### **VERTIWRAP® VPS**

# PRIMERLESS, SELF-ADHERED, WATER RESISTIVE VAPOR PERMEABLE AIR BARRIER

#### **PRODUCT DESCRIPTION**

Vertiwrap VPS air barrier membrane permits the passage of water vapor, while acting as a barrier to air and liquid water. Vertiwrap VPS reduces the buildup of moisture in the wall assembly, increasing the wall durability and comfort of the building occupants. Primerless and Self-Adhered to a variety of substrates, including glass-mat exterior grade sheathing, for quick and easy install. Vertiwrap VPS is compliant in a wide variety of NFPA 285 Wall Assemblies.

#### **FEATURES AND BENEFITS**

- > 14 perms
- Primerless, airtight adhesion to glass mat sheathing down to 25°F
- Sheds water while allowing vapor to pass
- Fully adhered to substrate virtually eliminating water migration
- Watertight, airtight laps
- Seals around post-applied fasteners used in brick ties, termination bars, etc.
- Immediate resistance to wind-driven rain
- 6 months UV exposure
- NFPA 285 compliant in most wall assemblies

#### **SYSTEM COMPONENTS**

- Vertiwrap NPS
- Vertiwrap NPS 6"
- Vertiwrap NPS 9"
- Vertiwrap NPS 12"
- Vertiseal 50
- Vertiwrap TWF

#### **TECHNICAL DESCRIPTION**

Property	Test Method	Typical Result
Color		White with Green Print
Thickness, nominal		22 mils
Application Temperature, min		+25°F (-3.9°C)
Standard for Air Barrier	ASTM E1677	PASS
Water Resistance	ASTM E331	PASS @ > 15 psf
Water Resistance	AATCC TM127 Method B Option 2	PASS – 55 cm static water head for 5 hours without water leakage
Water Vapor Permeance	ASTM E96 Method B	> 14 perms
Air Leakage (Membrane)	ASTM E2178	< 0.02 L/S.m. <sup>2</sup>
Air Leakage through Assembly	ASTM E2357	PASS
Tensile Strength, Dry	ASTM D882	> 40 lbf / in per in width
Average Break Force, Dry	ASTM D5034	> 40 lb MD > 35 lb XD
Peel Adhesion to DensGlass <sup>1</sup>	ASTM D903	> 1.5 lbf/in
Lap Adhesion @ 25°F²	ASTM D903 Modified	> 1.5 lbf/in
Nail Sealability	ASTM D1970 Sec 8.9	PASS
Low Temperature Flexibility	AC38 Section 3.34	PASS
UV Exposure	AC38 Section 4.1.2	PASS
Flame Spread	ASTM E84	Class A
Smoke Developed	ASTM E84	Class A
NFPA 285	NFPA 285	PASS

<sup>1.</sup> At room temperature after 24 hours of conditioning at test temperature and pull speed of 12 in/min



#### **PRODUCT DATA**

 $4' \times 100' (1.2 \text{ m} \times 30.4 \text{ m})$   $400 \text{ ft}^2/\text{roll} (37.1 \text{ m}^2)$ Weight per roll 16.1 lb (7.3 kg) 40 rolls per pallet

#### **APPROVALS & CERTIFICATIONS**

NFPA 285 compliant in several wall assemblies

#### WHERE TO USE

• Above grade walls

#### **PRODUCT CODES**

• VTVVVPS48100



<sup>2.</sup> At 25°F after 24 hours of conditioning at test temperature and pull speed of 12 in/min

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#### STORAGE AND SHELF LIFE

12 month shelf-life if stored in its original packaging in a dry environment at a temperature between 40°F and 90°F (4°C and 32°C). Store Vertiwrap VPS off the ground and protected from moisture.

#### **LIMITATIONS**

Reference installation guide or contact Technical Service for limitations and proper application guidance.

- Vertiwrap VPS cannot be permanetely exposed to UV and must be protected or covered with the exterior cladding within 6 months of installation.
- Vertiwrap VPS has a maximum in-service temperature of 240°F (116°C).

### SUITABLE SUBSTRATES AND SURFACE PREPARATION

### EXTERIOR GRADE GLASS MAT SHEATHING, PLYWOOD OR OSB

Panel joints should be securely fastened, flush and spaced according to the manufacturer's requirements. Any gaps greater than ¼" must be filled with Vertiseal 50 or a Polyglass approved sealant and tooled flush. Damaged sheathing must be repaired according to the manufacturer's requirements. Mapeprime \$710 or solvent based spray adhesive on gypsum cut edges is advised prior to installing Vertiwrap products. Wood substrates must contain a moisture content of less than 18%.

#### **CONCRETE MASONRY UNIT (CMU)**

CMU joints should be struck full and flush, and mortar must be allowed to cure for a minimum of 3 days prior to application of the Vertiwrap system. All mortar must be removed from pre-installed brick ties. CMU substrates will require the use of Mapeprime S710 Primer.

#### CONCRETE

Remove any loose aggregate and repair spalled areas or other deficiencies in the concrete. Allow concrete to cure for a minimum of 7 days. Concrete substrates will require the use of Mapeprime S710 Primer.

#### **INSTALLATION**

Ensure that wall assemblies are dried in and that the top of walls are protected from water intrusion prior to installing.

Vertiwrap VPS can be installed vertically or horizontally with minimum side and end laps of 2". All laps should be installed in a fashion that sheds water. Ensure that all horizontal or vertical end laps are offset by a minimum of 12".

Roll the Vertiwrap VPS with a hand roller (linoleum roller or similar) firmly in place during application.

The Vertiwrap VPS Membrane can be stopped or continued into framed openings. All framed openings should be flashed with Vertiwrap NPS Flashing or Vertiseal 50 according to each product's application guidelines and standard Polyglass details. In applications such as soffits or ceilings the Vertiwrap VPS may require additional fastening. Fastening can be done within the lap prior to the installation of the next sheet and or as needed within the field of the membrane. Any fasteners used in the field of the Vertiwrap VPS should be sealed with Vertiseal 50 or a Polyglass approved sealant.

All penetrations through the Vertiwrap system must be fully secured. Vertiseal 50 or a Polyglass approved sealant must be applied around all penetrations through the Vertiwrap VPS membrane. Vertiseal 50 may also be applied to all post applied fasteners at the discretion of the installer or as part of the project design requirements.

At the top of the wall the Vertiwrap must be terminated with Vertiseal 50 or a Polyglass approved sealant. Sealant may also be required at the end of each working day to ensure the Vertiwrap VPS remains firmly in place and any precipitation cannot undermine the membrane.

#### **REPAIRS**

The system should be inspected for damage prior to concealment.

Repairs to damaged areas should be made by first removing any unbonded membrane and then installing Vertiwrap VPS a min. of 6" past the damaged area and sealing any non-water shedding edges with Vertiseal 50 or a Polyglass approved sealant.

#### **TEMPERATURE**

Vertiwrap VPS may be applied without primer to dry substrates per substrate and surface preparations guidelines when air and surface temperature are 25°F (-4°C) and rising.



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#### **CORPORATE HEADQUARTERS**

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**Product Disclaimer:** Unless otherwise incorporated into or part of a supplemental manufacturer's warranty, Polyglass warrants its product(s) against manufacturing defects in its product that directly results in leakage for a period of 1 year. Refer to safety data sheet (SDS) for specific data and handling of our products. All data furnished refers to standard production and is given in good faith within the applicable manufacturing and testing tolerances. Polyglass U.S.A., Inc., reserves the right to improve and change its products at any time without prior notice. Polyglass U.S.A., Inc. cannot be held responsible for the use of its products under conditions beyond its own control. For most current product data, detail drawings and warranty information, visit www.polyglass.us

