

HIGHLANDER

STEEP SLOPE - RESIDENTIAL - LAMINATE - SKU: 241

TECHNICAL DETAILS					
WIDTH ± 1/8"	LENGTH ± 1/4"				
131/4"	38%"				
337 mm	0.99 m				
EXPOSURE	GRANULE ADHESION				
5%"	0.35 g				
143 mm	Typical Results				
SHINGLES/SQUARE	SQUARES/PALLET				

TECHNICAL DETAILS

NEX® POLYMER MODIFIED LAMINATED ARCHITECTURAL SHINGLES



ICC APPROVAL

ESR-3150

Class 3

16

PRODUCT USE 241 Highlander® is a laminated asphalt shingle fortified with sustainable NEX® polymer modified asphalt

TEST COMPLIANCE ASTM ASTM D7158 D3462 Class H **ASTM ASTM** D3018 D3161 Class F Type I **ASTM** CSA E108 A123.5 Class A Fire Rating

exclusive nailing accuracy-enhancing design of The Zone®, a larger nailing area that dramatically improves correct fastener placement. Highlander® Golden Amber, Ivory Mist, Sienna Blend, and Silverwood shingles have measured radiative property values listed with the Cool Roof Rating Council, and can be used to comply with California Energy Code Title 24 Part 6, and City and County of Los Angeles Cool Roof Requirements. Please consult Malarkey's Technical Services Department for approval of roof systems.

technology for enhanced granule adhesion and increased weather protection. Highlander® features the

ICC-ES ACCEPTANCE

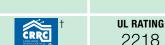
66

3 bundles/square

COMPOSITION & MATERIALS

AC438

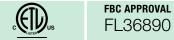
Highlander® is manufactured on a non-woven fiberglass mat and impregnated on both sides with NEX® polymer modified bitumen (asphalt) that is compounded with a fire-retardant mineral stabilizer. Its surface incorporates an innovative combination of ceramic granules that provide varied color, weatherability, even smog reduction; other granules increase energy efficiency by adding solar reflectivity.



APPLICATION



Shingles should be applied over a Malarkey underlayment or an approved, code-compliant substitute. Installation instructions, in three languages, are available on the shingle wrapper by scanning the corresponding Quick Response (QR) code, on our website at WWW.MALARKEYROOFING.COM, or by contacting your local Malarkey representative. Industry standards are found in NRCA manuals. Shingles should be attached to decking with approved fasteners, and Malarkey recommends the use of corrosionresistant nails for this purpose. Staples are not allowed.



PRECAUTION

See page 2 for solar reflectance technical data.

Highlander® should be protected from the weather and stored in a cool, dry, well-ventilated area until applied. Do not double-stack pallets. Do not use on roofs where pitch is less than 2:12 (2" [51 mm] per 12" [305 mm]). For slopes 2:12 up to 4:12 (4" [102 mm] per 12" [305 mm]), a double layer of underlayment is required (IBC & IRC have an exception for a single layer of ASTM D1970 underlayment in lieu of a double layer). Highlander® has a factory-applied self-sealing strip that activates in warm weather. When applied in cold weather or windy locations, hand-sealing is recommended but not required if sealant activates. On slopes greater than 21" (533 mm) per 12" (305 mm), hand-sealing underneath and six nails are required. Contact Malarkey for further conditions and instructions.

FEATURES & BENEFITS

Sustainable NEX® asphalt technology

· Superior granular embedment

- Larger nailing area of The Zone®
- · Double rain seal protection
- 3M[™] Smog-Reducing Granules
- · Limited Lifetime Shingle Warranty
- Limited & Enhanced Wind Warranties

WARRANTY

[†] CRRC and California Energy Code Title 24, Part 6 only applies to Highlander® Golden Amber, Ivory Mist, Sienna Blend, and Silverwood shingles.

Malarkey Roofing Products® offers various warranties to meet specific requirements. The warranty packages available for Highlander® include a Limited Lifetime Warranty, a 110 mph (177 kph) Limited Wind Warranty, and can be combined with other Malarkey products for a 130 mph (209 kph) Enhanced Wind Warranty. Contact your roofer, local distribution center, or Malarkey for full details. See below for TECHNICAL ASSISTANCE contact information.



Highlander® and other Malarkey products are available throughout North America and Pacific Rim countries.

Visit WWW.MALARKEYROOFING.COM for additional product information and availability.

Note: Malarkey Roofing Products® Inventory SKU number for this product: 241 Highlander®





Effective 03/23 Supersedes all previously published data

Check for most current version on our website.

TECHNICAL ASSISTANCE:

Malarkev has technical services assistance available. Contact Malarkey for details: Call weekdays 7:00 am to 5:00 pm Pacific Time at 800.545.1191 or 503.283.1191. technicalinquiries@malarkeyroofing.com

CORPORATE OFFICE:

3131 N. Columbia Blvd. Portland, OR 97217-7472

or 800.545.1191 Fax: 503.289.7644

Telephone: 503.283.1191

P.O. Box 17217 Portland, OR 97217-0217

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NEX® POLYMER MODIFIED LAMINATED ARCHITECTURAL SHINGLES



SOLAR REFLECTANCE TECHNICAL DATA

Highlander® Golden Amber, Ivory Mist, Sienna Blend & Silverwood are listed with the Cool Roof Rating Council. Highlander® Golden Amber, Ivory Mist, Sienna Blend & Silverwood have tested to these radiative property values:



Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary.

Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.

	HIGHLANDER® (GOLDEN AMBER)		HIGHLANDER® (IVORY MIST)		HIGHLANDER® (SIENNA BLEND)		HIGHLANDER® (SILVERWOOD)	
	INITIAL	WEATHERED	INITIAL	WEATHERED	INITIAL	WEATHERED	INITIAL	WEATHERED
SOLAR REFLECTANCE	0.21	0.21	0.25	0.24	0.21	0.20	0.21	0.21
THERMAL EMITTANCE	0.94	0.91	0.92	0.95	0.92	0.92	0.93	0.93
SOLAR REFLECTIVE INDEX (SRI)	22	21	26	26	21	20	21	21
Related Product ID Licensed Manufacturer ID: 0850 Classification: Production Line	0850-0024		0850-0055		0850-0025		0850-0065	

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