MAPEI

Monolastic Ultra



Rapid drying, one component, flexible cementitious waterproofing membrane

WHERE TO USE

Waterproofing balconies, terraces, bathrooms and showers before laying ceramic tiles. Waterproofing concrete structures, render and cementitious screeds. Protecting render or concrete with cracks caused by shrinkage, to block penetration of water and aggressive agents in the atmosphere.

TECHNICAL CHARACTERISTICS

Monolastic Ultra is a single component, cementitious waterproofing membrane with cementitious binders, selected, fine-grained aggregates and special, highly-flexible acrylic polymers. Once mixed with water, it forms a paste with excellent workability characteristics which is easy to apply with a trowel, roller or brush, and which may also be applied on vertical surfaces without running and without waste. **Monolastic Ultra** also bonds extremely well to all surfaces in concrete, masonry, ceramic and marble, if they are sound and clean.

RECOMMENDATIONS

- Do not add cement, inert materials or gypsum to **Monolastic Ultra**.
- Do not apply **Monolastic Ultra** at a thickness of more than 2 mm per layer.
- Never apply the product on substrates saturated with water.
- Do not use the product if the temperature is lower than +5°C.
- If it is about to rain after laying the dressing material, protect the surface for at least 24 hours.
- The maximum thickness of **Monolastic Ultra** must be no higher than 4 mm.

APPLICATION PROCEDURE

Preparation of the substrate

Pay particular attention to the laying surfaces and how they are protected.

Existing floors

Old floors in ceramic, porcelain, klinker, terracotta, etc. must be bonded well to the substrate and must be completely free of substances which could compromise the bond, such as grease, wax, oil, paint and efflorescence. If the coating material is not well bonded, remove it and smooth over the surface with **Adesilex P4** to make it flat.

Cementitious screeds

Cracks caused by settling and plastic or hygrometric shrinkage must be sealed beforehand using **Eporip**. If extra layers of up to 2 mm thick need to be created (e.g. to form sloping surfaces or to even out hollows), use **Adesilex P4**.

Renders

Cementitious and lime and cement-based render must be well cured (we recommend at least 7 days for each cm of render applied), well bonded to the substrate, strong and free of dust and all kinds of paint. Dampen

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absorbent surfaces with water before applying **Monolastic Ultra**, without saturating them.
Before spreading **Monolastic Ultra** on the surface, special care must be taken around expansion joints and the areas blended in between horizontal and vertical surfaces.
In the case of structural joints, use **Mapeband TPE** bonded to the substrate using **Adesilex PG4**, covered by another layer of **Adesilex PG4** sprinkled with sand on the surface to guarantee a good grip with **Monolastic Ultra**. In the areas where horizontal and vertical surfaces are blended together, Use **Mapeband** synthetic rubber fabric bonded in place with **Monolastic Ultra**.

Preparation of Monolastic Ultra

Pour the water required for mixing (7 litres if applied with a roller and 6 litres if applied with a trowel) into a suitable clean container. Then slowly add the **Monolastic Ultra** while mixing, and continue mixing carefully for a further 3 minutes until it is completely blended, making sure that all the product is also removed from the walls of the container. Leave the mix standing for around 5 minutes, and then re-mix for up to 2 minutes.
A low-speed mechanical mixer is recommended for this operation, to avoid too much air being entrapped in the mix. Avoid mixing the product manually.

Application of Monolastic Ultra

Monolastic Ultra must be applied in at least two layers with a roller or trowel within 60 minutes of mixing at a distance of at least 2 hours between each coat, and in all cases, only once the first coat has set, until a final thickness from 2 to 4 mm has been formed.
When waterproofing terraces, we recommend using **Mapetex Sel** micro-porous, non-woven polypropylene fabric. While the first coat of **Monolastic Ultra** is still fresh, lay the **Mapetex Sel** on the surface making sure that adjacent sheets of fabric overlap by 10 cm, then press firmly with a flat trowel so that all the fabric is impregnated.
Once the first coat has completed its curing cycle, lay a second coat of **Monolastic Ultra** on the **Mapetex Sel** so that it is completely embedded, and smooth over with a flat trowel.
After completing the application cycle of **Monolastic Ultra**, wait at least 2 days before laying ceramic.

Laying ceramic on Monolastic Ultra

BALCONIES AND SWIMMING POOLS:

- lay the tiles leaving a wide joint, using MAPEI adhesives. In swimming pools, use **Granirapid** (class C2FS1), **Elastorapid** (class C2FTES2) or **Keracrete** + **Keracrete Powder** (class C2T). When laying mosaic, **Adesilex P10** + **Isolastic** mixed with at least 50% of water may also be used (class C2TES1);
- grout the tile joints with a specific cementitious grouting mortar (e.g. **Keracolor FF** or **Keracolor GG** mixed with **Fugolastic** or **Ultracolor Plus** - class CG2) or an epoxy mortar (e.g. **Kerapoxy** - class RG);
- seal the expansion joints with a specific MAPEI flexible sealant (e.g. **Mapeflex PU21**, **Mapeflex PU20**, **Mapeflex PU50 SL** or **Mapesil AC**, according to specific requirements).

Cleaning

While the product is still fresh, it may be removed from tools and hands using plenty of clean water. Once hardened, **Monolastic** may only be removed mechanically.

Consumption

1.1 kg/m² per mm of thickness.

Packaging

10 kg and 20 kg paper sacks.

Storage

Monolastic Ultra may be stored for up to 6 months in its original packaging in a dry place.

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

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Monolastic Ultra contains cement which, in contact with perspiration or other body fluids, produces an irritating alkaline reaction and, in those subjects sensitive to such products, an allergic rash.
Use protective gloves and goggles.
The Safety Data Sheet is available upon request for professional users.

FOR PROFESSIONAL USE.

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

TECHNICAL DATA (typical values)

APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing water (%):	32-35
Consistency of fresh mix:	fluid, applicable by trowel
Colour of mix:	light grey
Density of the fresh mix (kg/m³):	1,400
Workability time of mix at +20°C:	approximately 1 hour
Application temperature range (°C):	5-30
Maximum applied thickness per layer (mm):	2
Hazard classification according to Directive 1999/45/CE:	none. Before using the product, refer to the “Safety instructions for preparation and application” section and the information contained on the packaging and Safety Data Sheet
Customs class:	3824 50 90

FINAL PERFORMANCE		
	Acceptance range according to EN 14891	**Performance figures Monolastic Ultra**
Impermeability to water under pressure: EN 14891-A7 (1.5 bar for 7 days of positive lift):	no penetration	no penetration
Crack-bridging ability at +20°C according to EN 14891-A8.2 (mm):	> 0.75	1.8
Initial bond strength according to EN 14891-A6.2 (mPa):	> 0.5	1.4
Bond strength after immersion in water according to EN 14891-A6.3 (mPa):	> 0.5	0.8
Bond strength after application of heat source according to EN 14891-A6.5 (mPa):	> 0.5	1.8
Bond strength after freeze-thaw cycles according to EN 14891-A6.6 (mPa):	> 0.5	0.9
Flexibility after 28 days (DIN 53504 modified) - expressed as elongation after 28 days (+20°C - 50% R.H.) (%):	not required	50

*Bond values according to EN 14891 measured using **Monolastic Ultra** or a* C2F-type *cementitious adhesive according to EN 12004 - average thickness 2 mm*

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