MAPEI wet room

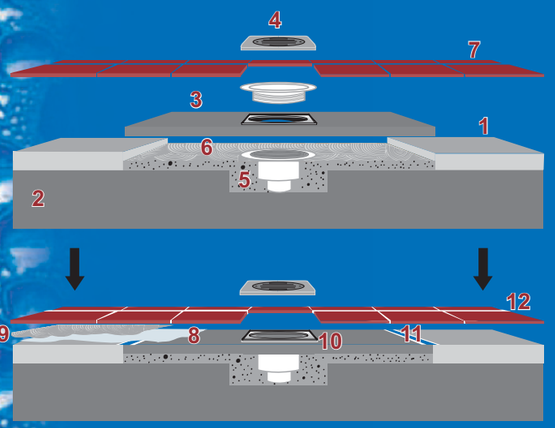
Site Survey

There are two main types of wet rooms:

- **Solid Floor**
- **Timber Floor**

Application Procedure for Solid Floors

Key points:
The concrete floor should be cut out to allow the installation of the **Shower Base** with **Keraquick** adhesive so that the finished floor is level.

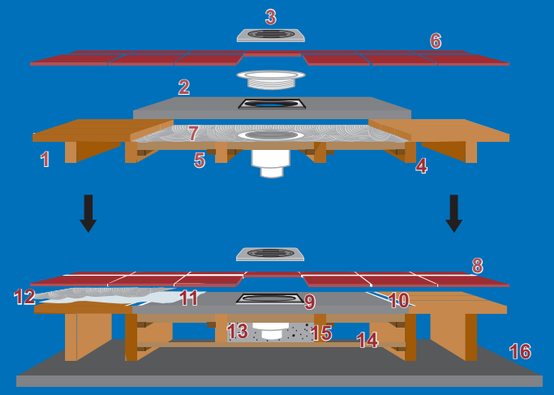


1. Screed
2. Concrete Floor
3. Mapei Shower Base
4. Drain
5. Sand Cement Infill (Topcem Pronto)
6. Layer of Keraquick
7. Tiles
8. Layer of Mapegum WPS
9. Layer of Keraquick
10. Mapesil AC sealant
11. Mapeband Tape
12. Ultracolor Plus grout (available in 26 colours)

For full and detailed installation instructions for solid floors please contact our Technical Services Department on 0121 508 6970.

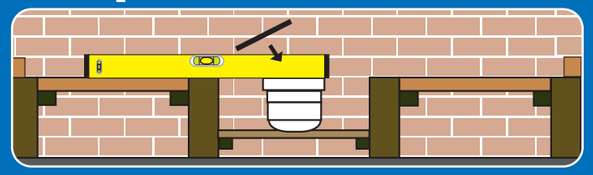
Application Procedure for Timber Floors

Key points:
The floorboards must be rigidly fixed to sound joists prior to tiling.

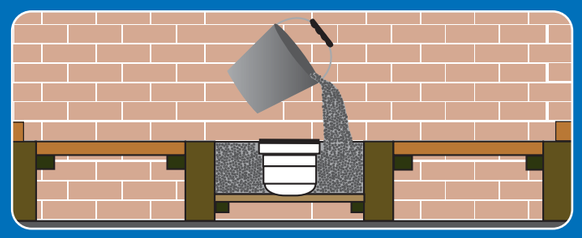


1. Wooden Floor
2. Mapei Shower Base
3. Drain
4. Joists
5. Noggin
6. Tiles
7. Layer of Keraquick & Latex Plus
8. Ultracolor Plus grout (available in 26 colours).
9. Mapesil AC sealant
10. Mapeband Tape
11. Layer of Mapegum WPS
12. Layer of Keraquick & Latex Plus
13. Sand Cement Infill (Topcem Pronto)
14. Support Board
15. Boxing
16. Floor/Ceiling

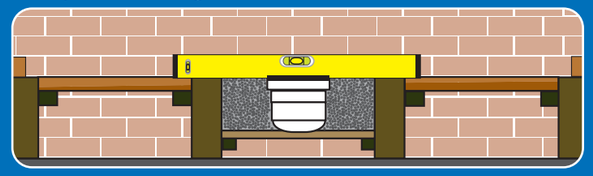
Step 1 Preparation



Make sure the supporting base is completely flat. The **Shower Base** must be fully supported over its complete area.The top face of the drain body must be flush with the level at which the **Shower Base** is to be fixed. After positioning the drain body, fit the drain rubber gasket to the top of the drain body.

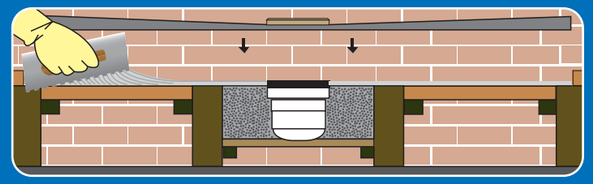


Ensure the drain body is fully supported. This may require fitting of a supporting box around the drain; which can then be filled with Topcem Pronto.
See previous diagram.

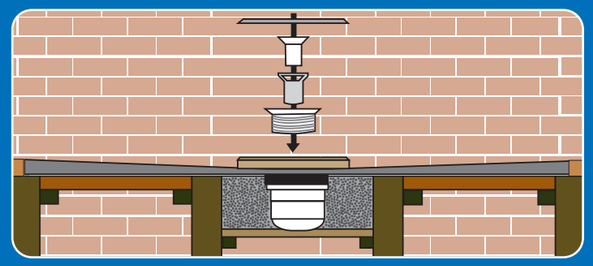


Re-check the supporting base beneath the **Shower Base** to ensure it is completely flat. DO NOT HANG THE DRAIN FROM THE **SHOWER BASE** WITHOUT SUPPORT.

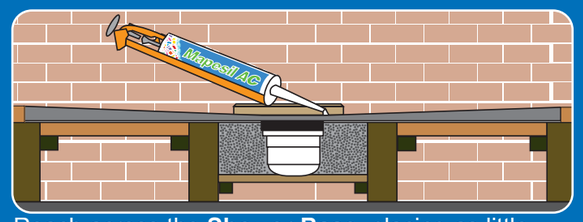
Step 2 Installation of the Shower Base and Drain



When the drain has been correctly positioned the **Shower Base** should be fully bedded down onto the substrate with **Keraquick/Latex Plus** flexible tile adhesive. Apply up to a 10mm radius around the drain. Ensure **Shower Base** is perfectly level and the centre is correctly positioned over and in line with the drain body before the adhesive sets.



Using the tool supplied with the drain, screw the upper (waste) drain section through the **Shower Base** into the lower drain body to create a watertight seal. Use a spirit level to check that all 4 sides of the **Shower Base** are completely level. *Note: Even 1° out of true will affect the drainage performance of the **Shower Base**.*



Reach across the **Shower Base**, placing as little weight on the **Base** as possible, and using **Mapesil AC** silicone sealant carefully seal under and around the square drain.

Step 3 Applying Mapeband & first coat Mapegum WPS

In the areas around expansion joints and the joints between horizontal and vertical surfaces, water inlet pipes, drainage pipes and joints between the **Shower Base** and the existing floor, **Mapeband** rubber-backed synthetic tape must be used to ensure the waterproof layer is continuous.

The **Mapeband** is fixed with **Mapegum WPS** applied in a thin layer, at least 1mm thick, to all areas. The tape or corners and gaskets should be pressed into the fresh layer of **Mapegum WPS** using a smooth trowel.
Allow first coat to dry (approx. 1-2 hours).

Step 4 Applying second coat of Mapegum WPS

Apply the second coat of **Mapegum WPS** to all areas in the wet room; by trowel, roller or brush. The product must be applied in thin coats, 1mm thick, with the second coat at right angles to the first.

Mapegum WPS should never be less than 1mm in thickness. After 12 - 24 hours the surface is ready for laying ceramic tiles or natural stone etc.

Step 5 Tiling

Tiles may now be installed using **Keraquick** adhesive. Mix with clean water and apply with a notched trowel. The selection of the trowel is dependent on the tile size, to give a solid bed.

Step 6 Grouting

After approx. 3 hours grouting can commence. Mix **Ultracolor Plus** with clean water. It is important to use the correct ratio of powder to water; always add powder to water and double mix, allowing 2-3 mins between mixes. Float the grout into the joint, when the grout turns from wet to dull you can wash excess grout off the surface of the tile using a good sponge. When dry, dust off with a dry cloth.

Step 7 Sealing

Joints may be filled with **Mapesil AC**. Apply masking tape on both sides of the joint. Cut nozzle to fit joint size. Extrude the **Mapesil AC** into the joint, smooth the joint with soapy water and a small brush. Remove masking tape once sealant has cured.

For further technical assistance please call our Technical Services Department on 0121 508 6970

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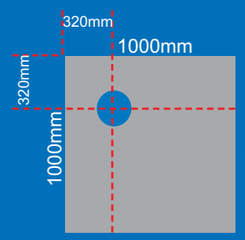
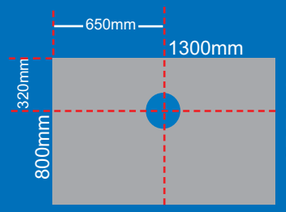
Halesowen • West Midlands
B62 8HD
Tel: 0121 508 6970
Fax: 0121 508 6960
Email: info@mapei.co.uk
Website: www.mapei.co.uk

Shower Base Dimensions



Shower Base	
Size:	**1000x1000mm**
Drain Diameter:	**95mm**
Perimeter Height:	**20mm**
Weight:	**5kg**



Shower Base	
Size:	**1300x800mm**
Drain Diameter:	**95mm**
Perimeter Height:	**20mm**
Weight:	**5.2kg**

Standard sizes:

Offset Drain	Perimeter Height (±1mm)	Weight (±0.5kg)
mm	**mm**	**kg**
1000 x 1000	20	5
1300 x 800	20	5.2

Technical Properties:

Compressive Strength (ASTM C579)	0.3N/mm²
Density	0.36kg/m³
Fire Rating	Class 0 (BS476 part 6+7)

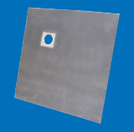
Mapei Shower Base - Advantages:

- Pre-laid to falls (min 2% drain angle)
- Easy access, floor level
- Can be finished with tiles
- Can be cut to fit on site
- Can be used to create ‘wet room’ or enclosed shower area
- Preformed – no skilled laying of falls
- Lightweight – compared to concrete products
- Can be fixed to timber or concrete floors

For further technical assistance please call our Technical Services Department on 0121 508 6970

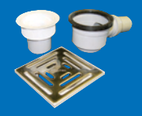
Wet Room Essentials

Mapei Shower Base



The Mapei Shower Base is designed for wet rooms and showers in confined locations. The Shower Base is pre-laid to falls at 2% minimum.
1000 x 1000 offset drain
1300 x 800 offset drain

Drain



140 x 140 Shower Drain 10mm frame
Extra extension frame

Topcem Pronto

Ready to use, fast drying screed.
Available in 20kg

Wet Room Kit

A synthetic rubber tape for waterproofing all corners and pipe connections.
Mabepand Wet Room Kit contains:
5m Mapeband Tape (120mm wide)
2 x Mapeband Pipe Gaskets
2 x Mapeband Internal Corners
Extra lengths also available

Mapegum WPS

A ready-to-use liquid membrane.
For waterproofing bathroom and shower walls and floors before the application of ceramic tiles.
Available in 10kg, 25kg

Keraquick

Fast setting polymer modified deformable adhesive for fixing all types of ceramic, porcelain and glass tiles and mosaics.
Available in 20kg Grey or White

Latex Plus

Latex admixturefor Keraquick.
Available in 6kg

Ultracolor Plus

Fast setting and drying, high performance, anti-efflorescence, water-repellent grout for joints from 2-20mm. With Drop-Effect® and anti-mould with BioBlock® technology.
To grout joints between all types of ceramic tiles, and many other materials.
Suitable for wet areas including power showers.
Available in 5kg alu-pack 26 colours

Mapesil AC

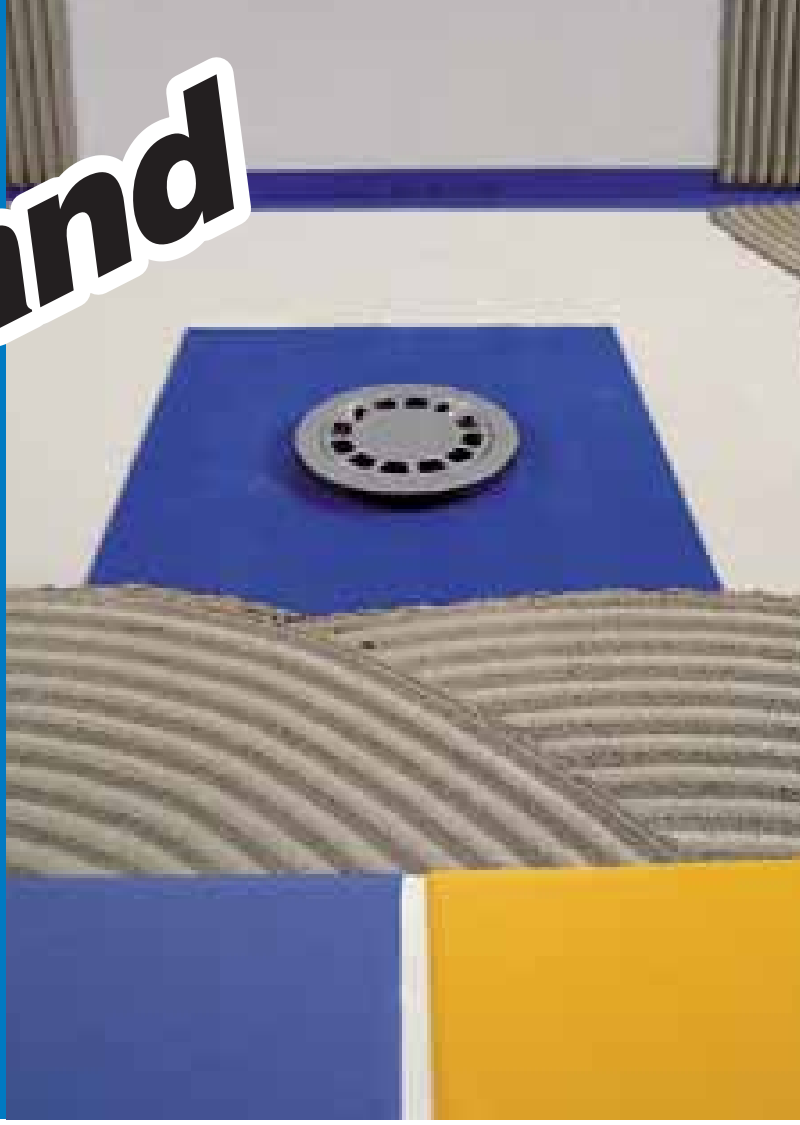
A crosslinking, single component, solvent free silicone sealant, with excellent durability to climatic changes. For vertical and horizontal surfaces. Available in 310ml cartridges.
26 colours + transparent

MAPEI wet room

step by step installation guide

MAPEI

Mapeband



Rubber-coated polyester tape for waterproofing expansion joints in interiors and exteriors

WHERE TO USE
- Waterproofing corners between adjacent walls and between walls and floors before treating with **Mapegum WPS**, **Mapelastic** or **Mapelastic Smart**.
- Flexible waterproofing of expansion joints in terraces and balconies, etc. before treating with **Mapelastic** or **Mapelastic Smart**.
- Sealing pipes and drains in bathrooms, showers and kitchens in conjunction with **Mapeband** gaskets.
- Sealing expansion joints in pre-fabricated panels.

TECHNICAL CHARACTERISTICS
Mapeband is a rubber-coated polyester tape that is waterproof and vapour-proof.

Mapeband is elastic and deformable even at low temperatures with excellent resistance to adverse weather conditions.

Mapeband is resistant to alkalis, acids and salt solutions (for special cases, test before using).

Mapeband is also available in ready-made internal and external corner sections along with **Mapeband** gaskets for pipes in bathrooms, kitchens, showers, etc.

RECOMMENDATIONS
- For perfect sealing on corners use **Mapeband** special corner pieces.
- For perfect sealing on pipes use **Mapeband** gaskets.

APPLICATION PROCEDURE
Apply a thin layer of **Mapegum WPS**, **Mapelastic** or **Mapelastic Smart**, at least 1 mm thick, to the sides of the corners and expansion joints to be waterproofed with **Mapeband**.
Apply the cloth side of the **Mapeband** tape or special pieces (corners and gaskets) over the fresh layer of **Mapegum WPS**, **Mapelastic** or **Mapelastic Smart**, using a smooth trowel.
It is essential that the **Mapegum WPS**, **Mapelastic** or **Mapelastic Smart** wet both sides of the **Mapeband** tape for a width of several mm.
For movement joints (i.e. in terraces) **Mapeband** must be positioned in the shape of an omega Ω (see overleaf): **Mapeband** can then be subjected to tension.
Joints between **Mapeband** strips must be sealed with **Adesilex T** or **Adesilex T Super**.

PACKAGING
- 50-m rolls of 120 mm total width;
- angles of 90° and 270°;
- gaskets for 118x118-mm and 400x400-mm pipes.

FOR PROFESSIONALS.

WARNING
Although the technical details and recommendations contained in this report correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical applications; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Mapeband

An example of waterproofing a structural joint on a terrace

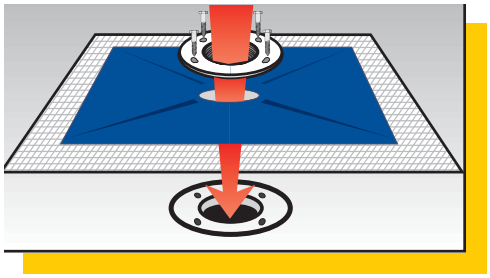
An example of Mapeband waterproofing a corner between the bottom and a side of a bath tub

TECHNICAL DATA (typical values)

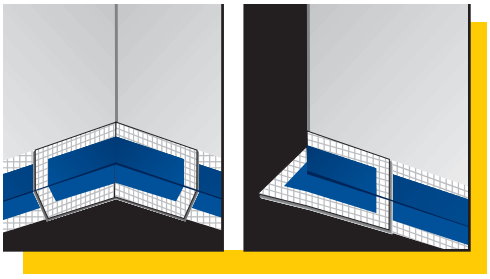
PRODUCT IDENTITY	
Shore A hardness (according to DIN 53505/ISO 868):	60 ± 5
Breaking load (according to DIN 53504/ISO 37) (N/mm²):	> 8
Ultimate elongation (according to DIN 53504/ISO 37) (%):	> 700
Resistance to tearing (according to DIN 53507/ISO 34) (N/mm²):	> 9
Temperature when in use:	from –40°C to +90°C
Maximum movement (%):	100
Customs class:	3921 90 90

MAPEBAND SPECIAL SECTIONS

Ω positioning of Mapeband inside an expansion joint



Rubber-coated square section for flexible waterproofing and sealing of drain outlets 342 mm x 342 mm



Corners

All relevant references of the product are available upon request

MAPEI®

BUILDING THE FUTURE

MAPEI GROUP CERTIFIED MANAGEMENT SYSTEMS (Quality, Environment and Safety)

CERTIQUALITY No. 250 · ISO 14001 Plant in Robbiano di Mediglia CERTIQUALITY No. 1250 · ISO 14001 Plant in Latina CERTIQUALITY No. 4127 · EMAS VERIFIED ENVIRONMENTAL MANAGEMENT Reg. No. I-000019 PLANT IN ROBBIANO DI MEDIGLIA · OHSAS 18001 CERTIFIED BY CERTIQUALITY Certificate No. 3586 MAPEI — MAPEI S.p.A. - ITALY

CERTIQUALITY No. 6853 — MAPEI CORP - U.S.A.

CERTIQUALITY No. 3358 — MAPEI FAR EAST Pte Ltd MAPEI MALAYSIA SDN BHD

ITC No. 03 0063 SJ — MAPEI s.r.o. - CZECH REP.

CERTIQUALITY No. 1517 — MAPEI FRANCE

QMI No. 004157 — MAPEI INC - CANADA

DNV No. 94-OSL-AQ-6236 · ISO 14001 Plant in Sagstua DNV No. 2002-OSL-SYMI-0147 · EMAS VERIFIED ENVIRONMENTAL MANAGEMENT Reg. No 2003-OSL-AE-9111 PLANT IN SAGSTUA — RESCON MAPEI AS - NORWAY

DNV No. 12026-2002 AQ-BUD-TGA — MAPEI Kft. - HUNGARY

IRAM No. AR-QS-688 — MAPEI ARGENTINA S.A.

CERTIQUALITY No. 5776 — MAPEI SUISSE SA

www.mapei.com

337-5-2005

MAPEI

Topcem Pronto

CT
CEMENTITIOUS SCREEDS
C30-F6
A1fl
MAPEI
IN COMPLIANCE WITH EUROPEAN STANDARDS
EN 13813

CE
EN 13813

Pre-blended ready-to-use mortar with normal setting for fast-drying screeds (4 days)

CLASSIFICATION ACCORDING TO EN 13813
Screeds prepared with **Topcem Pronto** in accordance with the specifications described in this technical data sheet are classified as CT - C30 - F6 - A1fl in compliance with the European Norm EN 13813.

WHERE TO USE
For forming floating and integral screeds on new and existing slabs in interiors and exteriors prior to installing wood, PVC, linoleum, ceramic tile, natural stone, carpet, or other floor coverings in areas where fast-drying screeds are required in order to lay floorings in a short time.

Some application examples
- Forming screeds that are trafficable in 12 hours and completely dry in 4 days, for installing wood parquet and resilient flooring such as rubber, PVC, linoleum, etc.
- Screeds that are ready to receive ceramic tiles after 24 hours and natural stone flooring after 2 days.
- Repairing screeds in areas where it is required to lay floorings in a short time (e.g. supermarkets, shops, residences, offices, etc.).
- Forming screeds over radiant heating coils without the need for polymer additives.

TECHNICAL CHARACTERISTICS
Topcem Pronto is a pre-blended ready to use mortar with normal setting and controlled shrinkage based on a special hydraulic binder and graded aggregate.

Topcem Pronto is extremely easy to use: just mix with water. This prevents mistakes from being made in adding the correct amount of binder and properly graded aggregate, which could compromise the final performance characteristics of the screed when cured.

Topcem Pronto is the ideal solution where good quality graded aggregate is hard to find or for job sites such as those in city centres where the logistics involved in mixing conventional binders can be difficult.

Topcem Pronto is workable for the same length of time as conventional cement based mortars but cures much faster.

RECOMMENDATIONS
- Do not use **Topcem Pronto** on substrates subject to rising damp (place a vapour barrier in between).
- Do not mix **Topcem Pronto** with other binders (e.g. **Mapecem**, **Topcem**, cement, lime, gypsum, etc.) or aggregate.
- Mix **Topcem Pronto** with the correct amount of water.
- Do not add water to the **Topcem Pronto** mix once it has begun to set.
- Do not wet the surface of the **Topcem Pronto** screed.

APPLICATION PROCEDURE
Preparing the substrate
Topcem Pronto can be used on any substrate as long as it is not subject to rising damp. If so, use a waterproof membrane.

Topcem Pronto

For screeds from 10 to 35 mm thick, that require anchoring, the substrate must be dry, without cracks, free of dust and loose particles, varnish, wax, oil, and gypsum residue.

Preparing the mix
Topcem Pronto can be mixed in:

- rotating mixers;
- normal job site mixers;
- centrifugal mixers;
- truck mixers;
- automatic pressure pumps.

Mix one 25-kg bag of **Topcem Pronto** with 1.7 l of water for at least 5 minutes. Never vary the amount of water because this will weaken the mortar's final performance.

The mix should have a semi-dry consistency. Tamp and float the mix until a dense, smooth surface is obtained without bleeding.

FLOATING SCREEDS (35 to 60 mm thick)

The **Topcem Pronto** mix must be laid on an isolating layer, made up of a polyethylene sheet barrier, or similar, to allow for movement between the screed and the existing substrate. In case of rising damp use a waterproof membrane to form a vapour barrier underneath the screed.

Areas of **Topcem Pronto** screeds containing pipes must be reinforced with light steel reinforcement such as a hexagonal mesh.

Spread the **Topcem Pronto** mix just like any other cement based screed mix: use screed guides, then spread the mix, and tamp thoroughly before floating to obtain a better surface finish.

Place isolating material (such as cardboard, polystyrene foam, cork, etc.) about 1 cm thick around the sides of the area and around columns before casting.

If work is interrupted, place steel rods 20 to 30 cm long and 3 to 6 mm in diameter, spaced 20 to 30 cm apart, into the screed (which has been cut perpendicular to the substrate) to ensure a perfect connection between the new and the old pours and to prevent uneven joins and cracks.

The Topcem Pronto mix is usually workable for a greater length of time than a conventional screed mix. Ambient temperatures may influence the setting and drying times.

INTEGRAL SCREEDS (from 10 to 35 mm thick)

Thin screeds must be laid directly in contact with the substrate, which may be cementitious material or made up of an old ceramic or stone floor. For other substrates, consult the MAPEI Technical Service.

After cleaning the substrate and immediately before placing the **Topcem Pronto** screed, prepare a bonding slurry as described below and apply it evenly with a brush or trowel. For perfect adhesion, place the **Topcem Pronto** mix while the bonding slurry is still fresh (fresh on fresh).

The **Topcem Pronto** mix for integral screeds is exactly the same as the mix described above for floating screeds.

Bonding slurry
Mix to a uniform consistence:

Planicrete:	250 g
Water:	250 g
Topcem Pronto:	3 kg

The mix tends to segregate- remix before applying.

MEASURING MOISTURE CONTENT

Normal electric hygrometers give values that are not reliable for **Topcem Pronto** screeds. It is therefore absolutely necessary that a carbide hygrometer is used to measure the level of residual humidity; this instrument shows the absolute value of humidity by weight.

CONSUMPTION

18-20 kg/m^2 per cm of thickness, depending on compaction.

Cleaning
Clean tools with water.

PACKAGING

Topcem Pronto is available in 25 kg bags.

STORAGE

Topcem Pronto is stable for at least 12 months when stored in a dry place.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

Topcem Pronto is not hazardous according to the current european standards on the classification of preparations. It is recommended to wear gloves and protective goggles and to take the usual precautions for handling chemical products.
For further information refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this report correspond to the best of our knowledge and experience, all the above information must, in every case be taken as merely indicative and subject to confirmation after long-term practical applications; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

All relevant references for the product are available upon request and from www.mapei.com

TECHNICAL DATA (typical values) **Conformity with:**	**– European EN 13813 CT - C30 - F6 - A1fl**
PRODUCT IDENTIFICATION	
Consistency:	powder
Colour:	grey
Bulk density (kg/m³):	1,500
Dry solids content (%):	100
Storage:	12 months in a dry place in original sealed packaging
Hazard classification according to EC 1999/45:	none. Before using refer to the "Safety Instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Customs class:	3824 50 90
APPLICATION DATA (at +23°C - 50% R.H.)	
Mix ratio:	1.7 l of water per 25 kg of **Topcem Pronto**
Density of the mix (kg/m³):	2,100, depending on compaction
Mixing time:	5 to 10 mins
Workability of the mix:	60 mins
Application temperature range:	from +5°C to +35°C
Set to light foot traffic:	after 12 hours
Waiting time before application of levelling compounds:	1 to 4 days, depending on the type of flooring to be laid
FINAL PERFORMANCE DATA	
Resistance to moisture:	excellent
Resistance to ageing:	excellent
Resistance to solvents and oils:	excellent
Resistance to acids and alkalis:	poor
Resistance to temperature:	from -30°C to +90°C
Flexibility:	no

Compressive and flexural strength, and resistance to residual moisture	Compressive strength (N/mm²)	Flexural strength (N/mm²)	Resistance to residual moisture (%)
– after 1 day:	> 8	> 3	< 3.5
– after 4 days:	> 15	> 4	< 2.0
– after 7 days:	> 22	> 5	–
– after 28 days:	> 30	> 6	–

Topcem Pronto

(GB) A.G. BETA

209-1-2007

MAPEI®

BUILDING THE FUTURE

MAPEI

Ultracolor Plus

Fast setting and drying, high performance, polymer-modified, anti-efflorescence, water-repellent grout for joints from 2 to 20 mm. With DropEffect® and anti-mould with BioBlock® technology

CLASSIFICATION ACCORDING TO EN 13888

Ultracolor Plus is a class CG2 improved (2) cementitious (C) mortar for tile joints (G).

WHERE TO USE

Internal and external grouting of floors and walls in all types of ceramic (double-fired, single-fired, klinker, porcelain, etc.), terracotta, stone material (natural stone, marble, granite, agglomerates, etc.), and glass and marble mosaic.

Some application examples

- Grouting floors and walls in areas subject to intense traffic (airports, shopping centres, restaurants, bars, etc.).
- Grouting floors and walls in residential areas (hotels, private houses, etc.).
- Grouting floors and walls on façades, balconies, terraces and on swimming pools.

TECHNICAL CHARACTERISTICS

Ultracolor Plus is a mortar made up of a blend of special hydraulic binders, graded aggregates, special polymers, water repellent additives, organic molecules and pigments.
With **Ultracolor Plus**, the **Ultracolor** technology based on a special, self-hydrating hydraulic binder which guarantees perfect colour uniformity, is further enhanced by two innovative technologies which are the result of MAPEI research: BioBlock® and DropEffect®.

Ultracolor Plus

Spreading Ultracolor Plus on a floor with a rubber squeegee

Spreading Ultracolor Plus on a wall with a rubber float

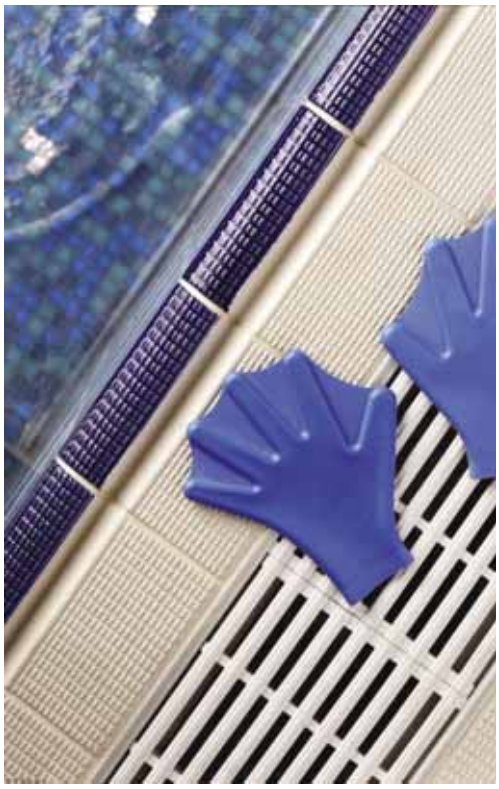
Cleaning and finishing the tile joints on a wall with a sponge

The BioBlock® technology consists of special organic molecules which are distributed uniformly in the micro-structure of the grout, to block the formation at the root of the micro-organisms which cause mould. The DropEffect® technology, with a synergic effect, reduces the absorption of surface water. When it is mixed with water in the proportions recommended and correctly applied, **Ultracolor Plus** forms a grouting mortar with the following characteristics:

- water-repellent and droplet-effect;
- uniform colour and free of staining since **Ultracolor Plus** does not produce efflorescence. From an analysis carried out using an electronic microscope (SEM), note that, compared with a Portland cement-based binder in a normal cementitious grouting mortar, the special cements in **Ultracolor Plus** do not generate the calcium hydroxide (hydrolysis lime) crystals which cause efflorescence during the hydration process;
- colours resistant to ultra-violet rays and atmospheric agents;
- short waiting time before cleaning and easy finishing;
- ready for light foot traffic and for use after a short period of time;
- smooth, compact finished surface, with low water absorbency for easy cleaning;
- shrinkage compensated, therefore free from cracks;
- optimum resistance to abrasion, compression and flexural strength, even after freeze/thaw cycles, and therefore optimum durability;
- good resistance to acids with pH > 3.

RECOMMENDATIONS

- **Ultracolor Plus** does not contain Portland cement and must not be mixed with gypsum or other hydraulic binders; never add water to the mix once it has started to set.
- Never mix **Ultracolor Plus** with salty or dirty water.
- Use the product at temperatures between +5°C and +35°C.
- Carry out grouting only on substrates which are sufficiently dry or have been waterproofed, to avoid a whitish film forming on the surface.
- In order to avoid an uneven colour finish, we do not recommend sprinkling **Ultracolor** powder onto the filled grout joints.
- When resistance to acids or, where extreme cleanliness or sterile conditions are required, use a suitable acid-resistant epoxy grout.



Example of a swimming pool grouted with Ultracolor Plus

- Expansion and movement joints on walls and floors must never be filled with **Ultracolor Plus**. Use a suitable flexible sealant from the MAPEI range.
- The surface of certain tiles or stone material may have micro-porosity or a rough surface. We recommend carrying out a preliminary test to check how easy it is to clean the surface where necessary to apply a protective treatment to the surface, to ensure the grout does not penetrate into the surface porosity of the tiles.
- If an acid-based cleaner is used to clean the joint, we recommend testing the product befoehand to check the resistance of the colour. Always make sure that the joints are thorougly rinsed down to avoid leaving traces of acid in the joints.

APPLICATION PROCEDURE

Preparing the joints

Grouting may take place when the adhesive is completely set. Make sure that the waiting times indicated in the technical data sheets are followed.
The joints must be clean, free of dust and empty down to at least 2/3 of the thickness of the tiles. Any adhesive or mortar which has seeped into the joints while laying the tiles must be removed while still fresh. With very absorbent tiles, high temperatures or windy conditions, dampen the joints with clean water.

Preparing the mix

While stirring, pour **Ultracolor Plus** into a

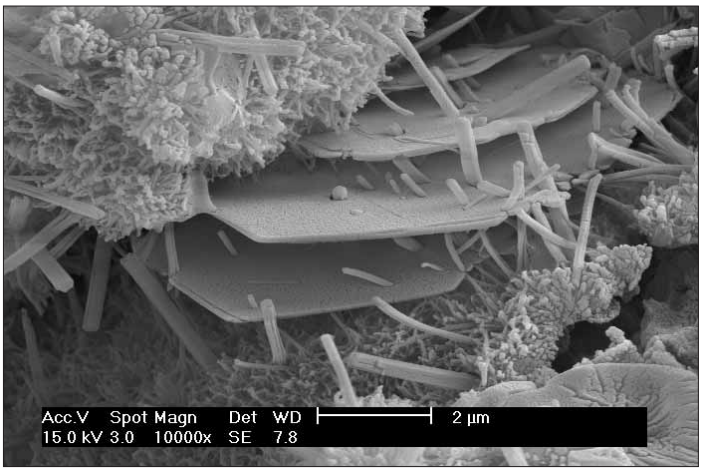
TECHNICAL DATA (typical values) Conforms to standards:	– European EN 13888 such as CG2 – ISO 13007-3 such as CG2WAF – American ANSI A 118.7 - 1999
PRODUCT IDENTITY	
Consistency:	fine powder
Colour:	26 colours from the MAPEI range
Bulk density (kg/m³):	1,400
Dry solids content (%):	100
Storage:	12 months in original packaging in a dry place
Hazard classification according to EC 1999/45:	none. Before using refer to the “Safety instructions for preparation and application” paragraph and the information on the packing and Safety Data Sheet
Customs class:	3824 50 90
APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio:	100 parts **Ultracolor Plus** with 21-23 parts water, dependent on the colour
Consistency of the mix:	fluid paste
Density of mix (kg/m³):	1,980
pH of mix:	approx. 11
Pot life of mix:	20-25 minutes
Application temperature range:	from +5°C to +35°C
Grouting after installation: **– on walls bonded with normal adhesive:** **– on walls bonded with fast-setting adhesive:** **– on walls with mortar:** **– on floors bonded with normal adhesive:** **– on floors bonded with fast-setting adhesive:** **– on floors with mortar:**	 4-8 hours 1-2 hours 2-3 days 24 hours 3-4 hours 7-10 days
Waiting time for finishing:	15-30 minutes
Set to light foot traffic:	approx. 3 hours
Ready for use:	24 hours (48 hours for basins and swimming pools)
FINAL PERFORMANCES	
Flexural strength after 28 days (N/mm²) (EN 12808-3):	9
Compressive strength after 28 days (N/mm²) (EN 12808-3):	40
Flexural strength after freeze/thaw cycles (N/mm²) (EN 12808-3):	9
Compressive strength after freeze/thaw cycles (N/mm²) (EN 12808-3):	40
Abrasion resistance (EN 12808-2):	700 (loss in mm³)
Shrinkage (mm/m) (EN 12808-4):	1.5
Water absorption (g) (EN 12808-5) after 30’:	0.1
Water absorption (g) (EN 12808-5) after 4 hours:	0.2
Resistance to solvents and oil:	excellent
Resistance to alkalis:	excellent
Resistance to acids:	good resistance to acids with pH > 3

Spreading Ultracolor Plus on a wall with a rubber trowel

Cleaning the joints with Scotch-Brite® (when the product is partially set)

Cleaning and finishing the tile joints with a sponge

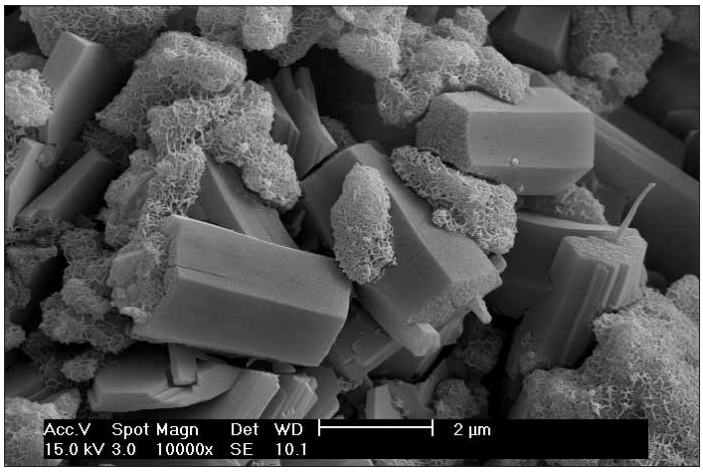
Wall covering in porcelain tiles grouted with Ultracolor Plus



Hydration of a Portland cement-based binder in a traditional grouting mortar

Spreading Ultracolor Plus on a floor with a rubber float

Hydration of Ultracolor Plus special cement-based binder. Note the absence of lamellar crystals of Portlandite (calcium hydroxide), which is the cause of whitish efflorescence



Cleaning and finishing the tile joints with a sponge

clean, rust-free container containing 21-23% by weight of clean water.
Mix the grout with a low-speed mixer to avoid air entrainment, until a smooth paste is obtained.
Let the mix stand for 2-3 minutes, and stir again briefly before use.
Use the mix within 20-25 minutes of its preparation.

Applying the grout

Fill the joints with the **Ultracolor Plus** mix using a special MAPEI grout float or rubber squeegee, without leaving any gaps or steps.
Remove any excess of **Ultracolor Plus** from the surface, by moving the float diagonally to the joints while the mix is still fresh.

Finishing

When the mix loses its plasticity and becomes opaque, which usually takes place after 15-30 minutes, clean off the excess **Ultracolor Plus** with a hard, damp sponge (e.g. a MAPEI sponge), working in a diagonal direction to the joints. Rinse the sponge frequently, using two different containers of water: one to remove the excess mix from the sponge, and the other, containing clean water, to rinse the sponge. This operation may also be carried out with a machine with a sponge belt or rotating disc.
When the mix is partially set, after 50-60 minutes, a damp Scotch-Brite® sponge or an abrasive felt disc may be passed over the joints to even out the surface.

If the cleaning operation is carried out too soon (the mix is still too wet), some of the mix may be removed from the joints.
If grouting is carried out in extremely hot, dry or windy weather, we recommend that dampen the joints filled with **Ultracolor Plus** are dampened after a few hours.
Damp curing of **Ultracolor Plus** improves its final characteristics in all cases.

Final cleaning of the powdery film of **Ultracolor Plus** from the surface may be carried out with a clean, dry cloth.
After the final cleaning operation, if the surface still has traces of **Ultracolor Plus** due to incorrect application, it may be cleaned down with an acidic cleaner (e.g. **Keranet**), by following the relevant instructions, at least 24 hours after grouting the joints. Only use **Keranet** on surfaces which are resistant to acid, and never use it on marble or limestone material.

Example of porcelain tiles on the walls and floor of a bathroom, grouted with Ultracolor Plus

CONSUMPTION TABLE ACCORDING TO THE SIZE OF THE TILES AND WIDTH OF THE JOINTS (kg/m²)

Size of the tile (mm)	Width of the joint (mm)						
	2	3	5	8	10	15	20
20 X 20 X 4	1.3						
50 X 50 X 4	0.5						
75 X 150 X 6		0.6	1.0				
100 X 100 X 6		0.6	1.0				
100 X 100 X 10		1.0	1.6				
100 X 200 X 6		0.4	0.7				
100 X 200 X 10			1.2	1.9	2.4		
150 X 150 X 6		0.4	0.6				
200 X 200 X 8		0.4	0.6				
120 X 240 X 12			1.2	1.9	2.4		
250 X 250 X 12			0.8	1.2	1.5		
250 X 250 X 20			1.3	2.0	2.6	3.8	5.1
250 X 330 X 8		0.3	0.4	0.7	0.9		
300 X 300 X 8		0.3	0.4	0.7	0.9		
300 X 300 X 10		0.3	0.5	0.9	1.1		
300 X 300 X 20			1.1	1.7	2.1	3.2	4.3
300 X 600 X 10		0.2	0.4	0.6	0.8		
330 X 330 X 10		0.3	0.5	0.8	1.0		
400 X 400 X 10		0.2	0.4	0.6	0.8		
450 X 450 X 12			0.4	0.7	0.9		
500 X 500 X 12			0.4	0.6	0.8		
600 X 600 X 12			0.3	0.5	0.6		

FORMULA TO CALCULATE THE CONSUMPTION:

$$\frac{(A + B)}{(A \times B)} \times C \times D \times 1.6 = \frac{kg}{m^2}$$

A = length of tile (in mm)
B = width of tile (in mm)
C = thickness of tile (in mm)
D = width of joint (in mm)

SET TO LIGHT FOOT TRAFFIC
Floors are ready for light foot traffic after approx. 3 hours.

READY FOR USE
Surfaces grouted with **Ultracolor Plus** may be put into service after 24 hours.
Basins and swimming pools may be filled up 48 hours after grouting.

Cleaning
Tools and containers may be cleaned using plenty of water whilst **Ultracolor Plus** is still fresh.

CONSUMPTION
The consumption of **Ultracolor Plus** varies according to the size of the joints and the size and thickness of the tiles.

The table illustrates a number of examples of the consumption in kg/m².

PACKAGING
23 kg bags, and 4x5 kg or 9x1 kg boxes dependent on the colour.

COLOURS AVAILABLE
Ultracolor Plus is available in 26 colours of the MAPEI range (please refer to the colour samples).

STORAGE
The shelf life of **Ultracolor Plus** is 12 months if stored in a dry place in its original packaging. However, after a certain amount of time, the setting time may extend but without modifying the final characteristics of the product.

Ultracolor Plus

Example of a glass mosaic- chip dressing grouted with Ultracolor Plus in a shower cubicle

Example of annealed tiles laid in a kitchen and grouted with Ultracolor Plus

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

The product contains special hydraulic binders that, when in contact with sweat or other bodily fluids, may cause a slightly irritating alkaline reaction.
Wear protective gloves and goggles.
For further information, please refer to the Safety Data Sheet.

FOR PROFESSIONALS.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

All relevant references for the product are available upon request and from www.mapei.com

(GB) A.G. BETA

2801-11-2006

MAPEI®
BUILDING THE FUTURE

MAPEI

Mapesil AC

Solvent-free, acetic-crosslinking mildew-resistant silicone sealant, available in 26 colours and transparent

WHERE TO USE

Mapesil AC is an acetic-crosslinking silicone sealant suitable for sealing glass, ceramic and anodised aluminium. After first having used a bonding enhancer, **Primer FD** can also be used on concrete, wood, metal, painted surfaces, plastic and rubber.

Mapesil AC is used for:

- Sealing expansion joints of ± 20% expansion of the initial size.
- Forming a perfectly elastic gasket between different elements in building, mechanical engineering, ship-building, automobile manufacturing, etc.

Some application examples

In building:

- Sealing joints in wall and floor coverings of ceramic and cement, provided they are not subject to heavy abrasion.
- Sealing joints between sinks or sanitary ware and ceramic tiles in kitchens, bathrooms and showers with colours coordinated with the grouts.
- Sealing expansion joints in swimming pools.
- Assembling compositions of glass tiles and artistic stained glass windows.
- Sealing glazing of door and window frames.
- Sealing air ducts, water pipes, etc.
- Sealing portholes, windows, glazed frames, etc.

Mapesil AC

Cutting the nozzle according to the size of the joints

Application of Primer FD

Application of Mapesil AC

- Sealing tanks, service pipes and boilers.
- Sealing materials of different exposure coefficient.
- Adhesive and sealant for general use.

TECHNICAL CHARACTERISTICS

Mapesil AC is a coloured or transparent single-component solvent-free silicone sealant with acetic cross-linking at normal temperatures; prepared as an elastic thixotropic paste, it is easily applied onto both horizontal and vertical surfaces, having the following features:

- Excellent durability. Seals remain unchanged even after many years exposure to climatic extremes, industrial pollution, sudden temperature changes and immersion in water.
- High elasticity.
- Excellent bonding to glass, ceramic and anodised aluminium.
- Mildew resistant.
- Waterproof and permeable to vapour.
- Resistant to chemical agents.
- Flexibility up to –40°C and resistant to temperatures at +180°C.
- Easily workable.

RECOMMENDATIONS

- Do not use **Mapesil AC** for joints between ceramic tiles and light-coloured natural stone because dirt could accumulate by the joints. Use **Mapesil LM.**
- For sealing surfaces sensitive to acids such as lime stone, use a neutral silicone sealant (e.g. **Mapesil LM**).
- The use of **Mapesil AC** is not recommended on highly plasticised material or on bituminous surfaces because of the release of substances that reduce bonding and penetrate into the sealant, altering the colour and resistance.
- The resistance of **Mapesil AC** to chemical agents is generally good; however, due to the numerous products and working conditions to which **Mapesil AC** can be applied, it is always advisable to make a preliminary sample test in cases of doubt.
- Do not use **Mapesil AC** to seal aquariums because it contains a biocide.
- For sealing floors subject to heavy traffic, use a polyurethane sealant (e.g. **Mapeflex PU21**).

APPLICATION PROCEDURE AS AN ACID-RESISTANT GROUT

Preparing and calculating joints size

All the surfaces to receive the sealant must be dry solid and free from dust and loose particles, oils, grease, wax, old paint and rust. In order that the seal can carry out its function , provision must be made for it to elongate and compress freely.

It is therefore necessary that:

- it adheres only to the side of the walls of the joint and not to the base of the joint;
- the joint is sized so that the estimated maximum extension is not greater than 20% of the initial width (calculated at +20°C);
- the width of the joint is 5 mm the thickness must be equal to the width; for widths greater than the thickness must be equal to half the width.

To control the depth of the joint and to prevent **Mapesil AC** from adhering to the base, the bottom of the joint should be filled with a sized **Mapefoam**, a polyethylene cord.

Application of Primer FD

Where the use of **Primer FD** is necessary, it must be applied with a small brush onto the appropriate areas of the joints and left to dry for several minutes to allow the solvent to evaporate. Then apply **Mapesil AC**.

Application of Mapesil AC

Mapesil AC is packed in cartridges of 315 ml; to use, cut the cartridge above the end of the thread and screw on the nozzle, which should be cut at 45° to produce a hole corresponding to the size of the joint. Insert the cartridge into the gun and extrude the sealant.

The surface of **Mapesil AC** must be finished off with a damp tool, preferably moistened with soapy water, before a superficial film has formed.

Crosslinking

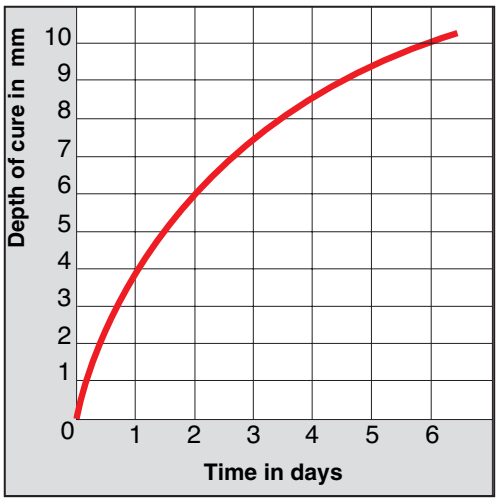
Mapesil AC exposed to air crosslinks as a result of the humidity, and becomes elastic.

The speed at which **Mapesil AC** crosslinks depends only slightly on temperature, but is fundamentally linked to humidity in the atmosphere.

The graph shows the cross linking at +23°C and 50% humidity in the atmosphere.

Cleaning

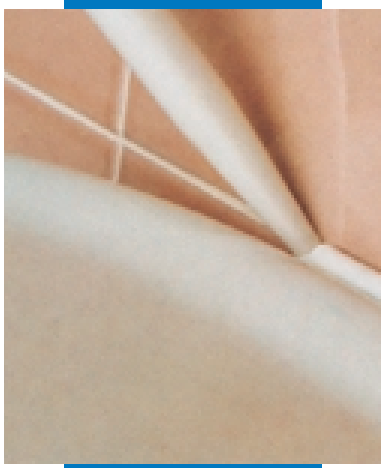
To clean partially cross-linked **Mapesil AC**



TECHNICAL DATA (typical values): In compliance with:	BS 5889 type B ASTM C920 TT –S-00230 C TT –S-001543 A DIN 18540, T. 2, KLASSE E
PRODUCT IDENTITY	
Type:	thixotropic paste
Colour:	transparent + 26 colours
Density:	1.03 g/cm³
Dry solid content:	100%
Storage:	24 months in a dry cool place (max. +25°C) in original sealed cartridges.
Health hazard acc. to EEC 88/379:	no
Inflammability:	no
Customs class:	3214 90 00
APPLICATION DATA at +23°C and 50% R.H.	
Application temperature range:	from +5°C to +50°C
Extrusion speed from a 3.5 mm nozzle at a pressure of 0.5 MPa:	120 g/minute
Time for formation of skin:	10 minutes
Shrinkage during vulcanisation:	3.5%
Speed of vulcanisation:	4 mm in 1 day 10 mm in 7 days
FINAL PERFORMANCES	
Tensile strength - according to DIN 53 504-S3A:	1.6 N/mm²
Elongation at breaking point – according to DIN 53 504-S3A:	800%
Tear strength (ASTM D 624, Die C):	8 N/mm
Shore-A-Hardness (DIN 53 505):	20
Density at +25°C (DIN 53 479):	1.02 g/cm³
Permeability to water vapour (DIN 53 122, 2 mm sheet):	23 g/m²/day
Modulus of elongation measured according to ISO 8339 METHOD A **– at 25% elongation:** **– at 50% elongation:** **– at 100% elongation:**	 0.20 N/mm² 0.27 N/mm² 0.35 N/mm²
Maximum movement allowed:	20%
Resistance to water:	excellent
Resistance to ageing:	excellent
Resistance to atmospheric agents:	excellent
Resistance to chemical agents, acids and dilute alkali:	good
Resistance to soap and detergents:	excellent
Resistance to solvents:	limited
Resistance to temperature:	from –40°C to +180°C

Smoothing the joint with soapy water and a small brush

Sealing ceramic tile floor with Mapesil AC

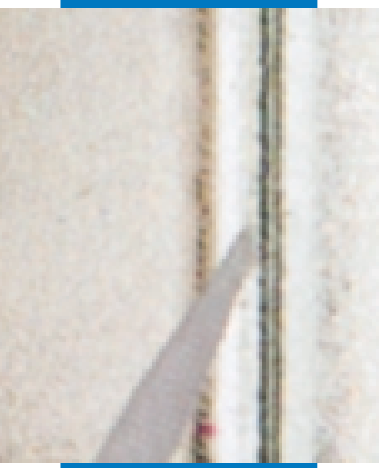


Sealing sanitary ware

Mapesil AC

COVERAGE TABLE (linear metres per cartridge)

END JOINT	
Joint size in mm (axb)	Linear metres per cartridge
5x5	12
5x10	6
10x10	3
15x10	2
20x10	1.5
25x10	1.25
30x15	0.7
40x20	0.4
TRIANGULAR JOINT	
Joint size in mm (l_1 x l_2)	Linear metres per cartridge
5	25
10	6
15	3
20	1.5



Sealing U profiled glass

from tools and contaminated surfaces, common solvents may be used (e.g. ethyl acetate, petrol, toluene). Once cross-linking is complete, silicone rubber can only be cleaned mechanically.

COVERAGE
Coverage of **Mapesil AC** varies depending on the width of the joints. Some examples of coverage for end joints and triangular joints are shown in the chart.

PACKAGING
310 ml cartridges.

COLOURS
Mapesil AC is available in 26 colours from the "THE COLOURED GROUTS 2000" range plus transparent.

STORAGE
Mapesil AC can be stored 24 months in a dry cool place in original cartridges.

WARNING
N.B. - Although the technical details and recommendations contained in this product report correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical applications: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

SPECIFICATIONS

Sealing of expansion joints or fitting different building elements in construction, with acetic-crosslinking coloured or transparent silicone sealant (e.g. MAPEI S.p.A. **Mapesil AC** or equivalent), which is able to absorb joint movements up to 20% of the width, after having first, if necessary, applied a fixing primer (e.g. MAPEI S.p.A. **Primer FD** or equivalent). The seal must be mildew-resistant and must remain unchanged even after many years of exposure to climatic extremes, industrial pollution, sudden temperature changes and immersion in water. A closed cell polyethylene foam cord (e.g. MAPEI S.p.A. **Mapefoam** or equivalent) must inserted into the joint.

Sealing aluminium window frame with Mapesil AC

All relevant references of the product are available upon request.

(GB) A.G. BETA

401-9-2000

MAPEI®
BUILDING THE FUTURE

MAPEI

Keraquick

Rapid set flexible adhesive S1

CE EN 12004

IN COMPLIANCE WITH EUROPEAN STANDARDS EN 12004 C2FT MAPEI CEMENTITIOUS ADHESIVE FOR CERAMIC TILES

MAPEI
In compliance with EN 12002 norm
DEFORMABLE ADHESIVE
S1

High performance, fast setting cementitious adhesive with no vertical slip, for ceramic tiles and stone

CLASSIFICATION IN COMPLIANCE WITH EN 12004

Keraquick is an improved (2) fast setting (F) cementitious (C) adhesive and slip resistant (T) classified as C2FT.

Keraquick *is CE marked, as declared in* ***ITT*** *certificate* ***N° 25040475/Gi (TUM)*** *issued by the Technische Universität München laboratory (Germany).*

CLASSIFICATION IN COMPLIANCE WITH EN 12002

Keraquick is a deformable adhesive classified as S1.

WHERE TO USE

Bonding to cement screeds, cement-based renders, cured concrete, existing floors in interiors and exteriors:
- ceramic and mosaic tiles and natural stone that are not sensitive to moisture;
- insulating materials such as expanded polystyrene and polyurethane, gypsum board, glass and rock wool, Eraclit®, foamed-concrete blocks, sound-deadening panels etc.

Some application examples

- Renovation in heavy trafficked areas and when surfaces need to be in service rapidly, such as public premises, motorway bars, pedestrian passages, supermarkets, showrooms;
- rapid installation or renovation in swimming pools, industrial plants (breweries, wine-cellars, dairies etc.), refrigeration units;
- rapid repair work in bathrooms, showers, kitchens, terraces;
- installing non-absorbent flooring over existing flooring, where the setting time of other cement-based adhesives would be too slow;
- installing marble and other stone material, even light coloured stone (for the latter, use **Keraquick** white).

TECHNICAL CHARACTERISTICS

Keraquick is a grey or white powder composed of a blend of special cements, selectively-graded aggregates, synthetic resins and setting accelerators that develop high bond strength only 2-3 hours after installation.
For this reason floors and walls can therefore be used very quickly. Floors are set to light traffic in 24 hours and can be grouted after only 2 hours.
By mixing **Keraquick** with **Latex Plus** the deformability improves, to meet the requirements of class S2 (highly deformable adhesive) according to EN 12002.

RECOMMENDATIONS

Use **Keraquick** mixed with **Latex Plus** in the following cases:
- on deformable substrates (gypsum boards, asbestos cement, etc);
- for exterior installations of large-size tiles;
- for fixing to timber bases.

Do not use **Keraquick** in the following cases:
- on metal, rubber, PVC and linoleum surfaces;
- on walls and floors subject to extreme flexing or vibration (wood, asbestos cement, etc.);
- for bonding insulating panels of expanded polystyrene with protective film.

APPLICATION PROCEDURE

Preparing the substrates

Substrates must be flat, mechanically strong, free of loose parts, grease, oil, paint, wax, etc. and sufficiently dry. Moist substrates could reduce **Keraquick**'s setting time.
Cementitious substrates must not continue to shrink once the tiles have been installed, therefore renders

Keraquick

Setting white Carrara with Keraquick white

An example of an installation with Keraquick in an Auchan supermarket - Sosnowiec (Poland)

An example of an installation of marble walls with Keraquick - Feuchtwangen casinò bathroom (Germany)

should be cured at least 2 weeks.
Cementitious screeds must have an overall cure of at least 3÷4 weeks unless they have been made with the special MAPEI binders for screeds such as **Mapecem** or **Topcem** or a ready-mixed mortar such as **Topcem Pronto** or **Mapecem Pronto**.
Dampen surfaces that have become hot due to exposure to direct sunlight with water.
Gypsum substrates and anhydrite screeds must be perfectly dry (maximum residual moisture 0.5%), sufficiently hard and free from laitance. They must be treated with **Primer G** or **Mapeprim SP**. Areas subject to extreme damp must be primed with **Primer S**.

Preparing the mix

A 20 kg bag of **Keraquick** grey should be mixed with about 4.8-5.2 litres of water, while a 20 kg bag of **Keraquick** white should be mixed with about 5.2-5.6 litres of water.
While stirring, pour **Keraquick** into a bucket containing clean water and mix with a mechanical stirrer until a homogeneous lump-free paste is obtained.
Let the mix stand a few minutes then stir again briefly before applying. The mixture must be used within 30 minutes.

Applying the mix

Apply **Keraquick** to the substrate with a notched trowel to a max of 10 mm thick.
To achieve good adhesion, first apply a skim coat of **Keraquick** onto the substrate using the straight edge of the trowel followed immediately by the correct thickness.
When selecting the trowel, choose one that transfers the adhesive to at least 65% to 70% of the back of the tiles for interior walls and floors and 100% coverage for floor areas and exteriors.

- For mosaics up to 5x5 cm, the MAPEI square-notched trowel no. 4 is recommended;
- for normal ceramic wall tiles, the MAPEI V-notched trowel no. 5 is recommended;
- for floors, very irregular surfaces and tiles with high ribs or lugs, the MAPEI V-notched trowel no. 6 is recommended;
- for very demanding applications such as exteriors subject to freezing, installations in swimming pools, Jacuzzis, floors subject to heavy loads, floors to be polished in situ, dove-tailed tiles, tiles with high ribs or lugs, or large-format tiles, the adhesive should also be applied to the backs of the tiles (back-buttering).

This method is prescribed for sizes exceeding 30x30 cm. If the substrates are very absorbent and in high temperatures, it is recommended to dampen the substrate in order to extend the adhesive's, open time before applying **Keraquick**.

Installing the tiles

Do not wet the tiles before installation; if, however, the backs are very dusty, they should be dipped in clean water. Allow to dry before fixing.
Keraquick's open time in normal temperature and humidity is about 15-20 minutes; unfavourable weather conditions (strong sun, drying wind, high temperature), or a highly absorbent substrate may shorten this open time, sometimes quite drastically, to just a few minutes.
Constantly check to see whether the adhesive has formed a surface skin.
Should a surface skin have formed, the adhesive should be re-trowelled. It is not recommended to wet the adhesive when it has formed a skin because a non-adhesive film will be formed.
Tiling installed with **Keraquick** must not be subjected to washout or rain for at least 3 hours and must be protected from frost and strong sun for at least 24 hours after installation.

Spot-bonding insulating materials

Spot bonding to sound-deadening or insulating panels should be applied using a float or trowel, the trowel type and size will be determined by the flatness of the surface and the weight of the panels.
In these cases, check the open time and bear in mind that a few spots of adhesive on heavy panels may require temporary shoring which should only be removed once the **Keraquick** has begun to set.

GROUTING AND SEALING

Joints can be grouted after 3 hours with the special MAPEI cementitious or epoxy grouts, available in different colours.
Expansion joints must be sealed with the special MAPEI sealants.

LIGHT FOOT TRAFFIC

Floors are able to take light foot traffic after 2-3 hours.

READY FOR USE

Surfaces are ready for use after approximately 24 hours. Basins and swimming pools can be filled after 3 days.

Cleaning

Tools should be cleaned with water before the adhesive sets. Floors and walls can be cleaned with a damp cloth. Water should be used only in moderate quantities and after a few hours.

An example of an installation of a marble floor - Feuchtwangen casinò hall (Germany)

TECHNICAL DATA (typical values) In compliance with:	– European EN 12004 as C2FT – European EN 12002 as S1 – DIN 18156 - Part 2 – American ANSI A 118.4 - 1999 – Canadian 71 GP 30 M type 2	
PRODUCT IDENTITY		
Type:	powder	
Colour:	dark grey or white	
Bulk density (kg/m³):	1400 (grey); 1200 (white)	
Dry solids content (%):	100	
Storage:	12 months in a cool dry place in the original packing	
Hazard classification according to 99/45/CE:	none Before using refer to the “Safety instructions for the preparation and application” paragraph and the information on the packing and Safety Data Sheet	
Customs class:	3824 50 90	
APPLICATION DATA at +23°C - 50% R.H.		
Mixing ratio:	**Keraquick Grey** 100 parts of powder with 24-26 parts by weight of water	**Keraquick White** 100 parts of powder with 26-28 parts by weight of water
Consistency of mix:	creamy paste	creamy paste
Colour:	grey	white
Density of mix (kg/m³):	1500	
pH of mix:	approx. 11	
Pot life:	30 minutes	
Application temperature range:	from +5°C to +30°C	
Open time (according to EN 1346):	15-20 minutes	
Grouting joints:	2-3 hours	
Set to light foot traffic:	2-3 hours	
Ready for use:	24 hours (3 days for basins and swimming pools)	
FINAL PERFORMANCES		
Tensile adhesion strength according to EN 1348 (N/mm²): **– initial (after 28 days):** **– after heat ageing:** **– after water immersion:** **– after freeze-thaw cycles:**	 2.0 1.8 1.0 1.0	 2.0 1.8 1.0 1.0
Resistance to acids:	fair	
Resistance to alkali:	excellent	
Resistance to oils:	excellent	
Resistance to solvents:	excellent	
Temperature when in use:	from –30°C to +90°C	

Laying heavy insulation panels

Rapid overlaying on asphalt industrial floor

Repair work in a refrigerator unit

Keraquick

All relevant references of the product are available upon request

Rapid overlaying of steps

CONSUMPTION

Bonding floors and walls

Mosaics and small size tiles: 2 kg/m² (trowel no. 4);

normal size tiles: 2.5-3 kg/m² (trowel no. 5);

large sizes, floors, exteriors: 4 kg/m² (trowel no. 6 or 10 or larger).

Bonding insulating material, etc.

Foamed materials etc.: 0.5-0.8 kg/m²;

gypsum wallboard, foamed concrete: 1.5 kg/m²;

full-bonding on rough surfaces: 2.5 kg/m²;

PACKAGING

Keraquick Grey is supplied in 20 kg, 10 kg paper bags and in 5 kg Alupack bags and 4x5 kg boxes.

Keraquick White is supplied in 20 kg, 10 kg paper bags and in 5 kg Alupack bags and 4x5 kg boxes.

STORAGE

12 months in a dry place in the original packing.
Longer storage could extend the setting time without altering the final performances.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Contains cement, that in contact with sweat or other body fluids produces an irritant alkaline reaction. Use protective gloves and goggles. For further information consult the safety data sheet.

FOR PROFESSIONALS.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

(U.K.) A.G. BETA

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