

## **Technical Product Data**

### **BLACK DIAMOND® BASE SHEET**

## HEAT-ACTIVATED SELF-ADHERED SBS-MODIFIED BASE SHEET FOR HYBRID ROOF SYSTEMS

## Product Information



**Product Use:** Black Diamond® Base Sheet is designed for use as a heat-activated, self-adhered base sheet for hybrid roof systems with a torch-applied cap or cap set in hot asphalt for modified bitumen or built-up roofing systems. It is suitable for use in both new construction and reroofing over a variety of substrates¹, including but not limited to insulation, concrete and plywood/OSB². Black Diamond Base Sheet delivers measurable labor savings over traditional fully adhered asphaltic membranes without compromising waterproofing protection. Black Diamond Base Sheet also may be used as a vapor retarder under roof insulation and may be left exposed for up to six months without asphalt degradation. This versatile base ply can be used in CertainTeed two-ply, low-slope roofing systems for up to 20-year warranty durations (see CertainTeed Commercial Roof System Specifications for details).

**Precautions:** 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. Black Diamond Base Sheet relies on heat-activation to achieve its full bond; it must be installed with either a torch-applied cap sheet or cap sheet set in hot asphalt. It cannot be paired with a self-adhered cap sheet or one set in cold adhesive. Rolls should be stored upright off the ground and completely protected from the weather.

Do not attempt application if ice, snow, moisture or dew are present. Surface to be bonded to must be clean, dry and free from any dust or deterrent to adhesion. Do not attempt installation on roofs without adequate slope and drainage.

**Product Composition and Features:** Black Diamond Base Sheet is manufactured using a dimensionally-stable, fiberglass reinforced mat, saturated and coated with a superior grade of SBS-modified bitumen compound on the top of the sheet and a proprietary pressure sensitive SBS-modified bitumen adhesive on the back of the sheet. It is surfaced on the bottom with a removable release film and on the top with highly UV stable, black slag particles.

Roll Dimensions: 39%" X 68' 7" (225 square feet)

Nominal Coverage: Two squares Approximate Weight: 78 lbs.

Top Surface: Fine black slag 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.

See CertainTeed Commercial Roof Systems Specifications manual for all approved substrates.

<sup>2</sup>When directly adhering to wood or OBS, priming is required; direct adhesion to plywood or OSB is not permitted by code in Miami-Dade County (check your local building code); at the end of the roofing membrane's life, roofing membranes directly adhered to wood roof decks will require replacement of the deck.



## Technical Data (cont'd)

Test Description	Test Method	Results*
Thickness:	ASTM D1970	1.4 mm (55 mils)
Tensile Strength:	ASTM D5147 @ 73.4 +/- 3.6°F MD/XD	50/30 lbs./in.
H₂O Absorption:	0.1%	
Dimensional Stability:	ASTM D5147	MD 0.1%/XD 0.1%
Adhesion to Plywood:	ASTM D1970	30 lbs./ft.
Tear Strength:	ASTM D5147 MD/XD	80/50 lbs./in.

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

#### Warranties

CertainTeed offers material and/or material/workmanship (No Dollar Limit) limited 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 No Dollar Limit (NDL) limited warranties on specific roof projects.

# Technical Assistance and Services

CertainTeed provides technical assistance in the product selection, specification and application guidelines for all CertainTeed commercial roof systems. Field representatives are available for consultation in each region.

For more information, contact CertainTeed Commercial Roofing Technical Services at 800-396-8134 ext. 2 or rpg.comm.services@saint-gobain.com

