

Guide Specification

VB-250 (11mil) Vapor Retarder

UNDER-SLAB VAPOR RETARDER (03300 & 07260)

PART I – GENERAL

1.1 SUMMARY

A. Products Supplied Under This Section

1. Vapor Retarder, Seam Tape & Accessories for installation under concrete slabs
2. Only 100% Virgin Resin Products – NO Recycled Polyethylene / Visqueen
3. Only products by Manufacturer – No Private Label / Marketed / Outsourced Products
4. Only products with Local Manufacturer Field Representative

B. Related Sections

1. Section 03300 – Cast-in-place Structural Concrete
2. Section 07260 – Under-Slab Vapor Retarder

1.2 REFERENCES

A. 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 D 903 – Standard Test Method for Peel or Stripping Strength of Adhesive Bonds

B. American Concrete Institute (ACI)

1. ACI 302.1R-04 – Vapor Retarder Component (plastic membrane) is not less than 10 mils thick

1.3 SUBMITTALS

A. Quality Control / Assurance

1. Submit Laboratory test results showing compliance with ASTM & ACI Standards
2. Submit Manufacturers Product Samples & Literature
3. Manufacturer's installation instructions for placement, seaming and pipe boot installation

PART II – PRODUCTS

2.1 MATERIALS

A. Vapor Retarder

1. Must Be 100% Virgin Resin High Density Polyethylene Vapor Retarder
 - a. Water Vapor Permeance ASTM E 96 0.020 Perms (US)
 - b. Water Vapor Permeance ASTM E 96 0.013 Perms (Metric)
 - c. Water Vapor Retarder ASTM E 1745 Meets Class A (Plastics)



IntePlus® XF FILM

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- d. Tensile Strength ASTM D 882 50 lbs/in
- e. Puncture Resistance ASTM D 1709 2400 grams
- 2. Vapor Retarder Products
 - a. Barrier-Bac VB-250 (11 mil) by Inteplast, 877-535-0555, www.BarrierBac.com
 - b. Premoulded Membrane with Plasmatic Core by WR Meadows
 - c. Zero-Perm by Alumiseal
 - d. Florprufe 120 by Grace Construction Products

2.2 ACCESSORIES

A. Seam Options

- 1. Seam Tape must have the following qualities:
 - a. Water Vapor Permeance ASTM E 96 <0.02 Perms
 - b. Tensile Strength ASTM D 882 22 lbs/in. minimum
- 2. Seam Tape
 - a. Barrier-Bac Seam Tape by Inteplast, 877-535-0555, www.BarrierBac.com
- 3. Seam Welding
 - a. Seams may be heat welded if desired
 - b. Contact Inteplast at 877-535-0555 for heat welding assistance

B. Pipe Boots

- 1. Construct pipe boots from Vapor Retarder material & Seam Tape per manufacturer details

PART III – EXECUTION

3.1 PREPARATION

- A. Ensure that subsoil is approved by architect or geotechnical firm
 - 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 1643-98
 - 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 manufacturer's tape.
 - d. Seal all penetrations (including pipes) per manufacturer's instructions.
 - 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 tape.
 - g. Vapor Retarder installation to be inspected by field representative prior to concrete placement at no charge to owner, architect, engineer or contractor.
 - h. Architect to be notified when installation of Vapor Retarder is started to schedule field inspection.