

Ceiling Diffusers - Plastic

Round Eggcrate Diffuser

Code		Size (mm) (Diameter)
adRED15	Eggcrate with damper	150
adRED20	Eggcrate with damper	200



adRED

Airflow Data

Code	Diameter	Neck area	Neck velocity	Air quantity	Pressure drop
RED150	150mm	0.0176m ²	2.5m/s	40L/s	11pa
			3.0m/s	48L/s	17pa
RED200	200mm	0.0314m ²	2.5m/s	70L/s	11pa
			3.0m/s	83L/s	17pa

Due to a policy of continuous development, prices and specifications are subject to change without notice.

Christchurch

264 Annex Road

Riccarton 03 343 6184

Wellington

15 Te Puni Street

Petone 04 566 7969

Auckland

6 Stanway Place

Penrose 09 579 3257

0800 SMOOTH (0800 766 684)

www.smooth-air.co.nz

sales@smooth-air.co.nz

VEA...VRF series

A...VRF Series



Application

- For supply and exhaust ventilation, air conditioning and heating. mounting in false ceilings or walls

- Used for correct air circulation in properties.

Design

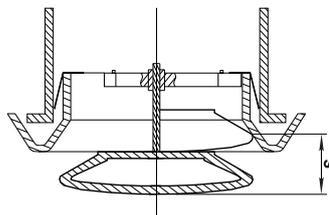
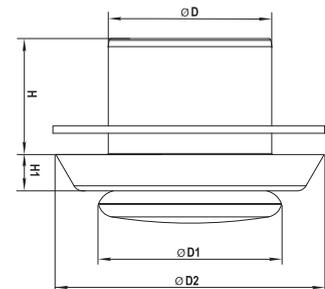
- Made of high quality plastic (ABS plastic)
- Special aerodynamic disc valve design ensures uniform air distribution.
- Smooth air pass regulation due to rotation of central part of the damper.
- Easy installation with fixing lugs and a mounting flange with a lock ring.
- The internal part has a sealing ring for a tighter fit.

- Equipped with a mounting flange and lock ring for easy connection to round air ducts
- Mounting flange is fixed to false ceiling with screws.
- Lock ring provides easy fixing of the flexible air duct on the mounting flange.

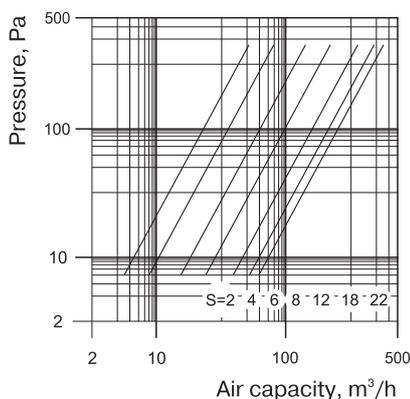


Overall dimensions

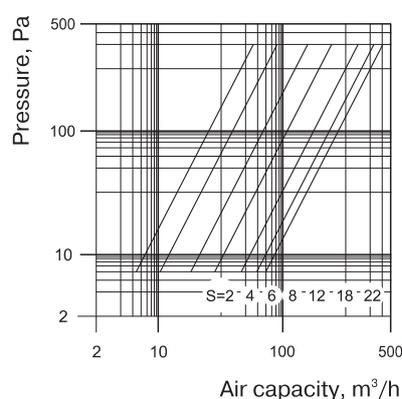
Code	Dimensions					Air pass, m ²	Damper normal pitch, mm
	D	D1	D2	H	H1		
VEA100VRF	100	90	148	58	28	0-0.006	0-20
VEA125VRF	125	110	166	58	20	0-0.008	0-22
VEA150VRF	150	128	200	58	20	0-0.009	0-23



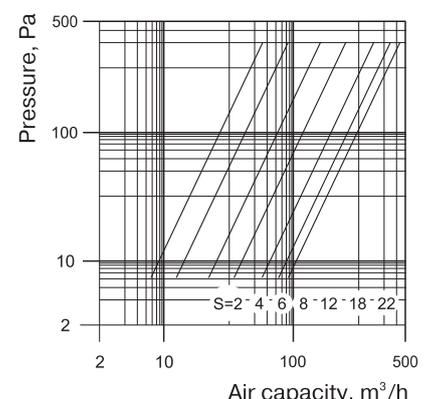
A 100 VRF



A 125 VRF



A 150 VRF



Due to a policy of continuous development, prices and specifications are subject to change without notice.

Christchurch

264 Annex Road

Riccarton 03 343 6184

Wellington

15 Te Puni Street

Petone 04 566 7969

Auckland

6 Stanway Place

Penrose 09 579 3257

0800 SMOOTH (0800 766 684)

www.smooth-air.co.nz

sales@smooth-air.co.nz

MV...PF Series



Application

- For supply and exhaust ventilation, air conditioning and heating. mounting in false ceilings or walls

- Used for correct air circulation in properties.

Design

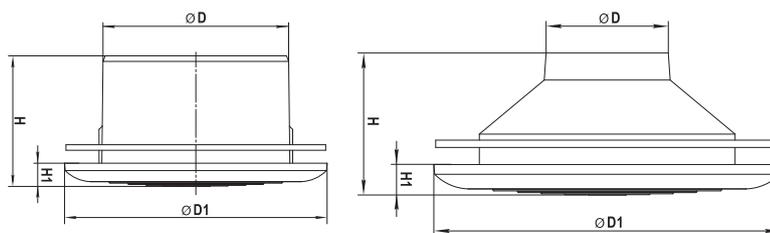
- Made of high quality plastic (ABS plastic)
- Special aerodynamic disc valve design ensures uniform air distribution.
- Easy mounting with a mounting flange and lock ring.
- The internal part has a sealing ring for a tighter fit.
- Built in insect screen.

- Equipped with a mounting flange and lock ring for easy connection to round air ducts



Overall dimensions

Code	Dimensions				Air pass, m ²
	D	D1	H	H1	
VEMV125PF	125	166	72	14	0.010
VEMV150PF	150	188	72	15	0.014



Due to a policy of continuous development, prices and specifications are subject to change without notice.

Christchurch

264 Annex Road

Riccarton 03 343 6184

Wellington

15 Te Puni Street

Petone 04 566 7969

Auckland

6 Stanway Place

Penrose 09 579 3257

0800 SMOOTH (0800 766 684)

www.smooth-air.co.nz

sales@smooth-air.co.nz

Ceiling Grilles - Round Ceiling Diffuser

Description: Round ceiling diffusers suitable for ceiling mounted heating, cooling or ventilation applications. Four sizes are available.

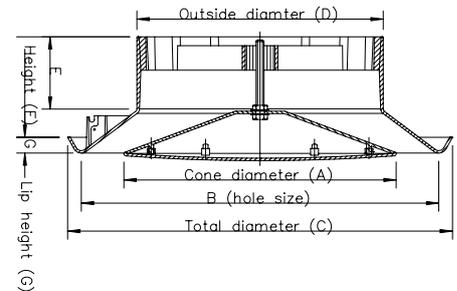
Construction: All models are constructed from ABS polymers providing long term strength and rigidity. The air passages are smoothed and graduated, ensuring quiet and efficient airflow. The external exposed surfaces have an etched finish. The centre cone can be wound up or down to adjust airflow. Total shut off can be achieved by winding the centre cone in.

Performance: The centre cone acts as a damper to the airflow, thereby leading to an increase in exit velocity relative to duct velocity. The airflow hugs the outer body, and spreads out in a concentric pattern along the ceiling. The airflow pattern is ideal for cooling applications in rooms with standard ceiling height where some stratification may be considered acceptable, such as in reverse-cycle applications.

Finish: Standard finish is off white. The surface has an etched face, which lowers light reflections and ensures an unobtrusive finish.



Round Ceiling Diffuser



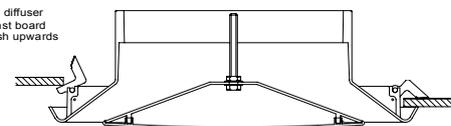
Dimensions

Model	A Cone	B Hole	C Total	D Dia	E Spig L	F Height	G Lip	Weight
PYCD150	170	207	245	147	50	80	16	0.40kg
PYCD200	225	280	315	197	74	115	17	0.64kg
PYCD250	280	367	488	249	77	128	18	0.97kg
PYCD300	326	405	441	299	70	103	17	

Note: All dimensions in mm

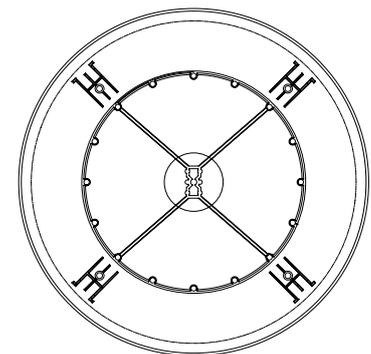
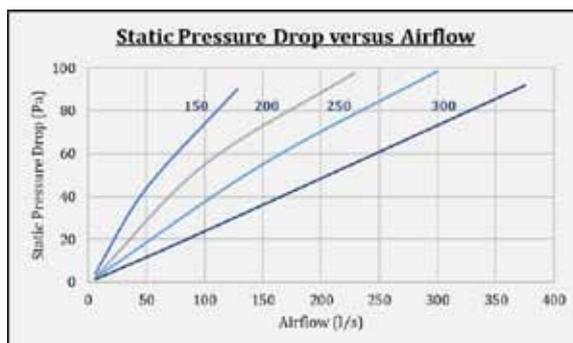
- Easy one touch adjustment for air flow control
- Easy fitment with snap in ceiling fixing and metal duct clips
- Tough high impact ABS
- Large mounting flange for ease of installation
- Connects straight to duct
- Easy clean and non reflective

Hold diffuser against board and push upwards



Operation of toggle clips

Toggle clip snaps into place holding diffuser firmly



Due to a policy of continuous development, prices and specifications are subject to change without notice.

Christchurch

264 Annex Road

Riccarton 03 343 6184

Wellington

15 Te Puni Street

Petone 04 566 7969

Auckland

6 Stanway Place

Penrose 09 579 3257

0800 SMOOTH (0800 766 684)

www.smooth-air.co.nz

sales@smooth-air.co.nz

Ceiling Grilles - Down Jet Diffuser

Description: Round downjet diffusers suitable for ceiling mounted heating, cooling or ventilation applications. Three sizes are available.

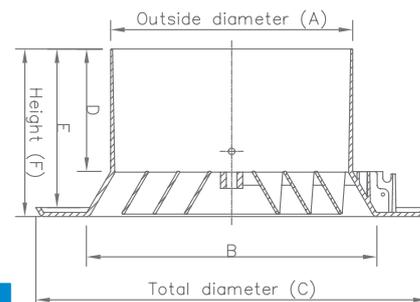
Construction: All models are constructed from ABS polymers providing long term strength and rigidity. The diffusers consist of a series of concentric rings that deliver the air downwards at a slight angle to the vertical. The external exposed surfaces have an etched finish. A centre knob can be pushed and turned by hand to adjust an integrated butterfly flap. The flap impedes the airflow allowing individual control of airflow for an area. Total shut off is possible.

Performance: The airflow pattern is ideal for ceiling mounted heating applications where warm air is directed downwards from the downjet. The directional nature of the airflow improves mixing of cooler air at lower levels. The downjet is regularly used in ducted heating applications where underfloor ductwork is not available, such as occurs in properties with solid concrete floors. The downjet is also suitable for ventilation applications.

Finish: Standard finish is off white. The surface has an etched face, which lowers light reflections and ensures an unobtrusive finish.



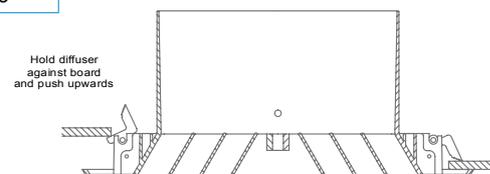
Down Jet Diffuser



Dimensions

Model	A	B	C	D	E	F
PYDJD150	147	173	237	74	96	101
PYDJD200	196	224	288	92	115	120
PYDJD250	248	274	338	118	138	143

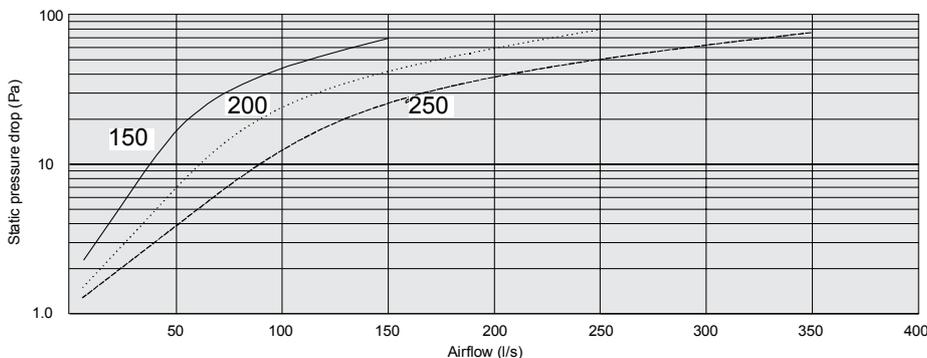
Note: All dimensions in mm



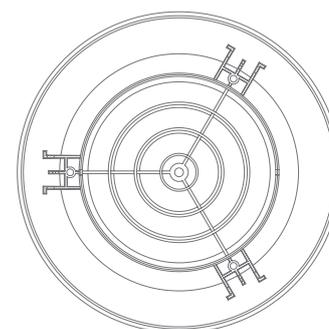
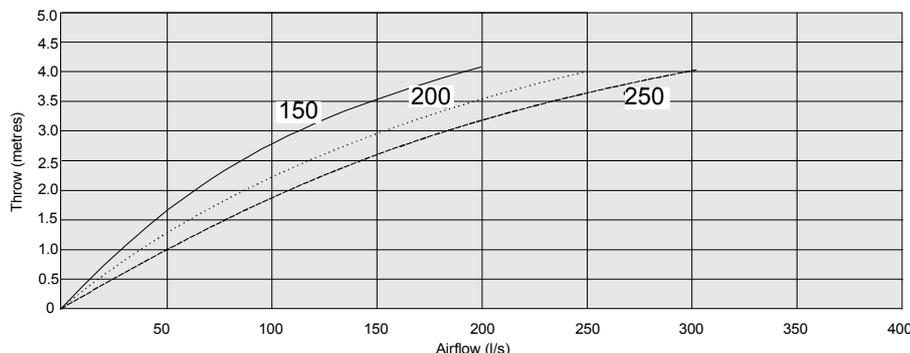
Operation of toggle clips

Toggle clip snaps into place holding diffuser firmly

Static pressure drop versus airflow



Throw versus airflow



Due to a policy of continuous development, prices and specifications are subject to change without notice.

Christchurch

264 Annex Road

Riccarton 03 343 6184

Wellington

15 Te Puni Street

Petone 04 566 7969

Auckland

6 Stanway Place

Penrose 09 579 3257

0800 SMOOTH (0800 766 684)

www.smooth-air.co.nz

sales@smooth-air.co.nz

Ceiling Diffusers - Circular Heritage Outlet

Circular Heritage Outlet

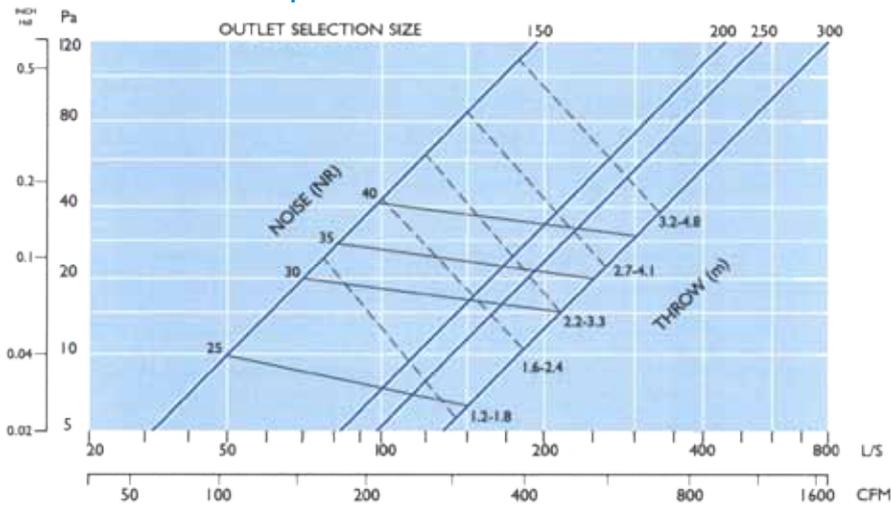
Code	Size (mm) (Diameter)
PYHD150	150
PYHD200	200
PYHD250	250
PYHD300	300

- Easy One touch adjustment for air flow control
- Tough High Impact ABS
- Large mounting flange for ease of installation
- Patented quick snap in locking system
- Removable inserts for easy cleaning
- Connects straight to flex duct
- Suitable for wet areas



Circular Heritage Outlet

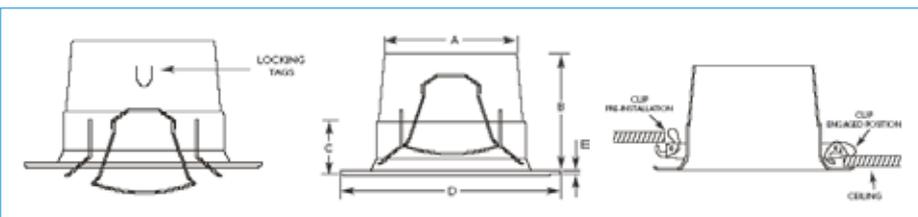
Performance Graph



- Three stage regulation from closed through partially open to full open so that airflow needs can be tailored
- Fully adjustable (one touch adjustment for air flow control)
- Incorporating neck adaptor and spring loaded fixing clips

Dimension Data

Size	150	200	250	300
A	145	195	245	295
B	120	245	120	120
C	50	120	50	50
D	240	285	340	390
Cut Hole Size	180	260	315	365



Note:

- Noise ratings are calculated with 8dB deducted for room absorption.
- Sound data based on one outlet with insulated flexible duct connect straight to outlet.
- Air-flow valves measured per ISO 5219.1928 as – ‘The maximum distance from the centre of the core and a plane which is tangent to the 0.25m/s, 0.5m/s etc. envelope, and perpendicular to the intended direction of flow.’
- Static pressures measured average within the normal selection of the neck adaptor.
- Technical data relates to outlet in fully open position.
- More detailed technical data available upon request.

Due to a policy of continuous development, prices and specifications are subject to change without notice.

Christchurch

264 Annex Road

Riccarton 03 343 6184

Wellington

15 Te Puni Street

Petone 04 566 7969

Auckland

6 Stanway Place

Penrose 09 579 3257

0800 SMOOTH (0800 766 684)

www.smooth-air.co.nz

sales@smooth-air.co.nz