 4.1
	Pa		4	6	7	8	10	12	13	15
	NC		<20	<20	<20	<20	<20	<20	22	23
	Air Volume l/s		400	425	450	475	500	525	550	575
	Throw m		2.1 - 4.3	2.2 - 4.6	2.5 - 4.9	2.6 - 5.1	2.7 - 5.4	2.8 - 5.7	3.0 - 6.0	3.2 - 6.2
	Pa		18	20	22	25	28	30	33	36
	NC		25	27	29	30	32	33	34	36
	Air Volume l/s									

For Return Air: Multiply the Pressure Drop by 0.75 • Noise Levels remain the same

NOTE:

All throws based on terminal velocities of 0.5-0.25 m/s

For Return Air Applications Multiply Pa x 0.75, NC Levels remain the same

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OTHER PRODUCTS TO CONSIDER IN OUR RANGE



**'RSW' HIGH
CAPACITY
DIFFUSER**



**'CSW' TEGULAR
SWIRL
DIFFUSER**