



## TECHNICAL PRODUCT DATA SHEET

## TECHNICAL DETAILS

### WEIGHT/ROLL

60 lbs. [27.2 kg]

### ROLL SIZE

2 square roll

### WIDTH

36" [0.91 m]

### LENGTH

65' [19.8 m]

### TOTAL AREA PER ROLL

195 ft<sup>2</sup> [18.1 m<sup>2</sup>]

### THICKNESS

65 mils [nominal]

### PERM RATING

≤ 0.1 [U.S. perms]

### LAY LINES

2", 4", 17"  
[51 mm, 102 mm, 432 mm]

### ROLLS/PALLET

25 from OR/CA, 28 from OK

## TEST COMPLIANCE

ASTM D1970



## FEATURES & BENEFITS

- Sustainable NEX<sup>®</sup> asphalt technology
- Self-adhering; waterproof
- Seals around nails
- Helps protect against leaks from ice dams and wind-driven rain
- Equally effective flashing membrane

Effective 08/23  
Supersedes all previously published data.

Check for most current version at  
[WWW.MALARKEYROOFING.COM](http://WWW.MALARKEYROOFING.COM)



# ARCTIC SEAL<sup>®</sup>

## NEX<sup>®</sup> Polymer Modified Self-Adhering Underlayment For Ice And Water Protection

## PRODUCT USE

401 Arctic Seal<sup>®</sup> is a specially designed and manufactured, self-adhering, NEX<sup>®</sup> SBS polymer modified asphalt underlayment for use on steep slopes to help prevent moisture intrusion from ice dams and wind-driven rain, as required by many building codes. Arctic Seal<sup>®</sup> serves a dual role as a flashing membrane, helping protect areas susceptible to leaks such as valleys, roof-to-wall transitions, and around vents and skylights. Arctic Seal<sup>®</sup> is approved for use under fire-rated, code-compliant roof coverings and as a vapor retarder in various FM Approved roofing assemblies. Consult Malarkey's Technical Services Department for approval of roof systems.

## COMPOSITION & MATERIALS

Arctic Seal<sup>®</sup> is manufactured on a non-woven fiberglass mat with a NEX<sup>®</sup> SBS polymer modified bitumen [asphalt] top coating and surfaced with a sand release agent. The underside has an aggressive asphalt-based adhesive, protected with a factory-applied, split-release film that is removed prior to installation.

## APPLICATION/INSTALLATION

Arctic Seal<sup>®</sup> shall be applied as specified. Roof decks should be sound, smooth, dry, meet necessary local requirements, and provide positive drainage. Minimum approved slope for steep slope applications is 2" [51 mm] per 12" [305 mm]. When using Arctic Seal<sup>®</sup> for full deck protection, make sure adequate ventilation and moisture control issues are addressed. Do not use Arctic Seal<sup>®</sup> as an underlayment under metal roofs, but it is recommended under and around sheet metal flashing details on shingle roofs, including valley metal. It is not intended as a permanently-exposed roofing surface but can be left uncovered for up to 60 days if necessary before the primary roof covering is installed. Arctic Seal<sup>®</sup> has passed ASTM D5147 compound stability testing up to 225°F [107°C] without failure. Installation instructions can be found at [WWW.MALARKEYROOFING.COM](http://WWW.MALARKEYROOFING.COM) or by contacting our Technical Services Department.

## STORAGE & HANDLING

For best results, Malarkey recommends Arctic Seal<sup>®</sup> be protected from the weather and stored on end in a cool, dry, well-ventilated area until applied.

## WARRANTY

Arctic Seal<sup>®</sup> is eligible for expanded warranty coverages relative to its use as a single roofing accessory or in combination with others in a complete Malarkey roofing system. Installed separately, it carries a 10-year product warranty against manufacturing defects. Contact your roofing contractor, local distribution center, or Malarkey for full details. See below for TECHNICAL ASSISTANCE contact information.

Arctic Seal<sup>®</sup> and other Malarkey products are available throughout North America and Pacific Rim countries.

Visit [WWW.MALARKEYROOFING.COM](http://WWW.MALARKEYROOFING.COM) for additional product information and availability.

Note: Malarkey Roofing Products<sup>®</sup> inventory SKU number for this product: 401 Arctic Seal<sup>®</sup>

**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.

[technicalinquiries@malarkeyroofing.com](mailto:technicalinquiries@malarkeyroofing.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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# ARCTIC SEAL<sup>®</sup>

## NEX<sup>®</sup> Polymer Modified Self-Adhering Underlayment For Ice And Water Protection

PHYSICAL PROPERTIES	ASTM SPECIFICATION D1970	TYPICAL RESULTS
Maximum load MD/CD, min	25 lbf/in. [4.4 kN/m]	Pass
Elongation @ break, min of modified bitumen portion	10%	Pass
Adhesion to plywood, min at 40°F [4.4°C]	2.0 lbf/ft width [0.92 kgf/30.5 cm]	Pass
Adhesion to plywood, min at 75°F [24°C]	12.0 lbf/ft width [5.44 kgf/30.5 cm]	Pass
Thermal stability, max	0.1 in. [3 mm]	No flow
Flexibility temperature	- 20°F [- 29°C]	Pass
Tear resistance MD/CD, min	20 lbf [89 N]	Pass
Moisture vapor permeance, max	0.1 U.S. perms [5.7 ng/Pa.S.M. <sup>2</sup> ]	0.03 U.S. perms [1.71 ng/Pa.S.M. <sup>2</sup> ]
Sealability around nail	No leaks	Pass
Waterproof integrity after low temperature flexibility	No leaks	Pass
Waterproof integrity of lap seam	No leaks	Pass

As manufactured, Arctic Seal<sup>®</sup> meets the requirements of ASTM D1970 TABLE 1, Physical Requirements of Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.

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