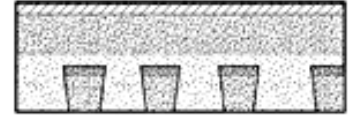


Technical Data Sheet

Landmark Solaris™ Impact Resistant Shingles



PRODUCT INFORMATION

The innovative technology of Landmark Solaris IR produces an impact resistant shingle that reflects solar energy. All colors are rated by Cool Roof Rating Council (CRRC) for cool roofs and meet California's Title 24 requirements for cool steep slope roofing. All Solaris IR colors have a Solar Reflectance (SR) of 0.25 or greater, thus complying with Energy Star® requirements and qualifying for the current federal tax credit for Energy Star qualified roofing products. Further, all Solaris IR colors have a Solar Reflective Index (SRI) of 29 or higher, which qualifies them for a USGBC LEED®-NC "point" under Urban Heat Island (Roofs). These shingles are available in "Metric" dimensions – 13 1/4" x 38 3/4". This product also features CertainTeed's NailTrak™ that offers a wider nailing area.

Landmark™ Solaris IR (Impact Resistant) shingles reflect the same high manufacturing standards and superior warranty protection as the rest of CertainTeed's line of roofing products, and they meet UL 2218 Class 4 Impact Resistance at time of manufacture. Landmark Solaris IR shingles are built on the industry's toughest fiber glass mat base, and have an added durable reinforcement on its underside to achieve the highest (Class 4) impact resistance. Complex granule color blends and subtle shadow lines produce a distinctive color selection.

Landmark Solaris IR shingles are algae resistant, and help protect against staining or discoloration caused by algae.

Colors: Please refer to product brochure or CertainTeed website for the colors available in your region.

Limitations: Use only on roofs with slopes greater than 2" per foot. Low-slope applications (2" to 4" per foot) require additional underlayment. In areas where icing along eaves can cause the back-up of water, apply CertainTeed WinterGuard™ Waterproofing Shingle Underlayment, or its equivalent, according to application instructions provided with the product and on the shingle package. For Class 4 impact resistance, Landmark Solaris IR shingles must be applied according to the instructions indicated below, in a new roof or tear-off application only, and *not* by "roofing-over" existing shingles.

Product Composition: Landmark Solaris IR shingles are composed of a fiber glass mat base. Ceramic-coated mineral granules with high solar reflectance are tightly embedded in carefully refined, water-resistant asphalt. Two pieces of the shingle are firmly laminated together in a special tough asphaltic cement. The backer shim contains an impact resistant reinforcement. All Landmark Solaris IR shingles have self-sealing adhesive strips.

Applicable Standards

ASTM D3018 Type I
ASTM D3462
ASTM E108 Fire Resistance: Class A
ASTM D3161 Class F Wind Resistance (110-mph)
ASTM D7158 Class H Wind Resistance
UL 2390/ASTM D6381 Class H Wind Resistance
UL 790 Fire Resistance: Class A
UL 997 Wind Resistance
UL 2218 Impact Resistance: Class 4

NYC-MEA-120-79-M
ICC Evaluation Report ESR-1389
CSA Standard A123.5-98 (& -05)
Ontario BMEC Auth. 97-10-219
Miami-Dade Product Control Approved
Florida Product Approval # FL5444
Energy Star Rated
CA Title 24, Part 6 (Cool Steep Slope Roofing)
USGBC LEED®-NC

Technical Data:

Weight/Square (approx.)	250 lb	Shingles/Square	66
Dimensions (overall)	13 1/4" x 38 3/4"	Weather Exposure	5 5/8"

Landmark Solaris Color Blend Name	CRRC Rated Initial SR	CRRC Rated Initial TE	CRRC Product ID No.	ASTM E408 Initial TE	Solar Reflective Index (SRI)*	Energy-Star Qualified
Max Def Burnt Sienna	0.26	0.91	0668-0053	0.95	29	YES
Max Def Resawn Shake	0.26	0.88	0668-0051	0.96	29	YES
Max Def Weathered Wood	0.26	0.90	0668-0050	0.95	29	YES

*Solar Reflective Index (SRI) is calculated by ASTM E1980, using TE data obtained by ASTM E408. Roofing shingles with SRI \geq 29 can qualify for a USGBC LEED@-NC Urban Heat Island point.

INSTALLATION

The following is a general summary of the installation methods. Detailed installation instructions are supplied on each bundle of Landmark Solaris IR shingles and must be followed. Separate application sheets may also be obtained from CertainTeed.

Roof Deck Requirements: Apply shingles to minimum 3/8" thick plywood, minimum 7/16" thick non-veneer (E.g. OSB), or minimum 1" thick (nominal) wood decks. The plywood or non-veneer decks must comply with the specifications of APA-The Engineered Wood Association.

Ventilation: Provisions for ventilation should meet or exceed current HUD Standards. To best insure adequate ventilation, use a combination of continuous ridge ventilation (using Ridge FilterVent manufactured by Air Vent Inc, or a comparable product with an external baffle) and balanced soffit venting.

Valleys: Valley liner must be applied before shingles. The Closed-Cut valley application method is recommended, using CertainTeed WinterGuard Waterproofing Shingle Underlayment or its equivalent to line the valley prior to being fully covered by the shingles.

Underlayment:

On slopes 4" per foot or greater, CertainTeed recommends one layer of DiamondDeck™ Synthetic Underlayment, or Roofers' Select™ High-Performance shingle underlayment, or shingle underlayment meeting ASTM D226, D4869 or ASTM D6757. Always ensure sufficient deck ventilation, and take particular care when DiamondDeck or other synthetic underlayment is installed. For UL fire rating, underlayment may be required. Corrosion-resistant drip edge is recommended and should be placed over the underlayment at the rake and beneath the underlayment at the eaves. Follow manufacturer's application instructions.

On low slopes (2" up to 4" per foot), one layer of CertainTeed's WinterGuard Waterproofing Shingle Underlayment (or equivalent meeting ASTM D1970) or two layers of 36" wide felt shingle underlayment (Roofers' Select High-Performance Underlayment or product meeting ASTM D226, D4869 or ASTM D6757) lapped 19" must be applied over the entire roof, ensure sufficient deck ventilation. When DiamondDeck or other synthetic underlayment is installed, weather-lap at least 20" and ensure sufficient deck ventilation. When WinterGuard is applied to the rake area, the drip edge may be installed under or over WinterGuard. At the eave, when WinterGuard does not overlap the gutter or fascia, the drip edge should be installed under WinterGuard. When WinterGuard overlaps the fascia or gutter, the drip edge or other metal must be installed over it. Follow manufacturer's application instructions.

Fastening (NailTrak™):

Low & Standard Slopes: On low and standard slopes, four nails are required per shingle. There are three nail lines on NailTrak shingles. Position nails vertically between the upper and lower nailing-guide lines. It is acceptable to nail between either the middle and lower lines or between the upper and middle lines. Nails must be of sufficient length to penetrate into the deck 3/4" or through the thickness of the decking, whichever is less. They are to be located 1" and 12" in from each side of the shingle (see instructions on product wraps.) Nails are to be 11 or 12 gauge, corrosion-resistant roofing nails with 3/8" heads.

Steep Slopes: On slopes greater than 21" per foot, fasten each shingle with six nails and four spots of roofing cement placed under each shingle according to application instructions provided on the shingle package. Fasteners must penetrate the two-layer common bond area that is indicated by the middle and lower NailTrak lines, also illustrated on the shingle package.

Application: The recommended application method is the 'Five-Course, Diagonal Method' found on each bundle of shingles. In this method, shingle course offsets are 6" and 11". Instructions also may be obtained from CertainTeed. For Class 4 impact resistance, Landmark Solaris IR shingles must be applied according to the instructions indicated above, in a new roof or tear-off application, and not by "roofing-over" existing shingles.

Flashing: Use corrosion-resistant metal flashing.

Hips and Ridges: Use CertainTeed Solaris™ Accessory IR (Impact Resistant) shingles of the same color for capping hips and ridges.

MAINTENANCE

These shingles do not require maintenance when installed according to manufacturer's application instructions. However, to protect the investment, any roof should be routinely inspected at least once a year. Older roofs should be looked at more frequently.

WARRANTY

Landmark Solaris IR shingles carry a Lifetime Limited Warranty, 10-year SureStart protection, and a 10-year 110 mph wind-resistance warranty (upgradeable to 130 mph when using CertainTeed starter and CertainTeed hip and ridge). For specific warranty details and limitations, refer to the warranty itself (available from the local supplier, roofing contractor or on-line at www.certainteed.com/products/roofing).

FOR MORE INFORMATION

Sales Support Group: 800-233-8990

Web site: www.certainteed.com

CertainTeed Roofing
P.O. Box 860
Valley Forge, PA 19482