Waterproofing Systems

- Cold-Fluid-Applied Waterproofing Membrane
- Bentonite Clay Waterproofing Membranes
- Self-Adhering Sheet Waterproofing Membranes
- Prefabricated Drainage Composites
- Waterproofing Accessories
- Surface-Preparation Products
# TABLE OF CONTENTS

## Introduction .................................. 2-3

### COLD-FLUID-APPLIED WATERPROOFING MEMBRANE
  Planiseal® CR1 ..................................... 4

### BENTONITE CLAY WATERPROOFING MEMBRANES
  Mapeproof™ HW and Mapeproof SW .... 5

### SELF-ADHERING SHEET WATERPROOFING MEMBRANES
  Mapethene™ HT and Mapethene LT ...... 6

### PREFABRICATED DRAINAGE COMPOSITES
  Mapedrain™ 10................................. 7
  Mapedrain 20................................. 7
  Mapedrain 25................................. 7
  Mapedrain 30................................. 7
  Mapedrain 40................................. 7
  Mapedrain 50................................. 8
  Mapedrain TD Drainage Composite ...... 8
  Mapedrain TD Fittings ....................... 8

### WATERPROOFING ACCESSORIES

#### Contact Adhesives
  Mapebond™ 700............................... 9
  Mapebond 710............................... 9
  Mapebond 720............................... 9

#### Detailing Accessories
  Mapethene Mastic............................ 10
  Mapeflex™ P2 NS ............................ 10
  Mapeflex P1................................. 10
  Mapecover™ 810............................. 10
  Idrostop™ 25................................. 10
  Idrostop B25................................. 10
  Mapeproof Granules.......................... 10
  Mapeproof Sealant........................... 10
  MAPEI LMR Fabric............................ 11
  Mapeband™ TPE.............................. 11
  Planibond® AE............................... 11

### SURFACE-PREPARATION PRODUCTS
  Planiseal 88................................. 12
  Planitop® X................................. 12
  Planitop XS................................. 12
  Planicrete® AC .............................. 12
Introduction

A WORLDWIDE LEADER
Originally established in 1937, today MAPEI is a privately owned global corporation headquartered in Milan, Italy, with 87 subsidiaries including 81 plants in 35 countries. The company specializes in manufacturing chemical products for building, including waterproofing products, specialty mortars and admixtures for concrete, products to restore historic buildings, and decorative and protective coatings for concrete surfaces. In addition, MAPEI is the world leader in the manufacturing of mortars, grouts, adhesives and complementary products for installing all types of floor and wall coverings. MAPEI Corporation, the division responsible for supporting the North American markets, is based in Deerfield Beach, Florida, and employs over 1,100 team members – ranging from Manufacturing and R&D to Technical Services and Sales. The Canadian subsidiary MAPEI Inc. supports those efforts with about 300 additional employees.

SUPERIOR PRODUCTS
A Complete Range of Products
MAPEI produces the most innovative products for the construction market. More than 5,000 products globally (adhesives, sealants, mortars, admixtures, latex, etc.) are manufactured in MAPEI’s plants, which produce the world’s most complete range of building products. Diversified, high-quality chemical products – from powdered adhesives, to liquid and paste products, to polymers – are created to meet the needs of more than 66,000 customers around the world.

Quality Control
MAPEI is an ISO 9001-2000 certified company. Its products are produced according to exacting standards, strictly adhering to process and procedural guidelines with documented compliance. This rigid production format is vigilantly followed to ensure that every product is produced uniformly from batch to batch.

PROFESSIONAL SUPPORT NETWORK
Knowledgeable Sales Force
MAPEI offers the largest, most highly trained sales force within the industry to serve your needs for product application/installation recommendations. Its sales representatives are focused on supporting you with product knowledge, product demonstrations, product information, marketing support materials and other relevant tools to help you generate sales.

Technical Expertise
An in-house Technical Services Call Center responds to customers’ telephone inquiries with answers to installation challenges in real time. In addition, MAPEI can offer field support for job startups, product training and on-site problem resolution.
Customer Service Plus
MAPEI’s standards for customer service are best-in-class. Our leadership includes such service innovations as:

- Customer-friendly, efficient processes
- One-call resolution
- Employee commitment to effective customer dialog

Innovative Research & Development
Worldwide, more than 12% of MAPEI employees are involved in the development of new technologies and product innovations, keeping our customers at the forefront of the industry. The company has taken the additional initiative of focusing its R&D efforts on environmentally sustainable solutions.

To remain on the cutting edge of innovation, MAPEI reinvests 5% of its annual revenues into researching and developing new products and technologies; in particular, 70% of its R&D efforts are directed to develop eco-sustainable and environmentally friendly products.

Best-Backed™ Warranty Program
To bring it all together, MAPEI complements the industry’s best products with simple, easy-to-understand requirements for a variety of warranty options.
Planiseal® CR1

Single-Component, 100%-Solids, Cold-Fluid-Applied, Structural Waterproofing Membrane

Planiseal CR1 is a fast-curing, 100%-solids, cold-fluid-applied, single-component, moisture-curing, structural waterproofing membrane that will not shrink and is VOC-compliant in virtually all municipalities. Very low in odor, it is well suited for use in and around occupied spaces. Thanks to advanced proprietary technology, this single-grade membrane can be used in horizontal as well as vertical applications, maximizing versatility. Planiseal CR1 can be applied by roller, brush, trowel or squeegee.

Features and benefits:

- Single-grade membrane for vertical and horizontal applications
- Suitable for green concrete
- Seamless and monolithic
- Does not require a primer
- Applies easily with no mixing or special equipment required
- Free of solvents
- Very low odor
- Free of tar and asphalt
- Compatible with common construction materials such as concrete, concrete masonry units (CMUs), stone, metal, wood (pressure-treated and fire-treated), rigid insulation and insulating concrete forms (ICF)

Applications:

- Vertical and horizontal waterproofing on structural foundation walls and decks
- Vertical and horizontal waterproofing on tunnels, plaza decks, balconies, split slabs, courtyards, planters, parking decks and bridges
- Interior applications such as bathrooms, kitchens, mechanical rooms and laboratories
- Suitable for use in confined spaces and occupied buildings

The Planiseal CR1 structural waterproofing system includes:

- Planiseal CR1 waterproofing membrane.
- Mapedrain™ drainage composites to protect the Planiseal membrane and to filter and channel water away from the structure.
- Mapecover™ 810 protection board.
- Mapeflex™ P2 NS and Mapeflex P1 for detailing and penetrations.
- Idrostop™ 25 and Idrostop B25 expandable waterstops.
Bentonite Clay Waterproofing Membranes

Mapeproof™ HW and Mapeproof SW

Sodium Bentonite Waterproofing Membranes

MAPEI’s Mapeproof sodium bentonite waterproofing membranes have been proven, worldwide, to be the most consistent and reliable products of their kind. Certified as manufactured in accordance with ISO 9001, both Mapeproof HW and Mapeproof SW are constructed using a layer of woven and nonwoven, puncture- and tear-resistant polypropylene fabrics. Encased within these fabrics is high-swelling, self-sealing sodium bentonite, loaded at an industry leading rate of 1.1 lbs. per sq. ft. (5.3 kg per m²), minimum. The process by which the sodium bentonite is encased within these fabrics ensures that, regardless of hydration cycles and/or the geometric plane in which it is installed, the membrane will perform as designed.

When hydrated, Mapeproof membranes form a monolithic membrane with very low permeability, protecting underground structures from water ingress. Designed for sites where contaminated or salt groundwater is present, Mapeproof SW also contains a proprietary polymer to ensure that the membrane performs as designed when hydrated.

Features and benefits:

- Can be installed over damp or green concrete
- Self-healing if punctured
- Creates a strong mechanical bond to poured concrete
- Can be installed regardless of ambient or surface temperatures
- VOC-free
- Mapeproof membranes are not affected if the level of the water table rises and falls.
- The needle-punched pattern in the geotextile fabrics guarantees that the sodium bentonite is held firm and stable, even when applied vertically.

Applications:

- Waterproofing for new and rehabilitation projects
- Below-grade vertical and horizontal foundation structures
- Cast-in-place concrete applications, including backfilled concrete walls
- Underground tunnels with earth-covered roofs
- Below concrete slabs and elevator pits
- Blindside applications, including soldier piles, lagging, steel sheet piling, secant piles, shotcrete and stabilized soil-retention walls

The Mapeproof waterproofing system includes:

- Mapeproof HW and Mapeproof SW waterproofing membranes.
- Mapeproof Sealant for detailing and penetrations.
- Mapeproof Granules for detailing and penetrations.
- Idrostop™ 25 and Idrostop B25 expandable waterstops.
- Mapedrain™ drainage composites, which create a consistent plane for the Mapeproof membrane and channel water away from the structure.

Mapeproof warranties:

MAPEI offers a variety of product and system warranty programs. Contact your local MAPEI representative for warranty information on your project.

For more information on the Mapeproof waterproofing system, including installation instructions and CAD details, please visit www.mapei.com.

Idrostop 25 is an expandable, flexible waterstop that features an acrylic polymer base and is used to create watertight concrete joints.
**Mapethene™ HT and Mapethene LT**

**Self-Adhered Sheet Waterproofing Membranes**

*Mapethene HT* and *Mapethene LT* are 60-mil-thick, self-adhering sheet waterproofing membranes composed of an impact-resistant, cross-laminated high density polyethylene (HDPE) film 4 mils thick, which is laminated onto a proprietary rubberized asphalt 56 mils thick.

**Features and benefits:**

- Factory-produced products ensure a controlled thickness
- Ideal waterproofing for new and rehabilitation projects
- High hydrostatic head pressure resistance
- Easy to apply, requiring no special tools or equipment
- Fully adhered membrane, eliminating the potential for water migration behind the membrane
- Elastomeric nature of the membrane allows for the normal expansion and contraction of the structure.
- Wide application temperature window:
  - *Mapethene HT*: Ambient and substrate temperatures of 40°F (5°C) and above
  - *Mapethene LT*: Ambient and substrate temperatures of 25°F to 60°F (-4°C to 16°C)
- Compatible with common construction materials such as concrete, concrete masonry units (CMUs), metal, wood (pressure-treated and fire treated), rigid insulation and insulated concrete forms (ICF)

**Applications:**

- Used for vertical and horizontal waterproofing on structural foundation walls and decks
- Can be used on below-grade foundation walls, tunnels, balconies, split slabs, plaza decks, parking decks and bridges
- Good for interior applications such as bathrooms, kitchens, mechanical rooms and laboratories

**The Mapethene waterproofing system includes:**

- *Mapethene HT* or *Mapethene LT* waterproofing membrane.
- *Mapebond 700* solvent-based, fast-drying contact adhesive.
- *Mapebond 710* low-VOC, solvent-based, fast drying contact adhesive.
- *Mapebond 720* water-based, contact adhesive.
- *Mapelot™ P2 NS* and *Mapelot™ P1* for detailing and penetrations.
- *Mapethene Mastic* for sealing terminations.
- *Mapedrain™* drainage composites, to protect the *Mapethene* membrane and to filter and channel water away from the structure.
- *Idrostop™ 25* and *Idrostop B25* expandable waterstops.

**Mapethene warranties:**

MAPEI offers a variety of product and system warranty programs. Contact your local MAPEI representative for warranty information on your project.

For more information on the *Mapethene* waterproofing system, including installation instructions and CAD details, please visit www.mapei.com.
Prefabricated Drainage Composites

**Mapedrain™ and fittings**

**Drainage Composites, Foundation Perimeter Drain and Fittings**

Two critical components of virtually all waterproofing systems are the abilities to protect the waterproofing membrane and channel water away from the structure. The proper drainage composite can protect the waterproofing membrane from accidental punctures that may occur, especially when backfilling. It also relieves hydrostatic pressure over the life of the waterproofing system. To meet the needs of various construction applications, MAPEI offers seven distinct drainage composites in addition to four drain fittings, all designed to ensure proper building drainage.

**Product construction:**

MAPEI’s Mapedrain drainage composites are composed of a three-dimensional, polypropylene core, which has significantly greater chemical resistance than other products on the market that use polystyrene or other polymeric materials. Each core has a polypropylene geotextile fabric, either woven or nonwoven (depending upon application requirements) heat-welded to the top of the dimples; this fabric retains soil/concrete and filters out any debris that could clog the water channels created by the three-dimensional core. Because filter fabrics are heat-welded to the core, a process far superior to “gluing” them, they have a greater ability to stay in place during backfill or overburden placement. In addition, the polypropylene cores of all Mapedrain products contain at least 40% post-industrial recycled content.

**Mapedrain™ 10**

Mapedrain 10 is a basic, single-sided drainage composite for low-depth (< 10 ft. [3.05 m]) foundation walls and is typically used in residential and light commercial construction.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>11,000 psf (527 kN/m²)</td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>18 g/min/ft (223 L/min/m)</td>
</tr>
<tr>
<td>Geotextile fabric</td>
<td>Nonwoven</td>
</tr>
<tr>
<td>Core thickness</td>
<td>0.40” (10.16 mm)</td>
</tr>
</tbody>
</table>

**Mapedrain™ 20**

Mapedrain 20 is the standard for high-flow, high-compressive-strength, vertical, single-sided below-grade drainage.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>15,000 psf (718 kN/m²)</td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>21 g/min/ft (260 L/min/m)</td>
</tr>
<tr>
<td>Geotextile fabric</td>
<td>Nonwoven</td>
</tr>
<tr>
<td>Core thickness</td>
<td>0.40” (10.16 mm)</td>
</tr>
</tbody>
</table>

**Mapedrain™ 25**

Mapedrain 25 provides the same high level of performance as Mapedrain 20, with the addition of a backer film to prevent the potential for “die cutting” of a waterproofing membrane that is installed behind the drainage composite.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>15,000 psf (718 kN/m²)</td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>21 g/min/ft (260 L/min/m)</td>
</tr>
<tr>
<td>Geotextile fabric</td>
<td>Nonwoven</td>
</tr>
<tr>
<td>Core thickness</td>
<td>0.40” (10.16 mm)</td>
</tr>
</tbody>
</table>

**Mapedrain™ 30**

Mapedrain 30 is designed for horizontal applications that demand very high compressive strength and flow rates. Its woven filter fabric allows concrete to be poured directly on top of the drainage composite.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>21,000 psf (1 005 kN/m²)</td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>23 g/min/ft (286 L/min/m)</td>
</tr>
<tr>
<td>Geotextile fabric</td>
<td>Woven</td>
</tr>
<tr>
<td>Core thickness</td>
<td>0.40” (10.16 mm)</td>
</tr>
</tbody>
</table>

**Mapedrain™ 40**

Mapedrain 40 provides the same high level of performance as Mapedrain 30, but can be used in both vertical and horizontal applications. Additionally, the nonwoven filter fabric used in the construction of Mapedrain 40 is unmatched in its ability to prevent particulates from entering, and potentially clogging, the drainage channel.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>21,000 psf (1 005 kN/m²)</td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>23 g/min/ft (286 L/min/m)</td>
</tr>
<tr>
<td>Geotextile fabric</td>
<td>Nonwoven</td>
</tr>
<tr>
<td>Core thickness</td>
<td>0.40” (10.16 mm)</td>
</tr>
</tbody>
</table>
**Mapedrain™ 50**

Mapedrain 50 provides the ultimate in compressive strength and flow rate. Like Mapedrain 30, Mapedrain 50 is designed for horizontal applications and utilizes a woven filter fabric, so that concrete can be poured directly on top of the drainage composite. It is typically used in applications where the forces of heavy vehicular traffic will be encountered.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>33,000 psf (1,580 kN/m²)</td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>24 g/min/ft (298 L/min/m)</td>
</tr>
<tr>
<td>Geotextile fabric</td>
<td>Woven</td>
</tr>
<tr>
<td>Core thickness</td>
<td>0.40” (10.16 mm)</td>
</tr>
</tbody>
</table>

**Mapedrain™ TD Drainage Composite**

Mapedrain TD Drainage Composite is typically used to replace the traditional “French drain” foundation drainage system. Mapedrain TD Drainage Composite is used to collect high volumes of water, most commonly around footings where wall drainage composites discharge their water. It provides two-sided drainage with a nonwoven filter fabric.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>9,500 psf (455 kN/m²)</td>
</tr>
<tr>
<td>Maximum flow rate</td>
<td>30 g/min/ft (372 L/min/m)</td>
</tr>
<tr>
<td>Geotextile fabric</td>
<td>Nonwoven</td>
</tr>
<tr>
<td>Core thickness</td>
<td>1” (2.5 cm)</td>
</tr>
</tbody>
</table>

**Mapedrain™ TD Fittings**

Mapedrain TD Fittings aid in controlling the water discharged from a Mapedrain system, which includes Mapedrain TD Drainage Composite as the “footing drain.” MAPEI offers four fittings designed to direct and release the cumulative water being discharged from the system:

- Mapedrain TD splice fitting
- Mapedrain TD corner fitting
- Mapedrain TD side outlet fitting
- Mapedrain TD end outlet fitting

**Mapedrain warranties:**

MAPEI offers a variety of product and system warranty programs. Contact your local MAPEI representative for warranty information on your project.

For more information on the Mapedrain waterproofing system, including installation instructions and CAD details, please visit www.mapei.com.
WATERPROOFING ACCESSORIES

Waterproofing is a system, not a product. As such, when designing and installing a waterproofing system for a structure, one must consider the performance and quality of the primary waterproofing membrane as well as of the accessory products that support it. Often, these attributes affect the most critical areas, such as penetrations, terminations and transitions.

MAPEI draws on its history of 80 years of producing concrete system accessories that are not only installer-friendly, thus increasing the likelihood for a successful installation, but that will also stand up to the test of time.

For more information on any of these products, including Technical Data Sheets, CAD details and more, please visit www.mapei.com.

Contact adhesives

MAPEI offers the four best contact adhesives for waterproofing systems in the industry. All of these contact adhesives promote adhesion between various waterproofing products and a variety of substrates, including concrete, wood, gypsum sheathing, metal and more.

*Consult all applicable federal, state and local laws and regulations regarding allowable VOC content, disposal and other product physical properties before selecting any contact adhesive.

Mapebond™ 700

Solvent-Based Contact Adhesive

Mapebond™ 700 is an extremely quick-drying, solvent-based, high-tack contact adhesive.

Features and benefits:
- Extremely quick drying time
- Aggressive tack improves adhesion of waterproofing membranes
- Ready to use; no mixing or dilution required
- For vertical and horizontal applications
- Wide temperature application window

Mapebond™ 710

Low-VOC Solvent-Based Contact Adhesive

Mapebond 710 is a very quick-drying, solvent-based, high-tack contact adhesive.

Features and benefits:
- The low content of VOCs (volatile organic compounds) is < 250 g/L, which is compliant with most state and local VOC requirements for adhesives and sealants. Note: Be sure to check all applicable regulations, based on the project location.
- Very quick drying time
- Aggressive tack improves adhesion of waterproofing membranes
- Ready to use; no mixing or dilution required
- For vertical and horizontal applications
- Wide temperature application window

Mapebond™ 720

Water-Based Contact Adhesive

Mapebond™ 720 is a quick-drying, water-based, high-tack contact adhesive.

Features and benefits:
- Water-based; nonflammable
- Low odor
- Quick-drying
- Aggressive tack improves adhesion of waterproofing membranes
- Ready to use; no mixing or dilution required
- For vertical and horizontal applications
### Waterproofing Accessories

#### Detailing accessories

**Mapethene™ Mastic**

Rubberized-Asphalt Waterproofing Detailing Mastic

*Mapethene Mastic* is solvent-based, rubberized-asphalt mastic that provides excellent adhesion to the *Mapethene* waterproofing membranes as well as to structural concrete, masonry and wood surfaces. *Mapethene Mastic* is used as a secondary seal on seams, T-joints, laps, penetrations, terminations and other detailing areas on the top surface and edges of *Mapethene* waterproofing membranes. *Mapethene Mastic* should never be used underneath the waterproofing membrane.

**Idrostop™ 25**

Hydro-Expansive Waterstop

*Idrostop 25* is an expandable, flexible waterstop with an acrylic polymer base that is used to create watertight concrete joints. *Idrostop 25* is also used as a detailing accessory in conjunction with all MAPEI waterproofing membrane systems. When *Idrostop 25* comes into contact with moisture, it expands to fill voids and form a positive seal with the concrete. *Idrostop 25* can be used in standard applications and where contaminated or salt groundwater may be encountered.

**Idrostop™ B25**

Bentonite-Based, Hydrophilic, Expandable, Flexible Rubber Waterstop Strip for Watertight Construction

*Idrostop B25* is an expandable, flexible waterstop with sodium bentonite and a polymer base that is used to create watertight concrete joints. *Idrostop B25* can also be used as a detailing accessory in conjunction with all MAPEI waterproofing membrane systems. When *Idrostop B25* comes into contact with moisture, it expands to fill voids and forms a positive seal with the concrete.

**Mapeproof™ Granules**

Sodium Bentonite Granules

*Mapeproof Granules* are sodium bentonite clay granules used as a detailing accessory in conjunction with *Mapeproof HW* and *Mapeproof SW* waterproofing membranes. When *Mapeproof Granules* come into contact with moisture, they form into a dense, low-permeable gel that, when combined with *Mapeproof HW* or *Mapeproof SW* waterproofing membrane, produces a seamless waterproofing system.

**Mapeproof™ Sealant**

Detailing Sealant for *Mapeproof HW* and *Mapeproof SW*

*Mapeproof Sealant* is a trowel-grade sealant, composed of sodium bentonite clay and specially designed polymers, that is used as a detailing accessory in conjunction with *Mapeproof HW* and *Mapeproof SW* waterproofing membranes. When *Mapeproof Sealant* comes into contact with moisture, it swells to seal against water intrusion. *Mapeproof Sealant* is easily applied and bonds to most substrates. When used with *Mapeproof HW* or *Mapeproof SW*, *Mapeproof Sealant* forms a seamless waterproofing system.

---

**Mapecover™ 810**

Extruded Polystyrene Fanfold Protection Board

*Mapecover 810* is a rigid, lightweight, extruded polystyrene (XPS), fanfold protection board designed to protect MAPEI waterproofing membranes on vertical below-grade foundations during the placement of backfill and over horizontal waterproofing applications, to protect the membrane from other trades. *Mapecover 810* can also be used in planters, as a vertical protection course for MAPEI waterproofing membranes.

**Mapeflex™ P2 NS**

Two-Component, Non-Sag, Polyurethane Sealant

*Mapeflex P2 NS* is a two-component, non-sag, polyurethane elastomeric sealant that offers excellent adhesion to most surfaces, features faster curing than traditional one-component polyurethane sealants and meets the requirements of ASTM C920.

**Mapeflex™ P1**

One-Component, Non-Sag, Elastomeric Polyurethane Sealant

*Mapeflex P1* is a high-performance, one-component, elastomeric, moisture-cured, polyurethane sealant and adhesive. *Mapeflex P1* offers excellent adhesion to most surfaces, superior gunning/tooling and excellent flexibility for moving joints.

---

**Mapeproof™ Sealant**

Detailing Sealant for *Mapeproof HW* and *Mapeproof SW*

*Mapeproof Sealant* is a trowel-grade sealant, composed of sodium bentonite clay and specially designed polymers, that is used as a detailing accessory in conjunction with *Mapeproof HW* and *Mapeproof SW* waterproofing membranes. When *Mapeproof Sealant* comes into contact with moisture, it swells to seal against water intrusion. *Mapeproof Sealant* is easily applied and bonds to most substrates. When used with *Mapeproof HW* or *Mapeproof SW*, *Mapeproof Sealant* forms a seamless waterproofing system.
### MAPEI LMR Fabric

**Liquid Membrane Reinforcing Fabric**

MAPEI LMR Fabric is a spunbond, nonwoven polyester fabric used as a reinforcement for liquid-applied waterproofing membranes. When embedded into a liquid-applied waterproofing membrane, it will add strength and durability to the overall system.

### Mapeband™ TPE

**Flexible Waterproofing Tape for Moving Joints**

Mapeband TPE is a professional-grade, highly durable and flexible band tape used to waterproof expansion and other dynamic joints subject to movement of 2” to 4” (5 to 10 cm). TPE, an acronym for “elastomeric thermoplastic polyolefin,” represents a group of polyolefins that combine the best properties of thermoplastic polymers and synthetic elastomer technology. Measuring 47.2 mils thick and reinforced sidelong with polyester nonwoven fabric, Mapeband TPE tape must be bonded in place with Planibond® AE. Mapeband TPE is offered in two versions: Mapeband TPE 170 measures 6.7” (17 cm) wide, while Mapeband TPE 325 measures 12.8” (32.5 cm) wide.

### Planibond® AE

**High-Strength, Non-Sag, Epoxy Anchoring Gel**

Planibond AE is a high-strength, two-part, non-sag, epoxy anchoring gel designed for a wide variety of bonding and repair applications. Planibond AE is used to bond Mapeband™ TPE in place, but can also be used to anchor bolts, dowels and pins in concrete or masonry.
SURFACE-PREPARATION PRODUCTS

For any waterproofing system to function properly, it must be attached to a substrate that is structurally sound and crack-free with a surface profile appropriate for the waterproofing system being employed. While basic surface preparation, such as the removal of laitance and mortar joints being struck flush, remains essential, MAPEI offers the following products for when additional surface preparation is required.

For more information on any of these products, including Technical Data Sheets, CAD details and more, please visit www.mapei.com.

**Planiseal® 88**

Cement-Based Dampproofing Coating

Planiseal 88 is a one-component, polymer-modified, cementitious dampproofing coating. It can be used on horizontal, vertical and overhead surfaces such as walls, retaining walls, planters, beams and other applications to provide an appropriate surface to receive a waterproofing membrane. It can be mixed with potable water or, for superior bonding performance, Planicrete® AC diluted with water.

**Planitop® X**

One-Component, Fast-Setting, Fiber-Reinforced, Vertical and Overhead Repair Mortar

Planitop X is a one-component, fiber-reinforced, shrinkage-compensated, high-early-strength, fast-setting, polymer-modified, high-build cementitious repair mortar with a corrosion inhibitor. It is suited for all interior/exterior vertical and overhead concrete repairs, including precast/prestressed, tilt-up, post-tensioned and cast-in-place concrete. Planitop X can be applied from featheredge to 4” (10 cm) per lift. Planitop X is engineered to provide high early strength with ease of application. Planitop X dries to a light gray color, matching most concrete surfaces.

Planitop X is ideal for repairing defects in concrete surfaces, such as the filling of honeycombs, voids and cavities. Planitop X is a very fast-setting product, with a working time of 5 to 6 minutes, providing an initial set at 6 minutes and final set in less than 25 minutes. Planitop X can be mixed with potable water or, for superior bonding performance, with Planicrete® AC diluted with water.

**Planitop® XS**

One-Component, Fast-Setting, Extended-Working-Time, Vertical and Overhead Repair Mortar

Planitop XS is an extended-working-time variation of Planitop X. Shrinkage-compensated, fiber-reinforced, polymer-modified and containing a proprietary corrosion inhibitor, Planitop XS features Planitop X’s outstanding workability and versatility. Ideal for a wide variety of vertical and overhead concrete repairs, Planitop XS can be applied from featheredge to 4” (10 cm) per lift. Planitop XS dries to a light gray color, blending well with most concrete surfaces.

Planitop XS is ideal for repairing defects in concrete surfaces, such as the filling of honeycombs, voids and cavities. With Planitop XS, working time is extended to 20 minutes, providing an initial set at 40 minutes and final set in less than 60 minutes. Like Planitop X, Planitop XS can be mixed with potable water or, for superior bonding performance, with Planicrete® AC diluted with water.

**Planicrete® AC**

Acrylic Latex Admixture for Mortar and Concrete

Planicrete AC is a one-component, concentrated, liquid latex admixture used to enhance the performance of cementitious repair mortars, plasters, stuccos, concrete mixes and toppings for the restoration of horizontal, vertical and overhead concrete; concrete masonry units (CMUs); and masonry surfaces.

Planicrete AC can be used as an accessory with Planiseal® 88, Planitop® X and Planitop XS to enhance the bond strength to existing concrete.
MAPEI’s waterproofing tools for architects are available online

MAPEI offers Waterproofing Systems in the Architectural CAD/Spec Guide tool on its website. Users have easy access to Guide Specifications for the waterproofing systems, Technical Data Sheets and over 100 CAD details (available in DWG and PDF formats).