



# McKenzie Martin

Louvres & Ventilation Systems

Smoke Ventilation

Smoke Ventilation  
Firemac – Single Leaf



## Smoke Ventilation

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**Description**

The Firemac Single Flap Ventilator is suitable for both natural and smoke extraction purposes. Various options are available within the range providing flexibility and choice for the designer and customer. These include insulated and uninsulated versions along with units incorporating translucent polycarbonate tops for providing natural daylight. A further option is a unit with offset actuators to allow personnel access to rooftop areas. The variety of options and low profile appearance make the Firemac suitable for industrial buildings, shopping centres and atria. Smoke exhaust from stairwells is an ideal application for this unit.



Natural  
Smoke  
Ventilation

**Sizes & Free Area**

Single leaf Firemac units are manufactured in the following sizes to suit most requirements,

**Square units (Type C) –**

1000mm x 1000mm to 2000mm x 2000mm

**Rectangular units (Type E) –**

1000mm x 1200mm to 2000mm x 2500mm

With the use of wind baffles it is possible for the units to achieve an aerodynamic free area of 3.24m<sup>2</sup> (Type C) or 4.05m<sup>2</sup> (Type E)

**Unit Options**

The Firemac system can be fabricated from either Aluminium or Galvanised Sheet Steel. The internal structures can be provided either with or without insulation and the opening flap of each unit is available in the following options;

- Polycarbonate Structured Sheets
- Layered Insulated Sheets
- Double Glazing

Control options for the Firemac are;

- 24vDC Electrical Actuation
- Pneumatic Actuation
- 230v Electrical Actuation (Natural Vent Models Only)

Mesh Options;

- Bird Mesh
- Insect Mesh
- Anti-Burglar Bars



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## Sizes, Free Areas and Motor Loads

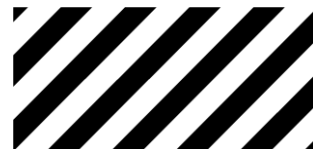
Flap Type	Nominal Dims A x B (mm)	Free Area M <sup>2</sup> (Without fairings or actuator)		Motor consumption (Amps) by Snowload Class	
		H = 500mm	H = 300mm	SL 250	SL 500
C 100	1000 X 1000	0.72	0.64	1 X 2.0	1 X 2.6
E100/120	1000 X 1200	0.85	0.75	1 X 1.0	1 X 4.0
C120	1200 X 1200	0.98	0.86	2 X 1.3	2 X 2.0
C125	1250 X 1250	1.05	0.91	2 X 1.3	2 X 2.6
C130	1300 X 1300	1.13	0.97	2 X 1.3	2 X 2.6
C135	1350 X 1350	1.20	1.03	2 X 1.3	2 X 2.6
C140	1400 X 1400	1.28	1.09	2 X 1.6	2 X 2.6
C150	1500 X 1500	1.44	1.22	2 X 2.6	
C155	1550 X 1550	1.52	1.29	2 X 2.6	
C160	1600 X 1600	1.60	1.36	2 X 2.6	
C170	1700 X 1700	1.77	1.50	2 X 4.0	
C180	1800 X 1800	1.95	1.64	2 X 6.0	
E100/130	1000 X 1300	0.92	0.80	1 X 1.0	2 X 1.3
E100/140	1000 X 1400	0.98	0.85	1 X 1.0	2 X 1.6
E100/150	1000 X 1500	1.04	0.90	1 X 1.0	2 X 2.0
E100/160	1000 X 1600	1.10	0.94	1 X 1.0	2 X 2.0
E100/180	1000 X 1800	1.22	1.03	1 X 1.0	
E100/190	1000 X 1900	1.28	1.07	1 X 1.0	
E100/200	1000 X 2000	1.34	1.11	2 X 1.3	
E100/210	1000 X 2100	1.40	1.15	2 X 1.3	
E100/220	1000 X 2200	1.45	1.19	2 X 1.3	
E100/230	1000 X 2300	1.51	1.23	2 X 1.3	
E100/240	1000 X 2400	1.56	1.26	2 X 1.3	
E100/250	1000 X 2500	1.61	1.29	2 X 1.3	
E110/200	1100 X 2000	1.45	1.21	2 X 2.0	
E115/200	1150 X 2000	1.50	1.25	2 X 1.3	
E120/140	1200 X 1400	1.13	0.97	2 X 1.3	2 X 2.6
E120/150	1200 X 1500	1.21	1.03	2 X 1.3	
E120/170	1200 X 1700	1.35	1.14	2 X 1.3	
E120/180	1200 X 1800	1.42	1.19	2 X 1.3	
E120/200	1200 X 2000	1.56	1.30	2 X 1.3	
E120/210	1200 X 2100	1.63	1.34	2 X 2.0	
E120/220	1200 X 2200	1.69	1.39	2 X 2.0	
E120/240	1200 X 2400	1.82	1.48	2 X 2.6	
E130/150	1300 X 1500	1.28	1.10	2 X 1.6	
E130/160	1300 X 1600	1.36	1.16	2 X 1.6	
E130/180	1300 X 1800	1.51	1.27	2 X 2.0	
E130/190	1300 X 1900	1.59	1.33	2 X 2.0	
E130/200	1300 X 2000	1.66	1.38	2 X 2.0	
E140/150	1400 X 1500	1.37	1.16	2 X 2.0	
E140/180	1400 X 1800	1.61	1.35	2 X 2.0	
E150/160	1500 X 1600	1.52	1.29	2 X 2.6	
E150/180	1500 X 1800	1.70	1.43	2 X 2.6	
E160/180	1600 X 1800	1.79	1.50	2 X 2.6	



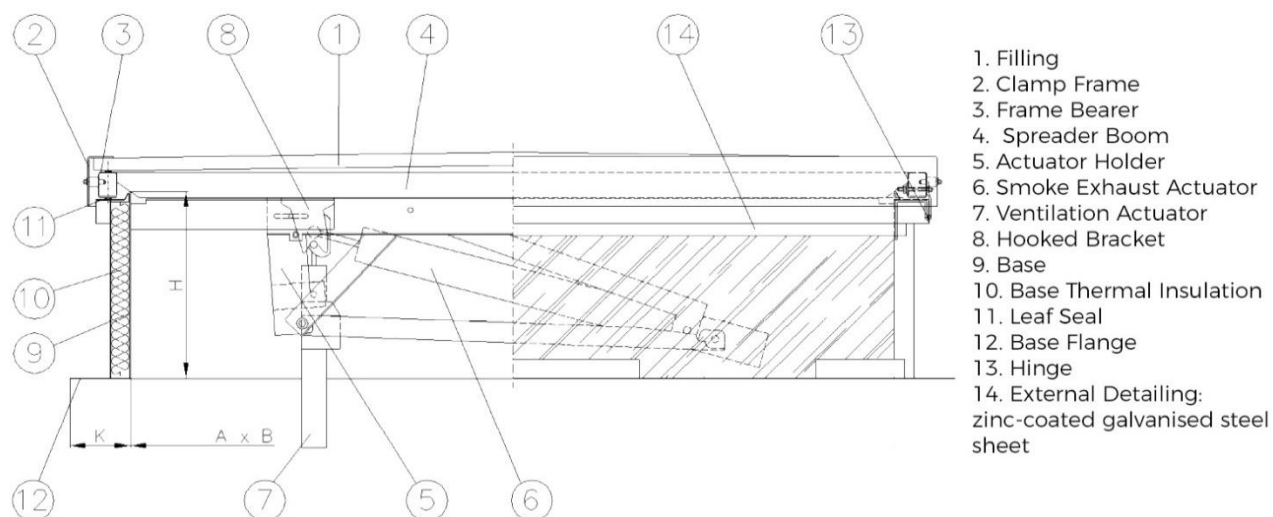


## Smoke Ventilation

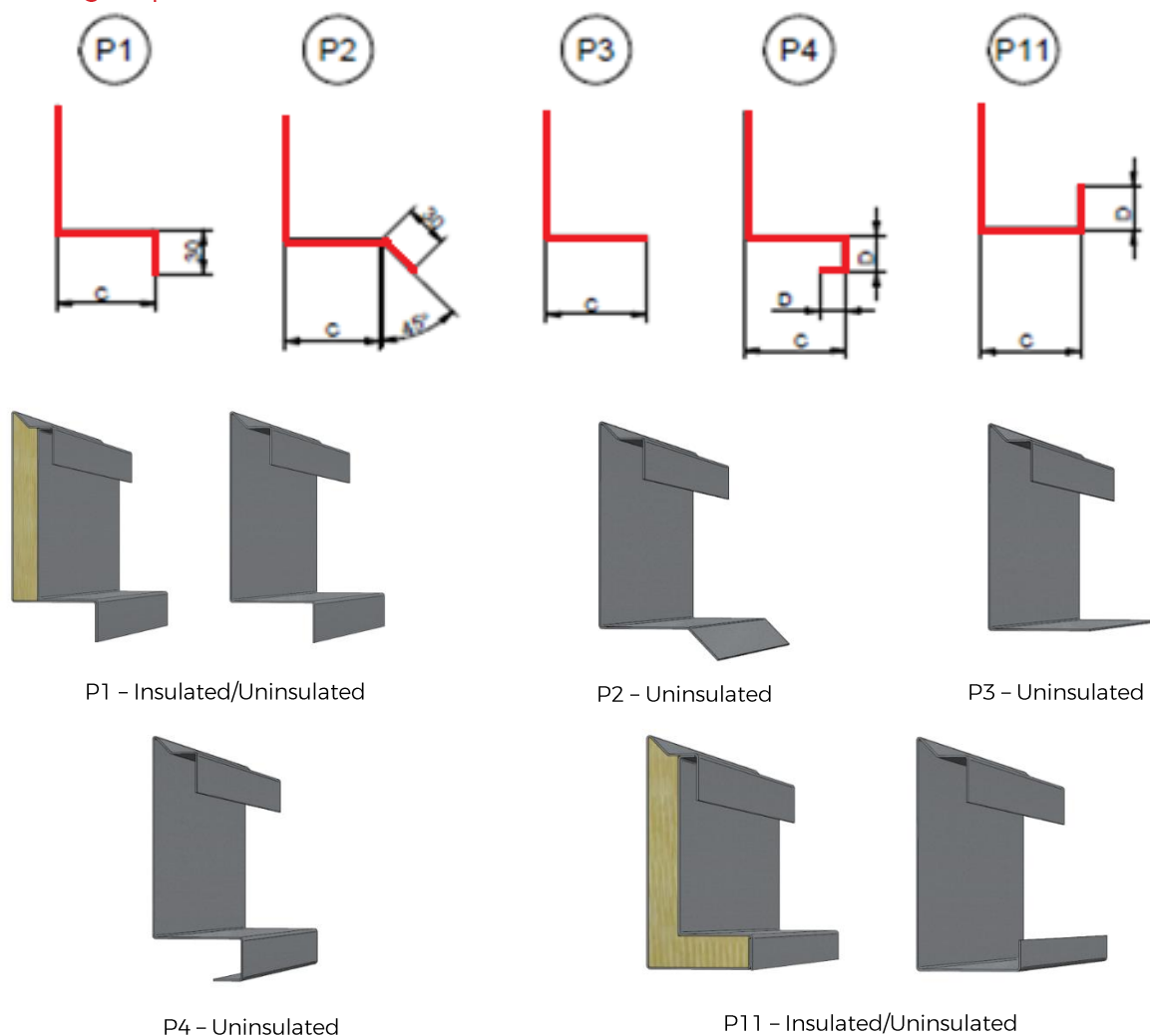
## Firemac – Single Leaf



## Standard Details



## Base Flange Options

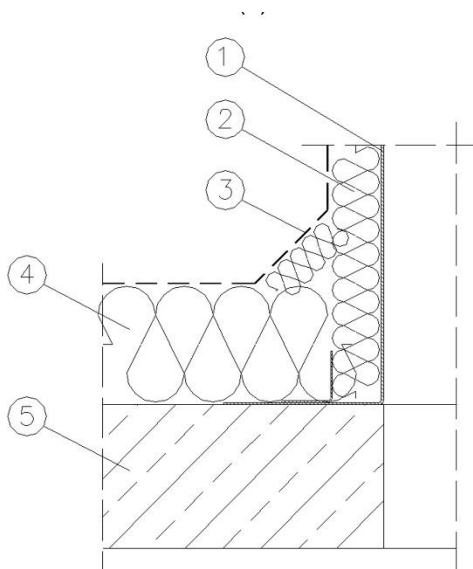
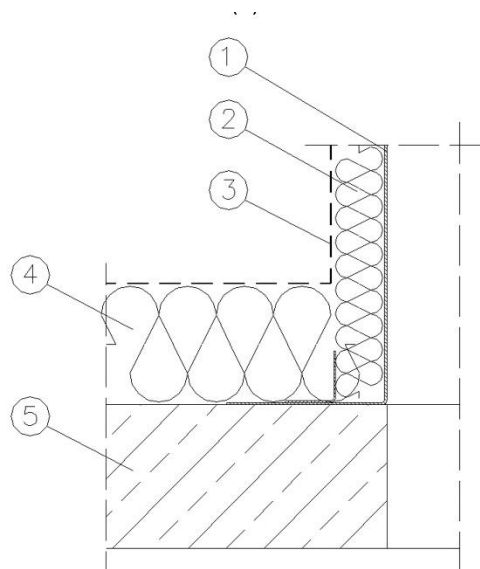


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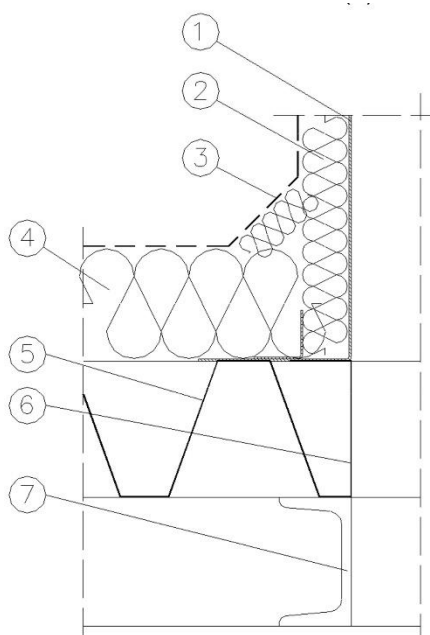
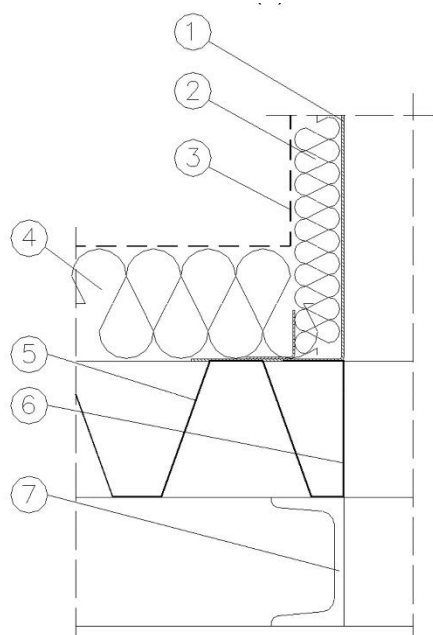


## Fixing Details



1. Vent steel base
2. Base thermal insulation
3. Roof works with membrane or felt
4. Roof thermal insulation
5. Reinforced concrete slab

Standard P1 type flange onto pre-prepared  
membrane/felt roof with Concrete Base



1. Vent steel base
2. Base thermal insulation
3. Roof works with membrane or felt
4. Roof thermal insulation
5. Roofing sheet
6. Additional roof work
7. Steel supporting structure

Standard P1 type flange onto pre-prepared  
membrane/felt roof with Steel Supports

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## Specifications



### Firemac Single Flap Smoke Ventilator – L10 NBS Spec

**Manufacturer:** McKenzie Martin Ltd

**Product Reference:** Firemac Single Flap Vent

**Description:** Roof mounted smoke/natural exhaust ventilator.

Comprising of external body containing top canopy.

**Sizes Available:**

**Square units (Type C) –**

1000mm x 1000mm to 2000mm x 2000mm

**Rectangular units (Type E) –**

1000mm x 1200mm to 2000mm x 2500mm

**Maximum Free Area:** 3.24m<sup>2</sup> (Type C) or 4.05m<sup>2</sup> (Type E)

**Material:** 1.2mm Aluminium 1050A H14 / Galvanised Sheet steel

**Finish:** Mill Finish / Polyester Powder Coated / Marine Grade Polyester Powder Coated

**Mesh:** Aluminium bird diamond mesh 35 x 12 / Aluminium fly diamond mesh 3.5 x 2

**Operation:** Pneumatic Actuation / 230v Actuator / 24v Actuator



**McKenzie Martin**  
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McKenzie Martin Ltd. Eton Hill Works.

Eton Hill Road, Radcliffe, Manchester. M26 2US

For more information or to speak to one of  
our sales advisors call 0161 723 2234 or  
email sales@mckenziemartin.co.uk

[www.mckenziemartin.co.uk](http://www.mckenziemartin.co.uk)

