

SECTION 07271

UNDER-SLAB VAPOR RETARDER

1 PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 specification sections, apply to work of this section.
 - 1. Vapor Retarder, seam tape, and pipe boots.

1.2 SECTION INCLUDES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM E 1745 Standard for Plaster 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 96 Standard Test Methods for Water Vapor Transmission of Materials
 - 4. ASTM E 1643 Standard Practice for Installation of Water 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. Independent laboratory tests results showing compliance with ASTM & ACI Standards.
 - 2. Manufacturer's samples, literature.
 - 3. Manufacturer's installation instructions for placement and seaming.

2 PART 2 PRODUCTS

2.1 MATERIALS

- A. 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 square fee.
- B. Equal to Vapor Block 10, by Raven Industries (800) 635-3456.

2.2 ACCESSORIES

A. Seam Tape:

1. Vapor Bond Tape, by Raven Industries (800) 635-3456 or other 4" wide tape approved by vapor retarder manufacturer.

B. Pipe Boots:

1. Raven VaporBoot or other manufacturer's supplied pipe boot.

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 Vapor Bond 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 Vapor Bond Tape or other 4" wide pressure sensitive tape.

...END OF SECTION