

## BLACK DIAMOND® BASE SHEET

### SBS MODIFIED BITUMEN SELF-ADHERING FIBERGLASS BASE SHEET FOR HOT ASPHALT AND TORCH APPLICATIONS

#### Product Information



**Product Use:** Black Diamond® Base Sheet is designed for use as a heat-activated base ply for modified bitumen or built-up roofing systems. It is suitable for use in the construction of various types of membranes for both new construction and reroofing over a variety of substrates. Black Diamond Base Sheet will provide additional strength, improved handling, pliability and moisture resistance when used as the first ply over non-nailable and insulated substrates. Black Diamond Base Sheet also may be used as a vapor retarder under roof insulation.

**Limitations:** Black Diamond Base Sheet is attached by a self-adhering method. It is not intended for attachment with hot asphalt, cold adhesive, coal tar pitch or mechanical fasteners. Rolls should be stored upright off the ground and completely protected from the weather. Roof decks must be structurally sound, dry, smooth and meet or exceed minimum requirements of the deck manufacturer, local code and CertainTeed. Black Diamond Base Sheet is a self-adhering base sheet featuring a peel-off backing.

**Product Composition and Features:** Black Diamond Base Sheet is manufactured on a dimensionally-stable, fiberglass reinforced mat that receives a coating of SBS modified bitumen compound and is surfaced with fine mineral particles. The fiberglass base mat provides uniform strength and moisture resistance. Black Diamond Base Sheet modified bitumen compound provides increased durability with improved pliability and high-tack characteristics for smoother, more uniform applications without the need of adhesives or hot asphalt.

**Roll Dimensions:** 39<sup>3</sup>/<sub>8</sub>" x 68' 7" (225 square feet)  
**Nominal Coverage:** Two squares  
**Approximate Weight:** 78 lbs. per roll  
**Top Surface:** Fine black mineral particles  
**Back Surface:** Release film

**Applicable Standards:** Meets ASTM D1970 and ASTM D4601, Type 1. Black Diamond Base Sheet is approved by Underwriters Laboratories for use in various Class A, B and C roof assemblies, Factory Mutual, Miami-Dade, Florida Building Code Statewide Approval (FL 2533 and FL 16709) and Texas Department of Insurance (RC-47).

**Packaging:** Black Diamond Base Sheet rolls are individually packaged in corrugated boxes.

#### Technical Data

The following information represents typical average properties of Black Diamond Base Sheet.

**Modified Bitumen Coating:** Non-oxidized (flux) asphalt, blended with a compatible elastomeric styrene-butadiene-styrene polymer and selected inert fillers.

**Support Mat:** Dimensionally-stable, fiberglass reinforced mat.

<b>Test Description</b>	<b>Test Method</b>	<b>Results*</b>
<b>Thickness:</b>	ASTM D1970	1.4 mm (55 mils)
<b>Tensile Strength:</b>	ASTM D5147 @ 73.4 +/- 3.6°F MD/XD	50/30 lbs./in.
<b>H<sub>2</sub>O Absorption:</b>	0.1%	
<b>Dimensional Stability:</b>	ASTM D5147	MD 0.1%/XD 0.1%
<b>Adhesion to Plywood:</b>	ASTM D1970	30 lbs./ft.
<b>Tear Resistance:</b>	ASTM D5147 MD/XD	80/50 lbs./ft.

\*NOTE: Published results are nominal production values confirmed by independent laboratory testing.

## **Product Application**

Roof systems constructed with Black Diamond Base Sheet as the base ply must be applied in accordance with installation procedures listed in the CertainTeed Commercial Roof Systems Specifications. The following information is intended for general information purposes only and is not all-inclusive.

**Preparation:** Substrates to receive a roof system must be firmly attached, smooth, dry, clean and free of sharp projections and depressions. Flashing details must be in place, ready to receive roofing with roof accessories available prior to application of materials. Substrates requiring priming must be primed with asphalt primer such as FlintPrime® and be allowed to completely dry. Substrates must provide positive drainage. Roof insulation must be tapered to drains.

**Installation:** Black Diamond Base Sheet must be installed with 4" side laps and 6" end laps, with end laps diagonally staggered not less than 3' apart. Black Diamond Base Sheet must be applied to a clean, non-nailable substrate by peeling off the siliconized backer that exposes a specially formulated SBS high-tack self adhesive surface, which is normally heat activated by the sun. Therefore, on hot sunny days, adhesion occurs quickly. In addition, mopping or torching a finished membrane to the base is more than sufficient to induce the adhesive's bite and set. During cool weather, the top surface of the Black Diamond Base Sheet can be heated in order to activate the adhesive at the bottom of the product.

**Precautions:** Cold weather applications require special handling to prevent damage to the rolls and ensure satisfactory installation. Do not apply roofing systems over improperly prepared substrates or substrates that contain moisture. Self-adhered membranes can act as a vapor barrier; it is the sole responsibility of the architect, contractor and owner to ensure adequate and appropriate substrate and roof system ventilation.

**Maintenance:** CertainTeed Commercial Roof Systems do not require any additional maintenance beyond normal roof maintenance procedures. CertainTeed recommends regular roof maintenance and inspection to determine the condition of drains, flashings and other similar items, and to prolong the life expectancy of the roof system.

## **Warranties**

CertainTeed offers Limited (product only) and No Dollar Limit (NDL, product and workmanship) warranties. Warranty type and duration is dependent on roof system configuration and contractor selection. Only CertainTeed Gold and Silver Star Contractors are eligible to apply for NDL warranties on specific roof projects. For more information, see CertainTeed Commercial Roof Systems Specifications or contact Commercial Roofing Technical Services.

## **Technical Assistance and Services**

CertainTeed provides technical assistance in the design, selection, specification and application guidelines of CertainTeed Commercial Roof Systems. Architectural and field representatives are available for consultation within each region. For more information, contact CertainTeed Commercial Roofing Technical Services at 800-396-8134 x2.

## **Caution: Fire Hazard**

Torch-down application of this product may create a risk of fire including smoldering fires. The roofing applicator is solely responsible for ensuring and enforcing safe and proper application of CertainTeed products by competent and qualified personnel. Only properly trained roofing professionals are authorized to install this product.

Never apply flame directly to combustible materials or allow the flame to enter into hidden or protected areas that may contain combustible materials. Follow all local code requirements. Have a Class A-B-C fire extinguisher available to each applicator. Thoroughly inspect the job site whenever torching equipment has been used. Be certain that all chances of a fire have been eliminated.

Refer to the CertainTeed Commercial Roof Systems Specifications, Midwestern Roofing Contractors Association (MRCA) CERTA program, National LP Gas Association, National Roofing Contractors Association (NRCA), National Fire Protection Association (NFPA), and Asphalt Roofing Manufacturers Association (ARMA) for further information and safety recommendations.

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