CURVED VANE SWIRL - SWC

DESCRIPTION & FEATURES

Square & Circular Fixed Swirl Diffusers (SWC) are suitable for Supply of Cooled Air with a large temperature differential, making these units ideal for Fan Coil Units, VAV and VRF Systems. The rotating supply air pattern provides a high degree of induction making these diffusers well suited to supply of both warm and cool air. Also suitable for Extract/ Return Air applications.

SWC diffusers are manufactured from Galvanised Steel.

Standard finish is RAL9010 or polyester powder coated to the customers colour requirement.

PLENUM BOXES

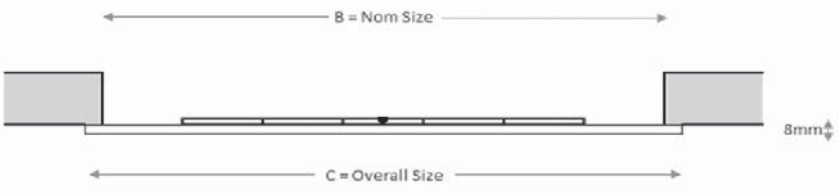
Plenum boxes are accessories for use with Grilles and Diffusers. They are designed to equalise the pressure profile within the box and hence provide an even velocity at the face of the Grille or Diffuser without the use of Equalising Grids.

SWC ORDERING CODE (DIFFUSER)	
Series	**SWC**
Const	**S** - Square **C** - Circular
Ceiling	**S** - Standard (cut in) **M** - Modular (595² tile) **T** - Tegular (see data sheet) **B** - Clip in tile (599² tile) **0** - Not applicable (Circular Units)
Fixing	**F8** - Crossbar Plenum Fixing **F9** - Crossbar Plasterboard Fixing (loose)
Finish	**1** - (Mill Finish) **2** - RAL9006 (Silver/Grey) **3** - RAL9010 (White) **4** - RAL9005 (Black) **5** - RAL9003 (White) **6** - RAL9016 (White), **7** - Other RAL/BS Code (additional costs may apply) **8** - Chrome Finish - Powder Coated
Note	Straight Vaned Swirl Option also available, contact Sales Office.
Example: **SWC/S/M/F8/3/Model Size**	

SWC ORDERING CODE (PLENUM)	
Type	**PBU** - Un-Lined Side **PBL** - Lined Side **PBA** - Adaptor Top
Series	**SWC**
Mesh	**P** - Perforated Equalising Mesh **0** - No Equalising Mesh
Damper	**LS** - Lever Spigot Damper **CS** - Cord Spigot Damper **0** - No Damper
Spigot	**OP** - 2 Opposite Spigots **AD** - 2 Adjacent Spigots **FL** - Flat Oval Spigot
Finish	**IN** - Black Internal **EX** - Black External **IE** - Black Internal & External
Example: **PBL/SWC/0/CS/Nominal Size/Spigot Size**	

CURVED VANE SWIRL - SWC

SWC DIMENSIONS (DIFFUSER)

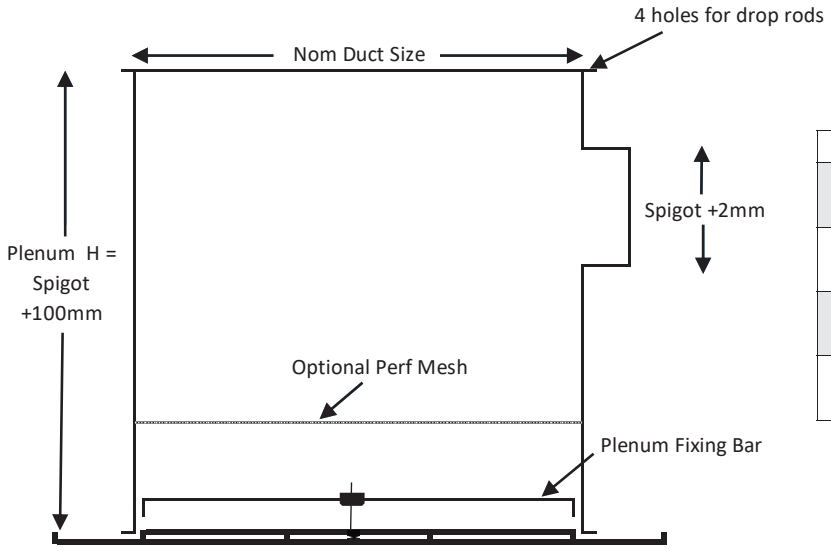


SIZE	TYPE	B	C
250	Sq	280x280	295x295
	Circ	280ø	300ø
350	Sq	380x380	395x395
	Circ	380ø	400ø
450	Sq	480x480	495x495
	Circ	480ø	500xø
550	Sq	580x580	595x595
	Circ	580ø	600ø

SWC

PLENUM BOX DIMENSIONS

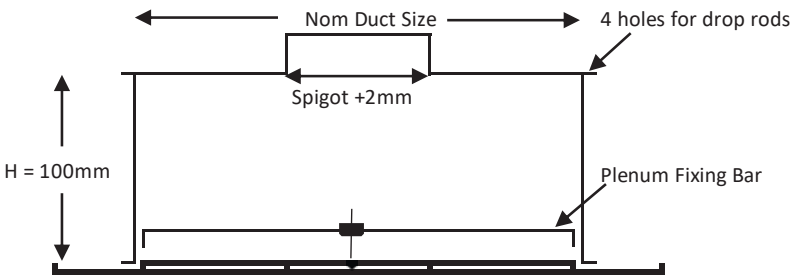
PLENUM BOX



Side Entry as drawn. Top Entry 250mm high

SIZE	TYPE	NOM
250	Sq	270x270
	Circ	290x290
350	Sq	370x370
	Circ	390x390
450	Sq	470x470
	Circ	490x490
550	Sq	570x570
	Circ	590x590

ADAPTOR BOX



CURVED VANE SWIRL - SWC

SWC DIMENSIONS (DIFFUSER)

AIR VOL (l/s)	SIZE	DIFFUSER c/w SUPPLY SIDE ENTRY PLENUM			EXTRACT			
		P.DROP	NOISE	THROW	DIFFUSER + PLENUM		FACE ONLY	
		(Pa)	(NR)	(m)	Pa	NR	Pa	NR
20	250	3	/	0.4	3	/	5	/
25	250	5	/	0.5	5	/	4	/
30	250	7	/	0.6	7	/	5	/
	350	3	/	0.5	3	/	5	/
40	250	13	20	0.8	13	20	10	/
	350	5	/	0.6	5	/	5	/
50	250	20	25	1.0	20	25	15	20
	350	7	/	0.7	7		5	/
	450	2	/	0.5	2		5	/
75	250	45	35	1.4	45	35	20	30
	350	18	25	1.1	18	25	10	/
	450	5	/	0.8	5		5	/
	550	3	/	0.7	3		5	/
100	350	30	30	1.9	30	30	25	20
	450	10	20	1.1	10	20	5	/
	550	5	/	1.0	5		5	/
125	350	45	35	1.8	45	35	35	25
	450	15	25	1.4	15	25	10	/
	550	7	/	1.1	7		5	/
150	450	20	30	1.6	20	30	15	20
	550	11	20	1.4	11	20	8	/
175	450	28	33	1.8	28	33	22	22
	550	16	25	1.6	16	25	10	/
200	450	35	35	2.1	35	35	30	30
	550	20	30	1.8	20	30	15	20
225	550	25	33	2.1	25	33	18	20
250	550	30	35	2.3	30	35	25	25

Throw data (metres) is based on a Terminal Velocity of 0.5m/s to give an average room air movement of 0.25m/s when fitted within a 2.7m high ceiling.

Sound Power Levels (NR) and Pressure Drops (Pa) applies to a fully opened Damper. The assumed room absorption is between 8-10dB.

Selection and tests are based on +/- 10ºC.

/ indicates a value of less than 20.

Notes