



Between the World  
and The Weather  
Since 1928

# Ram-Tough K-312 Elastomeric Roofing Bitumen

## PRODUCT DESCRIPTION

Barrett Ram-Tough K-312 roofing bitumen is a polymer-modified mopping grade asphalt which surpasses traditionally accepted industry standards. Unlike traditional asphalt, K-312 is manufactured using a heat and weathering resistant Kraton® SEBS polymer in conjunction with an asphalt base specifically selected for its compatibility with the polymer system. The formulation and high speed sheer manufacturing process yields a material with improved adhesion, elongation, elasticity and low temperature flexibility, when compared to conventional oxidized roofing asphalt. Polymer modification allows a lower softening point material to be installed on higher slopes than regular oxidized asphalt.

The choice of polymer content is an important part of selecting the right roofing system for a project. Each building has its own unique conditions to consider along with the building owner's needs and objectives. Ram-Tough K-312 offers 800% elongation and is best suited for severe weather exposures and when long term performance and economy is important.

Polymer content also has a direct effect on the products cost. Barrett Ram-Tough K-312, with Kraton® modifier, offers the best value price option for a wide range of applications. Use of Barrett's polymer modified roofing asphalt in combination with appropriate modified bitumen, polyester or fiberglass ply sheets and cap sheets provide roofing systems with superior toughness, puncture and impact resistance.

## FEATURES

- Enhanced physical properties through polymer modification
- Consistent premium quality
- Superior elongation and cold flexibility properties
- Superior adhesion characteristics

## BENEFITS

- Quality Assurance - every batch tested for compliance
- Out performs regular and lower polymer content roofing asphalts
- Polymer modification reduces thermal stress damage
- Superior traffic, abrasion and puncture resistance

## TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ST 500
Softening Point (°F)	ASTM D-36	190°F
Flash Point (°F)	ASTM D-92	575°F (min.)
Viscosity, Brookfield Model Hat probe #1 @50 RPM	ASTM D-3236	220 cp
Penetration, Units @ 77°F	ASTM D-5	15-30 dmm
Heat Resistance Penetration 77°F, 100 g, 5 sec.	ASTM D-5	35 max.
Elongation@ 77°F (%)	ASTM D-412	800%
Flexibility Low Temp	ASTM D-3111	10°F

Meets or exceeds the requirements of ASTM D-6152-97 (polymerized bitumen)

## APPLICATION RATES

Ram-Tough K-312 can be applied by mop or mechanical spreader. Material must be sufficiently hot to obtain the specified rate of application without exceeding the maximum recommended heating temperature. In cold weather conditions, special provisions are to be taken in order to stay within the recommended application temperature guidelines without over heating the material in the kettle.

Regardless of the application method, the bitumen is to be applied as a continuous film, without voids. Ply sheets are to be applied and broomed into place while the bitumen is still hot and fluid.

## HEATING GUIDELINES

Ram-Tough K-312 is heated in a conventional roofing kettle.

Maximum Kettle Temperature

Summer Conditions - 500°F

Winter Conditions - 525°F

Recommended Application Temperature 350°F-480°F

## SLOPE LIMITATIONS

Ram-Tough K-312 is recommended for the construction of built-up roof membranes with inclines up to 1 inch per foot, without backnailing.

## **PACKAGING**

60 lbs. per carton

32 cartons per pallet

Weight per pallet 1920 (approx)

22 pallets per truckload

## **APPLICATION PRECAUTIONS**

- For exterior use only
- Do not apply to wet or damp surfaces
- Follow recommended heating and application temperatures
- Provide positive drainage of membrane
- Do not smoke or expose to open flames during application
- To reduce the potential for odors entering the building, cover fresh air intakes, close windows, doors and other openings which would allow odors to enter during application. Interior negative air pressure can impact the potential for odor entering the building.
- Not for use with potable water collection systems.
- **READ MATERIAL SAFETY DATA SHEET BEFORE USING**
- **FOR PROFESSIONAL ROOFING CONTRACTOR USE ONLY.**

## **PRODUCT SAFETY INFORMATION**

Ram-Tough K-312 roofing bitumen offers no unusual health or safety risks for a product of this nature. As with any roofing process, proper ventilation, clothing and eye protection is important.

For specific information, contact the Barrett Company for a current Material Safety Data Sheet on this product.

The user should not assume that all safety measures are indicated or that other measures may not be required.

### **Note**

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