

Perforated plate diffusers (PPD)

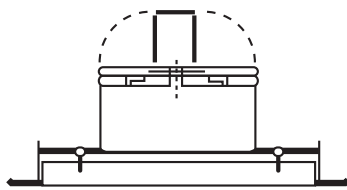
Perforated Plate Diffusers (PPD) are suitable for supply or return air in ceiling applications. They are available with 2, 3 or 4 way horizontal throw patterns and can be provided with either square or circular necks. A purpose made

diffuser is available for use in modular ceiling systems (PPD/CP). See page D07 for various options. PPD diffusers have an extruded aluminium frame with integral flange, the mitred corners being fully welded and finished. The

face plate is manufactured from 20 swg mild steel perforated plate (50% free area). Finally they are stove enamelled white RAL 9010 as standard. Other finishes are available.

D01

Perforated plate diffusers (PPD)



PPD/C/FD

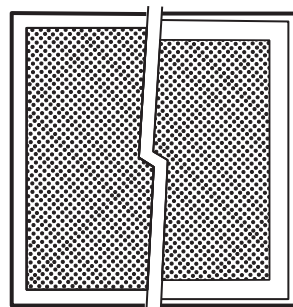
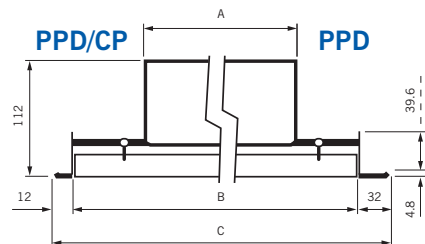
Perforated Plate Diffuser with circular neck and integral Flap Damper



PPD/OBD

Perforated Plate Diffuser with square neck and integral Opposed Blade Damper

Dimensions



Nom. Size	A	B	C	
			PPD	PPD/CP
300	100	270	334	296
300	150	270	334	296
400	150	370	434	N/A
400	200	370	434	
400	250	370	434	
500	200	470	534	N/A
500	250	470	534	
500	300	470	534	
600	250	570	634	596
600	300	570	634	596

Fixing methods

FMF: Screw fixing through duct neck (standard).

FMA: Countersunk hole through flange (32mm flange model only).

Performance data

Perforated plate diffuser (PPD)

One-way throw pattern

Diffuser Neck Size (mm)		1.5	Neck 2.0	Velocity 2.5	m/s 3.0	3.5	4.0
150 dia.	Air Vol m ³ /s	0.027	0.035	0.044	0.053	0.062	0.071
	Throw m.	1.7-3.4	2.2-4.3	2.7-5.4	3.2-6.5	3.8-7.5	4.3-8.6
	NC Level	27	33	39	44	48	51
	Press. Loss Pa	27	45	72	104	143	187
150x150	Air Vol m ³ /s	0.034	0.045	0.056	0.068	0.079	0.090
	Throw m.	2.0-4.0	2.6-5.2	3.2-6.4	3.8-7.7	4.4-8.8	5.0-10.0
	NC Level	28	35	40	45	49	52
	Press. Loss Pa	15	26	41	60	81	106
200 dia.	Air Vol m ³ /s	0.047	0.063	0.079	0.094	0.110	0.126
	Throw m.	2.5-5.0	3.2-6.4	3.9-7.9	4.6-9.2	5.3-10.6	6.0-12.0
	NC Level	25	32	38	42	46	49
	Press. Loss Pa	20	36	56	80	109	143
200x200	Air Vol m ³ /s	0.060	0.080	0.100	0.120	0.140	0.160
	Throw m.	3.0-6.1	3.9-7.9	4.9-9.7	5.8-11.5	6.7-13.4	7.6-15.2
	NC Level	24	31	37	41	45	48
	Press. Loss Pa	15	26	41	59	81	106
250 dia.	Air Vol m ³ /s	0.074	0.098	0.123	0.147	0.172	0.196
	Throw m.	3.4-6.8	4.5-9.0	5.6-11.2	6.7-13.4	7.8-15.6	8.9-17.8
	NC Level	22	29	35	39	43	46
	Press. Loss Pa	17	29	46	65	90	116
250x250	Air Vol m ³ /s	0.094	0.125	0.156	0.188	0.219	0.250
	Throw m.	4.2-9.4	5.4-10.8	6.6-13.2	7.8-15.6	9.0-18.0	10.2-20.4
	NC Level	27	34	40	44	48	51
	Press. Loss Pa	17	30	47	59	93	122
300 dia.	Air Vol m ³ /s	0.106	0.141	0.177	0.212	0.247	0.283
	Throw m.	3.6-7.3	4.8-9.7	6.1-12.2	7.3-14.6	8.5-17.0	9.7-19.5
	NC Level	24	31	36	41	44	48
	Press. Loss Pa	19	33	52	75	101	133
300x300	Air Vol m ³ /s	0.135	0.180	0.225	0.270	0.315	0.360
	Throw m.	4.3-8.6	5.6-11.2	6.9-13.8	8.2-16.4	9.5-19	10.3-21.6
	NC Level	28	35	40	45	49	52
	Press. Loss Pa	18	32	50	72	98	128

Performance data

Perforated plate diffuser (PPD)

Two-way throw pattern

Diffuser Neck Size (mm)		1.5	Neck 2.0	Velocity 2.5	m/s 3.0	3.5	4.0
150 dia.	Air Vol m ³ /s	0.027	0.035	0.044	0.053	0.062	0.071
	Throw m.	0.9-1.8	1.18-2.4	1.45-2.9	1.72-3.4	2.1-4.2	2.35-4.7
	NC Level	-	22	28	33	37	40
	Press. Loss Pa	1	2	2	3	5	6
150x150	Air Vol m ³ /s	0.034	0.045	0.056	0.068	0.079	0.090
	Throw m.	1.2-2.4	1.5-3.0	1.9-3.8	2.3-4.6	2.7-5.4	3.1-6.2
	NC Level	10	17	22	27	31	34
	Press. Loss Pa	7	13	20	29	40	52
200 dia.	Air Vol m ³ /s	0.047	0.063	0.079	0.094	0.110	0.126
	Throw m.	1.15-2.3	1.53-3.1	1.92-3.8	2.35-4.7	2.7-5.4	3.1-6.2
	NC Level	-	18	24	28	32	35
	Press. Loss Pa	2	4	6	9	12	16
200x200	Air Vol m ³ /s	0.060	0.080	0.100	0.120	0.140	0.160
	Throw m.	1.5-3.0	2.0-4.0	2.5-5.0	3.0-6.0	3.6-7.2	4.0-8.0
	NC Level	12	19	25	29	33	36
	Press. Loss Pa	7	13	20	29	40	52
250 dia.	Air Vol m ³ /s	0.074	0.098	0.123	0.147	0.172	0.196
	Throw m.	0.09-2.2	1.43-2.9	1.8-3.6	2.2-4.4	2.52-5.0	2.88-5.8
	NC Level	-	22	24	28	32	35
	Press. Loss Pa	4	7	11	15	21	28
250x250	Air Vol m ³ /s	0.094	0.125	0.156	0.188	0.219	0.250
	Throw m.	2.1-4.2	2.7-5.4	3.3-6.6	3.9-7.8	4.5-9.0	5.1-10.0
	NC Level	14	21	27	31	35	38
	Press. Loss Pa	7	13	20	29	40	52
300 dia.	Air Vol m ³ /s	0.106	0.141	0.177	0.212	0.247	0.283
	Throw m.	0.85-1.7	1.13-2.3	1.4-2.8	1.58-3.4	1.97-3.9	2.3-4.6
	NC Level	-	21	26	31	34	38
	Press. Loss Pa	5	10	15	22	29	38
300x300	Air Vol m ³ /s	0.135	0.180	0.225	0.270	0.315	0.360
	Throw m.	2.5-5.0	3.2-6.4	4.0-7.9	4.7-9.4	5.4-10.9	6.2-12.4
	NC Level	16	23	28	33	37	40
	Press. Loss Pa	7	13	20	29	40	52

Performance data

Perforated plate diffuser (PPD)

Three-way throw pattern

Diffuser Neck Size (mm)		1.5	Neck 2.0	Velocity 2.5	m/s 3.0	3.5	4.0
150 dia.	Air Vol m ³ /s	0.027	0.035	0.044	0.053	0.062	0.071
	Throw m.	0.45-0.9	0.58-1.2	0.72-1.4	0.87-1.7	1.0-2.0	1.12-2.2
	NC Level	-	-	19	24	28	31
	Press. Loss Pa	1	1	1	2	3	4
150x150	Air Vol m ³ /s	0.034	0.045	0.056	0.068	0.079	0.090
	Throw m.	0.7-1.4	1.0-2.0	1.3-2.5	1.6-3.1	1.8-3.7	2.1-4.2
	NC Level	8	15	20	25	29	32
	Press. Loss Pa	3	6	9	13	17	23
200 dia.	Air Vol m ³ /s	0.047	0.063	0.079	0.094	0.110	0.126
	Throw m.	0.64-1.3	0.85-1.7	1.04-2.1	1.25-2.5	1.47-2.9	1.65-3.3
	NC Level	-	-	21	25	29	32
	Press. Loss Pa	1	2	2	5	7	9
200x200	Air Vol m ³ /s	0.060	0.080	0.100	0.120	0.140	0.160
	Throw m.	1.1-2.2	1.4-2.8	1.7-3.4	2.0-4.1	2.4-4.7	2.7-5.3
	NC Level	10	17	23	27	31	34
	Press. Loss Pa	3	6	9	13	17	23
250 dia.	Air Vol m ³ /s	0.074	0.098	0.123	0.147	0.172	0.196
	Throw m.	0.71-1.4	0.94-1.9	1.15-2.3	1.44-2.9	1.6-3.2	1.82-3.6
	NC Level	-	18	24	28	32	35
	Press. Loss Pa	2	4	6	9	12	16
250x250	Air Vol m ³ /s	0.094	0.125	0.156	0.165	0.219	0.250
	Throw m.	1.2-2.5	1.7-3.4	2.2-4.4	2.7-5.4	3.2-6.4	3.7-7.3
	NC Level	12	19	25	29	33	36
	Press. Loss Pa	3	6	9	13	17	23
300 dia.	Air Vol m ³ /s	0.106	0.141	0.177	0.212	0.247	0.283
	Throw m.	0.69-1.4	0.91-1.8	1.1-2.2	1.35-2.7	1.55-3.1	1.8-3.6
	NC Level	-	-	22	27	30	34
	Press. Loss Pa	3	6	9	13	17	22
300x300	Air Vol m ³ /s	0.135	0.180	0.225	0.270	0.315	0.360
	Throw m.	1.7-3.3	2.1-4.3	2.6-5.3	3.1-5.3	3.6-7.3	4.1-8.2
	NC Level	14	21	26	31	35	38
	Press. Loss Pa	3	6	9	13	17	23

Performance data

Perforated plate diffuser (PPD)

Four-way throw pattern

Diffuser Neck Size (mm)		1.5	Neck 2.0	Velocity 2.5	m/s 3.0	3.5	4.0
150 dia.	Air Vol m ³ /s	0.027	0.035	0.044	0.053	0.062	0.071
	Throw m.	0.3-0.6	0.39-0.8	0.49-1.0	0.6-1.2	0.71-1.4	0.84-1.7
	NC Level	-	-	20	25	29	32
	Press. Loss Pa	-	1	1	1	2	3
150x150	Air Vol m ³ /s	0.034	0.045	0.056	0.068	0.079	0.090
	Throw m.	0.5-1.0	0.7-1.4	0.9-1.8	1.1-2.2	1.3-2.6	1.5-3.0
	NC Level	6	13	18	23	27	30
	Press. Loss Pa	2	3	5	7	10	13
200 dia.	Air Vol m ³ /s	0.047	0.063	0.079	0.094	0.110	0.126
	Throw m.	0.45-0.9	0.62-1.2	0.79-1.5	0.97-1.9	1.11-2.2	1.3-2.6
	NC Level	-	-	20	24	28	31
	Press. Loss Pa	-	-	2	4	5	7
200x200	Air Vol m ³ /s	0.060	0.080	0.100	0.120	0.140	0.160
	Throw m.	0.9-1.8	1.1-2.3	1.4-2.7	1.6-3.2	1.8-3.6	2.0-4.1
	NC Level	8	15	21	25	29	32
	Press. Loss Pa	2	3	5	7	9	12
250 dia.	Air Vol m ³ /s	0.074	0.098	0.123	0.147	0.172	0.196
	Throw m.	0.64-1.1	0.75-1.5	0.95-1.9	1.2-2.4	1.35-2.7	1.58-3.2
	NC Level	-	-	23	27	31	34
	Press. Loss Pa	2	3	5	7	9	11
250x250	Air Vol m ³ /s	0.094	0.125	0.156	0.188	0.219	0.250
	Throw m.	0.8-1.7	1.2-2.4	1.6-3.2	2.0-3.9	2.3-4.7	2.7-5.4
	NC Level	10	17	23	27	31	34
	Press. Loss Pa	2	3	5	7	9	12
300 dia.	Air Vol m ³ /s	0.106	0.141	0.177	0.212	0.247	0.283
	Throw m.	0.58-1.2	0.79-1.6	1.0-2.0	1.21-2.4	1.4-2.8	1.7-3.4
	NC Level	-	-	18	27	26	30
	Press. Loss Pa	2	4	6	9	12	16
300x300	Air Vol m ³ /s	0.135	0.180	0.225	0.270	0.315	0.360
	Throw m.	1.1-2.2	1.5-3.0	1.9-3.8	2.3-4.6	2.7-5.4	3.1-6.2
	NC Level	12	19	24	29	33	36
	Press. Loss Pa	2	3	5	7	9	12



Performance data

Perforated plate diffuser (PPD)

Rerturn air



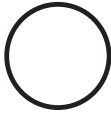







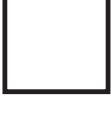

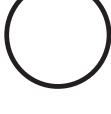

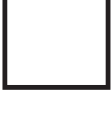
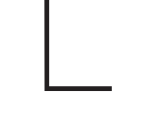

Diffuser Neck Size (mm)		1.5	Neck 2.0	Velocity 2.5	m/s 3.0	3.5	4.0
150 dia.	Air Vol m ³ /s	0.027	0.035	0.044	0.053	0.062	0.071
	NC Level	-	-	-	-	-	14
	Press. Loss Pa	0	1	1	1	2	2
150x150	Air Vol m ³ /s	0.034	0.045	0.056	0.068	0.079	0.090
	NC Level	-	-	-	-	-	20
	Press. Loss Pa	0	1	1	1	2	2
200 dia.	Air Vol m ³ /s	0.047	0.063	0.079	0.094	0.110	0.126
	NC Level	-	-	-	-	-	16
	Press. Loss Pa	1	2	3	4	5	6
200x200	Air Vol m ³ /s	0.060	0.080	0.100	0.120	0.140	0.160
	NC Level	-	-	-	-	-	22
	Press. Loss Pa	1	2	3	4	5	6
250 dia.	Air Vol m ³ /s	0.074	0.098	0.123	0.147	0.172	0.196
	NC Level	-	-	-	-	-	18
	Press. Loss Pa	2	3	5	7	9	12
250x250	Air Vol m ³ /s	0.094	0.125	0.156	0.188	0.219	0.250
	NC Level	-	-	-	-	-	24
	Press. Loss Pa	2	3	5	7	9	12
300 dia.	Air Vol m ³ /s	0.106	0.141	0.177	0.212	0.247	0.283
	NC Level	-	-	-	-	-	20
	Press. Loss Pa	2	4	6	9	12	16
300x300	Air Vol m ³ /s	0.135	0.180	0.225	0.270	0.315	0.360
	NC Level	-	-	-	-	-	21
	Press. Loss Pa	2	4	6	9	12	16

D06

Perforated plate diffusers (PPD)

Options

Perforated plate diffuser (PPD)

Description	Neck	Flange	Damper
<p>PPD Perforated Plate Ceiling Panel with square neck and 32mm flange.</p>			
<p>PPD/C Perforated Plate Ceiling Panel with circular neck and 32mm flange.</p>			
<p>PPD/OBD Perforated Plate Ceiling Panel with square neck and 32mm flange fitted with Opposed Blade Damper mounted in the square neck.</p>			
<p>PPD/C/FD Perforated Plate Ceiling Panel with circular neck, 32mm flange and Flap Damper mounted on the circular neck.</p>			
<p>PPD/CP Perforated Plate Ceiling Panel Diffuser with square neck and 12mm flange suitable for full ceiling tile installation.</p>			
<p>PPD/C/CP Perforated Plate Ceiling Panel Diffuser with circular neck and 12mm flange suitable for full ceiling tile installation.</p>			
<p>PPD/CP/OBD Perforated Plate Ceiling Panel Diffuser with square neck and 12mm flange fitted with Opposed Blade Damper mounted in the square neck.</p>			
<p>PPD/C/CP/FD Perforated Plate Ceiling Panel Diffuser with circular neck and 12mm flange and Flap Damper mounted on the circular neck.</p> <p>Note: For unites with a circular neck requiring Radical Dampers contact the sales office.</p>	