

# BUILDING ENVELOPE

#### **BUILDING ENVELOPE SOLUTIONS**

Polyglass U.S.A., Inc. is a leading manufacturer of high-quality modified bitumen roofing and waterproofing solutions. Acquired in 2008, Polyglass is a proud member of the Mapei Group; the family owned, 3-billion-dollar global building materials industry leader. Together we represent over 100 years of combined experience in the production and support of building envelope products and solutions, with 83 manufacturing facilities spanning 36 countries on 5 continents.

We are **more than** a manufacturer - Our company's family-based culture puts our customers, their projects and success, first. Polyglass and Mapei are committed to those founding core values in addition to the Research & Development, and Innovation required to ensure the performance expected from our world class organization.

#### **SERVICE & SUPPORT**

Our team of technical experts assist customers from concept to completion with each phase of the project.

- Waterproofing design assistance and analysis
- Periodic onsite observations
- 24/7 Technical Support: (866) 794-9659

#### WARRANTY PROTECTION

We "**Seal the Envelope**<sup>™</sup>" with solutions to protect your building from roof to wall to foundation. Polyglass stands behind our products and systems with the most reliable warranties in the industry, providing extended protection and assuring optimum performance.



#### **BUILDING ENVELOPE SOLUTIONS PRODUCTS**

Polyglass offers a complete range of superior products and systems to provide for all structural waterproofing specifications and requirements:

- Pre-Applied Horizontal and Vertical Applications
- Post Applied Foundation Walls
- Above Grade Exterior Walls
- Decks, Plazas, and Elevated Decks
- Fully Bonded Self-adhered Sheet Membranes or Fluid Applied Membranes
- Complete Portfolio of System Accessories

For full system components and requirements, reference product specific Technical Data Sheets at Polyglass.us or contact Technical Services (866) 794-9659.

#### POLYGLASS USA AND MAPEI ARE ISO 9001:2015 CERTIFIED

Our products are produced according to exacting standards which always meet, and often exceed ASTM standards and building product code requirements.

# MAPEPROOF<sup>™</sup> AL PRO

Pre-Applied with Kick Out Roll, Fully Bonded HDPE Waterproofing Membrane for Below Grade Applications



Mapeproof AL PRO bonds integrally to poured concrete forming an adhesive bond to protect below grade structures from water intrusion and lateral water migration. Convenient adhesive side lap forms watertight laps between successive sheets. Ideal for horizontal slabs and vertical blindside applications. The easy release strips and kick out roll make for a simplified installation saving you time and labor.

- Kick out roll for ease of installation
- Self-adhering side laps with easy release liner strips
- Prevents lateral water migration
- Bonds to concrete
- High hydrostatic head resistance
- Durable; resistant to trade damage
- Red list free

#### **MAPEPROOF<sup>™</sup> HW**

Bentonite Geotextile Sheet Waterproofing Membrane



Mapeproof HW waterproofing membrane is composed of sodium bentonite encapsulated between a woven and nonwoven polypropylene geotextile fabrics. The nonwoven fabric is needle-punched through to the woven fabric, mechanically locking the sodium bentonite clay in place with thousands of fibers. In the presence of water, the sodium bentonite hydrates and swells forming a monolithic waterproofing membrane. Ideal for horizontal slabs, vertical blindside, and backfilled walls applications.

- High swelling index helps prevent water intrusion
- Can be installed over damp or green concrete
- Self-healing if punctured
- Not affected by rises and falls in the water table

# MAPEPROOF<sup>™</sup> SW

Bentonite Geotextile Sheet Waterproofing Membrane for Salt or Contaminated Water Applications



Mapeproof SW waterproofing membrane is composed of sodium bentonite encapsulated between a woven and nonwoven polypropylene geotextile fabrics. The nonwoven fabric is needle-punched through to the woven fabric, mechanically locking the sodium bentonite clay in place with thousands of fibers. In the presence of water, the sodium bentonite hydrates and swells forming a monolithic waterproofing membrane. Ideal for horizontal slabs, vertical blindside and backfilled wall applications in the presence of salt or contaminated groundwater conditions.

- Includes a special additive for mitigating the affects of salt and contaminated water on the swell index
- High swelling index helps prevent water intrusion
- Can be installed over damp or green concrete at least 3 days old
- Self-healing if punctured
- Not affected by rises and falls in the water table

## MAPETHENE<sup>™</sup> LT60

Post-Applied, Self-Adhered Waterproofing Membrane for Below Grade Structures and Elevated Decks



Use Mapethene LT60 on below grade foundations, horizontal decks, tunnels, and balconies where structural waterproofing is needed. The specialized formulation combines a rubberized adhesive with an HDPE layer to act as a barrier against moisture, water, and gas. Mapethene LT60 membrane is suitable for installations where the ambient temperature is between 25°F and 60°F (-4°C and 16°C). For high temperature applications, use Mapethene HT60.

- Factory-made, ensuring a controlled thickness
- Ideal waterproofing for new and rehab projects
- High hydrostatic head resistance
- Cold-applied
- Low application temperature range, from 25°F and 60°F (-4°C and 16°C)
- Compatible with common construction materials such as concrete, concrete masonry units (CMUs), metal, wood (pressure-treated and fire-treated), and insulated concrete forms (ICFs)

# **MAPETHENE<sup>™</sup> HT60**

**MAPESEAL<sup>™</sup> GC** 

Post-Applied, Self-Adhered Waterproofing Membrane for Below Grade Structures and Elevated Decks



Use Mapethene HT60 on below grade foundations, horizontal decks, tunnels and balconies where structural waterproofing is needed. The specialized formulation combines a rubberized adhesive with an HDPE layer to act as a barrier against moisture, water and gas. Mapethene HT60 membrane is suitable for installations where the ambient temperature is above 40°F (5°C). For low temperature applications, use Mapethene LT60.

- Factory-made, ensuring a controlled thickness
- Ideal waterproofing for new and rehab projects
- High hydrostatic head resistance
- Cold-applied
- Wide application temperature range, from 40°F to 120°F (4°C to 49°C)
- Compatible with common construction materials such as concrete, concrete masonry units (CMUs), metal, wood (pressure-treated and fire-treated), and insulated concrete forms (ICFs)

## Single-Component, Fast-Curing, Monolithic Waterproofing Membrane for Damp and Green Concrete



Mapeseal GC is a single-component, fast-curing, monolithic waterproofing membrane that can be applied to damp and green concrete. This 100%-solids formulation guarantees the membrane will not shrink. VOC-compliant in virtually all municipalities. Proprietary, single-grade formulation suitable for both vertical and horizontal surfaces, as well as green concrete applications.

- Cold, fluid-applied
- Seamless and monolithic
- Does not require primer
- No special mixing
- Solvent free, very low odor
- Compatible with common construction materials such as concrete, concrete masonry units (CMUs), stone, metal, plastic (PVC and ABS), wood (pressure treated and fire-treated), rigid insulation and insulating concrete forms (ICF)
- Can be applied with roller, brush, trowel, or squeegee
- Reinforced systems available with Mapeseal Fabric

# MAPEPRIME<sup>™</sup> S710

Low-VOC, Solvent Based Adhesive Primer for Mapethene LT60/HT60



Mapeprime S710 is a quick-drying, high-tack adhesive primer, is specifically formulated to promote maximum adhesion when using Polyglass Mapethene LT60/ HT60 waterproofing membranes.

- Quick drying
- High tack
- Compliant with most state and local VOC requirements
- Wide temperature application window, down to 25°F (-4°C)
- Suitable for use over concrete and concrete masonry units (CMUs) and wood

# MAPEPRIME<sup>™</sup> 720 W

Water-Based Adhesive Primer for Mapethene LT60/HT60



Mapeprime 720W is a quick-drying, water-based, high-tack adhesive primer, is specifically formulated to promote maximum adhesion when using Polyglass Mapethene LT60/HT60 waterproofing membranes.

- Water based
- Quick drying
- High tack
- Low VOC, low odor formulation
- Suitable for use over concrete and concrete masonry units (CMUs), wood, metal, PVC, gypsum sheathings with glass-mat facers

# MAPEPROOF<sup>™</sup> LIQUID MEMBRANE

Two-Component, Monolithic Liquid Waterproofing Accessory for Above and Below Grade Applications



Mapeproof Liquid Membrane is two-component, thixotropic, solvent-free, trowel grade membrane, specifically designed for multiple uses with Polyglass Waterproofing Membranes. Use Mapeproof Liquid Membrane to seal, fill, or detail Mapeproof AL PRO or Mapethene LT60/HT60 Membranes. Ideal for a variety of applications including fillets/reinforcing applications, pile heads, vertical wall terminations, through-wall penetrations, repairs, and transitions. The unique sag resistance virtually eliminates the need to go back and re-tool on critical areas. The extended pot life is perfect for complex jobs, big or small.

- Available in 5 gallon and 2 gallon kits
- Trowel Grade
- Solvent free, odorless
- Sag resistant
- Weather resistant
- Cold Applied
- Compatible with concrete, cement masonry, steel rebar
- Specially designed for waterproofing Mapeproof AL PRO, Mapethene HT60/LT60

# MAPEPROOF<sup>™</sup> AL DETAIL TAPE

Two-sided, Pressure Sensitive Tape Specially Formulated for Below-Grade Detail Applications



Specially formulated for below grade detail applications, Mapeproof AL Detail Tape is designed to bond to concrete and prevent lateral water migration in the most complex of job site details. Forms a strong bond to Mapeproof AL PRO membrane, ensuring watertight details with enough durability to accommodate foot traffic.

- Available in 4" and 8" widths
- Flexible, easy to use
- Cold applied
- Bonds to concrete
- Red list free

# MAPEDRAIN<sup>™</sup> DRAINAGE PRODUCTS

High-Strength, High-Flow Drainage Mats with Protective Film



Mapedrain drainage mats provide hydrostatic relief while preventing the passage of soil or sand particles which might clog the polypropylene core. Each Mapedrain mat includes a polymeric protective film on the back side to provide additional protection to waterproofing membranes.

SKU's: Mapedrain HS, Mapedrain HS PLUS, Mapedrain HSW

- Options for both below grade and above grade applications
- Vertical and horizontal grades
- Lightweight and easy to install
- Geotextile filter fabric ensures no-clog drainage
- Below-grade relief of hydrostatic pressure
- 40% post-industrial recycled polypropylene material

# MAPEDRAIN<sup>™</sup> SIMPLE DRAINAGE SYSTEM

#### A complete system for easy, below grade water collection

Mapedrain Simple Drain System is a complete offering of modular 3-dimensional, high-flow, polypropylene drainage channels for easy on-site water collection. **SKU's** Mapedrain SDS 12" channel, Mapedrain SDS Side outlet, Mapedrain SDS End Outlet

Compatible with Mapedrain HS, HS PLUS, and HSW

# **MAPEPROOF<sup>™</sup> SEALANT**

Detailing Sealant for Mapeproof HW/SW



Mapeproof Sealant is a trowel-grade sealant made of sodium bentonite clay and specialized polymers that swell when exposed to water to prevent water intrusion. It can be applied easily and adheres well to different substrates, making it suitable for various detailing applications. Mapeproof Sealant is an ideal component to form a seamless waterproofing system when used with Mapeproof HW and Mapeproof SW.

- Can be installed over damp or green concrete
- Not affected by rises and falls in the water table
- Can be installed at the laps in wall applications for added protection against hydrostatic conditions
- No VOCs



# **MAPESTRIP**<sup>™</sup>

Hydrophilic, Expanding Rubber Waterstop for Watertight Joints and Transitions

Available in two varieties. Mapestrip 25 is a pre-formed hydrophilic rubber strip, with an acrylic polymer base specially designed to form watertight construction joints. Controlled volumetric expansion reduces the risk of concrete spalling.

Mapestrip 25B is a sodium bentonite based hydrophilic rubber strip specially designed to form watertight construction joints. The sodium bentonite swells when it encounters water to seal against leaks. Mapestrip 25 and 25B are ideal for horizontal and vertical construction joints and penetrations through slabs and walls. Both rolls are 3/4" x 1" x 16.4' (20 mm x 25 mm x 5 m)



#### MAPESTRIP<sup>™</sup> 25

- Uniform, volumetric expansion up to 120%
- Reproducible swell after wet/dry cycling
- Unaffected by freeze, thaw cycle



#### MAPESTRIP<sup>™</sup> 25B

- Swells in the presence of moisture to lock out water
- Can be installed over damp or green concrete
- Not affected by rises and falls in the water table

# MAPEPROOF<sup>™</sup> GRANULES

Bentonite Granules for Detailing with Mapeproof HW or Mapeproof SW



Mapeproof Granules are composed of sodium bentonite clay. In the presence of moisture, the sodium bentonite hydrates and swells forming a monolithic waterproofing membrane. Ideal for cost sensitive horizontal slabs and vertical blindside applications.

- High swelling index helps lock out moisture
- Can be installed over damp or green concrete
- Self-healing if punctured
- Not affected by rises and falls in the water table
- Suitable for vertical applications
- 0 VOCs

# **ABOVE GRADE AIR & VAPOR BARRIERS**



# Above Grade Air & Vapor Barriers

# **VERTIWRAP<sup>™</sup> VPS**

Primerless, Self-Adhered, Water Resistive Vapor Permeable Air Barrier



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.

- Impermeable to air, liquid water, and water vapor
- Improved adhesion eliminates need for rework at laps and areas peeling from substrate
- Primer-less, airtight adhesion to glass mat sheathing down to 25°F; 14 perms
- Immediate resistance to wind-driven rain
- Fully adhered to substrate eliminating water migration
- Seals around fasteners used in brick ties, termination bars, etc.
- NFPA 285 compliant in most wall assemblies
- 225 sqft rolls; 22 mil nominal thickness

# VERTIWRAP<sup>™</sup> NPS

Primerless, Self-Adhered, Water Resistive Nonpermeable Air Barrier



VertiWrap NPS air barrier membrane prevents the passage of air, water vapor, and liquid water from entering the wall assembly. VertiWrap NPS locks moisture out of 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 NPS is compliant in a wide variety of NFPA 285 Wall Assemblies.

- Impermeable to air, liquid water, and water vapor
- Improved adhesion eliminates need for rework at laps and areas peeling from substrate
- Primer-less, airtight adhesion to glass mat sheathing down to 25°F; <1 perms</li>
- Immediate resistance to wind-driven rain
- Fully adhered to substrate eliminating water migration
- Seals around fasteners used in brick ties, termination bars, etc.
- AAMA 711 compliant; detail tapes available in 6", 9", 12", 18" and 48" widths
- NFPA 285 compliant in most wall assemblies; 6 months UV exposure
- 225 sqft rolls

# VERTISEAL<sup>™</sup> 50

#### One-part, Low VOC, Moisture Cure, Sealant for use with VertiWrap<sup>™</sup> Air Barriers



VertiSeal 50 is a silane-terminated polyether (STPE) based sealant designed for use in terminations, penetrations, and openings. Low-odor formula is VOC-compliant in all 50 states.

- Can be used as a sealant and a liquid flashing
- ASTM C 920 Type S, Grade NS, Class 50
- VOC <20 g/L</li>
- Adheres to a variety of substrates
- Virtually no shrink
- Rain resistant within minutes
- Skin time 20 mins
- 20 oz sausage

#### VERTIWRAP<sup>™</sup> VPL

Primerless, Fluid-applied, Water Resistive Vapor Permeable Air Barrier with SwiftSet<sup>™</sup> Technology



VERTIWRAP<sup>™</sup> NPL

VertiWrap VPL air barrier membrane permits the passage of water vapor, while acting as a barrier to air and liquid water. VertiWrap VPL reduces the build up of moisture in the wall assembly, increasing the wall durability and comfort of the building occupants. VertiWrap VPL is compliant in a wide variety of NFPA 285 Wall Assemblies.

- Rain ready in 30 mins in ideal conditions
- Easy to spray, minimum thickness achieved with single pass application
- 50% solids; > 13 perms
- Designed to be sprayed, rolled, or trowel applied
- Monolithic membrane fully adheres to substrate virtually eliminating water migration
- Sheds water while allowing vapor to pass
- Seals around fasteners used in brick ties, termination bars, etc
- 5 gal pails; 55 gal drums

#### Primerless, Fluid-applied, Water Resistive Nonpermeable Air Barrier



VertiWrap NPL air barrier membrane prevents the passage of air, water vapor, and liquid water from entering the wall assembly. VertiWrap NPL reduces the build up of moisture in the wall assembly, increasing the wall durability and comfort of the building occupants. VertiWrap NPL is compliant in a wide variety of NFPA 285 Wall Assemblies.

- Quick drying and primerless improves speed of application
- Monolithic membrane is impermeable to air, liquid water, and water vapor
- Single pass application
- 40% solids; <1 perms</li>
- Tack free 2-4 hours; fully cured 24-72 hours
- Designed to be sprayed, rolled, or trowel applied
- Fully adhered to substrate virtually eliminating water migration
- Sheds water while allowing vapor to pass
- Seals around fasteners used in brick ties, termination bars, etc
- 5 gal pail ; 55 gal drums



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