Malarkey Roofing Products®

TECHNICAL PRODUCT DATA SHEET

HIGHLANDER® AR

NEX® Polymer Modified Architectural Shingles

TECHNICAL DETAILS

WIDTH ± 1/8"
13¼" [337 mm]

LENGTH ± ¼"
38⅞" [0.99 m]

EXPOSURE
5⅝" [143 mm]

GRANULE ADHESION
0.35 g (typical results)

SHINGLES/SQUARE
66 (3 bundles/square)

SQUARES/PALLET
16

TEST COMPLIANCE

ASTM D7158 CLASS H

ASTM D3462 | ASTM D3161 CLASS F

ASTM D3018 TYPE I

ASTM E108 CLASS A FIRE RATING

UL 2218 CLASS 3 | CSA A123.5

ICC APPROVAL – ESR-3150

ICC-ES AC438

FBC APPROVAL – FL36890

CRRC RATED PRODUCT †

Intertek

See page 2 for solar reflectance technical data.

FEATURES & BENEFITS

- Sustainable NEX® asphalt technology
- Superior granular embedment and tear resistance
- Larger nailing area of The Zone®
- Double rain seal protection
- Algae resistance*
- 3M™ Smog-Reducing Granules

GreenCircle CERTIFIED – A SUSTAINABLE SOLUTION – CERTIFIED SUSTAINABILITY FACTS

GreenCircle CERTIFIED – A SUSTAINABLE SOLUTION – WASTE DIVERSION FROM LANDFILL

† *CRRC and California Energy Code Title 24, Part 6 only applies to Highlander® AR Golden Amber, Ivory Mist, and Willow Wood shingles.*

Effective 02/26
Supersedes all previously published data.

Check for most current version at
WWW.MALARKEYROOFING.COM

PRODUCT USE

242 Highlander® AR is a laminated architectural shingle fortified with sustainable NEX® polymer modified asphalt technology for enhanced granule adhesion and increased weather protection. Highlander® AR also features the patended, nailing accuracy-enhancing design of The Zone® which dramatically improves correct fastener placement. Highlander® AR is algae-resistant and carries that coverage for 15 years.* Highlander® AR *Golden Amber*, *Ivory Mist*, and *Willow Wood* 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, while Highlander® AR *Golden Amber* and *Ivory Mist* shingles can also be used to comply with Los Angeles County, California Title 31 Cool Roof Requirements. Please consult Malarkey's Technical Services Department for approval of roof systems.

COMPOSITION & MATERIALS

Highlander® AR is manufactured on a non-woven fiberglass mat and coated 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, protection from blue-green algae, and even smog reduction.*

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 corrosion-resistant nails for this purpose. Staples are not allowed.

PRECAUTION

For best results, Malarkey recommends Highlander® AR 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 (IBC & IRC have an exception for a single layer of ASTM D1970 underlayment in lieu of a double layer). Highlander® AR 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 Highlander® AR 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. Highlander® AR also features a 15-year warranty against the growth of blue-green algae.* Contact your roofer, local distribution center, or Malarkey for full details. See below for TECHNICAL ASSISTANCE contact information.

Highlander® AR 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: 242 Highlander® AR

** The algae protection warranty applies only to blue-green algae (Gloeocapsa magma). The warranty does not extend to, and expressly excludes, all other forms of algae, mold, mildew, lichens, moss, or any other biological growths. Coverage is subject to the specific terms, conditions, and limitations set forth in the applicable warranty documentation.*

TECHNICAL ASSISTANCE:
Malarkey 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.

malarkey.technicalinquiries@amrize.com

CORPORATE OFFICE:
3131 N. Columbia Blvd. Portland, OR 97217-7472
P.O. Box 17217 Portland, OR 97217-0217

TELEPHONE:
503-283-1191 or 800-545-1191

FAX: 503-289-7644

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SOLAR REFLECTANCE TECHNICAL DATA

Highlander® AR Golden Amber, Ivory Mist & Willow Wood are listed with the Cool Roof Rating Council.

Highlander® AR Golden Amber, Ivory Mist & Willow Wood have tested to these radiative property values:

CRRC COOL ROOF RATING COUNCIL® RATED PRODUCT

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® (WILLOW WOOD)	
	INITIAL	WEATHERED	INITIAL	WEATHERED	INITIAL	WEATHERED
SOLAR REFLECTANCE	0.24	0.24	0.24	0.25	0.17	0.17
THERMAL EMITTANCE	0.91	0.93	0.94	0.95	0.93	0.93
SOLAR REFLECTIVE INDEX (SRI)	24	25	26	27	17	17
Related Product ID Licensed Manufacturer ID: 0850 Classification: Production Line	0850-0040		0850-0062		0850-0045	

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