Synthetic Underlayment
Installation Instructions
MALARKEY SECURESTART™ INSTALLATION INSTRUCTIONS

Directions for Applying
Malarkey SecureStart™ Synthetic Underlayment

GENERAL INSTRUCTIONS
Install Malarkey's 1030 SecureStart™ Synthetic Underlayment (SecureStart™) underlayment according to adopted building code requirements. To qualify for applicable warranty protection and obtain stated coverage for the roofing system, these printed instructions must be followed.

We assume no responsibility for damage to the underlayment or water damage to the roof deck or building interior prior to installation of the finished roofing system, or for leaks due to improper application or failure to properly prepare the surface.

IMPORTANT
• ALWAYS wear fall protection when working on a roof.
• Underlayments can be slippery, particularly when wet or covered with frost. Be careful when walking on them.
• All material loaded on the surface of SecureStart™ should be blocked to prevent slippage.

PRODUCT DESCRIPTION
Product Use: SecureStart™ is a lightweight, extremely versatile, synthetic membrane suitable for use as a watertight underlayment or dry-in sheet under all steep slope roofing applications: asphalt shingles, roof tile, wood shakes, slate, and metal shingles and panels. SecureStart™ is also the preferred underlayment for installation over vented nail base.

Contact Malarkey’s Technical Services Department for help with the use of SecureStart™ at (800) 545-1191 or (503) 283-1191, weekdays 7:00 a.m. to 5:00 p.m., Pacific Time.

Composition and Materials: SecureStart™ is a synthetic underlayment manufactured with resins and polymers. It meets or exceeds the physical requirements of ASTM D226 Type I & II and ASTM D4869, and is engineered to perform in temperatures from -40°F to 240°F (-40°C to 116°C).

SecureStart™ has course lap guide lines (lay lines) imprinted on the material at 3" (76 mm), 22" (559 mm), 26" (660 mm) and 45" (1.1 m). (See Figure 1)

Precautions: SecureStart™ requires dry, well-ventilated storage and protection from the weather.

Roof decks should be sound, smooth (free of protrusions), and meet adopted building code requirements. Sweep dirt and debris from the roof deck.

Minimum approved slope is 2" (51 mm) per 12" (305 mm).

Install SecureStart™ with the printed-side up, and lay underlayment courses parallel to the eaves. Cut the material with straight edge blades or scissors; do not use hook blades.

SecureStart™ has a perm rating of less than 1 and is considered a Class II semi-permeable vapor retarder. To prevent harmful condensation beneath the roof sheathing, roof structures must be provided with thorough ventilation. FHA property standards require one square foot of free ventilation to each 150 ft² (1 m²/150 m²) of attic area or one square foot/300 ft² (1 m²/300 m²) if 50% is provided near the ridge.

Ventilation provisions must meet or exceed current FHA or HUD requirements and adopted building codes.

SecureStart™ is not intended as a permanently-exposed roofing surface but can be left uncovered for up to 180 days if necessary before the primary roof covering is installed. However, good roofing practice dictates the
finished roofing material be installed over underlayment as quickly as possible to minimize the chance of blow-off and/or leaks.

**APPLICATION**

**Drip Edge Flashing:** In accordance with 2015 International Building Code, Section 1507.2.9.3 and International Residential (Building) Code, Section R905.2.8.5, install non-corrosive, 26-gauge, sheet metal *drip edge flashing* (drip edge) along eave and rake edges.

Install drip edge with dimensions large enough to both position the top flange of the metal 2" (51 mm) back from the edge of the roof deck, and extend outward, down over the edge.

Apply drip edge first along the eaves, and lap the initial course of SecureStart™ over it. Once underlayment have been applied up to the ridge on that section of roof, follow by flashing the rakes (over the ends of the underlayment courses).

Secure with roofing nails, centered on the top flange at 8" (203 mm) to 10" (254 mm) on center, or per adopted local building code.

Begin application of the rake drip edge at the lower corner of roof near the eave, and work your way up, lapping subsequent lengths of flashing over the lower pieces by a minimum of 2" (51 mm). Be sure to overlap the eave drip edge, too.

**Underlayment Fastening Instructions**

The extent to which SecureStart™ must be fastened is determined by several factors, and our instructions address these:

- Your climate region and related wind speeds
- Performance expected of the underlayment should a blow-off of the primary roof covering occur
- Degree of roof slope
- How long the underlayment will remain exposed before the primary roof covering is applied
- Safety

Malarkey recommends plastic cap fasteners with a nominal cap diameter of 1" (25 mm). Do not use staples without caps.

**Limited Exposure:** In temperate weather conditions with expectation the SecureStart™ will only have limited exposure prior to application of the primary roof covering, install enough fasteners to hold the underlayment firmly in place in order to work safely (or per adopted building code) until shingles can be applied.

Circular imprints on the material labeled ALWAYS NAIL act as guides for this purpose. Fastener spacing is 12" (305 mm) O.C. on side laps and 24" (610 mm) O.C. down the center of the sheet.

**Extended Exposure:** For added leak protection in coastal regions, other areas of wind-driven rain or when SecureStart™ will be left exposed for an extended period of time prior to application of the finished roofing materials, additional imprints are provided.

ALWAYS NAIL and HIGH WIND circle spacing is 6" (152 mm) O.C. on side laps and 12" (305 mm) O.C. down the center of the sheet. *(See Figure 2)*

**Optional High Wind Installation:** In addition to *Extended Exposure* fastening, seal all laps with asphalt roof cement conforming to ASTM D4586 (or other approved sealants).

In all instances, *vertical end laps* in the same course should be 6" (152 mm), fastened every 6" (152 mm), and staggered 6' (1.8 m) apart in subsequent courses.

**Steep Slope Installation: 4:12 Slopes and Greater**

A single layer of SecureStart™ is all that’s required for slopes 4:12 (4" [102 mm] per 12" [305 mm]) and greater.

Install the initial, full-width course at the lowest point of the roof deck, flush to the rake and along the eave; overhang the eave drip edge ¼" - ⅝" (6-10 mm).

Continue working up the roof, subsequent courses overlapping at side laps a minimum of 3" (76 mm). Lay lines show how far to lap the material (see Figure 1).

Fasten as described above.

Extend SecureStart™ 6" (152 mm) over hips, ridges and valleys. At roof-to-wall transitions, lap the membrane a minimum of 3" (76 mm) up the vertical wall and fasten.

Once the top of that expanse of roof is reached, apply drip edge flashing to the rakes, over the ends of SecureStart™.
Low Slope Installation: 2:12 Slopes Up to 4:12
SecureStart™ is installed in a double layer for slopes 2:12 (2" [51 mm] per 12" [305 mm]) up to 4:12 (4" [102 mm] per 12" [305 mm]).

Begin with a starter course of half-width underlayment (24" [610 mm] wide), and apply at the lowest point of the roof deck, flush to the rake and along the eave; overhang the eave drip edge ¼" - ⅜" (6-10 mm).

Cover the starter course completely with a full-width sheet of SecureStart™, and continue working up the roof, overlapping subsequent courses at side laps a minimum of 26" (660 mm). A lay line indicating this distance shows how far to lap the material.

Fasten as described above. *(See Figure 3)*

![Figure 3 - Low Slope Installation](image)

Extend SecureStart™ 6" (152 mm) over hips, ridges and valleys. At roof-to-wall transitions, lap the membrane a minimum of 3" (76 mm) up the vertical wall and fasten.

Once the top of that expanse of roof is reached, apply drip edge flashing to the rakes, over the ends of SecureStart™.

Ice Dam Protection
In geographic regions that regularly experience ice dams along the eaves or if required by building code, an application of Malarkey Arctic Seal® 401 self-adhering underlayment (or equivalent underlayment conforming to ASTM D1970) is recommended. DO NOT USE SecureStart™ as the principal protection where ice damming is possible.

Arctic Seal® must be installed directly to a dry, clean roof deck on all eaves and rake sides of the roof and extend up the roof and beyond the inside, warm interior wall of the house a minimum of 24" (610 mm) or above the expected level of ice dams or according to building code requirements.

For more information, please refer to complete Arctic Seal® installation instructions at WWW.MALARKEYROOFING.COM.

With the Arctic Seal® in place, SecureStart™ can be used on the broad expanse of roof. Follow Low Slope Installation instructions, first lapping the starter course 6" (152 mm) over the last course of Arctic Seal® and then proceeding as indicated above.