



Black-Knight®/Black-Stallion®

Black-Knight/Black-Stallion • Black-Knight LV Black-Stallion LV

PRODUCT DESCRIPTION

Black-Knight/Black-Stallion modified adhesives are specially formulated, high performance roofing bitumens. These products are modified with a revolutionary new polymer which maintains or improves upon the advantages of conventional coal tar while reducing most of the negatives associated with coal tar. Black-Knight/Black-Stallion modified adhesives are designed to be used as the interply and flood coat of a standard built-up roof or Millennium® roof system. These products are to be used in conjunction with tar saturated felts or polyester ply sheets. In addition, the physical performance of Black-Knight/Black-Stallion exceeds that of any other coal tar or modified coal tar available on the market today.

PRODUCT ADVANTAGES

Better Than Coal Tar - Coal tar pitch has long been recognized as one of the longest lasting waterproofing materials available for roofing systems. The Black-Knight/Black-Stallion products take coal tar technology to the next level. These materials provide the same high level of waterproofing protection and chemical resistance that you are accustomed to with coal tar, and provides other benefits as well. For example, Black-Knight/Black-Stallion have superior low temperature flexibility and elongation characteristics when compared to conventional coal tar. These added features are a direct result of the revolutionary technology that combines standard coal tar with a state of the art polymer to create an improved waterproofing material.

An Environmentally Friendly Coal Tar - Although coal tar pitch is an excellent waterproofing material, it is often not specified in sensitive areas because it is not perceived to be user or environmentally friendly. Through blending with its specialty polymers and preconditioning of the coal tar, Black-Knight/Black-Stallion modified adhesives have been formulated to reduce emissions when heating this material. Independent EPA testing has shown Black-Knight/Black-Stallion to eliminate a minimum of 50% of the volatile emissions typically present in coal tar emissions. In addition, the independent testing has shown dramatic reduction of many of the most hazardous compounds completely.

Impact Resistant - Roof systems constructed with coal tar pitch have many benefits. However, they become very brittle as the ambient temperature drops. When impacted with a heavy object at low temperatures, the coal tar roof may shatter into many pieces and many times will cause the separation of the plies. When this occurs, the roof system loses its waterproofing integrity. Black-Knight/Black-Stallion roof systems have excellent impact resistance and will not shatter or lose interply adhesion even at freezing temperatures. Due to a superior formulation, Black-Knight/Black-Stallion roof systems remain monolithic, retaining water tight integrity.

APPLICATION

Use extreme caution when heating and handling the Black-Knight/Black-Stallion products. Serious burns can occur around any hot bitumen and only authorized and trained personnel should handle hot bitumen.

Diluting or cutting back Black-Knight/Black-Stallion modified adhesives or mixing them with asphalt or coal tar is not permitted. The specially balanced chemistry will be altered and the resulting product will not perform as described. Overheating Black-Knight/Black-Stallion will cause undesirable changes and should be avoided. Slow uniform heating of the bitumen will provide the best results. Care should be taken not to heat the material over its flash point or maintain temperatures over 400°F (205°C) for any prolonged period of time. Black-Knight/Black-Stallion should be at 375°F (191°C) at the point of application.

Black-Knight/Black-Stallion modified adhesives can be used as an interply adhesive for a Millennium roof system. Two plies of BK Glasfelt, BK Premium Glasfelt, HPR Polyscrim, or ASTM D 4990 Type I coal tar fiberglass felts are solidly adhered followed by a Millennium membrane. Please contact your local Garland Representative for specific applications.

In addition, three, four or five plies of HPR Polyscrim, HPR Polyscrim Plus, BK Glasfelt, BK Premium Glasfelt or saturated felts as reinforcement with alternating applications of the Black-Knight/Black-Stallion modified adhesives. Additionally, these materials may be used as the flood coat over asphalt or coal tar built up roofs. Aggregate surfacing is required to reduce the exposure of UV rays and to extend the life of the roof system.



Black-Knight/Black-Stallion

Technical Data	Black-Knight/ Black-Stallion	Black-Knight/ Black-Stallion LV
Ring & Ball Softening Point	130-145°F (54-63°C)	135-150°F (57-66°C)
Penetration @ 77°F (25°C)	min. 30 dmm	min. 5 dmm
Viscosity @ 375°F (191°C)	200-400 cPs	50-150 cPs
Elongation	2000%	1500%
Low Temperature Flexibility	30-35°F (-1-2°C)	65-70°F (18-21°C)
Slope Restriction	1/4:12 max	1/4:12 max
Self Healing	Same as CTP	Same as CTP
Olinesis Test Asphalt Type III & IV	Pass	Pass
Flash Point (COC)	390°F (199°C)	390°F (199°C)
Fungi Resistance	Pass	Pass
Bacteria Resistance	Pass	Pass
Impact Resistance @ 35°F (2°C)	0	0
T-Peel Strength	30-40 lb.	30-40 lb.
Packaging	70 lb. (31.75 kg) keg	70 lb. (31.75 kg) keg

PRECAUTIONS

- Do not use Black-Knight/Black-Stallion over rubber or plastic substrates
- Make sure to have adequate ventilation
- Keep away from open flame
- In depth safety information can be obtained from Garland's Contractor Safety Guide, MSDS or the NRCA's Safety Awareness video
- Do not thin this product
- Keep material warm prior to application when at or below 50°F (10°C)

Please refer to the product information, Material Safety Data Sheet, and labeling for the potential risks and benefits. Exposure to this product may cause skin and respiratory tract irritation; prolonged skin exposure may result in skin cancer and long term exposure has been associated with kidney, bladder, scrotum, and lung cancer.

For specific recommendations and coverage rates, please contact your local Garland Representative or Garland Technical Service Department.

Eco-Facts	Black-Knight/ Black Stallion	Black-Knight/ Black-Stallion LV
VOC	N/A	N/A
Recycled Content Post Industrial	90%	88%



since 1895 For more information, visit us at: www.garlandco.com

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The Black-Knight product is protected by U.S. 6,300,394 and U.S. 5,854,322

Tests verified by independent laboratories. Actual roof performance specifications will vary depending on test speed and temperature. Data reflects samples randomly collected. A ± 10% variation may be experienced. The above data supersedes all previously published information. Consult your local Garland Representative or Garland Corporate Office for more information.

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