# TITANIUM<sup>®</sup> PSU30

### Self Adhered Underlayment

## **PSU30 INSTALLATION INSTRUCTIONS**

Titanium<sup>®</sup> PSU30 is designed as a secondary water barrier for use on steep slope roofs (2:12 or greater) under asphalt shingles, composite shingles, metal, concrete and clay tile, slate, and wood shakes. Titanium<sup>®</sup> PSU30 may also be used on slopes down to ½:12 under standing seam metal roof panels, and lapped, nonsoldered-seam metal roofs with applied lap sealant.

#### CAUTION

Read and understand all instructions and precautions before applying Titanium<sup>®</sup> PSU30 underlayment. Check local building codes prior to application of this product. Follow the recommendations of the roof covering manufacturer, Asphalt Roofing Manufacturer's Association (for asphalt shingles), Tile Roof Institute (for clay or concrete roof tiles), and the Metal Roofing Alliance (for metal roof panels).

#### DECK PREPARATION

Titanium<sup>®</sup> PSU30 underlayment should be applied on roofs having slopes of 2:12 or greater except as noted above. This product can be applied on new construction or when re-roofing, provided existing roofing has been removed. The deck must be clean, smooth and dry before applying Titanium<sup>®</sup> PSU30 underlayment. Remove all old roofing down to the deck or, in new construction, apply over the new deck. Sweep the deck surface to remove dirt and debris. Replace any damaged or rotted deck boards.

#### **Deck Edge Preparation**

Along eaves, install metal drip edge under the Titanium<sup>®</sup> PSU30 underlayment unless otherwise directed by local building codes. Along rakes, apply Titanium<sup>®</sup> PSU30 underlayment first, and put drip edge on top.

#### For Tile Roof Applications

Please see the table below for tile loading limitations. Loading of tile outside the parameters of this table requires installation of loading battens prior to tile loading.

#### Tile Loading Table

| Stacking<br>Pattern | Tile<br>Type      | Maximum<br>Roof Pitch |
|---------------------|-------------------|-----------------------|
| 10 Linear           | Flat              | 5:12                  |
| 10 Linear           | Profiled          | 6:12                  |
|                     | Pattern 10 Linear | Pattern Type          |

Note: When installing Titanium<sup>®</sup> PSU30 underlayment over the entire roof deck, proper ventilation is required. Consult a design professional and local building codes for ventilation requirements.

#### For Metal Panel Applications

#### Slopes 2:12 and greater

Follow standard installation instructions below

#### Slopes 1/2:12 - less than 2:12

Follow standard installation instructions below with the following modifications: End Laps must be min. 6 feet apart in adjacent courses. All end laps must be minimum 6 inches wide. Apply min. 6 inch wide bed of ASTM D4586 compliant roof cement at end of underlying piece and set overlying piece into roof cement, applying firm pressure on entire end lap.

#### INSTALLATION

- 1. Ensure that decking substrate is acceptable to roof covering manufacturer.
- 2. Unroll Titanium<sup>®</sup> PSU30 underlayment and cut into manageable lengths no more than 15 20 feet.
- 3. Allow it to relax for 3-5 minutes before installing.
- 4. Reroll each section.
- 5. Start at the eaves, laying the Titanium<sup>®</sup> PSU30 parallel to the eaves edge, with the lower edge of the Titanium<sup>®</sup> PSU30 flush with the outside of the primed drip edge. The lower edge of the underlayment is the edge that does not have a selvage edge.
- 6. After installation of each piece, remove the release lining from the selvage and, if necessary, secure with nails installed in the selvage spaced 6 inches on center. This fastening is required when Titanium<sup>®</sup> PSU30 is installed on slopes of 3:12 or greater. Consult local building codes for fastener requirements.

- 7. The entire roof surface should be rolled after installation of the Titanium<sup>®</sup> PSU30 using a minimum 40 lb. roller. Hand rolling over the selvage and directly above the selvage using a minimum 4 inches wide, minimum 10 lb. roller is recommended.
- 8. Overlap at least 6 inches when the ends of two rolls meet. To ensure good adhesion at the end lap, apply a minimum 6 inches width of a solvent-based asphaltic primer that complies with ASTM D41 across the width of the sheet using a roller, brush, or aerosol primer. As an alternative, asphalt roof cement that complies with ASTM D4586 may be used, approximately 1/8 inch thick (excessive roof cement can have an adverse reaction to the product). Apply heavy hand pressure or use a roller along the seam overlapping the next roll.
- 9. End laps should be offset a minimum of 6 feet on adjacent courses.
- 10. Along a valley, Titanium<sup>®</sup> PSU30 underlayment can be cut lengthwise for easier handling. For maximum protection, the roll width should remain intact and extend 18 inches on either side of the valley. Remove the release backer and press Titanium<sup>®</sup> PSU30 underlayment into place, working from the center of the valley or ridge outward in each direction. Always apply valleys starting at the low point and work upward. If an overlap is needed, be sure to overlap the previous piece by minimum 4 inches. Titanium<sup>®</sup> PSU30 underlayment should be applied in valleys before installing eave applications with membranes.

For further detail on various installation methods, please call 1-800-ROOFING (1-800-766-3464)

#### PRECAUTIONS

- 1. Cover Titanium<sup>®</sup> PSU30 underlayment with finish roof covering. Do not allow Titanium<sup>®</sup> PSU30 underlayment to remain uncovered. Exposure to sun and weather for more than 180 days may adversely affect this product's performance.
- 2. Titanium<sup>®</sup> PSU30 underlayment should be installed by a professional roofing contractor.
- 3. Titanium<sup>®</sup> PSU30 underlayment is a moisture and vapor barrier. The spaces under the covered deck area and the attic space must be ventilated in accordance with local building codes.
- Titanium<sup>®</sup> PSU30 underlayment is intended for exterior roof application only and is not intended for use on vertical surfaces.
- Apply Titanium<sup>®</sup> PSU30 underlayment directly to the wood deck. Do not apply any underlayment beneath Titanium<sup>®</sup> PSU30 unless required to do so by local codes.
- Roof coverings should not be installed over wrinkled or buckled Titanium<sup>®</sup> PSU30 underlayment.
- 7. Use extreme caution when installing Titanium<sup>®</sup> PSU30 underlayment. The Titanium<sup>®</sup> PSU30 underlayment surface may be slippery even when dry. Use of fall protection is highly recommended. Consult OSHA for guidelines on fall protection (29 CFR 1926.500).
- 8. For best results, apply Titanium® PSU30 underlayment when the air temperature is over 40°F (5°C) and rising, but below 100°F (38°C). When temperatures are under 40°F (5°C), Titanium® PSU30 underlayment will not fully adhere. Store at room temperature prior to installing product in cold weather. If applied in temperatures above 100°F (38°C), or exposed to direct sunlight, the release backing may become difficult to remove. If this situation should occur, move the product into a shaded area until the Titanium® PSU30 underlayment is cool. Once cooled, the release backing can be easily removed.
- Store Titanium<sup>®</sup> PSU30 underlayment in a dry, well-ventilated area. Stand Titanium<sup>®</sup> PSU30 underlayment upright. Do not store at 90°F (32°C) or warmer for extended periods of time. Do not store in direct sunlight.
- 10. When applying Titanium<sup>®</sup> PSU30 underlayment, always follow local building codes and the roof covering manufacturer's instructions for installation of this product.
- 11. When working on the roof, use all necessary safety precautions and guidelines in accordance with proper roofing trade practices.

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