Copperhead<sup>®</sup> Vapor Barrier PRODUCT DATA SHEET & SPECIFICATIONS





PRODUCT	Copperhead <sup>®</sup> 10-mil Reinforced Vapor Barrier (12' x 100')
	One side white, one side black, with polyethylene woven reinforcement
Weight	43.2 lbs. per 1,200 sq. ft. roll
Tensile Strength	MD: 136 LBF/IN
	TD: 134 LBF/IN
	ASTM E 154, Sec. 9
Tear Strength	54 LBS. (WARP)
	57 LBS. (WEFT)
	ASTM D 751 TONGUE
Grab Tensile*	138 LBF (directional average)
	ASTM D 751
Bursting Strength	318 LBS.
	ASTM D 751 MULLEN
Puncture Resistance	15,839 grams
(maximum weight sustained)	ASTM D 1709
Puncture Resistance	76 LBS.
	ASTM D 5602
CBR Puncture	626 LBF
	ASTM D 6241
Maximum Use Temperature	180° F
Minimum Use Temperature	-70° F
Water Vapor Permeance	.0016 PERMS (ASTM E 96/ 154 Sec. 7)
Water Vapor Transmission Rate	.0006 GRAINS/FT <sup>2</sup> *HR
Radon Diffusion Coefficient	11x(10 <sup>-12</sup> )M <sup>2</sup> /S

\* Tests are an average of Machine and Transverse Directions

To the best of our knowledge, the specification chart lists typical property values and are intended as guides only, not as specification limits. Crawlspace Supply Pros makes no warranties as to the fitness for a specific use or merchantability of products referred to, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

MANUFACTURER: Radiant Barrier USA 3603 W. Pioneer Pkwy., Ste. B, Pantego, TX 76013, (817) 583-5222

#### **PRODUCT DESCRIPTION:** following page

### Crawlspace Supply Pros, LLC

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# Copperhead<sup>®</sup> Vapor Barrier PRODUCT DATA SHEET & SPECIFICATIONS

Basic Use: Copperhead<sup>®</sup> 10-mil Reinforced Vapor Barrier (herein referred to as Copperhead<sup>®</sup>) is a high-performance crawlspace vapor barrier designed to prevent moisture migration from the soil into the crawlspace. Copperhead<sup>®</sup> helps guard against mold, mildew, allergens, fungus, radon gas, methane gas, heat loss due to damp insulation, wood rot, and overall degradation of the crawlspace.

Composition and Materials: Copperhead® 10-mil white, triple-ply, extrusion coated, virgin polyethylene membrane. Copperhead® is manufactured using woven high-density fibers yielding the highest strength to weight ratio, tensile strength and puncture resistance of any product of its kind.

Size: 1,200 sq. ft. rolls (12' x 100') Weight: 36lbs. per 1,000 sq. ft.

#### **TECHNICAL DATA:**

APPLICABLE STANDARDS:

**ASTM E 1745** Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs.

**ASTM E 154** Standard Test Methods for Water Vapor Retarders used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.

**ASTM D 1709** Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method.

**ASTM D 5602** Standard Test Methods for Static Puncture Resistance of Roofing/Under-Slab Membrane Specimens. **ASTM E 96** Standard Test Methods for Water Vapor Transmission of Materials.

**ASTM D 882** Standard Test Method for Tensile Properties of Thin Plastic Sheeting.

ASTM D 751 Standard Test Method for Coated Fabrics. ASTM E 1643 Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.

**ASTM D 6241** Standard Test Method for Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe.

**Environmental Considerations:** Copperhead can aid in reducing soil gas and poisons, such as methane and radon. **Physical Properties:** Copperhead<sup>®</sup> exceeds all ASTM E 1745 Class A, B, and C requirements for under-slab vapor retarders.





#### INSTALLATION

Placement:

• If sump pump is present or is to be installed, slightly slope grade in the direction of the sump pit to allow for proper drainage. Tamp or roll subbase or granular base.

•Unroll Copperhead<sup>®</sup> in correlation with the longest dimension of the crawlspace area. Unfold to twelve-foot width.

•Install Copperhead<sup>®</sup> by means of Double-Bond Tape, mechanical fasteners, termination bar and/or high-grade construction adhesive to the upper portion of the block/concrete wall. Leave at least a three-inch gap from the sill to the top of the Copperhead<sup>®</sup> for future termite inspection. Seal the top edge of the Copperhead<sup>®</sup> with urethane caulk.

•Holes or openings through Copperhead<sup>®</sup> should be effectively sealed with all-weather tape to maintain the integrity of the vapor barrier. Overlap joints a minimum of six inches. Seal overlaps together with all-weather tape. *Protection*:

•Proper care should be taken when installing Copperhead<sup>®</sup>. Carelessness during installation can damage even the most puncture-resistant vapor retarders.

•Copperhead<sup>®</sup> will help guard against possible punctures and tears present from rigorous construction traffic.

•Avoid driving stakes through Copperhead<sup>®</sup>. If this cannot be avoided, each individual hole must be repaired.

•These are very general installation instructions. All installation instructions on architectural and/or structural drawings should be reviewed and followed. Detailed installation instructions can be obtained by calling our corporate office at (919) 633-0499.

AVAILABILITY AND COST: Copperhead® is sold through distributors throughout the United States. Current cost information can be obtained by calling our corporate office at (919) 633-0499 or contacting the manufacturer, Radiant Barrier USA, at (817) 538-5222.

WARRANTY: Warranty Information can be obtained by contacting the manufacturer, Radiant Barrier USA, at (817) 538-5222.

MAINTENANCE: Requires no maintenance once installed. TECHNICAL SERVICES: Technical information and detailed test results can be obtained by calling our corporate office at (919) 633-0499.

**FILING SYSTEMS:** Additional information can be obtained by calling our corporate office at (919) 633-0499.

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