Childers®

Mastics, Coatings, Adhesives, Sealants

CP-35 CHIL-PERM® WB Vapor Retarder Coating

Product Data Sheet

INDOOR & OUTDOOR
WATER-BASED, VAPOR RETARDER COATING

DESCRIPTION
CHIL-PERM® WB CP-35 is an effective, high-performance, water-based, vapor retarder coating designed for all interior and exterior, low temperature and some dual temperature applications. It is fast drying and forms a tough, flexible dry film which retards the flow of vapor through an insulation system. It looks heavy, but spreads easily.

USES
CHIL-PERM® WB CP-35 is effective on all types of thermal insulations in both cold and dual temperature service. As a vapor retarder coating, it is safely used to vapor seal fittings, piping and equipment insulated with mineral fiber, cellular glass, polyisocyanurate, polyurethane, polystyrene, phenolic and even open cell polyethylene foams. It may also be used to seal the joints of foil-faced boards and other factory, vapor-sealed, insulation materials (test before using for this application), as well as to seal punctures from pins and staples in vapor retarder facing materials.

APPLICATION
Easy application by trowel or brush. It is commonly applied with CHIL-GLAS® #10 Glass Fiber Reinforcing Mesh. See reverse side of product data sheet for complete application instructions.

ADVANTAGES
- Water-based for personal and environmental safety.
- Creates a smooth finish even over rough substrates.
- Resistant to many acids and alkalis for a long service life.
- Outdoor rated and UV resistant.

CERTIFIED
- MAS Certified Green®
- California Dept. of Public Health Standard Method v1.2
- VOC Emissions and Content requirements to contribute to **LEED v4** EQ Credit: Low Emitting Materials – Paints and Coatings
- VOC Content: 36 g/l, less water and exempt solvents
- Collaborative for High Performance Schools EQ 7.1
- CHIL-PERM® WB CP-35 meets NFPA Standard 90A and 90B 25/50 requirements as a vapor retarder membrane sealer

COLOR
White

AVERAGE WET WEIGHT (ASTM D1475)
12.1 lbs./U.S. gal. (1.5 kg/liter)

AVERAGE NON-VOLATILE (ASTM D2369)
60% by volume (73% by weight)

SERVICE TEMPERATURE RANGE
Temperature to which dry film is subjected.
-20°F to 190°F (-29°C to 88°C)

APPLICATION & STORAGE TEMPERATURE RANGE
50°F to 100°F (10°C to 38°C)

DRYING TIME
Temperature, humidity and film thickness will affect drying time.
To Touch: 3 Hours
Through: 24 – 36 Hours

COVERAGE
Varies with substrate and membrane.
4 to 6 U.S. gal./100 sq. ft. (1.6 to 2.4 l/m^2)

CLEAN UP
Warm, soapy water while coating is still wet.

WATER VAPOR PERMEANCE (TYPICAL AVERAGE)
Tested with reinforcing mesh.

ASTM F1249: 0.15 perms (0.10 metric perms) at ~ 50 mils (1.3 mm) dry film thickness. Tested at 73°F, 50% RH.

ASTM E96, PROCEDURE A: 0.15 perms (0.10 metric perms) at ~ 50 mils (1.3 mm) dry film thickness.

Meets the permeance requirements of ASTM C755-19, Section 7.2.2 for below ambient vapor retarder coatings when used as a closure mastic in conjunction with ASJ and other vapor retarder membranes.

SURFACE BURNING CHARACTERISTICS (ASTM E84)
Flame Spread: 0
Smoke Developed: 0
Tested as applied in a 3 in. strip at a rate of 25 sq. ft./U.S. gal.

Visit us on the web at www.fosterproducts.com

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Suggested Specifications CHIL-PERM® WB CP-35

To seal seams, overlaps, punctures, penetrations and terminations of vapor retarder membrane jacketing:

The insulation on all piping, fittings and equipment shall be vapor sealed with CHIL-PERM® WB CP-35 Vapor Retarder Coating. The first coat shall be a tack coat applied at a coverage rate of 2 U.S. gals./100 sq. ft. (0.8 l/m^2). While still wet, a layer of CHIL-GLAS® #10 Glass Fiber Reinforcing Mesh shall be embedded, with all seams overlapped a minimum of 2" (5.08 cm). A finish coat at a coverage rate of 2 U.S. gals./100 sq. ft. (0.8 l/m^2) shall be applied so that the total wet film thickness is a minimum of 0.064". This will provide a minimum dry film thickness of 0.038".

NOTES TO SPECIFYING ENGINEER

1. CHIL-PERM® WB CP-35 Vapor Retarder Coating, white, should be specified where white All Service Jacketing (ASJ), canvas or other white coatings/finishes are specified on the adjoining pipe or equipment insulation.
2. CHIL-BYL® CP-76 Joint Sealant is recommended for use with CHIL-PERM® WB CP-35 Vapor Retarder Coating.
3. Do not use over copper clad wire.
4. All outdoor horizontal surfaces must be sloped at least 1/2 inch per foot to assure water run-off and prevent the ponding of rain water and melting snow or ice.

Application Guide and Suggested Procedures

1. USE OF MATERIAL

CHIL-PERM® WB CP-35 Vapor Retarder Coating looks heavy and yet applies quite easily. DO NOT THIN. Store the product in a warm and dry area. Protect from freezing until dry.

It is essential in applying vapor retarder sealing materials that the recommended film thickness be achieved. Therefore, do not try to spread the vapor retarder coating too thin.

2. THE CONDITION OF THE INSULATION TO BE COATED

Since CHIL-PERM® WB CP-35 is an excellent vapor retarder, it should never be applied over insulation containing moisture. Dusty or porous substrates should first be primed with CHIL-SEAL® CP-50A MV1, diluted 50% with water for proper bonding. Allow the primer to thoroughly dry before overcoating with CHIL-PERM® WB CP-35 Vapor Retarder Coating.

3. HINTS FOR SUCCESS

A vapor retarder system is no better than its weakest link. It is extremely important that where the finish terminates at an uninsulated point, the finish of CHIL-PERM® WB CP-35 Vapor Retarder Coating and glass fiber reinforcing mesh be flashed over the uninsulated section for a minimum of 4" (10.16 cm).

Where there is a possibility of the temperature of the uninsulated section exceeding 190°F (88°C) due to steam-off or other heated application, the vapor sealing at this joint shall be accomplished by using CHIL-BYL® CP-76 Joint Sealant.

The surface of extruded polystyrene and polyisocyanurate boardstock may contain water-soluble inks that may bleed through water-based mastics. Please test before applying CHIL-PERM® WB CP-35 Vapor Retarder Coating.

4. SPRAY

CP-35 Vapor Retarder Coating may be airless spray applied. For spray equipment information, please consult Airless Spray Recommendations or contact your spray equipment supplier. Average viscosity range: 150,000 – 175,000 cps. Corrosion resistant pumps and fittings are suggested.

CUSTOMER SERVICE: 833-849-3700

For professional use only. Keep out of reach of children.

Consult Safety Data Sheet and container label for further information.