

HIGHLANDER-CS™

LAMINATE SHINGLE

Note: Malarkey Roofing Products™ (Malarkey) Inventory SKU numbers for this product: **271 Highlander-CS™** & **277 Highlander-CS™** 

Product Description

Product Use: The Highlander-CS™ shingle is an asphalt-laminated shingle used wherever increased flexibility, architectural design, tensile strength, and tear-resistance in shingles is desired. Highlander-CS™ features the exclusive nailing accuracy-enhancing design of *The Zone*®. The larger nailing area of *The Zone*® dramatically improves correct fastener placement. The smaller nailing area found in a majority of other shingles leads to poor fastener placement and results in improper installations which may void warranties.

Composition and Materials: Highlander-CS™ is manufactured on fiberglass mat and impregnated and coated on both sides with bitumen (asphalt) compounded with a fire-retardant mineral stabilizer. Highlander-CS™ is surfaced with embedded ceramic granules for ultraviolet protection and weatherability.

Technical Data

SPECIFICATIONS	PROPERTIES
Weight/ Square (nominal)	245 lbs (111 kg)
Dimensions	13¼" (±½") wide x 40" (±¼") long (337 mm wide x 1.02 M long)
Exposure	5⅝" (144 mm)
Shingles/ Square	64 shingles (4 bundles/ square)
Granule Adhesion	Maximum 1.0 g loss
Fire Rating	Class 'A' (ASTM E108)

As manufactured, Highlander-CS™ meets the requirements of ASTM D7158 Class H, ASTM D3462, ASTM D3161 Class F, ASTM D3018 Type I, ASTM E108 Class A, and CSA A123.5.

ICC Approval - ESR 3150.
FBC Approval - #14767

Application

Application Procedure: Highlander-CS™ shall be applied as specified. See Malarkey Specification Manual for specific installation instructions. Contact Malarkey's Technical Department for details.

Precautions: Highlander-CS™ requires a minimum deck slope of 2":12". For slopes between 2":12" and 4":12" additional deck protection is recommended and may be required by code. The Highlander-CS™ shingle has a factory-applied, self-sealing strip that activates in warm weather. In cold weather or dusty/windy conditions, hand sealing is recommended.

Technical Assistance: Malarkey has technical services assistance available. Contact Malarkey for details at (800) 545-1191 or (503) 283-1191, weekdays 7:00 am to 5:00 pm Pacific Time.

Warranty

Malarkey Roofing Products™ offers various warranties to meet specific requirements. The warranty package for Highlander-CS™ includes 30-year Limited Warranty and a 70 mph (113 kph) Limited Wind Warranty. An Enhanced Wind Warranty to 110 mph (177 kph) is also available. In addition, Highlander-CS™ featuring the Scotchgard™ Algae Resistant Roofing System from 3M, carries a twenty-year algae resistance warranty*. Contact your roofer, local distribution center, or Malarkey for full details.

Highlander-CS™ and other Malarkey products are available throughout North America and Pacific Rim countries. Visit WWW.MALARKEYROOFING.COM for additional product information and availability.


* Malarkey Roofing systems require algae resistant EZ Ridge XT™ 224 shingles or Hip and Ridge shingles 225 & 227, in conjunction with the algae resistant shingles, to receive the full 20 year algae resistant warranty system. Hurricane™ (240) featuring Scotchgard™ Algae Resistant Protection from 3M can be substituted as a Hip and Ridge shingle, in conjunction with the algae resistant shingles, to receive the full 20 year algae resistant warranty system. 3M and Scotchgard are trademarks of 3M Company. This supersedes all previous versions. Rev. 5/12.

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TECHNICAL PRODUCT DATA SHEET

Solar Reflectance Technical Data:

Highlander-CS™ Dove White is listed with the Cool Roof Rating Council.
 Highlander-CS™ Dove White has tested to these radiative property values:

		Initial	Weathered
	Solar Reflectance	0.27	pending
	Thermal Emittance	0.90	pending
	Rated Product ID	0850-0014	
Licensed Manufacturer ID	0850		
Classification	Production Line		
<p>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.</p> <p>Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.</p>			

Manufacturing location: South Gate, CA	Dove White
Recycled Content	0%
Solar Reflective Index (SRI)	28

*The Calculator used in this calculation was the US Green Building Council (USGBC) LEED-NC 2.2 as of October, 2010.

According to the USGBC Frequently Asked Questions: "Products cannot be certified; however, they can contribute to points under the rating system as a part of a successful submittal."