ALPHA RELIEF AIR VENTS



DESCRIPTION

The Alpha Relief Air Vents have been designed for air intake and exhaust applications or control of pressure within buildings. They may be used in a ducted system where the fan is mounted remotely to the cowl. Units are fitted with bird mesh as standard to eliminate the risk of debris and birds entering the building.

There are 9 models in the range capable of handling air flows from 0.04 to 6.0m³/s.

Typical Applications

May be used as the air intake and discharge point where the fan is mounted remotely.

To control relief air and the pressure within buildings.

Features

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- Lightweight, corrosion-proof construction.
- The pressure losses are approximately the same for exhaust and air intake.
- Protective bird-mesh guards are fitted as standard.
- 'MRV' and 'RV' units are designed for curb mounting.
- The 'PFR' units are designed to suit a range of metal deck roofs.
- Can be mounted at angles up to 30°.

Construction

MRV1, MRV2 and sizes 1 to 4 - Base and cowl are made of UV-stabilised plastic.

Sizes 5 & 6 - Base is made of fibreglass with a UV-stabilised plastic cowl.

Steel components have a corrosion-resistant finish.

Bird-mesh guards are fitted as standard.

SUGGESTED SPECIFICATION

The Relief Air Vents shall be of the MRV/RV/PFR Series (delete as appropriate) as designed and manufactured by Fantech Pty Ltd.

Each unit shall incorporate bird-mesh guards and be constructed from UV-stabilised plastic, or fibreglass and UV-stabilised plastic. Steel components shall have a corrosion resistant finish.

HOW TO ORDER

MRV & RV - Relief Vents

Select model required to handle the air quantity nominated from the performance graph.

PFR - Relief Vent

For the PFR30, use the How to Order below.

	PFR30
PFR30 - Profile Fan Relief Vent	
Roof Profile Required T - Trimdek** C - Custom Orb** D- Spandek** K - Klip-Lok 406** K700 - Kilp-Lok 700** B900 - Brownbuilt 900 [†]	
** Registered trade mark of Bluescope Steel † Available in New Zealand only	Limited



DIMENSIONS

MRV & RV - Relief Vents



PFR - Relief Vent





	Dime	nsions	, mm			App. wt.	App. vol.	Min. Free Area
Model	AD	В	С	D	ED	kg	m³	m²
MRV1	210	260	30	200	310	1.0	0.02	0.017
MRV2	350	410	55	350	570	3.0	0.14	0.073
RV1	400	500	95	380	670	5.0	0.21	0.110
RV2	510	610	90	450	770	7.0	0.32	0.170
RV3	670	770	90	560	890	11.0	0.52	0.270
RV4	780	980	85	640	1180	16.0	1.10	0.410
RV5	900	1100	85	700	1395	20.0	1.60	0.530
RV6	1100	1360	85	700	1640	23.0	2.20	0.820
PFR30	See Below	640	-	265	570	3.0	0.13	0.073
PEB Dimensions mm A*-								

Trimdek** 620 Klip-Lok 700** Klip-Lok 406*

440 Custom Orb**

Spandek** 490 Brownbuilt 900[†] 508



497

500

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ROOF MOUNTED FANS D-10

ALPHA RELIEF AIR VENTS - BUSHFIRE CODE COMPLIANT





The robust Alpha Relief Vents with bushfire code compliance have been designed to control relief air and the pressure within buildings. They may also be used in a ducted system where the fan is mounted remotely to the cowl. They comply with BAL-LOW to BAL-40 of the Australian Standard AS3959:2009 Construction of buildings in bushfire prone areas.

There are 6 models in the range capable of handling air flows from 0.04 to $4.0m^3/s$.

Typical Applications

To control relief air and the pressure within buildings in bushfire prone areas.

May also be used as the air intake and discharge point where the fan is mounted remotely.

Features

- Robust, heavy duty galvanised steel construction.
- Fitted with high quality bronze mesh to provide protection from burning embers.
- All units are designed for curb mounting.
- Can be mounted at angles up to 30°.
- Can also be used as air intake units. Pressure losses are approximately the same.
- Compliant to AS3959:2009, upto and including BAL-40

Construction

Cowls are of galvanised steel.

Bronze mesh with a maximum of 2mm aperture fitted.

Special note

Construction of buildings in bushfire prone areas

AS3959:2009, clause 6.6.5(b) "Roof penetrations" states: Openings in vented roof lights, roof ventilators or vent pipes shall be fitted with ember guards made from a mesh or perforated sheet with a maximum aperture of 2mm, made of corrosion-resistant steel, bronze or aluminium.

SUGGESTED SPECIFICATION

The roof ventilators shall be of the Alpha Relief Air Vents Series with bushfire code compliance as designed and manufactured by Fantech Pty Ltd.

They shall be constructed from galvanised steel and include ember protection mesh made from bronze or steel with openings a maximum of 2mm.

They shall comply with BAL-LOW to BAL-40 of the Australian Standard AS3959:2009 Construction of buildings in bushfire prone areas.



HOW TO ORDER

Select the model required to handle the air quantity specified from the performance graph.

DIMENSIONS



Model	Dime A¤	ensior B	ns, m C	m D	Eo	App. wt. kg	App. vol. m³	Min. Free Area m ²
MRV1-BFC	210	260	30	200	346	1.0	0.02	0.017
MRV2-BFC	350	410	55	350	570	3.0	0.14	0.073
RV1-BFC	400	500	85	380	670	5.0	0.21	0.110
RV2-BFC	510	610	90	450	774	7.0	0.32	0.170
RV3-BFC	670	770	90	560	890	11.0	0.52	0.270
RV4-BFC	780	980	90	640	1180	16.0	1.10	0.410





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ROOF MOUNTED FANS

D

BETA VERTICAL DISCHARGE COWLS



DESCRIPTION

D

The Beta Vertical Discharge Vents are ideal in ducted systems where the fan is mounted remotely to the unit. They enable the vertical discharge of air from a mechanical exhaust system, while providing protection from rain when not in use.

There are 6 sizes in the range handling air flows from 0.4 to 5.70 $\ensuremath{\text{m}^{\text{s}}}\xspace$ s.

Typical Applications

Used as the discharge point where the fan is mounted elsewhere in the system yet vertical discharge exhaust is required. Ideal in applications such as shopping centres, office buildings and sports centres. The pressure loss through the vent must be added to the system pressure loss before selecting the fan.

Features

- Fitted with reliable gravity operated, butterfly backdraft shutters.
- Lightweight but sturdy construction.
- Enables the vertical discharge of air while preventing rain from entering building.
- Can be mounted at angles up to 30°.

Construction

Sizes 1 to 4 - Bases are made of UV-stabilised plastic with a fibreglass windband.

Sizes 5 & 6 - Bases are made of fibreglass with a powder-coated galvanised steel windband.

Fitted with gravity operated, butterfly backdraft shutters.

Steel components have a corrosion resistant finish.

Special notes

Beta Vertical Discharge Vents are designed for relatively high air discharge velocity. At low discharge velocities, rain could enter the building. For these types of application an Alpha Relief Air Vent is recommended. See page *D*-10.

For any application where prevailing winds may lift the butterfly shutters of the Beta Vertical Discharge Vent, we recommend the fitting of Magloks^(R). See page *J*-8 for details.

Ensure the hinge of the butterfly shutters point down the slope of the roof.

ANCILLARY EQUIPMENT



Scan the QR Code to view more information online.





DIMENSIONS



Model	Min. * Air flow	Throat area	Dimensions, mm				App wt.	. App. vol.
RVV.	m³/s	m²	A□	В	С	D	kg	m³
1	0.66	0.11	400	50	95	440	4	0.13
2	1.02	0.17	510	50	85	450	7	0.22
3	1.62	0.27	670	50	85	560	15	0.40
4	2.46	0.41	780	100	85	700	25	0.80
5	3.80	0.53	900	100	85	760	35	1.16
6	5.70	0.82	1100	100	85	865	45	1.70

Air flow at which gravity-air operated backdraft shutters will open fully, and achieve acceptable discharge velocities.

SUGGESTED SPECIFICATION

The vertical discharge units shall be of the RVV series as designed and manufactured by Fantech Pty Ltd.

Each unit shall incorporate gravity operated, butterfly backdraft shutters and be constructed from UV-stabilised plastic, fibreglass and/or powder-coated galvanised steel.

Steel components shall have a corrosion resistant finish.

HOW TO ORDER

Select the model required to handle the air quantity nominated from the performance graphs.