

Enka-Engineered

Metal Roof Underlayment

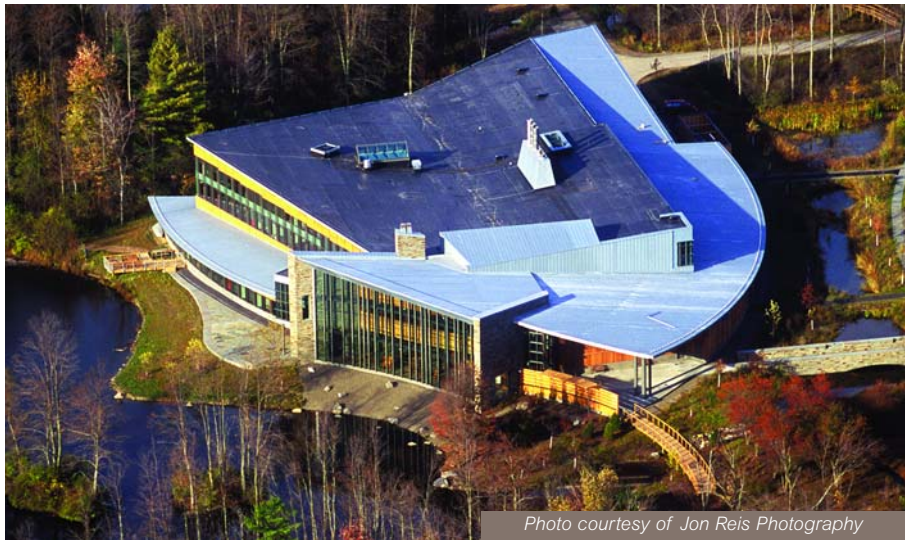


Photo courtesy of Jon Reis Photography

Metal roofs are used extensively throughout the world for functional and architectural purposes on both commercial and residential structures. The infinite variety of custom fabricated metal roof panels lends itself to more complex and interesting designs and pushes conventional building practices to the limit.

For buildings to be durable, their design and construction must suit local climate conditions including temperature, humidity, rainfall, and interior climate. In cold regions, condensation is a major concern and in other regions moisture flow management is important. In any climate, moisture can build up and cause damage to the structure and corrode roofing panels.

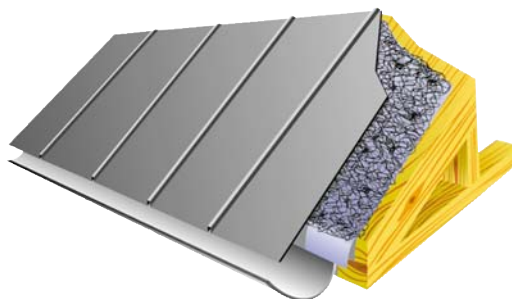
A ventilation layer placed between the roofing material and the sheathing and insulation has become a standard practice to ensure that moisture has a path to evacuate. Many metal roof manufacturers offer an in-service guarantee only if an approved venting layer is installed—ensuring a long service life of the roof.

Furring is an expensive way of spacing the insulation from the sheathing and limits air and water flow to one direction. Corrosion, mold, and mildew can occur in these spaces if air does not circulate freely. This system can now be replaced with Enkamat 7008/7010.

Enkamat 7008/7010 is a three-dimensional nylon matrix structure made of fused, entangled filaments used as a spacer to provide sound attenuation, ventilation and drainage under any type of metal roof. It is used between ballast and loose laid, fully adhered, or mechanically attached roofs and between waterproofing membrane or weather barrier and roof panels in sloped roof applications.



What makes this tangled mat product unique is its 95% open construction and its ability to add multiple benefits in a single 0.4" layer.



- *Sound Attenuation*
- *Ventilation*
- *Drainage*
- *Thermal Break*



Enkamat creates a drainage plane by spacing the roof from the roof sheathing.¹



Workers walk directly on mat without damaging product or weather barrier.¹



Enkamat 7008/7010 can be installed horizontally or vertically.

Benefits:

- Provides ventilation, drainage, sound attenuation, and a thermal break all in a single product.
- Limits accumulation of water under the roof deck, reducing moisture / mold damage.
- Protects the weather barrier membrane from construction traffic.
- Prevents telegraphing of irregularities (nail heads, seaming, etc.) to exterior of roofing panels.
- Allows differential movement of roofing panels due to temperature change.

Reduces rainfall noise up to 50%

- Provides a 0.4" low profile cavity perfect for an acoustic break that can reduce impact noise (hail, sleet, rain) and air-borne noise (airplanes, traffic) up to 50%.*

Continuous air and water flow

- 95% open mat allows multi-directional flow. Furring strips limit air and water flow to one direction.
- Reduces condensation buildup and corrosion under roofing panels.
- Provides maximum ventilation and drainage even under high loads.

Reduces rooftop temperatures

- Reduces temperature at sheathing by 20%.
- Reduces energy consumption / costs during the cooling cycle months.

Flexible and conformable

- Conforms to any surface profile.
- Easy to maneuver around construction obstacles.

Lightweight and easy to install

- Can be installed vertically or horizontally directly over roof membrane / weather barrier.
- Cuts easily with scissors or knife.
- Lightweight rolls (37lbs.) are easy to get onto roof.

Excellent durability

- Nylon can withstand high temperatures up to 302°F or 150°C (melts at 422°F).
- NFPA Class A / UBC Class 1 fire rating.
- Excellent compatibility with other building materials.
- Can be exposed during construction without compromising performance.

¹ Photos courtesy of ZS Enterprises Ltd.

* International test results show a 9.5 - 13.5 dB reduction in noise when using an entangled filament underlayment vs. a metal roof applied directly to the sheathing. With insulation and an installed ceiling, the reduction is 21.5 dB. Every 10 dB reduction in sound cuts the noise level in half. Complete test results available upon request.



Hear the difference Enkamat 7008/7010 makes under a metal roof. Order a free copy from our website.

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Contact us to schedule a "Roof Underlayment" AIA/CES seminar at your firm. Seminar and technical information available in Spanish.

