

SECTION 07265

BELOW-GRADE VAPOR RETARDERS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
  - 1. Vapor retarders under slabs-on-grade.

1.2 DEFINITIONS

- A. Vapor Retarder: Material with a water vapor transmission rating of not over 0.04g per square foot per hour.
- B. Vapor Barrier: Material with a water vapor transmission rating of not over 0.015g per square foot per hour.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Verification: 12 inch (300 mm) square units for each type of vapor retarder indicated.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect materials from physical damage and from deterioration by moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers and Products: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following products listed in Part 2 of this Section.

## 2.2 VAPOR RETARDERS FOR UNDER SLABS

- A. Vapor Retarder for VCT and other moisture vapor sensitive flooring applications having the following qualities:
  - 1. Minimum Permeance: ASTM E-96, not greater than 0.04 perms.
  - 2. Tensile Strength: ASTM E154 or D638, Class B – over 30 lbs/in.
  - 3. Puncture Resistance: ASTM E-154, Class C – over 475 grams.
  - 4. Water Vapor Barrier: ASTM E-1745, meets or exceeds Class C.
  - 5. Thickness of Barrier (Plastic) ACI 302.1R-96, not less than 10 mils.
- B. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Stego Wrap, 10 mil thick vapor retarder by Stego Industries LLC, (877) 464-7834.
  - 2. Griffolyn Type-65 by Reef Industries.
  - 3. Vapor Block 10 by Raven Industries.
  - 4. MoistStop Ultra A by Fortifiber.
- C. Vapor-Retarder/Barrier Tape (for slabs): Stego Warp red polyethylene tape or tape as recommended by the manufacturer.
- D. Vaporlock edge tape, preformed 2" wide two-sided adhesive.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for Sections in which substrates and related work are specified and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Clean substrates of substances harmful to vapor retarders or air barriers, including removing projections capable of puncturing vapor retarders or air barriers, or of interfering with attachment.
- B. Do not install carpet over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet manufacturer.

### 3.3 INSTALLATION, GENERAL

- A. Comply with manufacturer's written instructions applicable to products and application indicated.
- B. Extend retarders or barriers in thickness indicated to envelop entire area to be covered. Cut and fit tightly around obstructions. Remove projections that interfere with placement.

### 3.4 INSTALLATION OF UNDER-SLAB VAPOR RETARDERS AND BARRIERS

- A. Moisture vapor barrier system shall be installed at all interior floor slabs and as otherwise indicated in the drawings in strict accordance with the manufacturer's printed instructions and as follows:
1. Snap chalk line along inside perimeter of foundation walls at top of slab elevation.
  2. Without wetting, clean a 3" wide band on the surface of the concrete below the chalk line at approximately mid-slab height. Remove dirt, residual form release, or other bond inhibiting surface contaminants. Grind smooth any surface projections within the band.
  3. While removing the contact paper on the backside, firmly press 2" wide Vaporlock perimeter strip onto wall, parallel to the chalk line on the cleaned band at mid-slab elevation.
  4. Remove contact paper on the face side.
  5. Apply a 12" wide strip of vapor barrier covering only the bottom 1" of contact surface on the perimeter strip. Cut, fit, and seal corner details with vapor barrier seaming tape.
  6. Align top edge of Iso-Strip isolation joint material to chalk line, and press material onto remaining 1" of exposed perimeter strip adhesive.
  7. Roll out vapor barrier material, overlapping edge rolls and all seams by 3". Tape all seams with vapor barrier seaming tape.
  8. All tears, punctures, etc. to be repaired and taped as required to maintain the watertight integrity of the vapor barrier system.

### 3.5 PROTECTION

- A. Protect installed vapor retarders from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where vapor retarders are subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

END OF SECTION