# UNDER-SLAB VAPOR RETARDER (Class A)

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Products Supplied Under This Section
  - 1. Vapor Retarder, seam tape, and pipe boots

#### 1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM)
  - ASTM E 1745 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil Or Granular Fill Under Concrete Slabs
  - 2. ASTM E 154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs
  - 3. ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials
  - 4. ASTM E 1643 Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs
- B. American Concrete Institute (ACI)
  - 1. ACI 302.1R-6 & 7 Section 3.2.3 Vapor Retarder

## 1.3 SUBMITTALS

- A. Testing/Specifications
  - 1. <u>Independent</u> laboratory test results showing compliance with ASTM & ACI Standards.
  - 2. Manufacturer's samples, literature.
  - 3. Manufacturer's installation instructions for placement and seaming.

#### **PART 2 – PRODUCTS**

#### 2.1 MATERIALS

- Provide a Vapor Retarder, which meets ALL criteria for Class A, per ASTM E-1745. Supplied material must be printed with "Meets ASTM E-1745 Class A" a minimum of 1 time per 500 sq.ft.
  - VaporBlock 15 by Raven Industries 800-635-3456

# Other manufacturers accepted meeting the above specification:

W.R. Meadows – 800-342-5976 Fortifiber Corporation – 800-732-6464

#### 2.2 ACCESSORIES

- A. Seam Tape
  - 1. VaporBond Tape by Raven Industries, 800-635-3456 or other 4" wide tape approved by vapor retarder manufacturer.
- B. Pipe Boots
  - 1. Raven VaporBoot System or other Manufacturer's supplied pipe boot system.

## **PART 3 – EXECUTION**

# 3.1 PREPARATION

- A. Ensure that subsoil is approved by architect
  - 1. Level and tamp or roll aggregate, sand or tamped earth base.

## 3.2 INSTALLATION

- A. Install Vapor Retarder:
  - 1. Installation shall be in accordance with manufacturer's instructions and ASTM E 1643.
    - A. Unroll Vapor Retarder with the longest dimension parallel with the direction of the pour.
    - B. Lap Vapor Retarder over footings and seal to foundation walls.
    - C. Overlap joints 6 inches and seal with VaporBond Tape or other 4" wide pressure sensitive tape.
    - D. Seal all penetrations (including pipes) with manufacturer's pipe boot.
    - E. No penetration of the Vapor Retarder is allowed except for reinforcing steel and permanent utilities.
    - F. Repair damaged areas by cutting patches of Vapor Retarder, overlapping damaged area 6 inches and taping all four sides with VaporBond Tape or other 4" wide pressure sensitive tape.