

TECHNICAL DETAILS

WIDTH ± 1/8" 13 1/4" 337 mm	LENGTH ± 1/4" 40" 1.02 m
EXPOSURE 5 5/8" 143 mm	GRANULE ADHESION 0.45 g Typical Results
SHINGLES/SQUARE 64 4 bundles/square	SQUARES/PALLET 12 from OR/CA/OK

LAMINATED ARCHITECTURAL SHINGLES



TEST COMPLIANCE

ASTM D7158 Class H	ASTM D3462
ASTM D3161 Class F	ASTM D3018 Type I
ASTM E108 Class A Fire Rating	CSA A123.5
ICC APPROVAL ESR-3150	FBC APPROVAL #14809

PRODUCT USE

The 271 Highlander® is a laminated asphalt shingle used whenever architectural design, tensile strength, and tear-resistance in shingles is desired. The Highlander® features the exclusive nailing accuracy-enhancing design of The Zone®. The larger nailing area of The Zone® dramatically improves correct fastener placement. Highlander® *Dove White*, *Golden Amber*, *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 Cool Roof Requirements. Highlander® *Dove White* is designated with ENERGY STAR. Please consult Malarkey's Technical Services Department for approval of roof systems.

COMPOSITION & MATERIALS

The Highlander® is manufactured on a non-woven fiberglass mat and impregnated on both sides with bitumen (asphalt) that is compounded with a fire-retardant mineral stabilizer. Highlander®'s are surfaced with embedded ceramic granules for ultraviolet protection and weatherability, while the *Dove White*, *Golden Amber*, *Sienna Blend*, and *Silverwood* granule colors add solar reflectivity.

APPLICATION

Shingles should be applied over a Malarkey underlayment or an approved, code-compliant substitute. Installation instructions are available on the shingle wrapper, 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 corrosion-resistant nails for this purpose. Staples are not allowed.

PRECAUTION

For best results, Malarkey recommends the Highlander® 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 the slope 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. The 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.

WARRANTY

Malarkey Roofing Products® offers various warranties to meet specific requirements. The warranty packages available for the 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.

The Highlander® shingle 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 numbers for this product: 271 Highlander®

Compliant with **CEC** Title 24, Part 6 Cool Roof Requirements†

See page 2 for solar reflectance technical data.

FEATURES & BENEFITS

- Superior granular embedment
- The Zone® nailing area
- Double rain seal protection
- Limited Lifetime Shingle Warranty
- Limited & Enhanced Wind Warranties

† CRRC and California Energy Code Title 24, Part 6 only applies to Highlander® *Dove White*, *Golden Amber*, *Sienna Blend*, and *Silverwood* shingles.

◊ ENERGY STAR only applies to Highlander® *Dove White* shingles.

TECHNICAL ASSISTANCE:

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

CORPORATE OFFICE:

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LAMINATED ARCHITECTURAL SHINGLES

SOLAR REFLECTANCE TECHNICAL DATA

Highlander® Dove White, Golden Amber, Sienna Blend, and Silverwood are listed with the Cool Roof Rating Council. Highlander® Dove White, Golden Amber, Sienna Blend, and 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® (DOVE WHITE)		HIGHLANDER® (GOLDEN AMBER)		HIGHLANDER® (SIENNA BLEND)		HIGHLANDER® (SILVERWOOD)	
	INITIAL	WEATHERED	INITIAL	WEATHERED	INITIAL	WEATHERED	INITIAL	WEATHERED
SOLAR REFLECTANCE	0.27	0.27	0.21	Pending	.17	Pending	.19	Pending
THERMAL EMITTANCE	0.90	0.96	0.94	Pending	.93	Pending	.94	Pending
SOLAR REFLECTIVE INDEX (SRI)	28	31	22	Pending	18	Pending	20	Pending
Related Product ID Licensed Manufacturer ID: 0850 Classification: Production Line	0850-0014		0850-0024		0850-0049		0850-0052	



Energy Star only applies to the Highlander® Dove White shingle. Energy Star is only recognized in the U.S., not in Canada.