

## **Backing Substrate under Steel Roofing Panels**

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?

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

On the other hand, stamped individual pieces such as Wakefield Bridge steel shingles and Monteciano steel tiles can only be installed over solid backing.

On a new construction, all roofing products can be installed directly over the deck using the appropriate underlayment. Use high temperature 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. On the remainder of the roof, synthetic underlayment is required.

On unheated buildings with no solid backing, most roll formed roofing products can be installed over wood strapping solidly fastened over the shingles. If such buildings are heated, underlayment (CondenStop<sup>TM</sup> for AMC) can be beneficial to prevent possible condensation from dripping down and damaging the insulation.

For retrofit application, over existing asphalt shingles, roll formed panels should be installed over wood strapping solidly fastened over the shingles. The deck underneath needs to be inspected and must be sound. In the event that these panels are installed directly over the existing shingles, some precautions need to be taken.

- Inspect the deck underneath to ensure a solid base.
- Remember you are installing steel shingles that will last 40 years. The deck must be sound!
- 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.

Ideal Roofing highly encourages the complete removal of existing asphalt shingles. Inspect and replace any rotten wood then use the appropriate ice & water shield membrane and synthetic underlayment.

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.