

# SWIMMING POOL SYSTEMS

FOR LAYING CERAMIC TILES

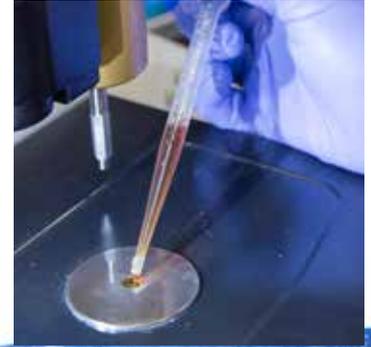


MAPEI offers more than 5,500 products for the construction industry, in a wide range of system solutions. This system approach is important to MAPEI. All our products are systematically adapted to each other and based on a large number of proven components. This, along with our product knowledge and professional expertise that we share with planners and builders, provides real added value.

Founded in Milan in 1937, MAPEI is today a global leader in the production of adhesives, sealants and chemical products for the construction industry. The quality of our products is based on more than 80 years of experience and continuous product innovation. At Mapei, we have a strong focus on customer proximity, the local market and the short transport distances. Today, the MAPEI Group has 81 subsidiaries with 83 factories. Each of our factories has its own quality-assurance laboratory. The Group has a presence in 36 countries, on five continents.

MAPEI has been a leading Norwegian supplier of adhesives, sealants and other chemical products for the construction industry in the Nordic countries since 1976, when the Norwegian company Rescon was established. In 1999/2000, Rescon went international when the company became part of the international group MAPEI S.p.A. Our plant in Nord-Odal, Norway, remains the cornerstone of the Nordic market, and is also home to one of the Mapei Group's international R&D centres.

The MAPEI Group invests more than 5 per cent of its annual turnover in R&D. Of this, 70 per cent goes to the development of environmentally friendly and sustainable products that meet or surpass internationally recognised certification standards. More than 12 per cent of the employees at MAPEI are involved in R&D and work every day to make MAPEI products even better. The results are tested in practice and used to create user-oriented solutions in line with state-of-the-art R&D technology. With system solutions from Mapei, you can be sure that all products meet international safety and environmental requirements and have a long lifetime.



## CONTENTS

<b>Introduction</b> .....	3
<b>Construction</b> .....	4
<b>Repairing concrete constructions</b> .....	5
Applying bonding slurry to walkways and the pool bottom.....	5
Repairing chips and damage from casting and shuttering, 5–50 mm.....	5
Grouting – rectify unevenness and imbalances, 10–30 mm.....	5
Pore grouting, 0–5 mm.....	6
Casting pool edges before applying membrane.....	7
Re-casting of penetrations in case of retrofitting.....	7
<b>Cementitious membrane – MAPELASTIC</b> .....	8
LSI index for membranes.....	8
Wiesbaden system.....	9
Finnish gutter system.....	9
<b>Laying ceramic tiles and natural stone</b> .....	10
<b>Choice of tile adhesive</b> .....	11
LSI index for tile adhesives.....	11
<b>Grouting ceramic tiles and natural stone</b> .....	12
LSI index for grouts.....	12
<b>Cross-section of penetrations</b> .....	13
Pool jets.....	13
Pool lighting step 1.....	13
Pool lighting step 2.....	13
Floor penetrations.....	14
Handrail post with flange.....	14
Expansion sealant.....	16
<b>Products</b> .....	18
Tile adhesive.....	18
Grouts.....	19
Grout colors.....	20
Membranes and accessories.....	21
Repairs and reinforcement.....	22
Flexible joints.....	24

## INTRODUCTION

As a world-leading manufacturer of chemical building products, MAPEI can look back on more than 80 years of experience in both the construction of new swimming pools and the renovation of existing pools.

Thanks to MAPEI's well-documented systems, we can offer a complete range of products and solutions for the construction and waterproofing of reinforced and unreinforced concrete structures in swimming pools, special adhesives for the installation of ceramic tiles and glass mosaics, grouts and sealants for expansion joints.

Swimming pools are complicated constructions: they often employ heavy concrete solutions with many different shapes and details that require special attention to achieve a successful end result. Unlike wet rooms, shower

facilities, etc., swimming pools are subject to constant water pressure. Cracks and leaks can occur over the years, and water can penetrate behind or under the waterproof membrane. Common types of damage include loose plaster in the tiling, washed-out joints and corrosion, which is why it is important to use good system solutions and products. A “waterproof swimming pool construction” can easily become non-waterproof unless you employ solutions that require special measures and product solutions. These solutions require careful planning, the correct products and a professional execution.

This brochure describes some of our most common swimming pool construction solutions and products. Our technical personnel contribute their know-how where needed.

## CONSTRUCTION

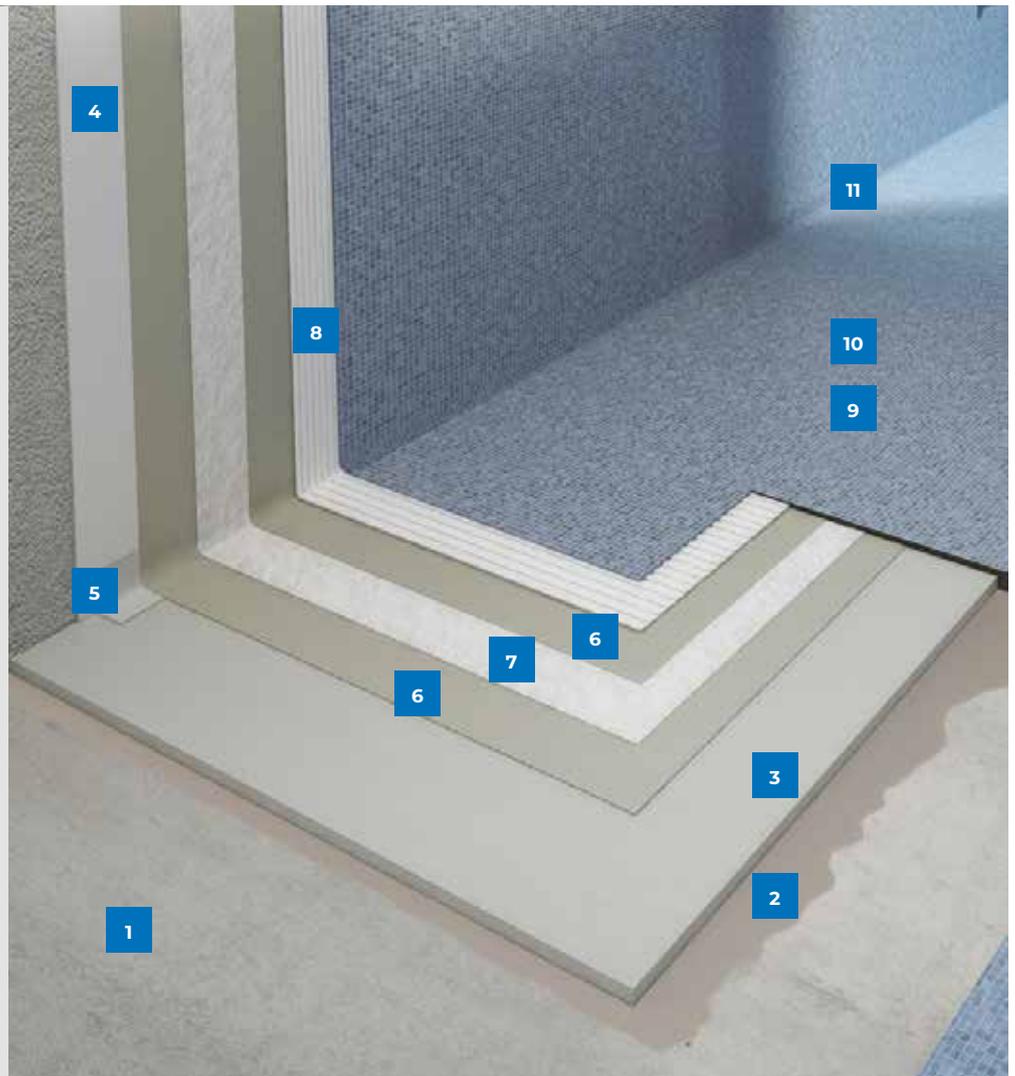
When building a swimming pool, it is important to ensure that it is watertight, and you must be able to guarantee that the surface will remain intact for a long time. With a new swimming pool, you can achieve this by using waterproof concrete (compliant with EN 206-1), which is characterised by having a low w/c ratio ( $w/c < 0.50$ ) and low shrinkage potential.

MAPEI offers a variety of admixtures in the **DYNAMON** range to allow you to make precisely this kind of concrete, i.e. with an extremely low water/cement ratio and excellent workability.

Joints in the construction between the foundation and the wall are often a potential source of water leakages. Perfect sealing in these areas can easily be achieved with **IDROSTOP**, a hydrophilic, water-absorbent rubber profile with 120 per cent expansion. In addition to the above, you need at least seven days of proper moisture curing to obtain a watertight swimming pool.



- 1 Concrete with admixture, **DYNAMON**
- 2 Epoxy adhesive, **MAPEPOXY L/ MAPEPOXY LR**
- 3 Cast, **CONFIX**
- 4 Filler layer, **REDIREP 25 RSF/ MAPEGROUT T40**
- 5 Sealing tape, **MAPEBAND EASY**
- 6 Cementitious membrane, **MAPELASTIC**
- 7 Reinforcement mesh, **MAPENET 150**
- 8 Tile adhesive, **ELASTORAPID/ KERAFLEX MAXI S1**
- 9 Ceramic tiles/ mosaic tiles
- 10 Sealant, **KERAPOXY DESIGN/CQ**
- 11 Silicone, **MAPESIL AC**



## REPAIRING CONCRETE CONSTRUCTIONS

### 1 Apply a bonding slurry to walkways and the pool bottom

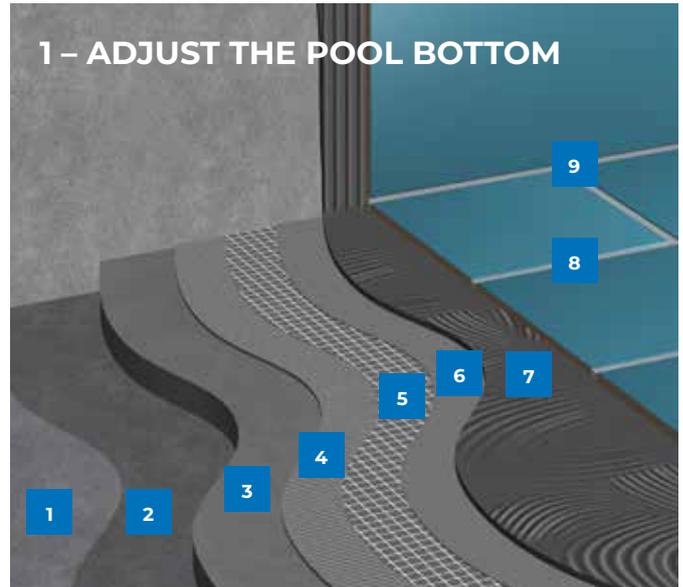
- Remove all impurities from the concrete by high-pressure hydro-blasting, grinding, grit blasting or shot blasting.
- Vacuum.
- Prime the substrate with [PLANICRETE](#) slurry/[MAPEPOXY L](#).
- Brush the primer into the substrate.
- Create the substrate with [MAPECEM PRONTO/CONFIX](#). This is cast in thicknesses up to 35 mm.

### 2 Repairing chips and damage from casting and shuttering, 5–50 mm

- Clean the surface of dust and loose particles.
- Pre-wet the surface. It can be useful to use a high-pressure washer to remove mortar residue at the same time.
- Pre-treat rebar with [REDISIT](#) bonding agent.
- Apply slurry to the surfaces using [REDISIT](#) bonding agent.
- Repair damage,  $t = 5\text{--}50$  mm, with [REDIREP 45 RSF](#) thixotropic repair mortar. Apply bonding agent using the wet-on-wet technique.

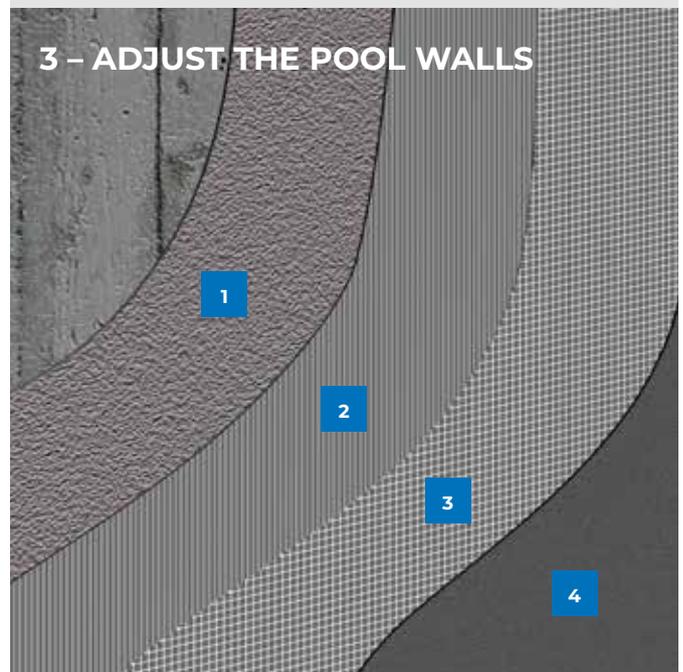
### 3 Grouting – rectify unevenness and imbalances, 10–30 mm

- Remove all residues and impurities from form-release agents by high-pressure hydro-blasting, grinding, grit blasting or shot blasting.
- The surface is grit blasted, shot blasted and pre-wetted.
- Pre-treat rebar with [REDISIT](#) bonding agent and anti-corrosion slurry.
- Level the surface with [REDIREP 25 RSF/MAPEGROUT T40](#). Apply screed to the surface. Apply mortar by hand or with a spray gun and scrape with a steel trowel before smoothing with a felt trowel.
- Apply the mortar to the slurry using the wet-on-wet technique.
- Apply [REDIREP 25 RSF/MAPEGROUT T40](#) in layers, up to 10 mm per layer.



### 1 – ADJUST THE POOL BOTTOM

- |   |                                  |   |                           |
|---|----------------------------------|---|---------------------------|
| 1 | Concrete                         | 5 | MAPENET 150               |
| 2 | MAPEPOXY L/<br>PLANICRETE slurry | 6 | MAPELASTIC                |
| 3 | CONFIX/<br>MAPECEM<br>PRONTO     | 7 | MAPEI Tile adhesive       |
| 4 | MAPELASTIC                       | 8 | MAPEI Tile grout          |
|   |                                  | 9 | MAPEI<br>Silicone sealant |



### 3 – ADJUST THE POOL WALLS

- |   |                                  |
|---|----------------------------------|
| 1 | REDIREP 25 RSF/<br>MAPEGROUT T40 |
| 2 | MAPELASTIC                       |
| 3 | MAPENET 150                      |
| 4 | MAPELASTIC                       |

## REPAIRING CONCRETE CONSTRUCTIONS

### 4 Pore grouting, 0–5 mm

- Remove all loose residues and particles.
- Pre-wet the surface. The substrate must be thoroughly moistened. There must be no residue of water on the surface. It can be useful to use a high-pressure washer to remove mortar residue.
- Pre-treat rebar with [REDISIT](#) bonding agent.
- Repair unevenness and damage up to 5 mm with [FIXOFIN/PLANITOP FINE FINISH](#). Give the surface a final finish with a felt trowel.

### 5 Casting of pool edges before applying membrane

- Remove all loose residues of mortar and putty.
- Pre-wet the surface. It can be useful to use a high-pressure washer to remove mortar residue at the same time.
- Pre-treat rebar with [REDISIT](#).
- Brush [MAPEPOXY L](#), or alternatively [REDISIT](#), into the substrate.
- Apply [CONFIX W/PP FIBRE](#) to the bonding agent using the wet-on-wet technique. Alternatively, use [REDIREP 45 RSF](#) when casting up to 50 mm.

### 6 Re-casting of penetrations in case of retrofitting

- Mount the new part in place.
- Mount the formwork against the inside of the pool.
- Brush [MAPEPOXY L](#) bonding agent onto concrete and metal surfaces.
- Cast with expanding mortar: [NONSET 120](#) or [NONSET 400](#).

## LSI INDEX

The LSI index (Langelier Saturation Index) provides information about the water quality, and we therefore recommend that you check the LSI index before the work is started. Aggressive chemicals such as calcium solvating CO<sub>2</sub>, ammonium, magnesium, chlorine and sulphates, combined with acidic water (low pH), may require resistant products. The hardness, alkalinity and calcium concentration of the water must be taken into consideration when selecting materials such as membranes, adhesives and sealants.

The Building Ceramics Association (BKF) and SINTEF, among many others, have issued good instructions on water quality and material selection in connection with aggressive chemicals in pools.



## CEMENTITIOUS MEMBRANE – MAPELASTIC

### APPLICATIONS

Indoor and outdoor waterproofing of swimming pools, cisterns, water tanks, spa facilities and changing rooms.

### PROPERTIES

- The system is adapted to the Northern European climate with regard to frost safety and UV resistance.
- Easy to work with, whether applying by hand or using a spray gun.
- Perfect as a sealing layer under ceramic tile or natural stone.

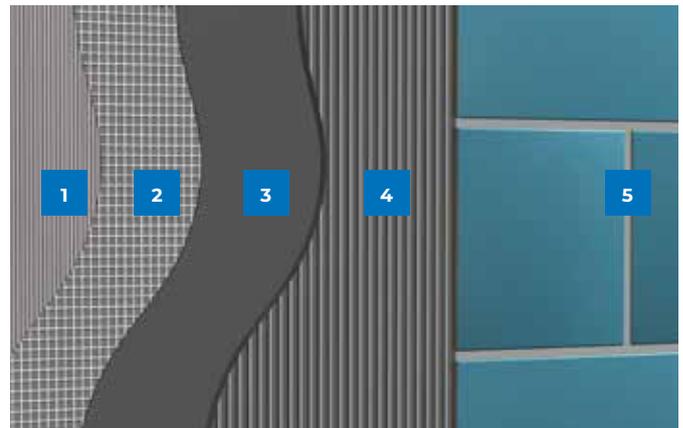
### SYSTEM COMPONENTS

#### PRE-TREATMENT

- The substrate must be firm, clean and with no loose areas.
- Pre-wet absorbent substrates before applying **MAPELASTIC**; there must be no water residue on the surface.
- Pre-treat non-absorbent substrates such as natural stone, ceramics (assuming the substrate is firmly affixed) or metal with **ECO PRIM GRIP**.

#### MEMBRANE

- Use a steel trowel to apply a layer of **MAPELASTIC** at all angles, corners and joints of material.
- Overlap **MAPEBAND EASY** sealing tape in joints with min 5 cm overlap bonded with **MAPELASTIC**. Make sure there are no air bubbles or creases.
- Seal pipe penetrations, nozzles and fittings in the same way with suitable sealing cuffs from the **MAPEGUARD** sealing cuff product range. Make sure that capillary breaks are installed in the concrete around the pipe penetrations (see pages 14–15).
- Mix **MAPELASTIC** according to the instructions on the packaging and apply to the substrate using a smoothing trowel. Make grooves in the membrane with a notched trowel (4–6 mm), and



- 1 Concrete
- 2 Pre-wetting
- 3 **MAPELASTIC + MAPENET 150**
- 4 **MAPEI** Tile adhesive
- 5 **MAPEI** Tile grout

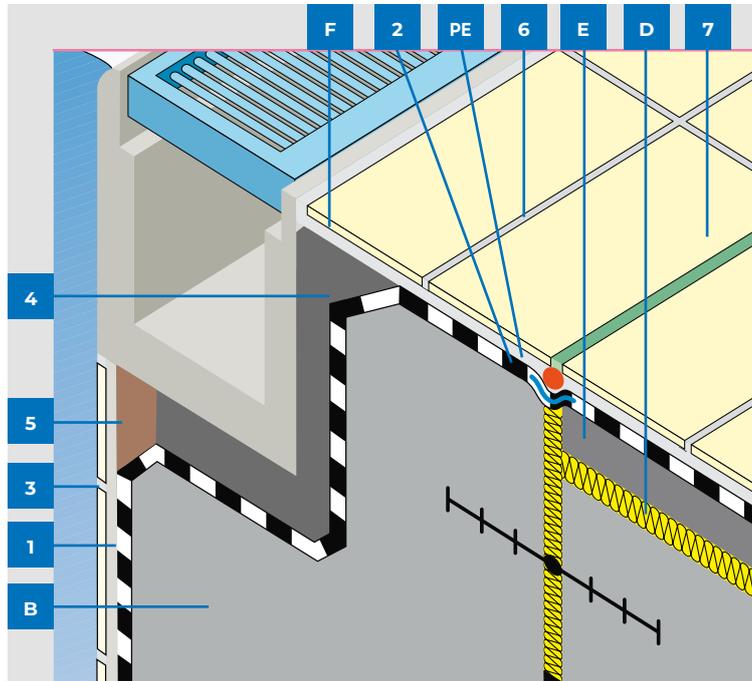
- lay **MAPENET 150** glass fibre mesh in the fresh membrane.
- Flatten the grooves with a light trowel so that the net is laminated into the membrane.
- Wait for the membrane to become surface dry. Then apply a new coat of **MAPELASTIC** with a smoothing trowel. In total, apply a min 2 mm layer of **MAPELASTIC** to the surface. Alternatively, **MAPELASTIC** can be applied with a regular spray gun.
- Allow it to cure for at least 24 hours before tiling (20 °C – RF 50%).
- **MAPELASTIC SMART** can be used if needed for additional crack-bridging in rounded pool edges and gutters.
- When using **MAPELASTIC SMART**, allow **MAPENET 150** to protrude 5 cm from the end of the **MAPELASTIC** membrane and build over the protruding part. **MAPELASTIC SMART** can be used with larger cracks in combination with **MAPENET 150**, or **MAPETEX SEL**, which is softer and easier to shape.

### LSI INDEX FOR MEMBRANES

LSI INDEX	LESS THAN -1.00	BETWEEN -1.00 AND -0.50	BETWEEN -0.50 AND 0	GREATER THAN 0
	HIGHLY AGGRESSIVE	MODERATELY AGGRESSIVE	NOT VERY AGGRESSIVE	NON-AGGRESSIVE
<b>MEMBRANES</b>				
<b>MAPELASTIC + MAPENET 150</b>		X	X	X
<b>MAPELASTIC SMART</b>		X	X	X

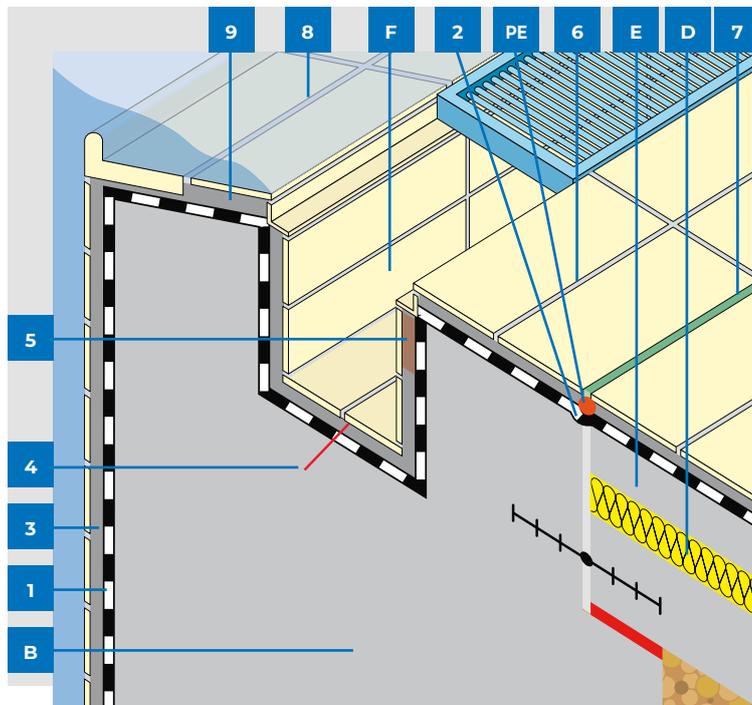
## CEMENTITIOUS MEMBRANE

### WIESBADEN SYSTEM



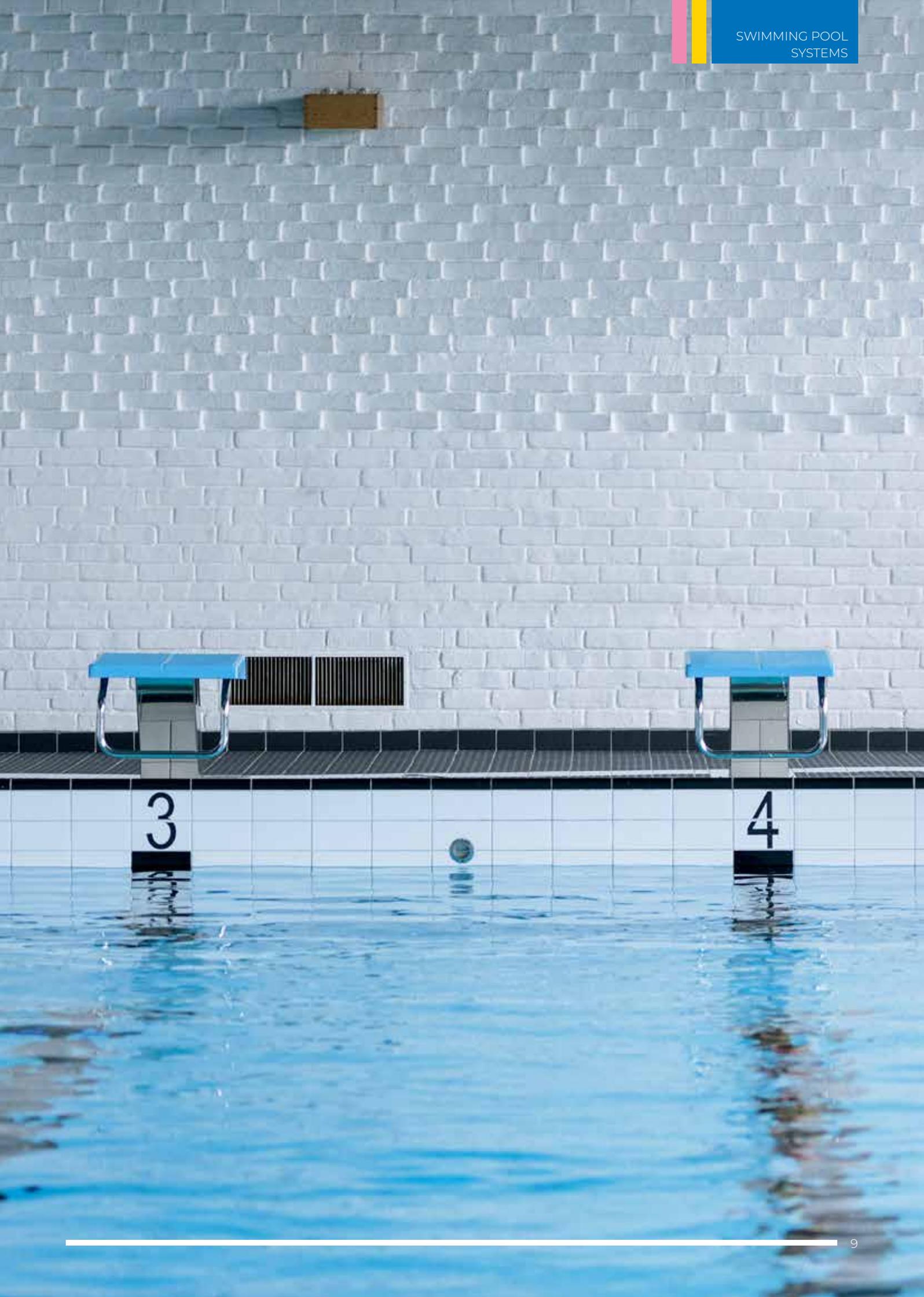
- 1** Sealing layer, [MAPELASTIC](#)
- 2** Sealing tape, [MAPEBAND TPE](#) bonded with [ADESILEX PG2/PG4](#)
- 3** Tile adhesive, [ELASTORAPID/ KERAFLEX MAXI S1](#)
- 4** Filling mortar, [MAPEPOXY HD-G](#)
- 5** Capillary break, [ADESILEX PG2/PG4](#) + quartz mix 0.1–0.4 mm
- 6** [MAPEI](#) Tile grout
- 7** Expansion sealant, [MAPESIL AC](#)
- B** Concrete
- D** Insulation
- E** Repair mortar, [CONFIX/REDIREP 45 RSF](#)
- F** Ceramic tiles
- PE** Base battens, [MAPEFOAM](#)

### FINNISH GUTTER SYSTEM



- 1** Sealing layer, [MAPELASTIC](#)
- 2** Sealing tape, [MAPEBAND TPE](#)
- 3** Tile adhesive, [ELASTORAPID/ KERAFLEX MAXI S1](#)
- 4** Filling mortar, [MAPECEM PRONTO/CONFIX](#)
- 5** Capillary break, [ADESILEX PG2/PG4](#) + quartz mix 0.1–0.4 mm
- 6** [MAPEI](#) Tile grout
- 7** Expansion sealant, [MAPESIL AC](#)
- B** Concrete
- D** Insulation
- E** Repair mortar, [CONFIX/REDIREP 45 RSF](#)
- F** Ceramic tiles
- PE** Base battens, [MAPEFOAM](#)
- 8** Epoxy sealant, [KERAPOXY DESIGN/KERAPOXY CQ](#)
- 9** Capillary break – tile adhesive, [KERAPOXY CQ](#)

The sketch(s) are for guidance only and may differ somewhat from actual execution.



## LAYING CERAMIC TILES AND NATURAL STONE



KUNGSBACKA SWIMMING POOL  
Sweden

### PROPERTIES

The tile adhesive you choose is determined by your requirements for curing and drying times, deformability and adhesion. Classification according to EN 12004 applies to cementitious adhesives (C, C1 = standard, C2 = improved), vertical slip-resistance (T), fast-curing (F) and extended open time (E).

Classification according to EN 12002 applies to deformability (S1 = deformable 2.5–5 mm; S2 = deformable > 5 mm). Adhesives not classified as S1 or S2 are considered “non-deformable”. Note that different tiles make different demands on the properties of the adhesive.

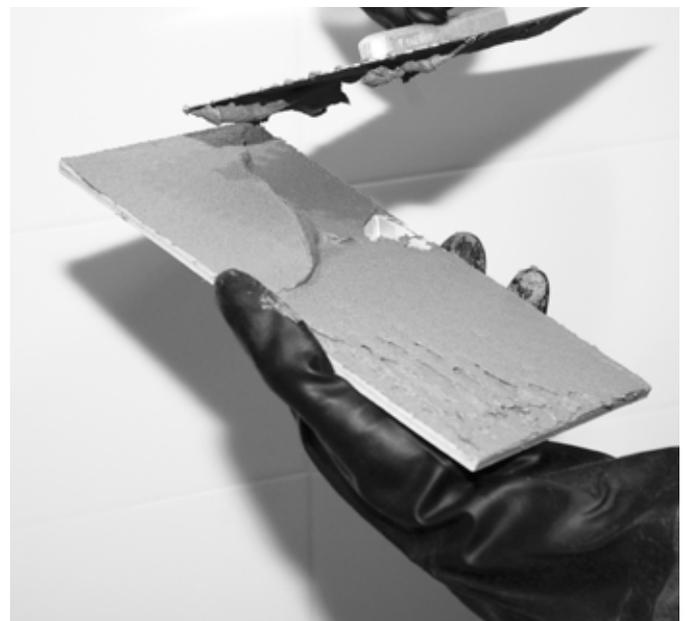
### SYSTEM COMPONENTS

#### PRE-TREATMENT

- The membrane must be fully cured.

#### LAYING TILES

- Mix the selected adhesive according to the instructions on the packaging.
- Apply the adhesive to the substrate with a smoothing trowel or a notched trowel.
- Create grooves with a notched trowel.
- Lay the tiles with a twisting motion to achieve full coverage underneath.
- Check regularly that full adhesive coverage is achieved.
- If full adhesive coverage cannot be achieved, you must apply double adhesive layer, i.e. apply an additional layer of adhesive to the back of the tile before laying.



### RECOMMENDED NOTCH SIZES

#### Tile type:

Tile type:	Notched trowel:
Mosaic	3–4 mm
Ceramic 10x10 cm	6 mm
Ceramic 15x15 cm	6 mm
Ceramic 20x20 cm	8 mm
Ceramic, natural stone 30x30 cm	10 mm
Ceramic, natural stone > 30x30 cm	10–15 mm

## CHOICE OF TILE ADHESIVE

PRODUCT	CONCRETE	MAPELASTIC	DRYING TIME BEFORE GROUTING THE FLOOR	DRYING TIME BEFORE GROUTING THE WALL	DRYING TIME BEFORE FILLING
ELASTORAPID	X	X	3-4 hours	3-4 hours	72 hours
KEFAFLEX MAXI S1	X	X	24 hours	4-8 hours	21 days
ULTRALITE S1	X	X	24 hours	4-8 hours	21 days
ULTRALITE S2	X	X	24 hours	4-8 hours	21 days
ULTRALITE S2 QUICK*	X	X	2-3 hours	2-3 hours	72 hours
KERAPOXY CQ/ KERAPOXYDESIGN	X	X	72 hours	72 hours	21 days
CONBIT**	X	X	24 hours		21 days

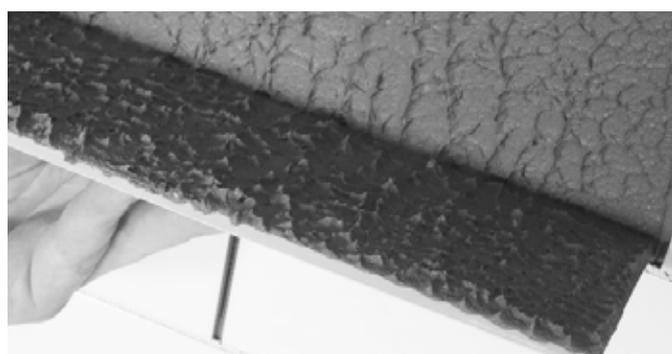
\* Tiles larger than 3,500 cm<sup>2</sup>

\*\* For natural stone

## MATERIAL CONSUMPTION

Dependent on the substrate and the back of the tiles. The size of the notched trowel should always be chosen so that full adhesive coverage is achieved.

LSI INDEX	LESS THAN -1.00	BETWEEN -1.00 AND -0.50	BETWEEN -0.50 AND 0	GREATER THAN 0
	HIGHLY AGGRESSIVE	MODERATELY AGGRESSIVE	MILDLY AGGRESSIVE	NON-AGGRESSIVE
<b>TILE ADHESIVE</b>				
ELASTORAPID			X	X
KEFAFLEX MAXI S1			X	X
KERAPOXY CQ/ KERAPOXY DESIGN	X	X	X	X
ULTRALITE S1			X	X
ULTRALITE S2			X	X
ULTRALITE S2 QUICK*			X	X
CONBIT**			X	X



## GROUTING CERAMIC TILES AND NATURAL STONE

### APPLICATIONS

Indoor and outdoor grouting of ceramic tile and natural stone in swimming pools, cisterns, water tanks, spas and changing rooms.

### PROPERTIES

The choice of grout depends on requirements for curing and drying times, the type of tiles chosen and the choice of pool. For classifications according to EN 13888, CG applies to cementitious grouts and RG to reaction resin grouts. 1 = standard, 2 = improved, W = reduced water absorption, AR = high abrasion resistance).

Please note that different tiles and different water quality and LSI indices set different requirements for the grout.

### SYSTEM COMPONENTS

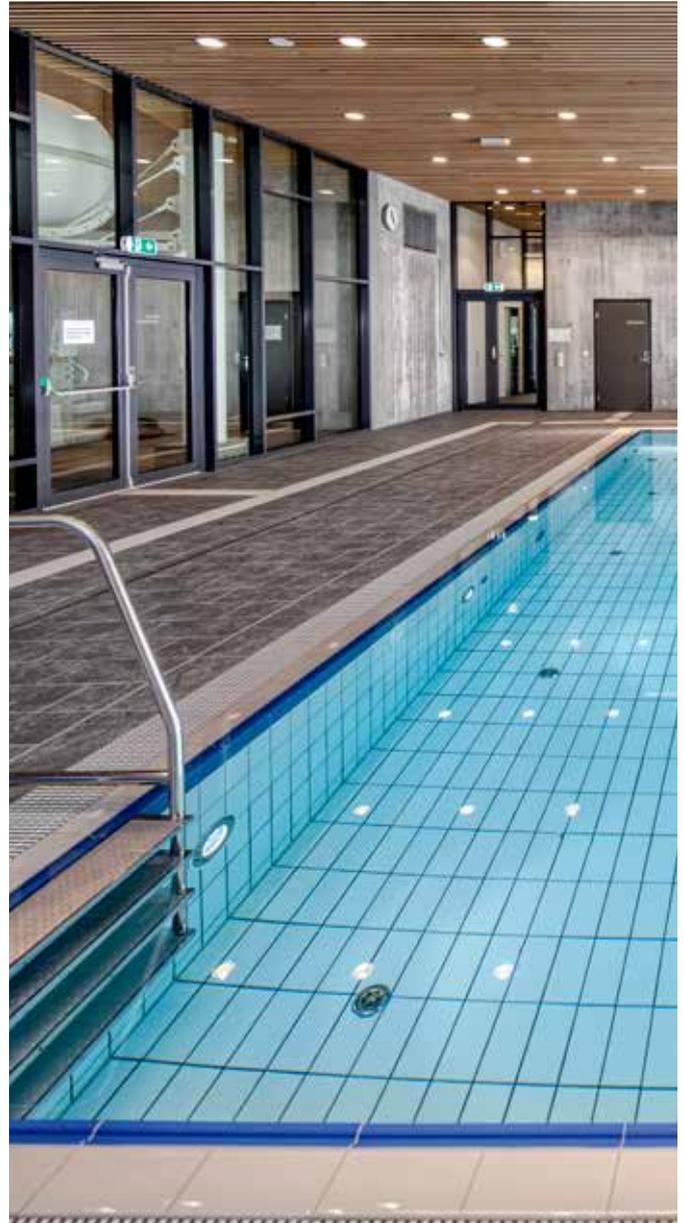
#### PRE-TREATMENT

- The substrate must be firm, clean and with no impurities.
- Any membrane must be fully cured.
- The adhesive must be fully cured.

#### GROUTING

- Mix the selected grout according to the instructions on the packaging.
- Apply the grout diagonally in the space between the tiles.
- Make sure the gap is completely filled.
- Remove excess grout from the tiles.
- When the surface is dry, wash away the excess with water.
- Wipe the surface with clean water.

When using salt water or heated water (> 30 °C) [KERAPOXY CQ/KERAPOXY DESIGN](#) must be used.



### CHOICE OF GROUT – LSI INDEX

PRODUCT	LSI < -1.00: HIGHLY AGGRESSIVE	LSI FROM -1.00 TO -0.50: MODERATELY AGGRESSIVE	LSI FROM -0.50 TO 0: MILDLY AGGRESSIVE	LSI > 0: NON- AGGRES- SIVE	50 CM FROM THE TOP DOWN, THE ENTIRE POOL	TEMP > 30 °C
ULTRACOLOR PLUS			X	X	X	
KERAPOXY CQ/ KERAPOXY DESIGN	X	X	X	X	X	X
KERACOLOR FF			X	X	X	
KERACOLOR GG			X	X	X	
MAPESILAC	X	X	X	X	X	X

## GROUTING CERAMIC TILES AND NATURAL STONE

### FLEXIBLE JOINTS

Use flexible joints in pools as needed for angles and corners. Before applying the sealant, ceramic tiles must be pre-treated with **PRIMER FD**. For flexible joints, use **MAPESIL AC** acetic silicone sealant.

For flexible joints in walkways and other surfaces around the pool, use **MAPESIL AC** or **MAPEFLEX MS45**. Flexible joints in zones particularly exposed to chlorinated pool water should be grouted with **MAPESIL AC**. Pre-treat non-absorbent substrates with **PRIMER FD**.

### CURING AND DRYING TIMES

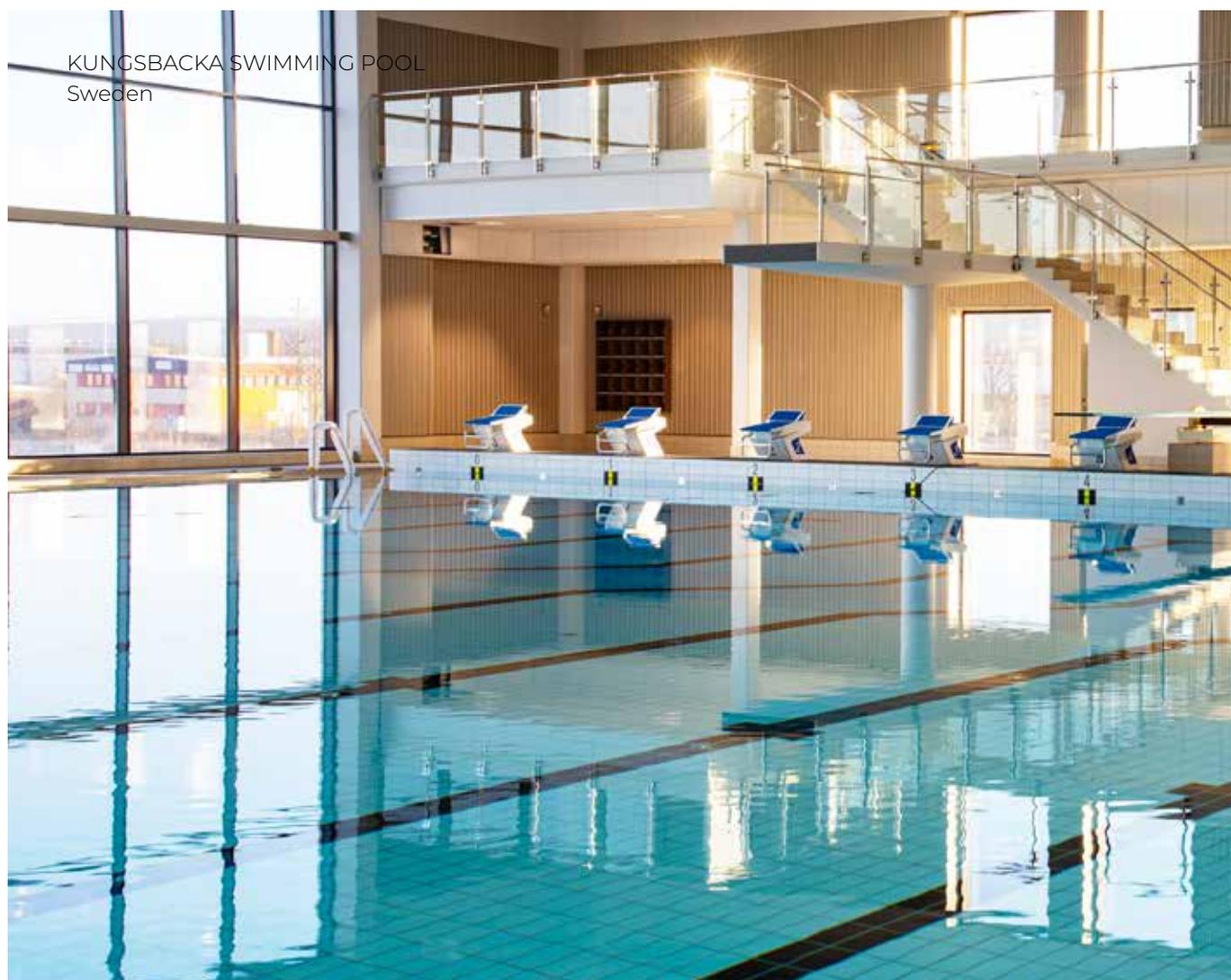
The choice of adhesive also affects the waiting time before grouting and the waiting time before the structure can be filled with water.

### MATERIAL CONSUMPTION

Dependent on the joint width.



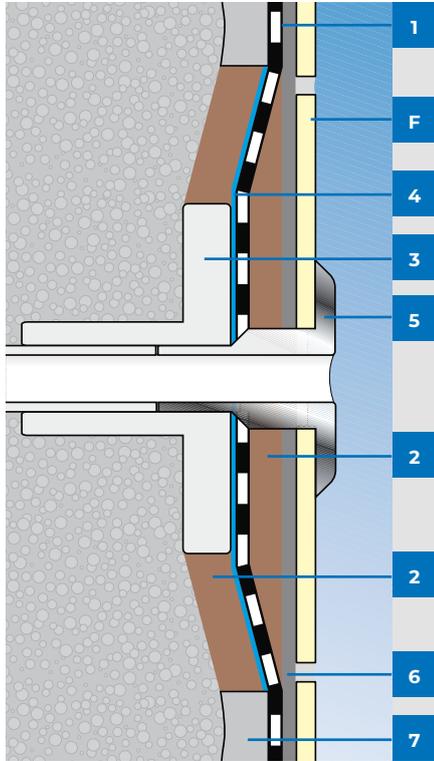
HARDANGERBADET AQUADOME  
Norway



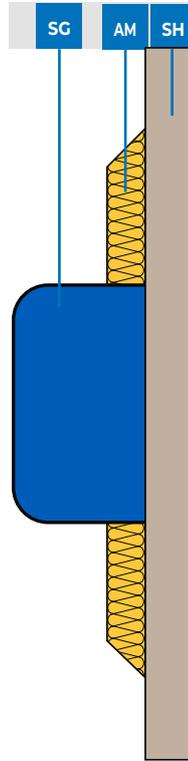
KUNGSBACKA SWIMMING POOL  
Sweden

## CROSS-SECTION OF PENETRATIONS

### POOL JETS

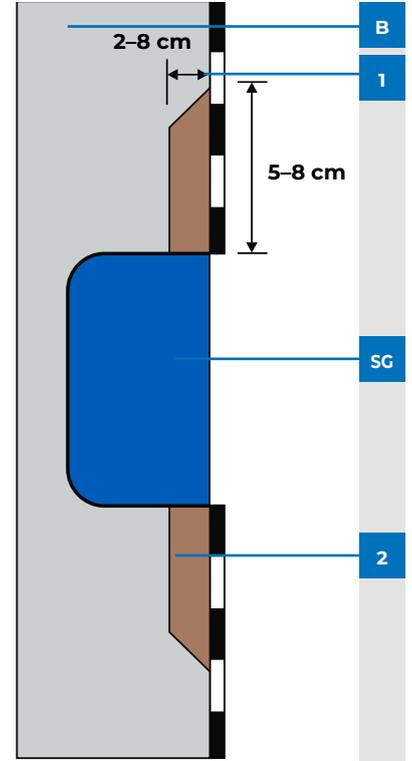


### POOL LIGHTING STEP 1



Formwork material

### POOL LIGHTING STEP 2



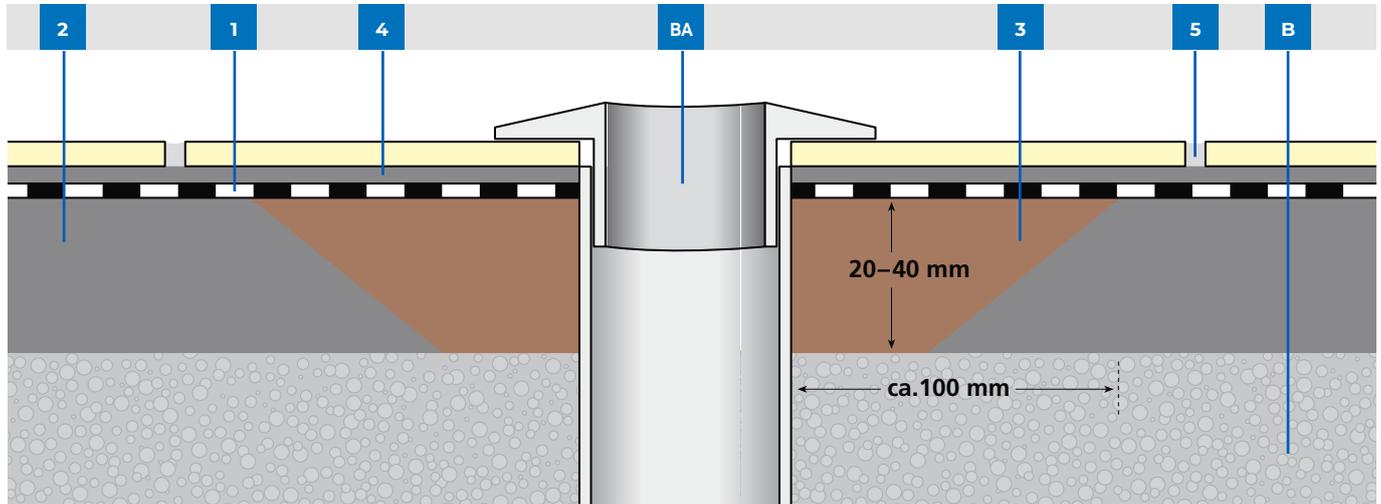
Recess filled with  
capillary-breaking material

- |          |   |           |                                      |
|----------|---|-----------|--------------------------------------|
| <b>1</b> | Sealing layer <b>MAPELASTIC</b> with alkali-resistant glass fibre mesh ( <b>MAPENET 150</b> ) | <b>7</b>  | Plaster/putty, <b>REDIREP 25 RSF</b> |
| <b>2</b> | Capillary break, <b>ADESILEX PG2/PG4</b> + sand 0.1-0.4 mm                                    | <b>F</b>  | Ceramic tiles                        |
| <b>3</b> | PVC (compression fitting)/stainless steel flange  | <b>B</b>  | Concrete                             |
| <b>4</b> | Capillary break, <b>MAPELASTIC</b>  | <b>AM</b> | Recess                               |
| <b>5</b> | Jet nozzle  | <b>SG</b> | Luminaire housing for pool lighting  |
| <b>6</b> | Tile adhesive   | <b>SH</b> | Formwork material                    |

The sketch(s) are for guidance only and may differ somewhat from actual execution.

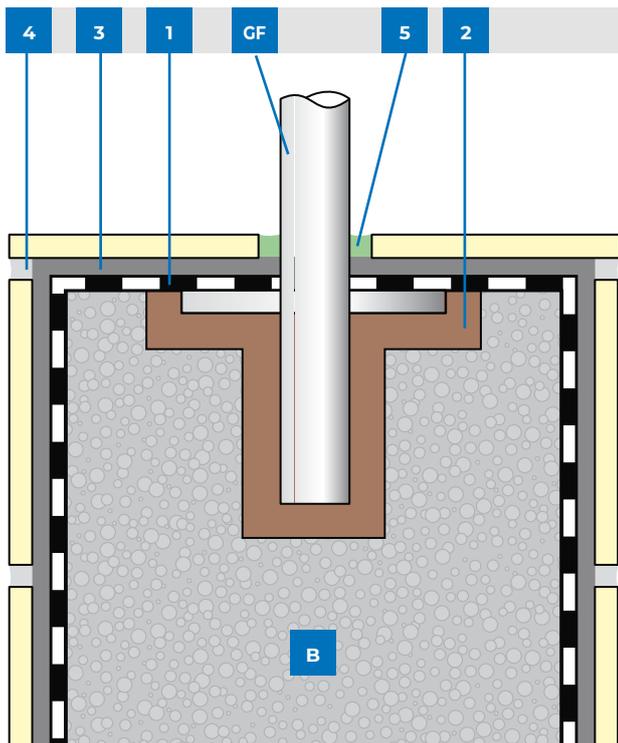
## CROSS-SECTION OF PENETRATIONS

### FLOOR PENETRATIONS



- |   |  |
|---|--|
| <p><b>1</b> Sealing layer <b>MAPELASTIC</b> with alkali-resistant glass fibre mesh (<b>MAPENET 150</b>)</p> <p><b>2</b> Integral cast, <b>CONFIX/REDIREP 25 RSF</b></p> <p><b>3</b> Capillary break, <b>MAPEPOXY HD-G</b> + sand 0.1-0.4 mm</p> | <p><b>4</b> <b>MAPEI</b> Tile adhesive</p> <p><b>5</b> <b>MAPEI</b> Tile grout</p> <p><b>B</b> Concrete</p> <p><b>BA</b> Drain</p> |
|---|--|

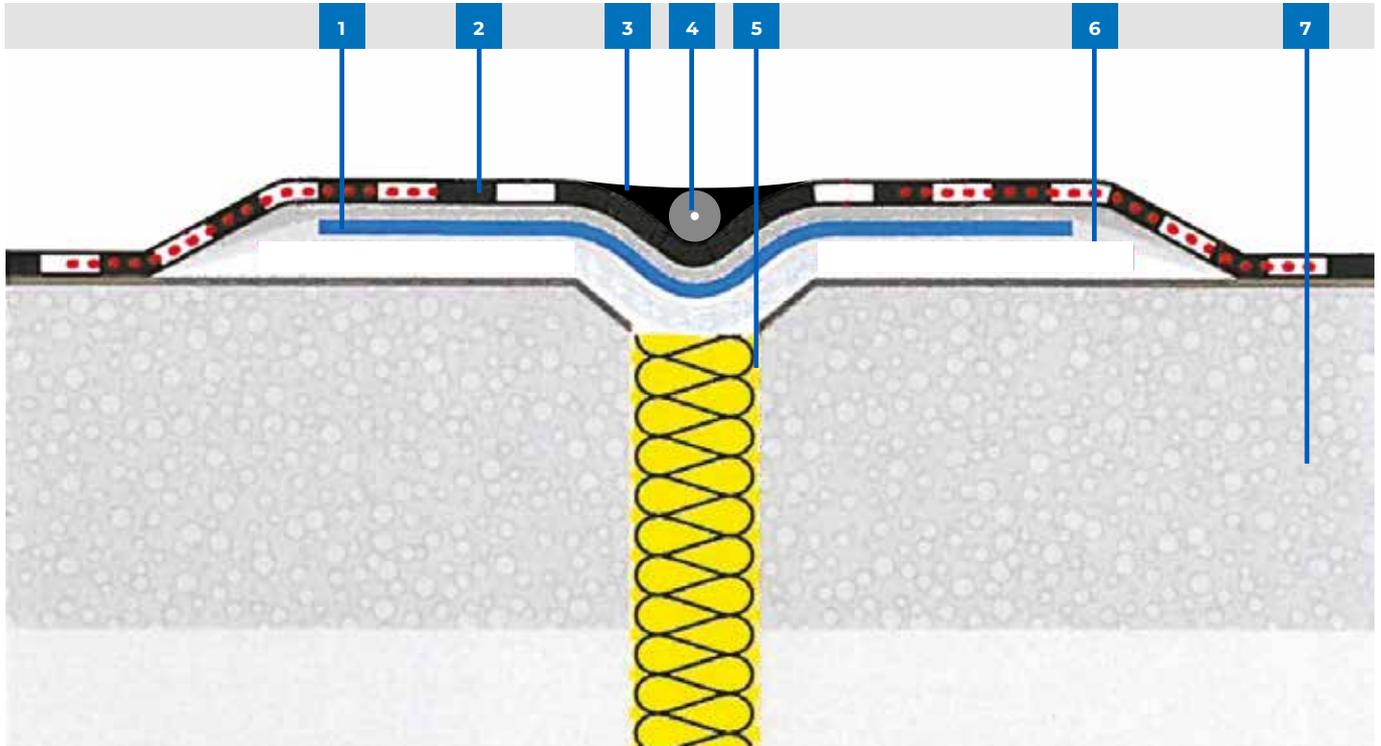
### HANDRAIL POST WITH FLANGE



- |  |
|--|
| <p><b>1</b> Sealing layer, <b>MAPELASTIC</b></p> <p><b>2</b> Capillary break, <b>MAPEPOXY HD-G</b> + sand 0.1-0.4 mm</p> <p><b>3</b> <b>MAPEI</b> Tile adhesive</p> <p><b>4</b> <b>MAPEI</b> Tile grout</p> <p><b>5</b> Elastic sealant, <b>MAPESIL AC</b></p> <p><b>GF</b> Handrail post with flange</p> <p><b>B</b> Concrete</p> |
|--|

## CROSS-SECTION OF PENETRATIONS

### EXPANSION JOINT



- |   |  |   |                  |
|---|--|---|------------------|
| 1 | MAPEBAND TPE*                          | 5 | Insulation       |
| 2 | MAPELASTIC with glass fibre mesh       | 6 | ADESILEX PG2/PG4 |
| 3 | MAPEFLEX MS45                          | 7 | Concrete         |
| 4 | MAPEFOAM closed-cell polyethylene cord |   |                  |

\*MAPEBAND TPE is folded into the joint.

The sketch(s) are for guidance only and may differ somewhat from actual execution.



HAUKELAND CHILDREN AND YOUTH CLINIC  
Norway



## PRODUCTS – TILE ADHESIVE



### ELASTORAPID

Two-component, highly deformable, high-performance, Fast-Track, quick-drying and fast-curing cementitious tile adhesive with no vertical slip and with an extended open time, for ceramic tiles and natural stone (thickness of adhesive up to 10 mm).



### KERAFLEX MAXI S1

High-performance, deformable cementitious adhesive with no vertical slip, extended open time, excellent workability and Low Dust technology for ceramic tiles, particularly recommended for bonding large porcelain and natural stone tiles (thickness of adhesive from 3 to 15 mm). With very low emission of volatile organic compounds.



### KERAPOXY CQ

Two-component epoxy grout, easy to apply and keep clean, with a bacteriostatic agent and BioBlock® technology, which makes it ideal for grouting ceramic tiles and mosaics. Can also be used as a sealant.



### KERAPOXY DESIGN

Two-component, decorative, translucent and acid-resistant epoxy grout for grouting glass mosaics, ceramic tiles and natural stone, for a special aesthetic expression. Can also be used as a sealant.



### ULTRALITE S1

One-component, high-performance, deformable, lightweight cementitious adhesive with no vertical slip, long open time, Low Dust technology and extremely high yield. Easy to apply with a notched trowel and very low emissions (VOC). For ceramic tiles, natural stone and thin porcelain tiles.



### ULTRALITE S2

One-component, flexible, lightweight, fast-curing and hydrating cementitious tile adhesive with extended open time and low consumption. Easy to apply with a trowel, excellent contact properties, with very low emissions of volatile organic compounds, for ceramic tile and stone material, ideal for thin porcelain tiles.



## PRODUCTS – TILE ADHESIVE



### ULTRALITE S2 QUICK

One-component, flexible, lightweight, fast-curing, hydrating Fast-Track cementitious tile adhesive with extended open time and low consumption. Easy to apply with a trowel, excellent contact properties, with very low emissions of volatile organic compounds, for ceramic tile and stone material, ideal for thin porcelain tiles.



## PRODUCTS – GROUTS



### KERAPOXY CQ

Two-component epoxy grout, easy to apply and keep clean, with a bacteriostatic agent and BioBlock® technology, which makes it ideal for grouting ceramic tiles and mosaics. Can also be used as an adhesive.



### KERAPOXY DESIGN

Two-component, decorative, translucent and acid-resistant epoxy grout for grouting glass mosaics, ceramic tiles and natural stone, for a special aesthetic expression. Can also be used as an adhesive.



### KERACOLOR FF

High-quality, polymer-modified, water-repellent, cementitious grout with DropEffect® technology for joints up to 6 mm.



### KERACOLOR GG

High-quality, polymer-modified, cementitious grout for joints from 4–15 mm.



### ULTRACOLOR PLUS

Quick-drying, quick-setting, high-performance, water-repellent, anti-efflorescence cementitious grout, for tile spaces of 2–20 mm. With DropEffect® technology; mould-resistant with BioBlock® technology.



## PRODUCTS – MEMBRANES AND ACCESSORIES



### MAPEBAND EASY

Rubber tape sandwiched between two layers of non-woven fabric to form elastic joints in waterproofing systems.



### MAPEGUARD PC GASKETS

Alkali-resistant flexible reinforcements around pipe penetrations in combination with membrane.



### MAPEBAND EASY CORNERS

Alkali-resistant reinforcement of internal (IC 90°) and external corners (EC 270°) in combination with waterproofing systems..



### MAPELASTIC

Two-component deformable cementitious mortar for protection and waterproofing of balconies, terraces, wet rooms and swimming pools.



### MAPELASTIC SMART

Two-component, highly flexible cementitious mortar applied with brush or roller.

MAPELASTIC SMART is used for waterproofing of concrete surfaces, such as balconies, terraces, wet rooms and swimming pools. It also protects against aggressive substances.



### MAPENET 150

Alkali-resistant glass fibre mesh for reinforcing MAPELASTIC.



Ø 10–24 mm  
 Ø 15–38 mm  
 Ø 28–50 mm  
 Ø 50–75 mm  
 Ø 75–110 mm  
 Ø 100–130 mm

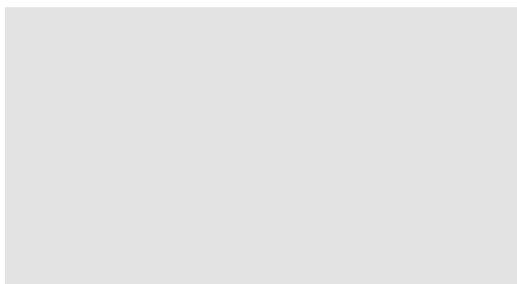


## PRODUCTS – MEMBRANES AND ACCESSORIES



### MAPETEX SEL

Non-woven polypropylene fabric for reinforcing MAPELASTIC.



## PRODUCTS – REPAIRS AND REINFORCEMENT



### ADESILEX PG2

Two-component, thixotropic epoxy adhesive for construction bonding.



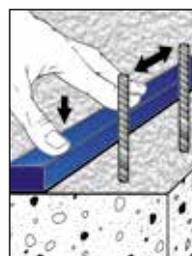
### ADESILEX PG4

Two-component thixotropic epoxy adhesive with modified rheology for bonding MAPEBAND EASY and MAPEBAND TPE, PVC braces, Hypalon and for structural bonding.



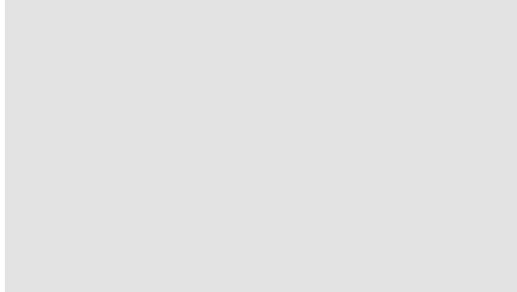
### FIXOFIN

Special mortar for filling pores and repairing superficial damage on concrete, specially adapted to concrete elements.



### IDROSTOP 10 / 15 / 25

Swelling sealing strips for moulding in construction joints, swells in contact with water.



## PRODUCTS – REPAIRS AND REINFORCEMENT



### MAPECEM PRONTO

Quick-setting casting mortar for moulding wet room floors, heated floors, etc. Can be coated with impermeable coating after 24 hours.



### MAPEFER

Two-component, anti-corrosion cementitious mortar. Contains corrosion inhibitor.



### MAPEGROUT T40

Compensated-shrinkage fibre-reinforced thixotropic mortar for repairing concrete.



### MAPEPOXY HD-G

Two-component filler epoxy for injection in coarse cracks and cavities.



### MAPEPOXY L

Two-component fast-curing epoxy adhesive for bonding fresh concrete to old concrete, old concrete to old concrete and steel to concrete. Can also be used as a hard-wearing and durable coating on steel and concrete. For professional use only. **MAPEPOXY L** has low emissions, and satisfies requirements for M1.



### NONSET 120

Used for anchoring rebar, joint filling and grouting under baseplates in thicknesses less than 50 mm.



## PRODUCTS – REPAIRS AND REINFORCEMENT



### NONSET 400

Expanding cementitious special mortar used for grouting under baseplates, joint filling, etc. in a thickness of 150 mm.



### REDIREP 25 RSF

Quick-hardening, fibre-reinforced, shrinkage-compensated special mortar for repairing concrete.



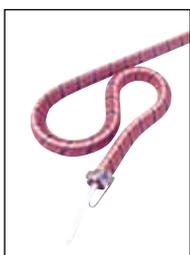
### REDIREP 45 RSF

Quick-hardening, fibre-reinforced, shrinkage-compensated special mortar for repairing concrete.



### REDISIT

One-component cementitious mortar for corrosion protection of rebar, and for use as a bonding agent.



### ULTRA INJECTION HOSE

Usually supplied in coils of 30 metres. Standard accessories are fitted to each roll and come in convenient packaging.

## PRODUCTS – FLEXIBLE JOINTS



### MAPEFLEX MS45

One-component flexible, thixotropic, fast-curing SMP-based sealant and adhesive with a high modulus of elasticity. For movements up to 20%.



### MAPEFOAM (BASE BATTEN)

Closed-cell, extruded foam polyethylene cord used as a support for elastomer sealants to gauge the correct size of flexible joints.

Supplied in rolls in various lengths according to the diameter of the foam.

Ø 6 mm, carton of 1,500 m  
Ø 10 mm, carton of 600 m  
Ø 13 mm, carton of 400 m  
Ø 16 mm, carton of 250 m  
Ø 20 mm, carton of 150 m  
Ø 24 mm, carton of 100 m  
Ø 30 mm, carton of 80 m  
Ø 35 mm, carton of 180 m  
Ø 50 mm, carton of 90 m



### MAPESIL AC

Pure acetic silicone sealant, mould-resistant with BioBlock® technology. For movements up to 25%.



### MAPESIL LM

Neutral silicone-based elastic sealant, mould resistant with BioBlock®. For movements up to 25%. Used for natural stone and does not leave any "silicone contamination".



### PRIMER FD

One-component primer for silicone-based sealants, such as [MAPESIL AC](#), [MAPESIL LM](#) and [MEGASIL SB](#). Used on most substrates.

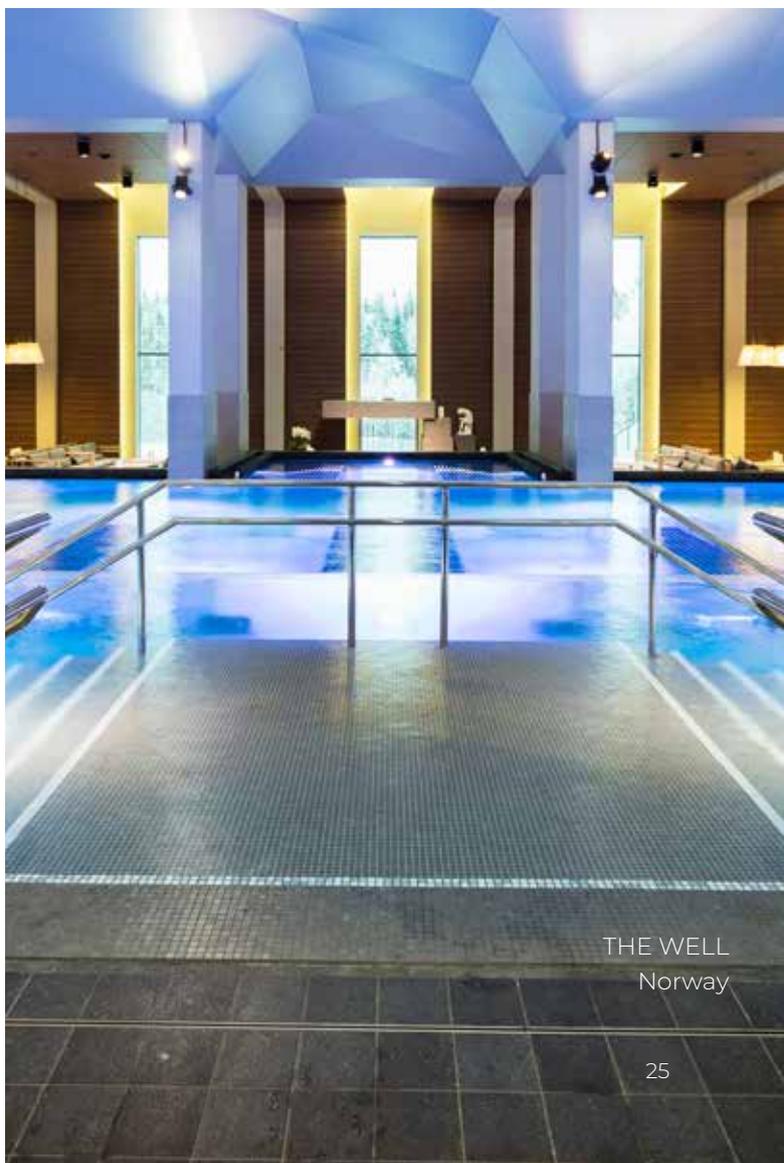
# SELECTED REFERENCES



KUNCSBACKA SWIMMING POOL  
Sweden



HARDANGERBADET AQUADOME  
Norway



THE WELL  
Norway

## SELECTED REFERENCES



VARA SWIMMING POOL  
Sweden



ANGERED SWIMMING POOL  
Sweden



HAKUNILAN SWIMMING POOL  
Finland



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