



Between the World  
and The Weather  
Since 1928

# Ram-Tough KLB-100

## Elastomeric Roofing Bitumens

### PRODUCT DESCRIPTION

Barrett KLB-100 bitumen utilizes advanced nano-technology to produce the highest quality polymer-modified roofing asphalt on the market. It is manufactured using a heat and weathering resistant Kraton® SEBS rubber polymer with an un-oxidized asphalt base, specifically selected for its compatibility with the polymer system. The rubber material's web-like molecular structure creates a microscopic, elastic network of strong, rubberized strands with tough, interlocking styrene end blocks. During the polymerization process, the polymer network absorbs the asphalt light ends, producing a waterproofing material with properties that are far superior to regular roofing grade asphalt and very rubber-like.

The formulation and manufacturing process yields an elastomeric material with significantly better adhesion, elongation, elasticity, low temperature flexibility, strain energy, and self-healing properties when compared to conventional oxidized roofing asphalts, coal tar and lower polymer content bitumens. This product's unique physical properties offer superior performance and durability, even in the presence of ponded water and severe climate variations.

The use of Barrett's polymer-modified roofing bitumen in combination with appropriate modified bitumen membranes, polyester or fiberglass ply sheets or cap sheets, delivers a composite roofing membrane assembly with extraordinary toughness, puncture and impact resistance.

KLB-100 bitumen is recommended for buildings intolerant of water intrusion, requiring optimum performance and limited maintenance. The high performance of KLB-100 does have a premium price which relates to a lower life-cycle cost..

This product is Factory Mutual and Underwriters Laboratory approved when used in Class I and Class A constructions as noted in the respective approval guides.

KLB-100 is also available with an additive which masks the traditional asphalt odor.

### FEATURES

- Superior physical properties through polymer modification
- Consistent premium quality
- Unmatched elongation and cold flexibility properties
- Superior adhesion characteristics
- Withstands ponded water
- Self-healing in warm weather

### BENEFITS

- Quality assurance with every batch tested for compliance
- Dramatically outperforms all other roofing asphalts
- Polymer modification reduces thermal stress damage
- Superior traffic, abrasion and puncture resistance

### TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	KLB-100
Softening Point (°F)	ASTM D-36	210°F
Flash Point (°F)	ASTM D-92	580°F (min.)
Viscosity, Brookfield Model Hat probe #1 @50 RPM	ASTM D-3236	75-250 cp
Penetration, Units @ 77°F	ASTM D-5	30-70 dmm
Heat Resistance Penetration 77°F, 100 g, 5 sec.	ASTM D-5	25-70 dmm
Ductility @ 77°F (cm)	ASTM D-412	40 cm
Elongation (%)	ASTM D-412	1000
Recovery from 300%	ASTM D-412	80%
Flexibility Low Temp	ASTM D-3111	-10°F*

Exceeds the requirements of ASTM D-6152-97 (polymerized bitumen)

\* By "Special Order" KLB-100 is also available with Low Temperature Flexibility properties of -15°F or -20°F

### APPLICATION RATES

Ram-Tough KLB-100 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 colder weather conditions, special provisions are to be taken in order to meet the recommended application range 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 KLB-100 is heated in a conventional roofing kettle.

Maximum Kettle Temperature

Summer Conditions - 500°F

Winter Conditions - 525°F

Application Temperature Range 350°F - 475°F

### SLOPE LIMITATIONS

Ram-Tough KLB-100 is recommended for the construction of built-up roof membranes with inclines up to 1 inch per foot.

**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
- 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 KLB-100 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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