



## DIAMOND MESH SHEET

The RHEINZINK Diamond Mesh Sheet is characterised by less material and greater ventilation. Its free ventilation cross-section of 63% improves ventilation levels by some 25% compared with standard perforated sheeting. This makes it easier to reconcile design concepts with the rules of the trade, so simplifying practical detailing to a significant extent.

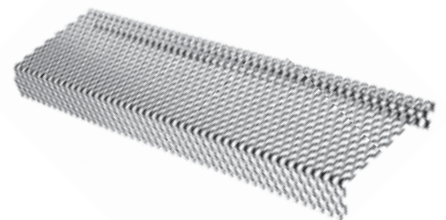
**Large ventilation cross-section**

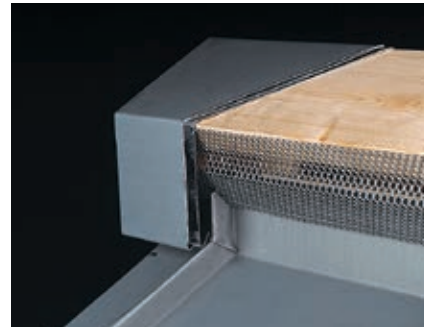
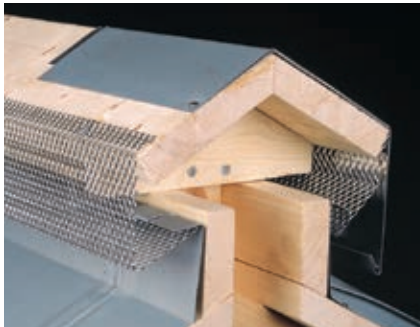
**Optimised air intake**

**Economical**

**Dimensionally stable**

**Durable and maintenance-free**





### RHEINZINK Diamond Mesh Sheet

The RHEINZINK Diamond Mesh Sheet is a protective grating equipped with air intake and exhaust openings at roof level and designed with an optimised airflow rate. While the cross-sectional width needs to be more than doubled for adequate air circulation in the case of standard perforated sheeting with a free ventilation cross-section of ~ 45% (see table), an unimpeded airflow is ensured by the RHEINZINK Diamond Mesh Sheet with just a minor increase in the cross-section. The large ventilation cross-section improves the intake of air, so exerting a positive effect on the rear ventilation function. The generously dimensioned perforation structure of the RHEINZINK Diamond Mesh Sheet prevents dirt particles from clogging up the grating while improving laminar flow.

### Highly economical

The RHEINZINK Diamond Mesh Sheet is especially recommended for use in non-visible roof areas – girth width ≤ 400 mm – and is a highly cost-effective alternative given the minor increase in the cross-section required.

### Regulatory requirements

The rules of the trade associations ZVSHK (Central Sanitary, Heating and Air Conditioning Association)/ZVDH (German umbrella association of roofers) stipulate the following for ventilated roof coverings:

- air intake and exhaust openings to be designed as continuous openings and positioned at the highest and lowest points
- observance of net slot widths as a function of roof pitch (see table)
- all ventilation openings to be protected from birds and small animals using gratings, e.g. perforated sheeting, with mesh size of 5-8 mm and a free cross-section of > 45%

### Technical data and product types

- Free ventilation cross-section 63 %
- Metal thickness 1.0 mm, surface weight 2.65 kg/m<sub>2</sub>
- Suitable for use with girth widths ≤ 400 mm
- Surface quality RHEINZINK-CLASSIC bright rolled
- Sheet size 1000 x 2000 mm
- Processed using conventional sheet metal tools and machines

In the case of air intake and exhaust openings in visible areas (e.g. facades) or with the necessity of using “preweathered” perforated sheeting, there is the option of using the RHEINZINK Round Hole Perforated Sheet with a free cross-section of 46%.

This product, which is 1 mm thick, is available in the surface qualities RHEINZINK-CLASSIC bright rolled, RHEINZINK-prePATINA blue-grey and RHEINZINK-prePATINA graphite-grey.

### Quality standards

The RHEINZINK Diamond Mesh Sheet is made entirely of RHEINZINK. This material meets the highest ecological standards. Following comprehensive evaluation of its entire life cycle – extraction of raw material, processing, usage and recycling – it was certified as an environmentally friendly building product by the Institute Construction and Environment e.V. according to ISO 14025, Type III. With certification to DIN EN ISO 9001:2008 all RHEINZINK products also satisfy even the most stringent quality criteria.

Roof pitch	Net width of ventilation slot 100% free ventilation cross-section	Gross cross-section of Diamond Mesh Sheet 63% free ventilation cross-section	Gross cross-section of standard perforated sheeting ~ 45% free ventilation cross-section
≥ 3° - ≤ 15°	40 mm	65 mm	90 mm
> 15°	30 mm	50 mm	70 mm

Individual verification: Please note: Ventilation cross-sections are nominal values, with deviations being possible in terms of structural physics, based on individual verification. The efficiency and functionality of the ventilation system is not automatically restricted even if values are lower.