TW UNDERLAYMENT Self-adhering roofing underlayment



WATERPROOFING PRODUCTS BEGIN TO AGE AS SOON AS THEY ARE EXPOSED TO NATURE. BUILDINGS EXPERIENCE AGING FACTORS DIFFERENTLY, SO IT IS DIFFICULT TO PREDICT HOW LONG WATERPROOFING PRODUCTS WILL LAST. THAT'S WHY TAMKO PROVIDES A LIMITED WARRANTY FOR MANY PRODUCTS, THAT INCLUDES A BINDING ARBITRATION CLAUSE AND OTHER TERMS AND CONDITIONS WHICH ARE INCORPORATED HEREIN BY REFERENCE. YOU MAY OBTAIN A COPY OF THE LIMITED WARRANTY AT TAMKO.COM OR BY CALLING 1-800-641-4691.

WARNING: Use of this product in an assembly that includes polyurethane foam insulation (including without limitation an application directly to the underside of a roof deck or within a wall assembly) may cause premature degradation or failure of this product. We are investigating compatibility of polyurethane foams with our asphalt building products. Chemical incompatibility, off-gassing after application and excess heat during and after application of polyurethane foams may affect the performance of asphalt and modified asphalt building products and metal fasteners used with those products.



IMPORTANT SAFETY INFORMATION: Do not install until all appropriate safety precautions have been read and understood. The TAMKO Safety Data Sheet (SDS) is available at <u>tamko.com/sds</u>. Always use appropriate fall protection equipment and wear appropriate personal protective equipment (PPE) when working with this product. Moisture, frost, debris or other material will decrease the traction and can cause slippery conditions when walking on the product. **Applicator safety is of utmost importance**.

THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR ROOFING CONDITIONS DESCRIBED. TAMKO BUILDING PRODUCTS LLC ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS. FAILURE TO FOLLOW THESE INSTRUCTIONS WILL ADVERSELY AFFECT COVERAGE UNDER THE LIMITED WARRANTY AND ARBITRATION AGREEMENT. SEE THE LIMITED WARRANTY FOR DETAILS.

CHECK LOCAL BUILDING CODES TO DETERMINE SUITABILITY OF THIS PRODUCT FOR YOUR INTENDED USE.

INFORMATION INCLUDED IN THESE APPLICATION INSTRUCTIONS WAS CURRENT AT THE TIME OF PRINTING.TO OBTAIN A COPYOF THE MOST CURRENT VERSION OF THESE APPLICATION INSTRUCTIONS, VISIT US ONLINE AT WWW.TAMKO.COM OR CALL US AT 1-800-641-4691. BEFORE INSTALLING TW UNDERLAYMENT UNDER COPPER ROOFING, A DESIGN PROFESSIONAL MUST BE CONSULTED TO ANALYZE THE INTERACTION OF THE BUILDING, ROOF DECK, AND ROOF ASSEMBLY WITH REGARDS TO ADEQUATE TEMPERATURE RESISTANCE.

TW Underlayment should not be applied on roof decks over unventilated spaces or where spray foam insulation has been applied directly to the underside of the roof deck; doing so may result in premature degradation or product failure. A vapor retarding layer may result when TW Underlayment is installed over an entire roof deck. Design of the entire roof system and the area immediately beneath the roof deck (e.g. attic, plenum, conditioned space) to properly address potential moisture and heat accumulation is the responsibility of a design professional (e.g. architect, engineer) and the building owner. Specific ventilation requirements expressed in applicable building codes or necessitated by the roof covering may apply and should be considered.

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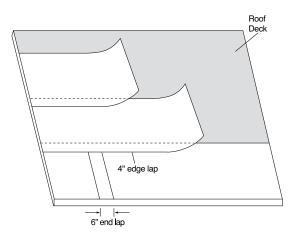


SURFACE PREPARATION

To begin, remove any dust, dirt, loose nails or other protrusions from the deck of new roofs. Remove all shingles, roofing felt, nails, or other existing roofing materials and debris from the deck of existing roofs. Sweep thoroughly to remove any dust and dirt. Apply TW Underlayment only in fair weather and when air, substrate, and membrane are at temperatures of 40°F or higher. Primer is generally not required for surfaces that are smooth, clean, and dry. In any case where adhesion is found to be marginal, prime with TWP-1 Adhesive Primer or TWP-2 Water-Based Adhesive Primer at the designated coverage rates. Priming is always required when adhering to concrete.

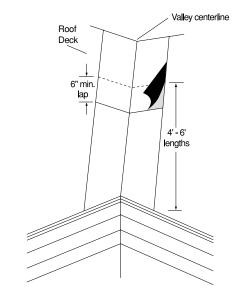
FOR ROOF DECKS

Apply TW Underlayment from low to high point shingle fashion as shown below, so that laps will shed water. Overlap edge seams 4". End seams should be overlapped 6" and staggered. Where necessary, the membrane may be unrolled and cut into 10-to-15 foot lengths. Align the membrane. Peel off 6" to 12" of release film from one end and adhere that portion of the membrane using a heavy hand pressure. Continue to remove the release film from the membrane using an industrial flat broom or squeegee. Utilize sufficient pressure with the broom to promote adhesion to the substrate. Care must be taken not to damage the membrane when brooming.



FOR VALLEYS AND RIDGES

Where necessary, the membrane may be unrolled and cut into 4-to 6-foot lengths. Peel the release film, center and drape the sheet over the valley or ridge as appropriate. Adhere the sheet by hand, pressing and working from the center of the valley or ridge outward in each direction, then broom the sheet into place to promote the adherence to the substrate. For valleys, apply the membrane starting at the lowest point and work upward. Overlap all sheets a minimum of 6". The TW Underlayment should be used on "closed valley" applications only. TW Underlayment should not be left permanently exposed to the weather. It must be covered by roofing materials.



APPLICATION WITH ROLL LENGTH PARALLEL TO THE ROOF SLOPE

TW Underlayment may be applied with the long dimension of the roll running parallel to the roof slope in situations where the roof slope equals or exceeds 21" per ft. In these applications, side laps must be a minimum of 4" wide. All side and end laps must be rolled with a roofing seam roller in addition to brooming the entire surface.

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REPAIRING MINOR DAMAGE TO TW UNDERLAYMENT

Patch Repair: Minor damaged areas of TW Underlayment that are no larger than 4" by 4" in size (e.g. tears, holes, fishmouths and delaminations) can be repaired by installing a patch of TW Underlayment extending a minimum of 12" beyond the damaged area on all sides.

End Lap Repair: Loose end laps no wider than 4" can be repaired by cutting and removing the loose material and applying a patch that extends 12" beyond the area on all sides. Limitations stated previously in the Product Data Sheet still apply when conducting repairs.

A patch repair or an end lap repair must begin with removal of dust, dirt and other materials that my interfere with adhesion from the area receiving the patch. Sweep the area to receive the patch with a stiff nylon bristle broom, making sure all loose material is removed from the area to receive the patch. Remove or cut non-adhered, torn or otherwise damaged membrane as necessary, creating a fully-adhered surface to receive the patch. The underlying substrate must not be damaged while performing a patch repair or an end lap repair.

In areas where available, prime the entire area receiving the patch with TWP-1 Adhesive Primer at the recommended application rate to enhance adhesion (refer to the primer's application instructions on the label or product data sheet available at tamko.com). Allow the primer to cure prior to installation of the TW Underlayment patch.

Install the TW Underlayment patch. Apply sufficient pressure using a broom or roofing seam roller to promote adhesion to the underlying material. Seal the edges of the patch by applying a bead of compatible polyurethane sealant; smooth the bead with a trowel. Select a sealant suitable for use with SBS modified asphalt per the sealant manufacturer's written application instructions.