

# OP-iM412 | 4 Wing flat roof attic ventilator with insulated base

## Description

Attic flat roof ventilator OP-iM412 is designed to ease the installation of membrane on the base when required. The ventilation openings are individually punched out. This eliminates all maintenance requirements and prevents rodents and birds from getting inside the attic. Its anti-gust deflectors prevents the infiltration of rain and snow into the attic. This model can easily replace 3 conventional gooseneck style vents. The OP-iM412 Ventilator allows for an advantageous cooler attic in summer and dryer attic in winter. This extends the life of the structure, and adds superior interior comfort. This also creates also energy savings. This static ventilator offers superior air circulation and, with the help of wind, produces a chimney effect. Air is continuously exchanged. To determine the roof surface that the Ventilator OP-iM412 can cover, the volume of air space between the roof and the insulation is required. It is the opening of the wooden box that will determine, along with the ventilator, the net amount of free air evacuation.



## Application

Determine ventilator's placement at the center of two trusses and 4 feet from the wall. Trace, with chalk, a 12"X12" square for the flashing, insuring that the flashing is parallel to the edge of the roof. Cut out the opening, remove any obstructions around the hole that would interfere with the ventilator's installation. Install the base of the ventilator over the opening and then align it. Install the roofing membrane according to the membrane manufacturer's instructions, so as to cover the base of the ventilator. The base is insulated to prevent any risk of condensation. Screw the ventilator to the base, making sure it is level. It is important that all of the ventilators are the same model and height to allow adequate ventilation and optimize the performance of the ventilator. Slide the ventilator over the wooden base. Make sure that the first ventilator wing is 6 inches above the height of the parapet. Screw ventilator to the high end of the wooden base insuring that it is level. It is important that all ventilator heads are positioned at the same height and that they are the same model.

ROOF AREA IS A VENTILATOR CAN VENTILATE				
*INDICATIVE CHARTER				
PRODUCT	NET VENTILATION AREA BETWEEN ROOF DECK AND INSULATION			
	6 in. and less	7 in. to 12 in.	13 in. to 24 in.	25 in. and more
OP-iM412	144 sq.ft.	151 to 250 sq.ft.	251 to 350 sq.ft.	351 to 450 sq.ft.

**Does not apply to all cases. Variances can influence the end results.**

## Use

Attic ventilation is required by Canada's building code. This requires keeping air circulating through the attic. Ideally, the attic temperature should be, within a few degrees of the temperature of the outside air. In summer, an Optimum ventilator allows excess heat to escape from the attic. Otherwise, excess heat radiates inside the house and warms up the interior. It can also create seepage problems, warp roof coatings or curl asphalt shingles. An air conditioner then must work continuously to cool down interior living areas. In wintertime, interior house air is warmer and contains more vapor, as opposed to the drier and colder attic air. Water vapor has a tendency to flow into the attic and condensate on colder building structure pieces. This condensation can dampen and compress insulation. This reduces the factor which then allow more water vapor migration into the attic. This humidity leads to ice formation on the roof, mildew and rot of the structure.

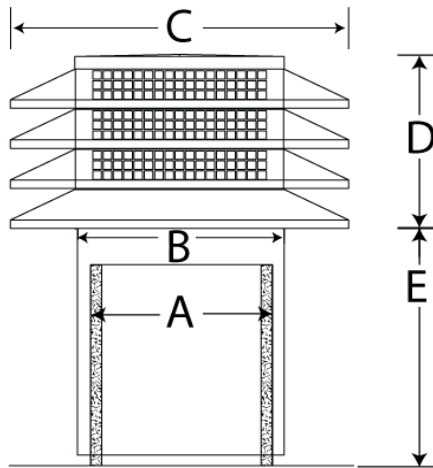


It is necessary to ensure that the base is completely watertight. A joints on the base must be well covered by proper products which make them completely waterproof. Make sure to cover the original joint located at the base of the flashing.

The national building code requires adequate ventilation of the attic, according to the minimum standard of Section 9.19.1 or according to CSA CAN3-A93-M82

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### Dimensions and special characteristics



The ventilator structure is made of galvanized steel. It is covered with baked powder coat paint.

PRODUCT	DIMENSIONS					EVACUATION	NUMBER OF DEFLECTORS	STEEL GAUGE USED
	A	B	C	D	E			
OP-iM412	27,9 cm • 11"	30,4 cm • 12"	52 cm • 20,5"	25,4 cm • 10"	27,9 cm • 11"	0,08 m <sup>2</sup> • 121 in. <sup>2</sup>	4	22 - 24 & 26
OP-iM414	33 cm • 13"	35,6 cm • 14"	57,2 cm • 22,5"	25,4 cm • 10"	34,2 cm • 13,5"	0,11 m <sup>2</sup> • 169 in. <sup>2</sup>	4	22 - 24 & 26
OP-iM516	38,1 cm • 15"	40,6 cm • 16"	62,2 cm • 24,5"	31,7 cm • 12,5"	40 cm • 15,75"	0,15 m <sup>2</sup> • 225 in. <sup>2</sup>	5	22 - 24 & 26
OP-iM518	43,1 cm • 17"	45,7 cm • 18"	67,3 cm • 26,5"	31,7 cm • 12,5"	42,5 cm • 16,75"	0,19 m <sup>2</sup> • 289 in. <sup>2</sup>	5	22 - 24 & 26
OP-iM620	48,2 cm • 19"	50,8 cm • 20"	72,4 cm • 28,5"	37,5 cm • 14,75"	41,3 cm • 16,25"	0,23 m <sup>2</sup> • 361 in. <sup>2</sup>	6	22 & 24
OP-iM622	53,3 cm • 21"	55,8 cm • 22"	77,5 cm • 30,5"	37,5 cm • 14,75"	42,5 cm • 16,75"	0,28 m <sup>2</sup> • 441 in. <sup>2</sup>	6	22 & 24
OP-iM724	58,4 cm • 23"	60,9 cm • 24"	82,6 cm • 32,5"	43,8 cm • 17,25"	43,2 cm • 17"	0,34 m <sup>2</sup> • 529 in. <sup>2</sup>	7	22 & 24

- Models OP-iM412 to OP-iM724 are available with filter if needed.
- Models OP-iM412 to OP-iM724 are available on special orders only.
- We can manufacture other dimension on request.
- There are other color choices available, see our website.

The exhaust area based on air evacuation ratio.

### Warranty

It is the responsibility of the customer and consumer to verify the suitability of this product for the intended purpose. Since the installer's skill, weather and surface conditions are beyond the manufacturer's control, we limit our liability to the replacement of defective material only in sealed container, within 1 year of proof of purchase. FOB plant.