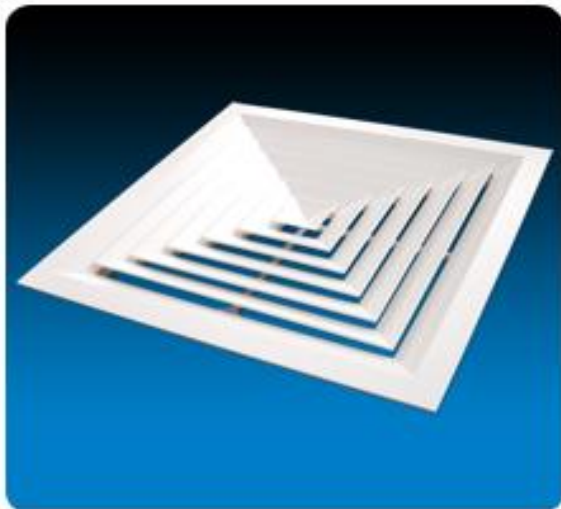


**SQUARE CEILING DIFFUSERS**

Model LFD



The Polyaire range of Square Ceiling Diffusers are designed to provide excellent directional performance typically in a 4 way airflow pattern. Manufactured from extruded aluminium the diffuser offers a removable core as standard while also providing options for 1 way, 2 way opposite, 2 way corner and 3 way airflow patters. LFD's are lightweight and will not rust or corrode under normal usage.

The flush frame is designed for surface monuting in the ceiling or alternatively as a lay-in T-Bar ceiling installations. Standard finish is powder coat white (RAL 9010) while other finishes are available to suit the interior and architectural design requirements.

**All sizes of 4-ways are also stocked in RAL 9016**

**We also stock the 595x595mm 4-Way in RAL9005 (Black)**

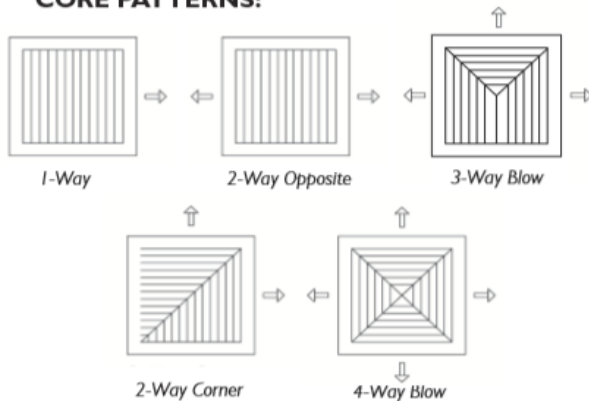
The LFD range is suitable for heating, cooling or ventilation in commercial and domestic applications

Diffuser ratings are based on mounting height being 2.8 metres.

Throw range is defined by the minimum and maximum horizontal distances at right angles to the side of the diffuser.

Note: Stock diffusers can also be provided with internal blanking plates to achieve 1, 2 & 3 way blow

**CORE PATTERNS:**



**MODEL NUMBER / NAME**

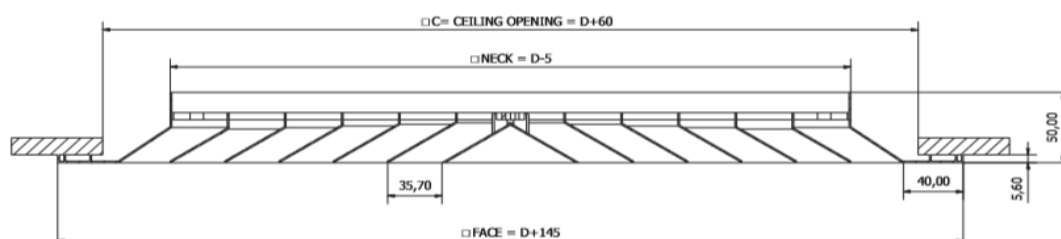
ITEM #	SIZE	Airflow Pattern
248100	1200 x 600	4 Way
248001	150/300	4 Way
248002	225/375	4 Way
248003	300/450	4 Way
248004	375/520	4 Way
248005	450/595 (Lay-In)	4 Way

**NEW**

We can now offer the following sizes with or without OBD:

248002/200 N	LFD 200 x 200mm Neck with 345 x 345mm Face 4-Way Blow / RAL9010
248002/250 N	LFD 250 x 250mm Neck with 395 x 395mm Face 4-Way Blow / RAL9010
48004/495x495 *	LFD 350 x 350mm Neck with 495 x 495mm Face 4-Way Blow / RAL9010

\* 495x495mm is to fit a 500mm Sq. lay-in ceiling grid



## Square Ceiling Diffusers Type LFD

NECK SIZE (mm)	Airflow (L/s)	Velocity (m/s)	STATIC PRESSURE DROP (P/a)	NR (dB)	Minimum Throw (m)	Maximum Throw (m)
150x150	100	2	9	17	0.4	1.4
	150	3	15	19	1.2	2.5
225x225	100	2	15	<22	0.5	1.5
	150	3	35	28	1.4	3.2
300x300	150	1.7	12	<22	0.9	2.7
	200	2.2	19	23	1.4	3.3
	250	2.8	31	26	2.2	4.2
	300	3.3	42	31	2.8	4.6
375x375	250	1.8	13	<22	1.3	3.4
	300	2.1	18	<22	1.5	3.9
	350	2.5	26	28	1.7	4.6
	400	2.9	32	31	2.1	5
	450	3.2	39	35	2.7	5.2
450x450	350	1.7	12	25	1.2	3.8
	400	2	15	26	1.4	4.2
	450	2.2	20	29	2	4.8
	500	2.5	25	32	2.7	5.4
	550	2.7	30	33	3.1	5.8
	600	3	35	35	3.5	6.2

NOTE: The above sizes are based on a 4-way throw

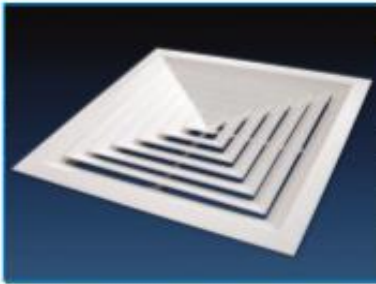
3-way x Air Quantity x 0.75

2-way x Air Quantity x 0.50

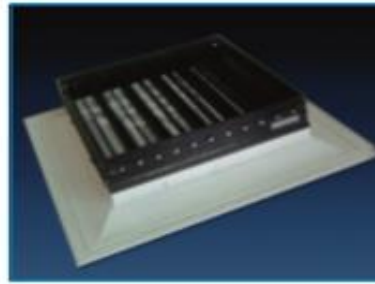
### Opposed Blade Dampers - Effect of Volume Control on Noise Levels

The additional noise level for diffusers with Opposed Blade Dampers installed is set out in the following table:

NR Addition for OBD		
Diffuser with OBD	Fully Open	50% Closed
NR 25 or less	1	5
NR 30	1	6
NR 35	2	8



FOUR WAY BLOW	
PART NO #	SIZE mm
248001	150 x 150
248002	225 x 225
248003	300 x 300
248004	375 x 375
248005	450 x 450 (595 x 595 face)



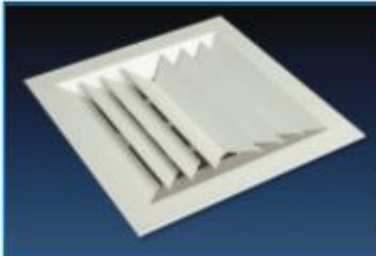
FOUR WAY BLOW WITH OBD	
PART NO #	SIZE mm
248001/6	150 x 150
248002/7	225 x 225
248003/8	300 x 300
248004/9	375 x 375
248005/10	450 x 450 (595 x 595 face)



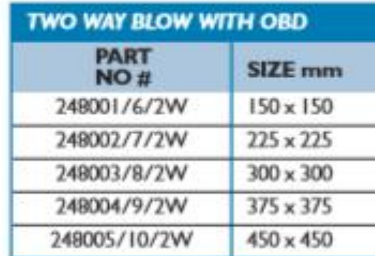
THREE WAY BLOW	
PART NO #	SIZE mm
248001/3W	150 x 150
248002/3W	225 x 225
248003/3W	300 x 300
248004/3W	375 x 375
248005/3W	450 x 450



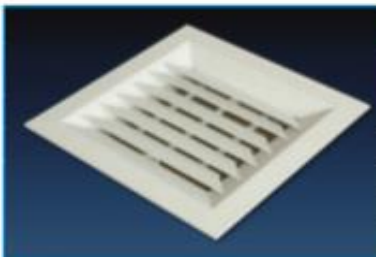
THREE WAY BLOW WITH OBD	
PART NO #	SIZE mm
248001/6/3W	150 x 150
248002/7/3W	225 x 225
248003/8/3W	300 x 300
248004/9/3W	375 x 375
248005/10/3W	450 x 450



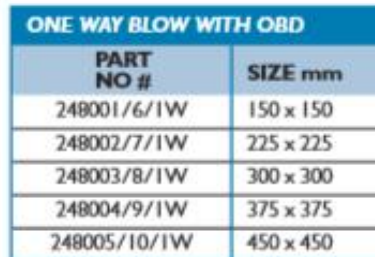
TWO WAY BLOW	
PART NO #	SIZE mm
248001/2W	150 x 150
248002/2W	225 x 225
248003/2W	300 x 300
248004/2W	375 x 375
248005/2W	450 x 450



TWO WAY BLOW WITH OBD	
PART NO #	SIZE mm
248001/6/2W	150 x 150
248002/7/2W	225 x 225
248003/8/2W	300 x 300
248004/9/2W	375 x 375
248005/10/2W	450 x 450



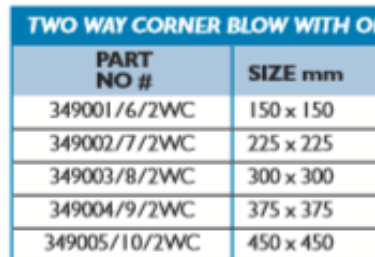
ONE WAY BLOW	
PART NO #	SIZE mm
248001/1W	150 x 150
248002/1W	225 x 225
248003/1W	300 x 300
248004/1W	375 x 375
248005/1W	450 x 450



ONE WAY BLOW WITH OBD	
PART NO #	SIZE mm
248001/6/1W	150 x 150
248002/7/1W	225 x 225
248003/8/1W	300 x 300
248004/9/1W	375 x 375
248005/10/1W	450 x 450



TWO WAY CORNER BLOW	
PART NO #	SIZE mm
349001/2WC	150 x 150
349002/2WC	225 x 225
349003/2WC	300 x 300
349004/2WC	375 x 375
349005/2WC	450 x 450



TWO WAY CORNER BLOW WITH OBD	
PART NO #	SIZE mm
349001/6/2WC	150 x 150
349002/7/2WC	225 x 225
349003/8/2WC	300 x 300
349004/9/2WC	375 x 375
349005/10/2WC	450 x 450

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