

Roofing Substrate – Frequently Asked Questions

Choosing the proper substrate underneath a metal roof is a frequently asked question. What is the proper support needed to ensure a structurally sound steel roofing base and what is the underlayment required underneath a steel roof?

Should there be strapping or solid backing underneath the roofing panels?

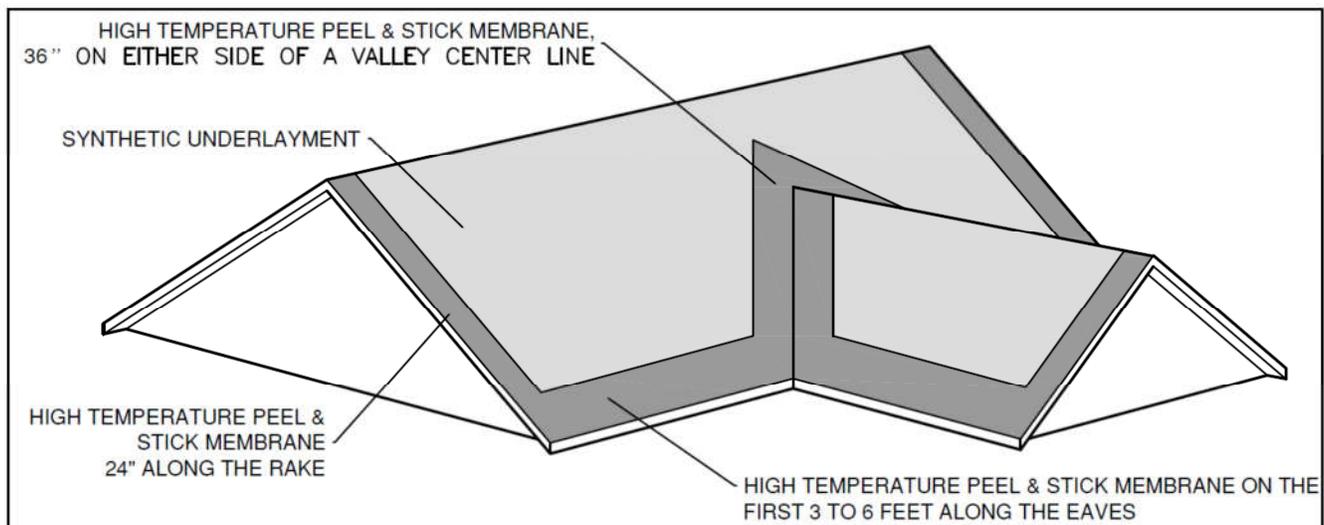
The type of required support depends on the metal roofing product. Roll formed products such as Ameri-Cana, Pocket Rib, Security Rib, and H-F are structurally able to carry reasonable loads, thus they can either be installed over wood strapping or solid backing.

However, certain products such as the Junior H-F panels and stamped individual pieces such as Wakefield Bridge steel shingles and Monteciano steel tiles can only be installed over solid backing.

The spacing of the strapping can vary depending on local snow loads, shape of the roof, and the capacity of the roofing panel determined by its profile and gauge which are indicated in load tables available on our website. You may also consult our technical department for more information.

What membranes or underlayment are required underneath the panels?

On a new construction, all roofing products can be installed directly over the deck using the appropriate underlayment. Use high quality ice and water shield on the first 3 to 6 feet from the eaves, 24" around the perimeter and 36" on each side of the valley (see image below). On the remainder of the roof, synthetic underlayment is required. Consult the roof membrane supplier for the appropriate product underneath the steel roof.



On unheated buildings with no solid backing, most roll formed roofing products can be installed over wood strapping solidly fastened to the rafters. If such buildings are heated, an underlayment such as the CondensStop™ for the Ameri-Cana can be beneficial to prevent possible condensation from dripping down and damaging the insulation.

Can roofing panels be installed directly over existing shingles?

Ideal Roofing highly encourages the complete removal of existing asphalt shingles. This gives an opportunity to assess the state of the roof structure. After removing existing shingles, inspect and replace any rotten wood and then use the appropriate ice & water shield membrane and synthetic underlayment.

If the existing shingles are to remain, some of the following precautions should be taken:

- Inspect the deck underneath to ensure a solid base.
- Make sure no nails protruding from the existing roof that might telescope through the new steel roof.
- Correct or remove curled up shingles.
- Cut off any overhanging material flush with the fascia and remove all moss and other debris from the roof and then, install a synthetic underlayment.

Roll formed panels should be installed over wood strapping solidly fastened over the shingles.

To achieve good and proper installation, it's important to plan and choose the proper kind of steel roofing product suitable for the roof in question.