

PERFORATED SWIRL DIFFUSER - SWP

DESCRIPTION & FEATURES

Square Perforated Fixed Swirl Diffusers (SWP) are suitable for Supply of 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. For Extract/Return air applications internal Swirl element is not required, thus our PPD Perforated Grille is used.



SWP diffusers are manufactured from Galvanised Steel.

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

PLENUM BOXES

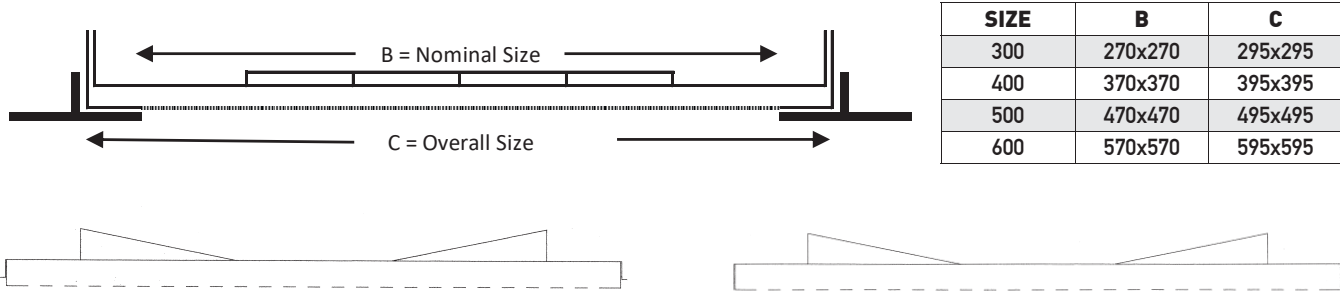
Plenum boxes are accessories for use with Grilles and Diffusers. They are designed to equalise the pressure profile within the box and hence provide an even velocity at the face of the Grille or Diffuser without the use of Equalising Grids

SWP ORDERING CODE (DIFFUSER)	
Series	SWP
Const	S - Square C - Circular
Ceiling	S - Standard (cut in) M - Modular (595 ² tile) T - Tegular (see data sheet) B - Clip in tile (599 ² 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
Example: SWP/S/M/F8/3/Model Size	

SWP ORDERING CODE (PLENUM)	
Type	PBU - Un-Lined Side PBL - Lined Side PBA - Adaptor Top
Series	SWP
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/SWP/0/CS/Nominal Size/Spigot Size	

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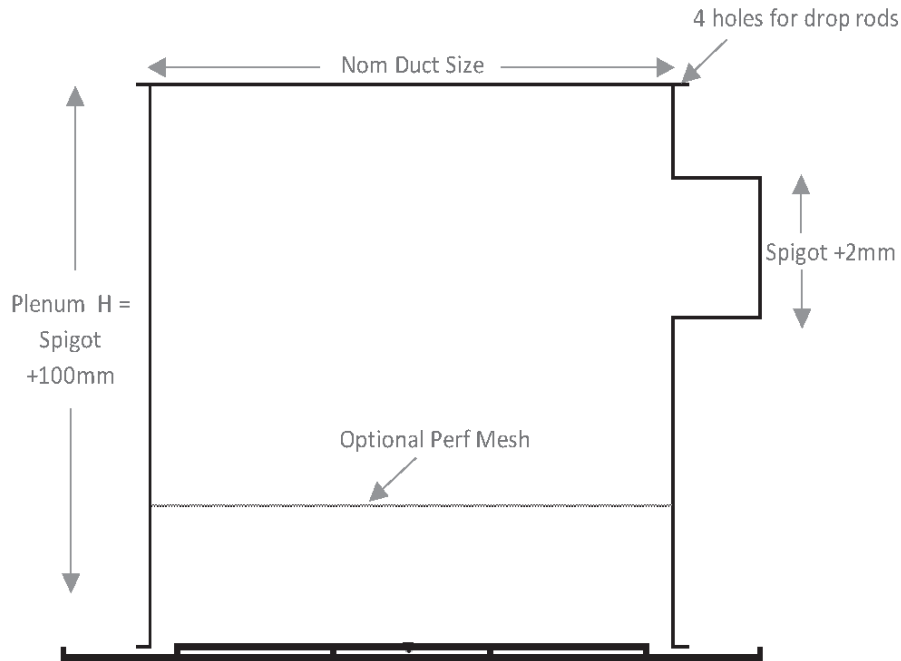
SWP DIMENSIONS (DIFFUSER)



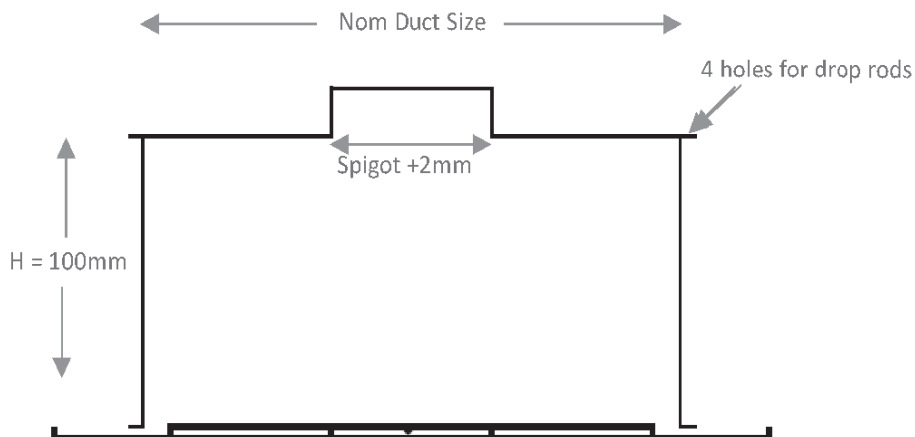
SIZE	B	C
300	270x270	295x295
400	370x370	395x395
500	470x470	495x495
600	570x570	595x595

PLENUM BOX DIMENSIONS

PLENUM



ADAPTOR BOX



Side entry as drawn. Top entry 250 high.

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SWP PERFORMANCE DATA

AIR VOL (l/s)	SIZE	DIFFUSER c/w SUPPLY SIDE ENTRY PLENUM			EXTRACT (based on PPD Series)			
		P.DROP	NOISE	THROW	DIFFUSER + PLENUM		FACE ONLY	
		(Pa)	(NR)	(m)	Pa	NR	Pa	NR
15	300	7	/	0.3	5	/	5	/
20	300	9	/	0.5	5	/	5	/
25	300	10	/	0.6	5	/	5	/
30	300	13	/	0.7	5	/	5	/
40	300	23	25	0.8	5	/	5	/
	400	8	/	0.6	5	/	5	/
50	300	27	32	1.0	7	/	5	/
	400	10	/	0.7	5	/	5	/
	500	5	/	0.6	5	/	5	/
75	400	23	25	0.9	10	/	5	/
	500	12	/	0.8	5	/	5	/
	600	5	/	0.7	5	/	5	/
100	400	40	35	1.0	10	/	5	/
	500	19	25	1.0	8	/	5	/
	600	8	/	0.8	5	/	5	/
125	500	28	32	1.1	12	/	5	/
	600	13	22	1.0	6	/	5	/
150	500	40	35	1.3	18	/	5	/
	600	18	25	1.1	10	/	5	/
175	600	22	28	1.2	13	/	5	/
200	600	25	30	1.3	16	/	5	/
225	600	35	38	1.4	20	20	5	/
250	600	45	40	1.5	25	25	5	/
500	600	N/A	N/A	N/A	N/A	N/A	10	20
600	600	N/A	N/A	N/A	N/A	N/A	15	20
750	600	N/A	N/A	N/A	N/A	N/A	22	25
1000	600	N/A	N/A	N/A	N/A	N/A	38	35

SWP

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 +/- 10°C.

/ indicates a value of less than 20.

Notes

SWP