

## GUIDE SPECIFICATION FOR PERMINATOR® 10 MIL UNDERSLAB VAPOUR BARRIER

SECTION 07 26 16 / SECTION 07130

Below Grade Vapour Barriers

Specifier Notes: This guide specification is written according to the Construction Specifications Canada (CSC) format. The section must be carefully reviewed and edited by the architect or engineer to meet the requirements of the project. Coordinate this section with other specification sections and the drawings.

Specifier Notes: W. R. MEADOWS® PERMINATOR underslab vapour retarders are a new generation of resin/chemical technologies. They are vapour retarders created to provide the vaporproofing industry with economical, highly effective methods for preventing the penetration through the slab of damaging alkaline salts, moisture, mold, radon gas, and water vapour.

- 1 General
- 1.1 SECTION INCLUDES
  - .1 Surface preparation.
  - .2 Application of an underslab vapour barrier.
- 1.2 RELATED SECTIONS

Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

- .1 Section 03 30 00 - Concrete.
- .2 Section 07 10 00 – Dampproofing and Waterproofing.
- .3 Section 09 64 00 - Wood Flooring.
- .4 Section 09 65 00 - Resilient Flooring.
- 1.3 REFERENCES
  - .1 American Society for Testing and Materials (ASTM)
    - .1 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.
    - .5 ASTM F 1249-01 Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor.

- .2 American Concrete Institute (ACI)
  - .1 ACI 302.1R-96 Vapor Barrier Component (plastic membrane) is not less than 10 mils thick.
- 1.4 SUBMITTALS
  - .1 Comply with Section 01 33 00 - Submittal Procedures.
  - .2 Submit manufacturer's product data and application instructions.
- 1.5 DELIVERY, STORAGE, AND HANDLING
  - .1 Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
  - .2 Store materials in a clean, dry area in accordance with manufacturer's instructions.
  - .3 Stack membrane on smooth ground or wood platform to eliminate warping.
  - .4 Protect materials during handling and application to prevent damage or contamination.
  - .5 Ensure membrane is stamped with manufacturer's name, product name, and membrane thickness at intervals of no more than 220 cm (85").
- 1.6 ENVIRONMENTAL REQUIREMENTS
  - .1 Product not intended for uses subject to abuse or permanent exposure to the elements.
  - .2 Do not apply on frozen ground.
- 2 Products
- 2.1 MANUFACTURER
  - .1 W. R. MEADOWS, INC., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax (847) 683-4544. Web Site [www.wrmeadows.com](http://www.wrmeadows.com).
- 2.2 MATERIALS
  - .1 Plastic Vapor Barrier
    - .1 Performance-Based Specification: Vapour barrier membrane must meet or exceed all requirements of ASTM E 1745 Classes A, B, & C.
      - .1 Maximum Permeance ASTM E 96: 0.0043 Perms
      - .2 Water Vapour Transmission Rate ASTM F 1249 calibrated to ASTM E 96 (water method): 0.0016 grains/ft.<sup>2</sup>/hr
      - .3 Resistance to Organisms and Substrates in Contact with Soil ASTM E 154, Section 13: 0.051 Perms
      - .4 Tensile Strength ASTM E 154, Section 9: 52 Lb. Force/Inch
      - .5 Puncture Resistance ASTM D 1709, Method B: 2,655 Grams
      - .6 Water Vapor Retarder ASTM E 1745: Meets or exceeds Class A, B & C
      - .7 Thickness of Retarder (plastic) ACI 302.1R-96: Not less than 10 mils
    - .2 Proprietary-Based Specification
      - .1 PERMINATOR 10 mil by W. R. MEADOWS.
- 2.3 ACCESSORIES
  - .1 Seam Tape

- .1 High Density Polyethylene Tape with pressure sensitive adhesive. Minimum width 4".
- .2 Pipe Boots
  - .1 Construct pipe boots from vapor barrier material and pressure sensitive tape per manufacturer's instructions.
- 3 Execution
- 3.1 EXAMINATION
  - .1 Examine surfaces to receive membrane. Notify architect if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.
- 3.2 SURFACE PREPARATION
  - .1 Prepare surfaces in accordance with manufacturer's instructions.
- 3.3 APPLICATION
  - .1 Installation shall be in accordance with manufacturer's instructions and ASTM E 1643-98.
  - .2 Unroll vapour barrier with the longest dimension parallel with the direction of the pour.
  - .3 Lap vapour barrier over footings and seal to foundation walls.
  - .4 Overlap joints 6" and seal with manufacturer's tape.
  - .5 Seal all penetrations (including pipes) with manufacturer's pipe boot.
  - .6 No penetration of the vapour barrier is allowed except for reinforcing steel and permanent utilities.
  - .7 Repair damaged areas by cutting patches of vapour barrier, overlapping damaged area 6" and taping all four sides with tape.

END OF SECTION