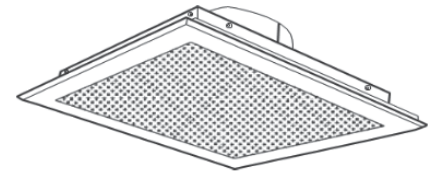


PERFORATED DIFFUSER - PPD

DESCRIPTION & FEATURES

Square Perforated Diffusers (PPD) are suitable for Supply Air ceiling applications where air is to be introduced with the maximum diffusion and minimum disturbance. Also suitable for Extract/Return Air applications.



Available to give 1, 2, 3 or 4 way throw patterns. The PPD can be supplied with Opposed Blade Dampers, Non Vision Plate, Plenum boxes and Adapter Boxes. PPD diffusers have extruded aluminium frames with integral flange, the mitred corners are fully welded and finished. The face plate is manufactured from 20 swg mild steel perforated plate (50% free area).

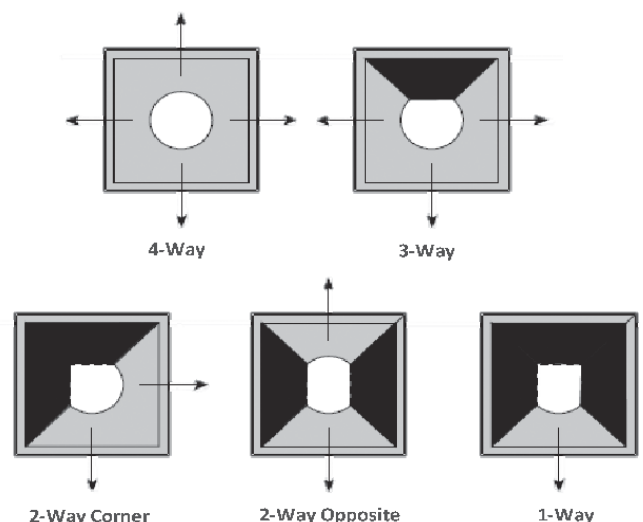
Standard finish is RAL9010 or polyester powder coated to the customers colour requirement.

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.

PPD ORDERING CODE (DIFFUSER)	
Series	PPD
Frame	S - 32mm (standard) N - 19mm
Core	F - Fixed H - Hinged
Ceiling	S - Standard (cut in) M - Modular (595sq tile) T - Tegular (see data sheet) B - Clip in tile
Pattern	1 2c (corner) 2o (opposite) 3 4 -Way E Extract
Access	N - Non Vision Plate, R - Neck Reducer (250, 300, 400, 500) 0 - Not applicable
Fixing	F0 - No fixings, F1 - CSK Flange Fixing Holes
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: LBG/NB/F/15/S/OB/F1/3/Nominal Opening Size	

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

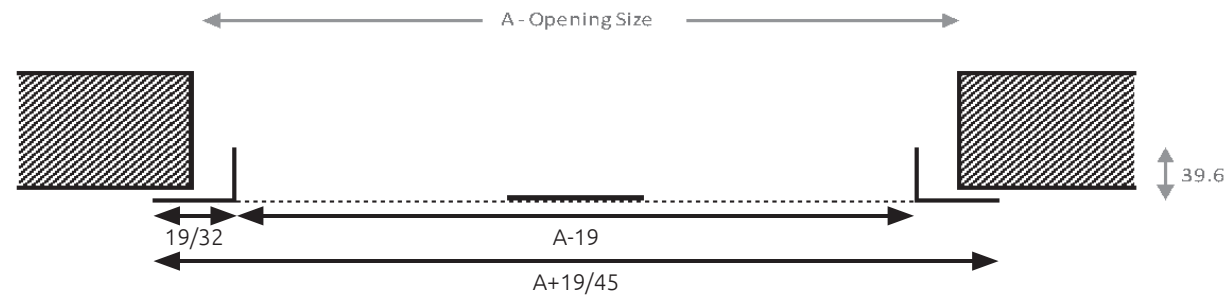


PERFORATED DIFFUSER - PPD

PPD DIMENSIONS (DIFFUSER)

SIZE	A	B
250	258	287
300	308	337
400	408	447
500	508	557
550	558	587

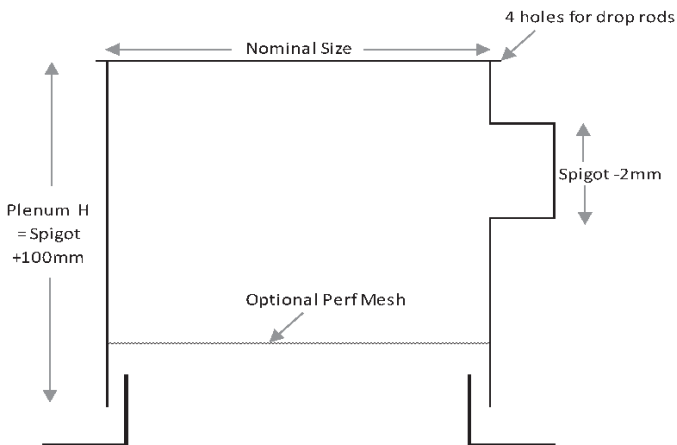
PPD/S CUT IN TYPE



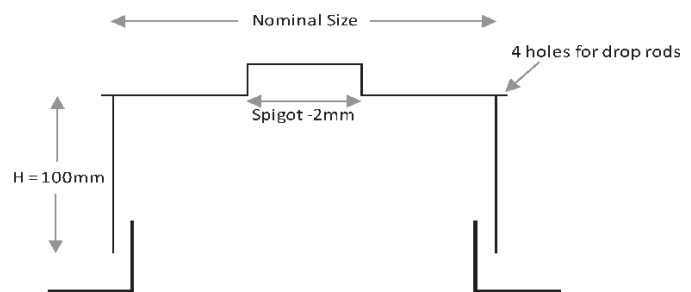
PPD/M or /T TILE REPLACER



PLENUM



ADAPTOR BOX



Side entry as drawn. Top entry 250 high.

PPD PERFORMANCE DATA

AIR VOL (l/s)	SIZE	SPIGOT (if applicable)	DIFFUSER c/w SUPPLY SIDE ENTRY PLENUM												EXTRACT				
			4-Way			3-Way			2-Way Opp.			2-Way Corner			1-Way			DIFFUSER + PLENUM	
			T	Pa	NR	T	Pa	NR	T	Pa	NR	T	Pa	NR	T	Pa	NR	Pa	NR
25	250	125dia	0.4	5	/	0.4	5	/	0.5	5	/	0.5	7	/	0.8	19	20	5	/
	300	160dia	0.3	5	/	0.3	5	/	0.4	5	/	0.4	5	/	0.7	10	/	5	/
30	250	125dia	0.4	5	/	0.5	5	/	0.6	8	/	0.6	10	20	1.0	28	26	5	/
	300	160dia	0.3	5	/	0.3	5	/	0.5	5	/	0.5	5	/	0.8	13	20	5	/
40	250	125dia	0.6	5	20	0.6	6	20	0.8	13	23	0.8	17	24	1.3	49	35	11	/
	300	160dia	0.5	5	/	0.5	5	/	0.6	6	/	0.6	8	/	1.0	23	26	5	/
400	200dia	0.4	5	/	0.4	5	/	0.5	5	/	0.5	5	/	0.5	5	20	5	/	/
	250	125dia	0.7	6	25	0.8	10	26	1.0	20	30	1.0	25	30			16	/	
50	300	160dia	0.6	5	/	0.6	5	/	0.8	10	20	0.8	13	22	1.3	34	31	6	/
	400	200dia	0.5	5	/	0.5	5	/	0.7	5	/	0.7	6	/	1.1	17	23	5	/
60	250	125dia	0.9	8	30	0.9	13	31	1.1	28	34	1.1	35	36			24	/	
	300	160dia	0.8	6	20	0.8	8	21	0.9	14	25	0.9	19	26	1.5	51	36	9	/
400	200dia	0.6	3	/	0.6	5	/	0.8	7	/	0.8	8	20	0.8	8	27	5	/	/
	300	160dia	1.2	17	33	1.2	21	35									24	/	/
100	400	200dia	1.0	9	25	1.1	11	28	1.3	20	28	1.3	23	31			9	/	/
	500	250dia	0.8	4	/	0.9	8	20	1.1	12	23	1.1	15	25	1.8	35	33	8	/
400	550	315dia	0.7	5	/	0.8	5	/	1.0	7	/	1.0	8	20	1.6	21	28	5	/
	200	200dia	1.2	13	31	1.3	18	30									14	/	/
125	500	250dia	1.0	10	23	1.2	12	25	1.4	19	26	1.4	23	31			12	/	/
	550	315dia	0.9	6	/	1.0	7	20	1.2	10	22	1.2	13	24	1.7	32	33	6	/
150	400	200dia	1.5	19	35												21	/	/
	500	250dia	1.3	15	28	1.4	17	30	1.7	28	33	1.7	34	36			18	/	/
200	550	315dia	1.1	8	22	1.2	10	24	1.5	15	28	1.5	19	31	2.3	47	38	9	/
	500	250dia	1.7	25	35	1.8	30	38									31	22	/
250	550	315dia	1.5	14	30	1.6	18	32	1.5	27	35	1.5	33	36			16	/	/
	300	315dia	1.8	22	35	2.0	27	37	2.5	42	40	2.5	50	41			25	20	/
300	550	315dia	2.2	32	40												35	23	/

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.

Where diffusers are required to be blanked (3, 2 or 1 way blow), the required volume should be divided 0.75, 0.5 or 0.25 respectively, and selections made from the 4 way performance charts. Where there is no ceiling effect, throw is reduced by approximately 35%.

/ indicates a value of less than 20.

EXTRACT DATA FACE ONLY
(30Pa, NC30 max)

SIZE/AIR VOL			
250	300	400	550
150l/s	225l/s	350l/s	600l/s
			850l/s



Notes

PPD