

TAM-SHIELD™ SYNTHETIC UNDERLAYMENT

PRODUCT DATA

DESCRIPTION

TAM-SHIELD SYNTHETIC UNDERLAYMENT is a woven synthetic underlayment which incorporates high strength, skid resistance and tear resistance with the increased coverage and lightweight properties of synthetic underlayments.

USES

TAM-SHIELD SYNTHETIC UNDERLAYMENT is well-suited for use as an underlayment to be applied over the deck prior to the installation of the final roof covering. It also provides secondary protection for shedding water after installation of the roof system.

ADVANTAGES

- Light grey surface provides a cooler working surface than traditional felt
- Skid-resistant and tear resistant
- 10-square roll, lightweight, more coverage per roll than traditional felt underlayments.
- Lay lines and cap-nail locations printed on the underlayment for ease of install. Also includes additional high wind cap nail locations.
- U.L. Prepared Roofing Accessory label
- 25-year Limited Warranty*
- ICC-ES ESR-3237

LIMITATIONS

- Membrane must not be applied to damp, frosty or contaminated surfaces.
- Membrane installation must be limited to use with roof coverings that do not involve hot asphalt or coal-tar pitch.

PRODUCT DATA**

| | 31001770 | 31001771 |
|----------------------------|---------------------------------|---------------------------------|
| Roll Size† | 10 square (1000 sq.ft.) | 5 square (500 sq.ft.) |
| Roll Coverage†† | 937.50 sq.ft. (87.10 sq. m.) | 468.75 sq.ft. (43.55 sq. m.) |
| Roll Dimensions | 48" x 250' | 48" x 125' |
| Thickness | 6 mil | 6 mil |
| Rolls per 40" x 48" Pallet | 30 | 48 |

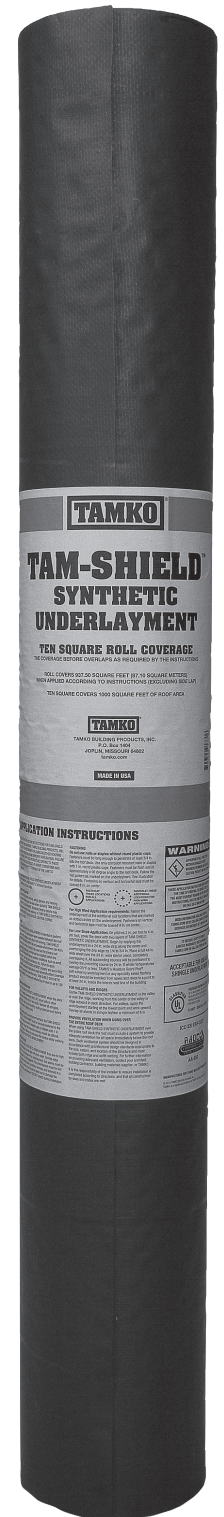
**All values stated as nominal

† The coverage before overlaps as required by the instructions.

†† When applied according to instructions (excluding side lap).

TYPICAL PHYSICAL PROPERTIES

| PROPERTY | TEST METHOD | TYPICAL VALUE |
|---------------------------|-------------------|---------------|
| Tear Resistance | ASTM D 1970 | 126 lbf. MD |
| | | 110 lbf. CD |
| Liquid Water Transmission | ASTM D 4869 | Pass |
| Tensile Strength | AC 48 Section 4.1 | 78 lbf/in. MD |
| | | 53 lbf/in. CD |
| Pliability | AC 48 Section 4.3 | Pass |



*See Limited Warranty for details. For information regarding a copy of TAMKO's Limited Warranty, contact your local TAMKO representative, visit us online at tamko.com, or call us at 800-641-4691.

tamko.com

Corporate

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TAMKO
BUILDING PRODUCTS

TAM-SHIELD™ SYNTHETIC UNDERLAYMENT APPLICATION INSTRUCTIONS

THESE ARE THE APPLICATION INSTRUCTIONS FOR TAM-SHIELD SYNTHETIC UNDERLAYMENT. TAMKO BUILDING PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR LEAKS OR OTHER ROOFING PROBLEMS RESULTING FROM IMPROPER APPLICATION. FAILURE TO PROPERLY APPLY THIS PRODUCT ACCORDING TO THESE INSTRUCTIONS COULD RESULT IN UNSAFE CONDITIONS AND COULD ADVERSLY AFFECT COVERAGE OF THE LIMITED WARRANTY.

SAFETY PRECAUTION

Personal fall protection devices, safety glasses and hearing protection should always be used when applying TAM-SHIELD SYNTHETIC UNDERLAYMENT. Moisture, frost or debris may decrease the traction while walking on TAM-SHIELD SYNTHETIC UNDERLAYMENT. PLEASE EXERCISE CAUTION DURING INSTALLATION.

USES

TAM-SHIELD SYNTHETIC UNDERLAYMENT is intended to perform the functions of an underlayment when installed between the roof deck and the shingles or other final roof covering. TAM-SHIELD SYNTHETIC UNDERLAYMENT will not prevent wind driven rain from entering the building nor should it be used as the primary roof covering. The final roof covering must be installed before the structure is exposed to adverse weather conditions, such as wind driven rain, high wind, hail, ice storms, etc. Failure to apply TAM-SHIELD SYNTHETIC UNDERLAYMENT properly and according to TAMKO's Application Instructions could adversely affect coverage under the applicable Limited Warranty. TAM-SHIELD SYNTHETIC UNDERLAYMENT is not adversely affected by UV rays for up to 180 days.

SURFACE PREPARATION

Apply TAM-SHIELD SYNTHETIC UNDERLAYMENT when the deck is dry. 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.

Before walking on the underlayment surface, the TAM-SHIELD SYNTHETIC UNDERLAYMENT must be securely fastened to the roof deck using corrosion-resistant nails or staples with 1 in. round plastic caps. Fall protection devices should be utilized. Moisture, frost or debris may decrease the traction while walking on TAM-SHIELD SYNTHETIC UNDERLAYMENT.

FOR ROOF DECKS

Apply TAM-SHIELD SYNTHETIC UNDERLAYMENT from low to high in shingle fashion so that laps will shed water. Overlap edge seams 3 in. as marked on the underlayment. End seams must be overlapped 6 in. and staggered. The underlayment must be laid out flat with printed side up without wrinkles and fastened to a smooth dry surface. Care must be taken not to damage the surface of the underlayment. DO NOT stretch during installation.

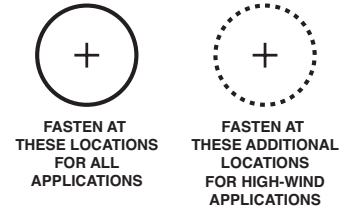


FASTENING

Do not use nails or staples without round plastic caps.

Fasteners must be long enough to penetrate at least 3/4 in. into the roof deck. Use only corrosion resistant nails or staples with 1 in. round plastic caps. Fasteners must be flush and at approximately a 90 degree angle to the roof deck. Follow the nail pattern as marked on the underlayment. See illustration for details.

Fasteners on vertical and horizontal laps must be spaced 8 in. on center.



For High Wind Application requirements: Fasten the underlayment at the additional nail locations that are marked as dotted circles on the underlayment. Fasteners on vertical and horizontal laps must be spaced 4 in. on center.

For Low Slope Application: On pitches 2 in. per foot to 4 in. per foot, cover the deck with two layers of TAM-SHIELD SYNTHETIC UNDERLAYMENT. Begin by applying the underlayment in a 24 in. wide strip along the eaves and overhanging the drip edge by 1/4 to 3/4 in. Place a full 48 in. wide sheet over the 24 in. wide starter piece, completely overlapping it. All succeeding courses will be positioned to overlap the preceding course by 24 in. If winter temperatures average 25°F or less, TAMKO's Moisture Guard Plus® self-adhering underlayment or any specialty eaves flashing product should be installed from eaves and rakes to a point to at least 24 in. inside the interior wall line of the building.

FOR VALLEYS AND RIDGES

Center TAM-SHIELD SYNTHETIC UNDERLAYMENT in the valley or over the ridge, working from the center of the valley or ridge outward in each direction. For valleys, apply the underlayment starting at the lowest point and work upward. Overlap all sheets in shingle fashion a minimum of 6 in.

PROVIDE VENTILATION WHEN USING OVER THE ENTIRE ROOF DECK

When using TAM-SHIELD SYNTHETIC UNDERLAYMENT over the entire roof deck the roof must include a system to provide adequate ventilation for all space immediately below the roof deck. Such ventilation system should be designed in accordance with architectural design standards appropriate to the size, nature, and location of the structure and must include both ridge and soffit venting. For further information on providing adequate ventilation, contact your architect, building contractor, building materials supplier, or TAMKO.

It is the responsibility of the installer to ensure installation is completed according to directions, and that all construction by-laws and codes are met.

For questions about TAM-SHIELD SYNTHETIC UNDERLAYMENT or its application, contact TAMKO's Technical Services Department at 800-641-4691.

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