

TAMKO® TW-60

Self-Adhering Sheet Waterproofing Membrane

PRODUCT DATA

DESCRIPTION

TAMKO® TW-60 is a flexible, self-adhering rubberized asphalt sheet membrane with a polymer film on the surface and a removable treated release film on the adhesive side.

USES

TW-60 is especially well suited for below-grade waterproofing of foundation walls, tunnels, earth shelters, and similar structures. TW-60 is also suitable for waterproofing plaza decks, parking decks, balconies, and terraces.

ADVANTAGES

- Excellent tensile, elongation, and permeance characteristics.
- Rubberized asphalt sheet and polymer surfacing provide superior waterproofing protection.
- Treated release film for easier installation and handling.
- Available in factory pre-cut widths of 6", 9", 12", 18", and 39-3/8" rolls.
- High temperature resistance up to 240°F.
- ICC-ES Legacy Report ER-5943.

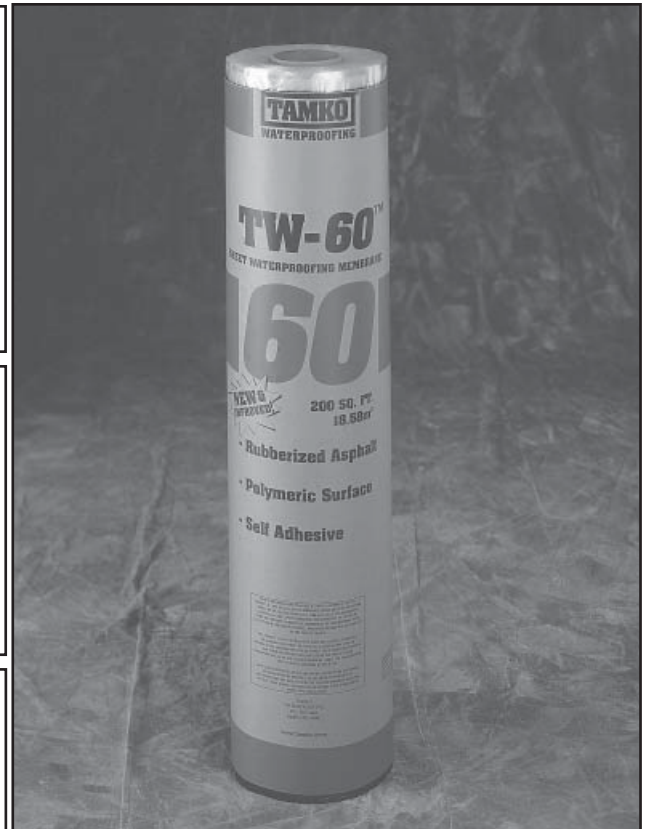
LIMITATIONS

- Membrane or primer should not be applied to damp, frosty or contaminated surfaces.
- Membrane should not be left exposed to sunlight for extended periods of time.
- Membrane should not come into contact with products containing coal-tar pitch.
- Best applied between the temperatures of 35°F and 90°F.

PRODUCT DATA*

Asphalt Modifier	SBS
Roll Size (200 sq. ft.)	39-3/8" x 61'
Product Thickness	60 mil

*All values stated as nominal at time of manufacture.



TYPICAL PHYSICAL PROPERTIES

Property	Test Method	Typical Value
Tensile, Membrane	ASTM D 412 (C)	425 psi
Tensile, Film	ASTM D 882	6300 psi
Elongation**	ASTM D 412 (C)	600% (min.)
Permeance	ASTM E 96 (BW)	0.05 perms (max.)
Low Temp. Flexibility	ASTM D 1970 (modified) ¹	Unaffected @ -20°F
Crack Cycling (100 cycles)	ASTM C 836	Unaffected @ -15°F
Peel Strength	ASTM D 903	9.0 lb/in. width (min.)
Lap Adhesion	ASTM D 1876	5.5 lb/in. width
Puncture Resistance	ASTM E 154	60 lb. (min.)
Hydrostatic Head	ASTM D 5385	231 ft. (min.)
Resistance to Soil Organisms (Fungi)	ASTM E 154	No effect (Permeability)

**% of elongation to ultimate failure of rubberized asphalt membrane.

¹ Testing done using procedures in ASTM D 1970 with adhesive side away from the mandrel.

www.tamko.com

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Southeast District	2300 35th Street, Tuscaloosa, Alabama 35401	800-228-2656
Southwest District	7910 South Central Expressway, Dallas, Texas 75216	800-443-1834
Western District	5300 East 43rd Avenue, Denver, Colorado 80216	800-530-8868

TAMKO®
WATERPROOFING

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APPLICATION INSTRUCTIONS

SURFACE PREPARATION

The concrete surface should 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 or until dry. Curing agents containing wax, oil, or pigment should not be used.

Any holes or voids should be repaired with non-shrink grout. **Note: On masonry surfaces mortar joints should be flush to the face of the concrete block or brick and have a thorough parge coat.**

Cracks greater than 1/16" in width shall be cut out to a minimum width of 1/4" with a minimum depth of 1/4" and sealed using polyurethane sealant prior to the installation of the sheet membrane.

All penetrations and drains should be flashed with TW-60 membrane, extending the membrane a minimum of 6" on all sides. All cracks and joints should be sealed with a polyurethane sealant and flashed with a 12" wide strip of TW-60 membrane centered on the axis of the corners.

PRIMING

Prime the area to be sealed with TWP-1*** or TWP-2 primer, stir primer until thoroughly mixed. Apply primer at recommended coverage rates with a sprayer or a long nap roller. Primer should be allowed to dry a minimum of 1 hour, or until completely tack-free. Drying time may vary according to weather conditions.

HORIZONTAL APPLICATION

Starting at the low point of the surface and working to the high point, install TW-60 membrane by simultaneously rolling the sheet into place while pulling and rolling the release film. Side laps should be 2.5", and end laps should be 5". Stagger all end laps. All terminating edges should be sealed with TWM-1 Mastic. Roll the entire membrane as soon as possible with a minimum 75 lb. garden roller wrapped with indoor/outdoor carpet.

Before the application of a protection layer, all horizontal applications should be flood tested with a minimum 2" head of water for 24 hours. Check for leaks and make repairs immediately. Before flood testing be sure the structure is capable of withstanding the dead load of the water. Re-test after repairs have been made.

VERTICAL APPLICATION

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

Terminations: TW-60 sheet should 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 or counter flashing. Press terminating edge firmly with a hammer handle or equal. Apply TWM-1 Mastic to all terminating edges.

TW-60 Sheet Membrane 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 to the terminating edge.

Apply TWM-1 Mastic to all vertical and horizontal terminations.

Note: Failure to use adequate pressure at terminating edges will result in poor seal and potential leak. The use of mastic is not a substitute for a good seal.

EXPANDED / EXTRUDED POLYSTYRENE APPLICATION

Joints and voids in the surface over 1/4" should be filled with non-shrink grout or compatible crack filler. Use a 12-inch wide strip of TW-60 membrane centered over the inside and outside corners, and on all brick ledges. Roll TW-60 into place after installation to insure good adhesion. Termination's, T-joints, pipe and electrical penetrations should be sealed the same day with a single component urethane sealant.

Adhesion of the TW-60 membrane to clean, dry EPS is adequate without the use of primer. Please note that ultraviolet radiation in sunlight causes a rapid deterioration of the EPS surface which can create a chalky or dusty layer which can interfere with the membrane adhesion. If this occurs, or if the surface of the EPS is dirty, brush off the excess dirt and dust. Apply TAMKO TWP-2 Water-Based Primer at a rate of 1 gal per 400 - 600 square feet according to application instructions. Then apply membrane. Do not use products containing solvents with EPS forming system.

INSULATED CONCRETE FORM APPLICATION

When waterproofing ICF with TW-60 apply a thick (Min. 3/8") bead of acrylic sealant using a putty knife at the termination of the waterproofing. A wood or metal termination bar is required at the head of the waterproofing.

Back fill must be clean fill with no rocks, pails or wood. After back fill is in place, it must be tamped with a tamper to compress the fill.

MEMBRANE PROTECTION

Vertical surfaces should be protected immediately following installation of the membrane. Horizontal surfaces should be protected immediately following the 24 hour flood test. If the flood test is delayed, a temporary protection layer must be installed to protect the membrane from future operations and other trades. Back fill must be clean fill with no rocks, pails or wood. After back fill is in place, it must be tamped with a tamper to compress the fill.

***WARNINGS AND HAZARDS

TWP-1 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 MSDS for detailed product information and warnings.

CAUTION: The National Institute for Occupational Safety and Health (NIOSH) has concluded that fumes of heated asphalt are a potential occupational carcinogen. Do not burn this product.

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PRODUCT DATA

APPLICATION INSTRUCTIONS

(CONTINUED)

PROTECTION COURSES FOR USE WITH TAMKO'S TW-60 WATERPROOFING MEMBRANE

Horizontal Applications

TAMKO recommends the use of TAMKO TWH-1 Horizontal Protection Course in situations where membrane protection is required or recommended in TAMKO's application instructions. Another manufacturer's protection course that is designed for horizontal installations can be used in conjunction with TAMKO's TW-60 waterproofing membrane provided the minimum requirements shown below are satisfied.

Vertical Applications

For vertical applications where membrane protection is required or recommended in TAMKO's application instructions, another manufacturer's protection course that is designed for vertical installations may be used in conjunction with TAMKO's TW-60 waterproofing membrane, provided the minimum requirements shown below are satisfied.

Minimum requirements for protection courses used in horizontal and vertical applications

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 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 Test Method for Compressive Properties of Rigid Cellular Plastics and maximum water absorption of 0.4% when tested in accordance with ASTM C272 Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions.

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

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