



# Isolastic 50

**Latex additive  
to elasticise  
cement-based  
adhesives**



**ISOLASTIC 50** is a latex to be mixed with **KERABOND PLUS** or **ADEFLEX TRADE** to improve their performances and deformability.

## **WHERE TO USE**

### **ISOLASTIC 50 + KERABOND PLUS**

For interior and exterior bonding of:

- Ceramic tiles of every type (double fired, single fired, grès, klinker, glass mosaic, porcelain tiles, etc.)
- Stone material and large size tiles.

### **Some application examples**

- Exterior installation of ceramic tiles and stone materials (façades, swimming pools, balconies, terraces)
- Ceramic tiles onto precast concrete panels (pre-fabricated bathrooms, wall in tunnel pre-fab system)
- Ceramic tiles onto existing floors (ceramic, marble, terrazzo, timber, etc.)
- Ceramic tiles onto screeds
- Ceramic tiles onto deformable substrates (gypsum-board, cement board, panels, reinforced concrete, etc.).

### **ISOLASTIC 50 + ADEFLEX TRADE**

For interior bonding of:

- Large-size ceramic tiles

- Natural stone
- Mosaics

### **Some application examples**

- Large-size ceramic floor tiles laid on underfloor heating installations
- Structural wood-based substrates, plasterboard, existing tile or stone substrates and Mapei waterproofing membranes.

## **TECHNICAL CHARACTERISTICS**

**ISOLASTIC 50** is a very fluid, pinkish-white liquid composed of a water dispersion of an extremely elastic polymer which, when mixed with cement-based adhesives, improves adhesion to all substrates, deformability and impermeability once hydration has taken place.

## **RECOMMENDATIONS**

Do not use for:

- installing stone slabs subject to deformation from moisture
- installing marble or natural stone subject to staining from moisture
- installing tiles in reservoirs, swimming pools or refrigeration rooms that need to be put in service quickly
- installing on metal, rubber, PVC and linoleum substrates.

In hot and dry climates the adhesive can have



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a short open time with the formation of a surface skin which must be removed by re-trowelling.

## APPLICATION PROCEDURE

All substrates must be flat, sound, cured, free of loose particles and clean. Precast concrete elements or cast in situ must be well cured.

Cementitious substrates must not be subject to shrinkage once the tiles have been installed, therefore renders should be cured at least one week per centimetre of thickness.

Cementitious screeds must have an overall cure of at least 28 days unless they have been made with the special MAPEI binders such as **MAPECEM**, **MAPECEM PRONTO**, **TOPCEM** or **TOPCEM PRONTO**.

Gypsum substrates and anhydrite screeds must be perfectly dry (maximum residual moisture 0.5%), sound and free from dust. They must be treated with **PRIMER G** or **ECO PRIM T PLUS**.

## Mixing ratio

### **KERABOND PLUS + ISOLASTIC 50:**

Mix a 20 kg bag of **KERABOND PLUS** with approximately 5.3 kg of **ISOLASTIC 50**.

### **ADEFLEX TRADE + ISOLASTIC 50:**

Mix a 20 kg bag of **ADEFLEX TRADE** with approximately 7-7.6 kg of **ISOLASTIC 50**.

## Preparing the mix

Pour the powder into **ISOLASTIC 50** and continuously stir the mix with a slow speed mechanical stirrer (approx. 300 RPM) until it becomes a smooth lump-free paste.

Let the mix sit for a few minutes and after further stirring, proceed with the application.

## Applying the mix

Select the appropriate sized notched trowel to achieve maximum adhesive coverage on the back of the tile. Ensure minimum coverage achieved is in accordance with the Australian Standard AS 3958. To obtain a good adherence, first apply a thin coat of the mix onto the substrate using the flat side of the trowel. Immediately after apply the desired thickness of the mix.

## Installing the tiles

The same recommendation as set for the adhesive with which **ISOLASTIC 50** is mixed. However great attention should be paid to open time which, in the equivalent and relative temperature and humidity condition, will be slightly shorter than the open time of the basic product.

**N.B.** *With exterior applications, in swimming pools, reservoirs, large sized tiles (over 400 cm<sup>2</sup>), or floors to be polished in situ, it is advisable to spread a layer of adhesive on the back of the tiles as well, so as to ensure perfect contact and the absence of voids. Always be careful about the formation of the surface skin.*

*It is advisable not to work in temperatures below +5°C or above +40°C.*

## GROUTING AND SEALING

Wall joints can be grouted after 4-8 hours and floor joints after 24-36 hours with special MAPEI cementitious or epoxy grouts, available in different colours.

Expansion joints must be sealed with the special MAPEI sealants.

## SET TO LIGHT FOOT TRAFFIC

Floors are set to light foot traffic after 24-36 hours.

## READY FOR USE

Surfaces are ready for use after approximately 14 days. Basins and swimming pools tiled using **KERABOND PLUS** and **ISOLASTIC 50** can be filled after 3 weeks.

## Cleaning

Tools can be cleaned using plenty of water before the adhesive begins to set. After setting, cleaning becomes very difficult, but can be helped with a solvent such as a white spirit.

## PACKAGING

**ISOLASTIC 50** is available in 6.6 kg or 25 kg drums.

## STORAGE

**ISOLASTIC 50** can be stored 24 months in original packaging. Protect from frost.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

For further and complete information about the safe use of our product please refer to our latest version of the Safety Data Sheet available for download from our website at [www.mapei.com.au](http://www.mapei.com.au).

PRODUCT FOR PROFESSIONAL USE.

## WARNING

*Although the technical details and recommendations contained in this product data sheet 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 application: 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.*

**TECHNICAL DATA (typical values)**

In compliance with

AS ISO 13007 as:

- C2 S1 (Kerabond Plus + Isolastic 50)

- C2 S2 (Adeflex Trade + Isolastic 50)

**PRODUCT IDENTITY**

<b>Type:</b>	fluid liquid
<b>Colour:</b>	pinkish white
<b>Density (g/cm<sup>3</sup>):</b>	1.00 - 1.02
<b>pH:</b>	5 - 7
<b>Dry solids content (%):</b>	16.5 - 18.5
<b>Brookfield viscosity (mPa*s):</b>	30

**COMPOSITION AND PROPERTIES OF THE MIXTURE AT +23°C AND 50% R.H.**

	Kerabond Plus + Isolastic 50	Adeflex Trade + Isolastic 50
<b>Mixing ratio by weight:</b>	100 : 26.5	100 : 35-38
<b>Consistency of mix:</b>	very pasty	very pasty
<b>Colour:</b>	grey/white	grey/white
<b>Density of the mixture (kg/m<sup>3</sup>):</b>	1.50	1.15
<b>pH of mix:</b>	over 12	over 12
<b>Pot life:</b>	8 hours	8 hours
<b>Application temperature range:</b>	from +5°C to +40°C	from +5°C to +40°C
<b>Open time:</b>	20-30 minutes	20 minutes
<b>Adjustability time:</b>	approx. 45 minutes	approx. 45 minutes
<b>Grouting wall joints:</b>	after 4-8 hours	after 4-8 hours
<b>Grouting floor joints:</b>	after 24 hours	after 24 hours
<b>Set to light foot traffic:</b>	24 hours	24 hours
<b>Ready for use:</b>	14 days	14 days

**FINAL PERFORMANCES**

	Kerabond Plus + Isolastic 50	Adeflex Trade + Isolastic 50
<b>Tensile adhesion strength (N/mm<sup>2</sup>)</b>		
- initial (after 28 days):	2.0	1.7
- after heating:	2.5	2.4
- after water immersion:	1.4	1.3
- after freeze-thaw cycles:	1.5	1.4
<b>Resistance to alkali:</b>	excellent	
<b>Resistance to oils:</b>	excellent (poor to vegetable oils)	
<b>Resistance to solvents:</b>	excellent	
<b>Temperature when in use:</b>	from -30°C to +90°C	
<b>Deformability (mm):</b>	> 2.5 S1 deformable	>5 S2 deformable

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Please refer to the current version of the Technical Data Sheet, available from our website: [www.mapei.com.au](http://www.mapei.com.au)

All relevant references for the product are available upon request and from [www.mapei.com.au](http://www.mapei.com.au)

## LEGAL NOTICE

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