ISI BUILDING PRODUCTS®

TECHNICAL DATA SHEET

PRODUCT NAME
Viper® CS II 20-mil
Crawl Space Vapor Barrier

MANUFACTURER
ISI Building Products
401 Truck Haven Rd.
East Peoria, IL 61611

CSI DIVISION
070000

WEIGHTS & MEASUREMENTS

STANDARD SIZES
12' x 100' (1,200 SF)

APPROXIMATE WEIGHT
97 lbs/MSF

CO-EXTRUDED

ODOR FREE

INTERTEK SUSTAINABILITY ACCREDITED
CLEAN AIR GOLD
CERTIFIED LOW VOC EMISSIONS

WARRANTY
LIFETIME

High-Performance Vapor Barrier

BASIC USE
Viper CS II is a high-performance crawl space vapor barrier designed to prevent moisture migration from the soil into the crawl space. Viper CS II helps guard against mold, mildew, allergens, fungus, radon gas, methane gas, heat loss due to damp insulation, wood rot and overall degradation of the crawl space.

COMPOSITION
Viper CS II is a white, co-extruded, virgin polyolefin membrane. Viper CS II is manufactured using a proprietary resin formulation, yielding excellent performance characteristics at an economical cost.

INSTALLATION
Install Viper CS II by means of Viper 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 Viper CS II for future termite inspection. Seal top edge of Viper CS II with urethane caulk.

Holes or openings through Viper CS II should be effectively sealed with Viper Vapor Tape, Viper Vapor Patch and/or Viper Vaporcheck Mastic to maintain the integrity of the vapor barrier. Overlap joints a minimum of twelve inches and seal overlap together with Viper Vapor Tape.

These are general instructions. Architectural and structural drawings should be reviewed and followed. Detailed installation instructions can be obtained at www.isibp.com.

APPLICABLE STANDARDS

ASTM E1745 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs

ASTM E154 Standard Test Methods for Water Vapor Retarders used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover

ASTM D1709 Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method

ASTM D6241 Standard Test Method for Static Puncture Strength of Geo-textiles and Geo-textile Related Products Using a 50-mm Probe

ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials

DOE/IRC Vapor Retarder Permeability and Classification

PROPERTIES	STANDARD/TEST	RESULT
THICKNESS (NOMINAL)	N/A	20-mil
WEIGHT (APPROXIMATELY)	N/A	97 lbs/MSF
CLASSIFICATION	ASTM E1745	CLASS A
MINIMUM USE TEMPERATURE	N/A	-70°F
MAXIMUM USE TEMPERATURE	N/A	180°F
TENSILE STRENGTH (AFTER SOAKING)	ASTM E1745 / ASTM E154	CLASS A (95 lbf/in [MD], 108 lbf/in [TD])
PUNCTURE RESISTANCE	ASTM E1745 / ASTM D1709	CLASS A (> 2,600 grams)
WATER VAPOR PERMEANCE	ASTM E1745 / ASTM E96	CLASS A / CLASS 1 (< 0.1 perms)
RADON DIFFUSION COEFFICIENT	ISO TS 11665-13 METHOD A	4.3×10^{-12} m^2/ sec

20-mil
CO-EXTRUDED

DISCLAIMER: To the best of our knowledge, the specification chart lists typical property values and are intended as guides only, not as specification limits. The manufacturer 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.