

#118 Moisture Emission Sealer

I. Description:

Constantine 118 Moisture Emission Sealer is a water dispersion of urethane polymers. It is non-flammable and environmentally compatible with our carpet adhesives and most fully cured, densified concrete subfloors. 118 Moisture Emission Sealer creates an integral barrier film to prevent moisture emissions from coming in direct contact with other subfloor preparations of paints, adhesive and floorcoverings. 118 Moisture Emission Sealer can be installed via two distinct installation procedures one being for subfloors having moisture emission levels at 6.0 pounds or below and the second where subfloor emissions are up to 8.0 pounds per 1000 square feet every 24 hours.

Moisture Emission levels must be determined prior to treatment using the Calcium Chloride Moisture Test Method as designed by ASTM F-1869-98. The minimum curing cycle for 118 Moisture Emission Sealer is 24 hours and a maximum time for cure of 72 hours. 118 Moisture Emission Sealer is intended for interior use only.

II. Uses:

118 Moisture Emission Sealer can be used on the following surfaces:

A. Subfloors where moisture emission levels are no more than 8.0 pounds per 1000 square feet per 24 hours as determined by the Calcium Chloride Moisture Test Method (ASTM F-1869-98).

Note: Constantine does not recommend nor will the stated warranty apply when moisture emissions are tested using any other test method such as moisture percent meters.

1. Fully cured Concrete (densified - not gypcrete or low density) on , below or above grade.
2. Plywood (APA underlayment grades)
3. Unglazed Ceramic Tile or Terazzo
4. Brick

B. In conjunction with the following carpet backings:

1. Broadloom carpet with woven polypropylene, urethane laminate, urethane cushion, and unitary backings.
2. PVC-backed Carpet Tiles
3. PVC-backed Six Foot Carpet

III. Specific Technical Data:

- A. Base - Water dispersion of urethane polymers.
- B. Color - Blue, dries transparent blue.
- C. Wt/Gal - 8.5 - 8.8 lbs.
- D. pH - 7.3 - 7.5
- E. Non-Flammable liquid.
- F. Solubility: uncured liquid-water; cured- NA
- G. Water emissions resistance - Fully cured application of two coats - 6.0lbs.; three coats - 8.0 lbs. as determined by Calcium Chloride Test (ASTM F-1869-98)
- H. Clean-up - clean tools with mild soap and water while compound is wet. The compound is extremely difficult to remove once it has dried. Take care not to allow the compound to stand on walls, doors, wall base, etc.
- I. Freeze-Thaw - Do not allow to freeze.
- J. Packaging Available - cs/gal(4), 4gal pail, 55 gal drum.

Special Note: To ensure effective results, a Calcium Chloride Test must be run on all suspect floor surfaces before and after the cured application of 118 Moisture Emission Sealer. These moisture test results must remain on file and available for review. Additional applications may be required to achieve specific moisture emission levels as specified by certain floor coverings. For moisture testing consistency we specify the Full Spectrum Flooring Technology "Calcium Chloride Moisture Test Kit".

IV. Application

1. 118 Moisture Emission Sealer forms a non-porous, extremely strong, continuous urethane film. To ensure that the 118 Moisture Emission Sealer forms a film, the floor must be completely smooth, free of dirt, dust, oil, grease, curing agents, other floor sealers, adhesive residue, or any other substance that may effect the bonding of the 118 Moisture Emission Sealer to the subfloor. The entire concrete subfloor surface must be "Shot Blasted" before the application of 118 Moisture Emission Sealer. All uneven cracks or subfloor defects should be leveled and filled with a latex fortified cementitious type floor patch. The floor patch should be fully cured per its manufacturer's specifications before applying 118 Moisture Emission Sealer.
2. 118 Moisture Emission Sealer should be applied using a short nap roller applicator.
3. 118 Moisture Emission Sealer work to chemically seal all surface pores by allowing both penetration and surface sealing.
4. 118 Moisture Emission Sealer does not prevent the occurrence of sub-surface moisture, nor does it eliminate the presence of alkali based salts which both can completely destroy painted surfaces or direct glue adhesives for floorcoverings. 118 Moisture Emission Sealer, however, can prevent any form of moisture emission up to 8.0lbs./1000sq.ft./24hrs. and thus the deposit of high pH, alkaline salts on the subfloor surface preventing floor failures due to these substances.
5. All foreign material coatings such as old cutback, old floor covering adhesives, other concrete sealers or curing agents or old paint should be removed so that they do not prevent or interfere with the proper application of 118 Moisture Emission Sealer. "Shot Blasting" is the only effective method for preparing a concrete subfloor to accept the 118 Moisture Emission Sealer.
6. 118 Moisture Emission Sealer contains a pigmented chemical additive which allows for the determination of uniformity of coverage and application of this sealer product.
7. 118 Moisture Emission Sealer can be applied where highly alkaline salts are present. The floor should be cleaned thoroughly and damp mopped using a 10% solution of muriatic acid or a 50% solution of white vinegar. Allow this to dry then damp mop using clean tap water. The pH should be below 11.0 before applying 118 Moisture Emission Sealer.
8. Environmental conditions of Relative Humidity below 65% and a temperature above 60°F must be maintained 72 hours before, during and 72 hours after proper application of 118 Moisture Emission Sealer. A subsurface moisture emission level below a maximum of 8.0lbs./1000sq.ft./24hrs. (as determined via Calcium Chloride Test) is required prior to applying 118 Moisture Emission Sealer. Subfloor temperature must be 60°F or greater for the same 72 hour periods.
9. A. Floors having emissions at 6.0lbs. or below:
 1. Apply the first coat of 118 Moisture Emission Sealer using a short nap roller at a rate of 300-325 sq.ft. per gallon. Allow to dry until film is tack free. (minimum two hours)
 2. Apply the second coat at a coverage rate of approximately 450-500 sq.ft. per gallon.
 3. Allow the two coats to cross-link (cure) for a minimum of 24 hours.
 4. Retest the moisture emission rate using a Calcium Chloride Test as per ASTM specs.
 5. If moisture emission results are as expected (3.0lbs. or below), proceed using the specified adhesive to install the carpet.
- B. Floors having emissions at 8.0lbs. or below:
 1. A floor having 6.1-8.0lbs. of moisture emission requires a *minimum* of three coats of 118 Moisture Emission Sealer. Follow the exact procedure as in 9A-1 and 9A-2 but a third coat will be required as prepared and installed per 9A-2 above.
 2. After all three coats have been completed, proceed with the same procedure as in section 9A3-9A.

October 15, 2001