



GUIDE SPECIFICATION FOR 20 MIL UNDERSLAB VAPOR BARRIER

PART 1 – GENERAL

1.1 SUMMARY

A. Products supplied under this section:

1. Vapor barrier, seam tape, and mastic for installation under concrete slabs.

B. Related sections:

1. Section 03 30 00 Cast-in-Place Concrete
2. Section 07 26 00 Vapor Retarders

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM E 1745-09 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs.
2. ASTM E 154-99 (2005) Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.
3. ASTM E 96-05 Standard Test Methods for Water Vapor Transmission of Materials.
4. ASTM F 1249-06 Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor.
5. ASTM E 1643-09 Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.

B. American Concrete Institute (ACI):

1. ACI 302.2R-06 Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.

1.3 SUBMITTALS

A. Quality Control/Assurance:

1. Summary of test results as per ASTM E 1745.
2. Manufacturer's samples, literature, and summary of test results.
3. Manufacturer's instructions for product installation and penetration repair.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Vapor Barrier/Retarder must exceed the ASTM E 1745 Class A requirements:

1. Water Vapor Permeance: ASTM F 1249 or ASTM E 96 - 0.005 Perm
2. Puncture Resistance: ASTM 1709 - 5000 grams or more
3. Tensile Strength: ASTM D 882 - 80.0 lbf/in³



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4. Life Expectancy: ASTM E 154 - Indefinite
5. Must Be 100% Virgin Resin Polyethylene/Polyolefin

B. Thickness: 20 mil minimum

C. Vapor barrier products:

1. Xtreme Vapor Barrier (20-mil) by Tex-Trude LP, 281.452.5961 www.tex-trude.com
2. Premoulded Membrane with Plasmatic Core, by WR Meadows, 847.683.4500
www.wrmeadows.com

2.2 ACCESSORIES

A. Seam tape:

1. Xtreme Seam Tape, by Tex-Trude LP, 281.452.5961 www.tex-trude.com

B. Penetration Mastic:

1. Xtreme Mastic, by Tex-Trude LP, 281.452.5961 www.tex-trude.com

PART 3 – EXECUTION

3.1 PREPARATION

A. Ensure base material is approved by Architect or Geotechnical Engineer.

1. Level and compact base material.

3.2 INSTALLATION

A. Install vapor barrier follow the guidelines of the ASTM E 1643 and/or by manufacturer's instructions.

1. Unroll vapor barrier with the longest dimension parallel with the direction of the concrete placement.
2. Overlap joints 6 inches and seal with manufacturer's tape.
3. Lap vapor barrier over footings and/or seal to foundation walls.
4. Seal all penetrations (including pipes) per manufacturer's instructions.
6. Repair damaged areas by cutting a patch of vapor barrier, overlapping damaged area 6 inches on all sides and taping all sides with seam tape or by manufacturer's recommendations.