

TW-60

SHEET WATERPROOFING MEMBRANE

BUILDING 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 BUILDING PRODUCTS WILL LAST. 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 continue to evaluate 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 tamko.com/sds. 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.**

THIS PRODUCT IS COVERED BY A 5-YEAR LIMITED WARRANTY AND ARBITRATION AGREEMENT. FOR INFORMATION REGARDING OR A COPY OF TAMKO'S LIMITED WARRANTY, VISIT US ONLINE AT TAMKO.COM, OR CALL US AT 1-800-641-4691.

THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR TW-60. 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.

INFORMATION INCLUDED IN THESE APPLICATION INSTRUCTIONS WAS CURRENT AT THE TIME OF PRINTING. TO OBTAIN A COPY OF THE MOST CURRENT VERSION OF THESE APPLICATION INSTRUCTIONS, VISIT US ONLINE AT WWW.TAMKO.COM OR CALL US AT 1-800-641-4691.

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SURFACE PREPARATION

Acceptable substrates include concrete, masonry, wood, metal, expanded/extruded polystyrene or insulated concrete forms. All surfaces must be dry, clean, and free from surface irregularities. Refer to the following sections for additional requirements for specific surfaces.

TAMKO® TW-60 must not be left exposed to sunlight for more than 30 days. Membrane must be applied when air, substrate, and membrane temperatures are above 40 °F. Not intended for use on roofs or prolonged exposure to temperatures above 160 °F.

CONCRETE

The surface must be dry and have a smooth (not broomed) finish and be free of form release agents, voids and sharp protrusions. Forms should be removed as quickly as possible. On a horizontal deck do not apply membrane when forms are in place, unless the forms are vented. Concrete should be allowed to cure for a minimum of 7 days before application of the sheet membrane. Curing agents containing wax, oil, or pigment should not be used. Any holes or voids must be repaired with non-shrink grout. Cracks greater than 1/16" in width shall be cut out to a minimum of 1/4" wide with a minimum depth of 1/4" and sealed using a sealant suitable for use with rubberized asphalt per sealant manufacturer, prior to the installation of the sheet membrane. **Note: Masonry surfaces must have a thorough parge coat and mortar joints must be flush to the face of the concrete block or brick, and have a thorough parge coat.**

EXPANDED/EXTRUDED POLYSTYRENE (EPS/XPS) OR INSULATED CONCRETE FORMS (ICF)

Ultraviolet radiation in sunlight causes a rapid deterioration of the surface of these materials which can create a chalky or dusty layer which could interfere with membrane adhesion. If this occurs, or if the surface is dirty, brush off all dirt and dust to provide a clean dry surface for the application of the membrane. Joints and voids in the surface over 1/4" wide should be filled with non-shrink grout, expandable foam or compatible crack filler.

PRIMING

Priming is required on concrete, masonry, metal, EPS/XPS and ICF surfaces. Priming may not be necessary on wood that is clean and dry. Apply TAMKO® TWP-1 Adhesive Primer[†] as appropriate for the surface to be primed. Thoroughly mix the primer. Apply at recommended coverage rates with a sprayer or long nap roller and allow drying as specified on the primer's product data sheet. Drying times will vary with weather conditions. Warning: DO NOT USE TAMKO® TWP-1 Adhesive Primer[†] or products containing solvents on EPS/XPS or ICF surfaces.

[†]WARNINGS AND HAZARDS

TAMKO® TWP-1 Adhesive Primer contains combustible solvents. Avoid exposure to sparks, open flame, heat, and other forms of ignition. Use in well-ventilated areas. Avoid breathing vapors. Refer to SDS for detailed product information and warnings. SDS information is available at tamko.com, or by calling TAMKO's Technical Services Department 1-800-641-4691.

FLASHING

All penetrations and drains must be flashed with TW-60, extending the membrane a minimum of 6" on all sides. All cracks and joints must be sealed with a sealant suitable for use with rubberized asphalt per sealant manufacturer, and flashed with a strip of TW-60 membrane centered on the crack and extending a minimum of 6" beyond the crack on all sides.

HORIZONTAL APPLICATION

Starting at the low point of the surface and working to the high point, install TW-60 by simultaneously rolling the sheet into place while removing the release film. Side laps should be a minimum of 2 1/2", and end laps should be a minimum of 5". Stagger all end laps. All edges terminating on a surface other than TW-60 should be sealed with TWM-1 Mastic or another compatible termination sealant. Roll the entire membrane as soon as possible with a minimum 75 lb. hard-surface or rubber-faced roller.

BALCONY AND BREEZEWAY

When using TW-60 as a waterproofing membrane for balconies and breezeways, roll membrane with a suitable hard-surface or rubber-faced roller. Incorporate proper drainage to prevent standing water by building in positive slope away from the wall. In situations where use of adequate slope to ensure drainage is not a feasible design option, install TW-60 with a minimum 5" lap at all junctions, thoroughly roll all laps, and seal all terminating edges with a sealant suitable for use with rubberized asphalt per sealant manufacture. Alternatively, install TW-60 with a minimum 8" lap at all junctions and thoroughly roll all laps.

VERTICAL APPLICATION

Install TW-60 in lengths of 8' or less. Overlap edge seams a minimum of 2 1/2". On walls greater than 8', apply in 8' sections, starting at the lowest point with the higher section overlapping the lower section a minimum of 5". Use heavy hand pressure or a suitable roller to press membrane firmly against wall and to seal all overlaps.

TERMINATIONS

CONCRETE OR MASONRY SURFACES

TW-60 to be installed over the top of a wall or over the edge of a slab. If the membrane must terminate on a vertical surface, use a reglet, termination bar, or counter flashing. Press terminating edge firmly with a hammer handle, roller, or similar tool. Apply TWM-1 Mastic or another compatible termination sealant to all edges terminating on a surface other than TW-60.

TW-60 shall be installed on the base of the foundation wall, over the edge of the footing and the terminating edge pressed firmly against the vertical surface of the footing. Apply TWM-1 Mastic or another compatible termination sealant to all terminating edges including both vertical and horizontal.

Note: Failure to use adequate pressure at terminating edges will result in poor seal, potential leaks and may affect coverage under the limited warranty. The use of a terminating sealant is not a substitute for a good membrane seal.

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EPS/XPS AND ICF SURFACES

Press terminating edge firmly with a hammer handle, roller or similar tool. Apply a thick (min 3/8") bead of sealant suitable for use with rubberized asphalt and EPS/XPS and /or ICF per sealant manufacturer, at the termination of the waterproofing membrane and smooth with a putty knife to seal the termination. Use a non-deteriorating termination bar or counter flashing at the head of the waterproofing membrane.

Warning: DO NOT USE TWM-1 MASTIC ON EPS/XPS OR ICF SURFACES.

MEMBRANE PROTECTION

Protection of TW-60 on vertical and horizontal surfaces is required immediately after installation with an appropriate protection course as designated in this section. For balcony and breezeway installations, use of protection course is not required.

Where membrane protection is required in TAMKO's application instructions, another manufacturer's protection course designed for the intended application (horizontal and/or vertical) may be used in conjunction with TAMKO's TW-60, provided the minimum requirements shown below are satisfied.

PROTECTION COURSE MINIMUM REQUIREMENTS

Asphalt composition boards used as protection course shall comply with ASTM D6506 Standard Specification for Asphalt Based Protection Board for Below-Grade Waterproofing.

Cellular polystyrene insulation used as protection course shall comply with ASTM C578 Standard Specification for Rigid, Cellular Polystyrene Insulation, Types IV, V, VI, VII, X, or XII.

Fan-folded extruded polystyrene insulation used as protection course shall have compressive strength exceeding 15 psi when tested in accordance with ASTM D1621 Standard Method for Compressive Properties of Rigid Cellular Plastics and maximum water absorption of 0.4% when tested in accordance with ASTM C272 Standard Test Method for Water Absorption of Core Materials for Sandwich Constructions.

Plastic drainage panels used as protection course shall have puncture strength exceeding 50 lbs. when tested in accordance with ASTM D4833 Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products.

BACKFILL

Backfill must be clean fill with no rocks, pails, wood or other debris. After backfill is in place, it must be tamped with a tamper to minimize settling after the first heavy rain, depending on soil properties.

REPAIRING MINOR DAMAGE TO THE TW-60 MEMBRANE

PATCH REPAIR

Minor damaged areas of TW-60 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-60 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.

A Patch Repair or an End Lap Repair must begin with removal of dust, dirt, and other materials that may interfere with adhesion from the area receiving 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.

Install the TW-60, applying sufficient pressure by hand or with a suitable roller to promote adhesion to the underlying material. Seal the edges of the patch by applying a 1/4" to 3/8" bead of TWM-1 Mastic or another compatible termination sealant; smooth the bead with a trowel.

INSTALLATION OF TW-60 OVER A PREVIOUSLY INSTALLED LAYER OF TW-60

A second layer of TW-60 may be applied over an existing layer of TW-60 provided that appropriate surface preparation of the existing material is successfully accomplished.

As required for direct installation to a substrate, the surface of the existing layer must be free of dust, dirt and other materials or conditions that could interfere with adhesion of the second layer. Irregularities in the installed TW-60 must be corrected prior to installation of second layer; this includes removing or cutting non-adhered, torn or otherwise damaged membrane or surface film. Take care to prevent damage to underlying substrates, such as insulated concrete forms, with these types of corrections. Side and end laps of the second layer must not coincide with side and end laps of the first layer.

The decision for surface suitability of the first layer is subjective and rests with the applicator; TAMKO assumes no responsibility for improper application of the first or second layer, including improper application due to poor adhesion from an improper surface.

Upon installation of a second layer of TW-60, the first layer of TW-60 is recognized as part of the assembly substrate and considered "sold AS IS" and without warranty of any kind.

Failure to properly apply TAMKO® TW-60 according to the Application Instructions may affect coverage under the applicable 5-year Limited Warranty and Arbitration Agreement.