



TRI-BUILT® SYNTHETIC UNDERLAYMENT

TRI-BUILT® Synthetic Underlayment is a highly engineered, coated woven protective layer for sloped roofs. TRI-BUILT® Synthetic Underlayment has a high strength design and durable nonwoven walking surface that delivers a considerable improvement over felt paper. The durable nonwoven walking surface has clearly marked nail guides and can be chalked just like felt paper.

Gain an edge in productivity and help increase profits. TRI-BUILT® Synthetic Underlayment is lightweight, 42 inch width and 286 foot run length allows for fewer laps, cuts, and easier roll handling compared to felt. This means you can do more jobs in less time, use less labor, and inventory fewer rolls.

TRI-BUILT® Synthetic Underlayment is up to 2x stronger than competitive underlayments. It offers exceptional wind resistance and durability through heavy roof traffic and adverse weather conditions. TRI-BUILT® Synthetic Underlayment can save you time and money with less material damage and fewer post-install repairs. Stay on track, take on more jobs, and sleep assured knowing your TRI-BUILT® Synthetic Underlayment projects will remain intact.

Unlike traditional asphalt-saturated felts, TRI-BUILT® Synthetic Underlayment can be used in extremely low temperatures without becoming stiff and difficult to unroll. It also does not dry out, crack, or leach oils in the heat like felt. TRI-BUILT® Synthetic Underlayment is 100% synthetic and will not absorb water or wrinkle like felt. It lays flat and does not support mold growth.

TRI-BUILT® Synthetic Underlayment can also be used in conjunction with Titanium® PSU30 self-adhered underlayments for ice damming protection along the eaves and in the valley areas.

TRI-BUILT® Synthetic Underlayment will continue to protect your primary roofing long after felt.

For use under Asphalt Shingles, Synthetic Shingles, Residential Metal Roofing and Cedar Shakes

TRI-BUILT® Synthetic Roofing Underlayment is manufactured exclusively for Beacon Sales Acquisition, Inc. by Owens Corning®. Product claims should be directed to Owens Corning at 1-800-ROOFING.



- Meets ASTM D226 Types I & II and D4869 Types II & IV
- Durable, slip-resistant walking surface
- 90 days UV exposure
- Up to 2x stronger than competitive underlayments*
- Easy to install – 42” wide lightweight rolls
- Synthetic construction is inert to mold growth
- Lays flat and does not absorb water and wrinkle
- Advanced backside non-slip coating
- Low temperature flexibility
- CAN/CSA A123.3
- CCRR-1067
- ASTM E108/UL790 Class A Fire Resistance (when installed under asphalt shingles)
- Texas Department of Insurance Listed
- Florida Building Code Approved (FL22259-R3)

Length per Roll:	286' / 87 m
Width per Roll:	42" / 1.1 m
Nominal Weight per Roll:	23.5 lbs / 10.6 kg***
Roll Size:	10 sq / 93 m ²
Rolls per Pallet:	67
Pallet Weight:	1,626 lbs / 738 kg

* Test data based on average of samples tested in accordance with ASTM 4533.

** See actual warrant for complete details, limitations and requirements.

*** Includes core weight.

TRI-BUILT® SYNTHETIC UNDERLAYMENT TECHNICAL DATA

Permeability ASTM E96	.05 Perms
Liquid Water Transmission ASTM D4869	Pass
Tear Strength ASTM D4533	MD 33 lbs (15 kg) CD 24 lbs (11 kg)
Tensile Strength ASTM D751	MD 88 lbs (40 kg) CD 70 lbs (32 kg)
Burst Strength ASTM D751	158 psi (1089 kPa)
Elongation ASTM D751	MD 20% CD 20%
Weight per Square ASTM D5261	2.25 lbs (1 kg)
Nominal Thickness ASTM D1777	7 mils (0.18 mm)
Service Range	-40 °F to 240 °F (-40 °C to 115 °C)

**** TRI-BUILT® Synthetic Underlayment is manufactured in accordance with national standards which allow for non-critical variances in weights and measurements. Test data is based on an average taken over several production runs and should not be considered or interpreted as maximum or minimum values. Values are typical data and not limiting specifications. All values ± 10%.

INSTALLATION INSTRUCTIONS:

TRI-BUILT® Synthetic Underlayment is a water and vapor barrier and therefore must be installed above a properly ventilated space(s). Follow ALL building codes applicable to your geographical region and structure type as it is considered a vapor barrier. Always follow safe roofing practices and OSHA safety requirements. Always wear and use fall protection devices when working on roofs.

Use caution when walking or standing on TRI-BUILT® Synthetic Underlayment in wet or dusty conditions that may reduce traction. Failure to use proper safety equipment and footwear can result in serious injury.

DECK PREP: TRI-BUILT® Synthetic Underlayment should be applied to a properly prepared dry deck that is smooth, clean and free from any depressions, projections, or protruding nails. Acceptable roof deck materials are minimum 3/8 inch plywood, minimum 7/16 inch OSB, or minimum 6 inch roof deck boards. Roof decks should be structurally sound and meet or exceed minimum requirements of the roof deck manufacturer and local building codes.

USE: TRI-BUILT® Synthetic Underlayment must be covered by primary roofing within 90 days of application. U20 is designed for use under asphalt or synthetic shingles, metal in residential applications, and cedar shakes that have been primed.

APPLICATION: Slopes from 4:12 and higher: TRI-BUILT® Synthetic Underlayment is to be laid out horizontally (parallel) to the eave with the printed side up. Horizontal laps should be 4 inches and vertical laps should be 6 inches and anchored approximately 1 inch in from the edge. End laps in a succeeding course should be located at least 6 feet from laps in the preceding course. Slopes 2:12 to less than 4:12: Cover the deck with two layers of TRI-BUILT® Synthetic Underlayment. Begin by fastening a 22 inch wide strip of TRI-BUILT® Synthetic Underlayment along the eaves with

the minimal fasteners need to hold the course in place. Place a full-width sheet over the 22 inch course and overlap each successive course by 50% plus 1 inch. Additional fasteners may be required in high-wind regions per local building codes. Vertical lap requirements are the same as 4:12 and higher slopes. Slopes less than 2:12: TRI-BUILT® Synthetic Underlayment is not recommended for use.

FASTENERS: Provided there is no rain or high winds, TRI-BUILT® Synthetic Underlayment can be anchored with staples, cap staples or corrosion resistant 3/8 inch head X 1 inch leg roofing nails (ring shank preferred, smooth leg acceptable), when covered with primary roofing on the same day. If TRI-BUILT® Synthetic Underlayment will not be covered on the same day and up to 90 days, then product must be attached to the roof deck using a minimum 1 inch diameter plastic or metal cap roof nail (ring shank preferred, smooth leg acceptable). Miami-Dade approved tin tags/metal caps are also acceptable, and it is recommended for best performance to use with the rough edge facing up. For extended exposure, it is required that TRI-BUILT® Synthetic Underlayment be anchored in all locations printed on the facer. Consult local building codes for fastener type and spacing requirements. For extended exposure conditions where driving rain or strong winds are expected, it is recommended to take additional precautions such as doubling the lap widths. Alternatively or in addition to, a compatible sealant could be used between the laps or a peel and stick tape could be applied to the overlaps.

ANCHORING: All anchoring nails must be flush, 90 degrees to the roof deck, and tight with the underlayment surface and the structural roof deck. Where seams and joints require sealant or adhesive, use a low solvent plastic roofing cement meeting ASTM D-4586 Type 1, or Federal Spec SS-153 Type 1 such as Karnak, Henry, DAP, MB, Geocel or equivalent. Acceptable alternatives are butyl rubber, urethane, and EDPM based caulk or tape sealant.