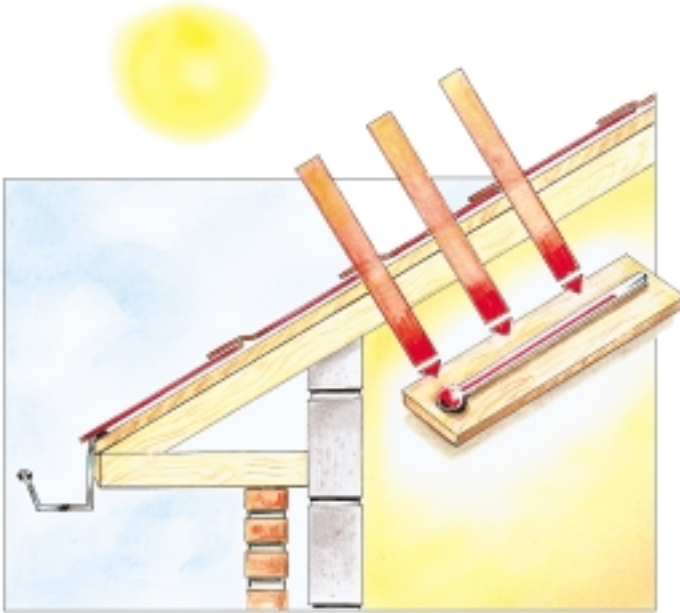
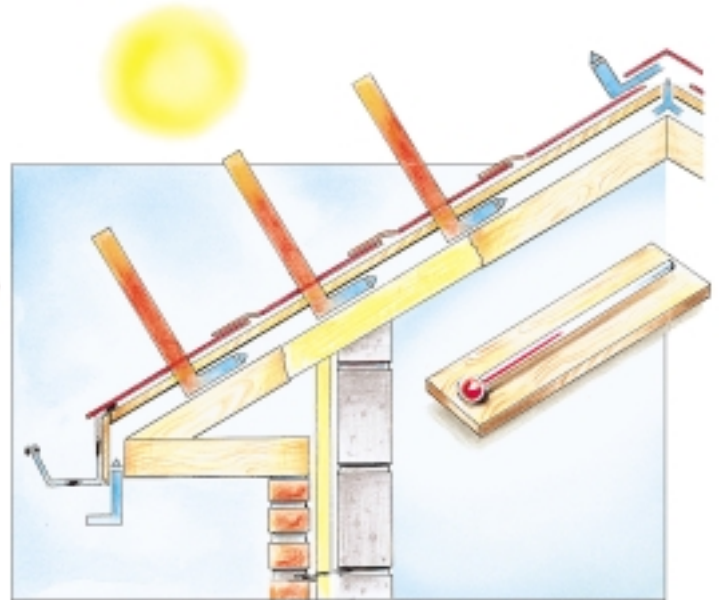


Extend the life of your roof
Increase your living comfort
Regulate the moisture in your roof



Unventilated: high temperature inside.

Without air gap between insulation and roof deck:
condensation forms and the roof structure is damaged.



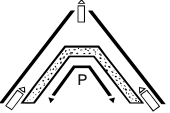
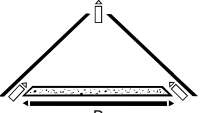
Ventilated: lower temperature inside.

With air gap between insulation and roof deck: air
escapes via ridge vents, leaving the roof structure
unaffected.

CALCULATING THE CROSS-SECTIONAL AREA OF THE VENT OPENINGS

The air gap between the insulation and the roof deck must be 4 to 6 cm. Air should flow in from the bottom of the roof (eaves) and out through the top of the roof (ridge). The air flow between the eaves and ridge vents must be unobstructed (by insulation or roof beams) to ensure cross-flow ventilation.

The total required cross sectional area (CSA) of vent openings is a function of the insulated roof area (P) and the slope of the roof.

SAMPLE ROOF STRUCTURES	
	
Roof slope	Required CSA of vent openings
15° - 40°	$P \div 300$
41° - 85°	$P \div 600$
Ventilation should be equally divided among the number of vents at eaves and ridges.	

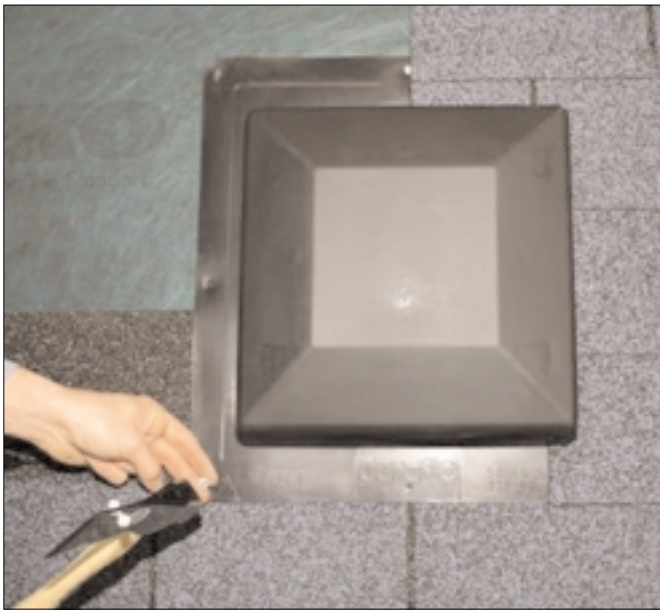
Example: $P = 70\text{m}^2$
Roof slope = 35°
CSA vent = 322 cm²

Total required CSA of vent openings:
 $140 \div 600 = 0.233 \text{ m}^2 = 2330 \text{ cm}^2$
Minimum number of vents required over total roof:
 $2330 / 322 = 7$
Number of vents at ridge:
 $7 \div 2 = 3.5 \rightarrow 4$
Number of vents at eaves:
 $7 \div 2 = 3.5 \rightarrow 4$

NOTE: Roofs with vapor barriers need 40% less ventilation.

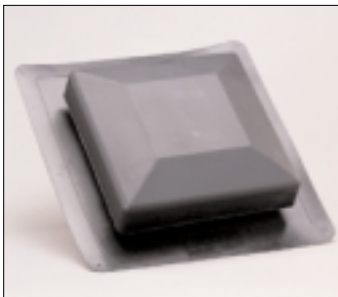
In certain regions (mountainous areas, the coast) special building regulations may apply.

ROOF VENT INSTALLATION



Ventilating your roof will equalize the temperature of the outer and inner roof. Your roof structure will then be able to withstand sudden temperature changes.
THIS WILL EXTEND THE LIFE OF YOUR ROOF.

RIDGE VENTS



STANDARD VENTS

Venting area 322 cm²

Colour Black



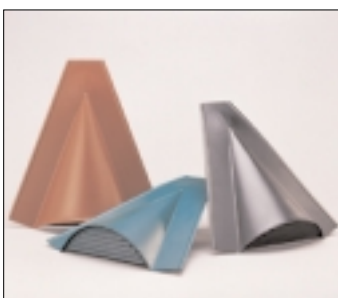
RIDGE VENTS 229

Venting area 260 cm²/m

Length 122 cm

Width 2.29 cm

Product Monarch, Armourglass



IKO SHINGLE VENTS

Venting area 30 cm²

Colour Black, Red, Green

RIDGE VENTS PLUS 279

Venting area 260 cm²/m

Length 122 cm

Width 27.9 cm

Product Diamant, ArmourShield,
Cambridge, Superglass-3Tab