

ADEFLEX TRADE

Deformable rubber modified cement based adhesive for bonding ceramic tiles and stone material



SURPASSES THE REQUIREMENTS OF ISO 13007-1

Adeflex Trade is a normal (1), cementitious (C) adhesive classified as C1.

Adeflex Trade is a deformable adhesive classified as S1.

Adeflex Trade mixed with **Isolastic 50** is a highly deformable adhesive classified as S2.

WHERE TO USE

For interior floor and wall installations, suitable for most ceramic tile types, mosaics, porcelain, natural stone, fully vitrified and quarry tiles, over most traditional, well prepared substrates including fully cured concrete and render, plasterboard and fibre cement sheeting.

Some application examples

- Bonding ceramic tiles and mosaics on the following substrates:
- for gypsum substrates and anhydrite screeds, provided they are dry and have been treated with a coat of **Primer G**;
- conventional concrete slabs or suspended concrete slabs provided they are completely cured and stable;
- conventional renders and cement mortar walls;
- plasterboard and fibre cement sheeting that is pre-primed and installed for tiling purposes;
- timber flooring (including rigid plywood, structural particleboard, chipboard, etc.) provided that fibre cement ceramic tile underlay (CTU) has been installed prior to tiling;
- rigid plywood or structural particleboard substrates if mixed with **Isolastic 50**;
- suitable for use over MAPEI and/or MAPEI approved waterproofing membranes.

TECHNICAL CHARACTERISTICS

Adeflex Trade is a grey powder composed of cement, special fillers based on recycled materials synthetic resins and special additives according to a formula developed in the MAPEI Research Laboratories.

When **Adeflex Trade** is blended with water, it becomes a creamy mortar which has an extraordinary pot life and is easy to spread. It has excellent thixotropic properties allowing it to be applied on vertical substrates without slumping or sagging.

Adeflex Trade is easily workable with exceptional coverage. It has a short setting time and floors can be grouted after approximately 6-8 hours.

Adeflex Trade is a cementitious, deformable adhesive of Class C1S1 when mixed with water.

The adhesion strength and deformability of **Adeflex Trade** can be improved by mixing it with **Isolastic 50** or **Isolastic** diluted 1:1 with water, resulting in an adhesive of Class C2S2 (improved and highly deformable)

RECOMMENDATIONS

DO NOT use **Adeflex Trade** in the following cases:

- on wooden, metallic, rubber, PVC or linoleum substrates;
- not suitable for external use;
- for tiling on existing tiled floors and wet areas unless it is mixed with **Isolastic 50**
- where a fast setting adhesive is required;
- to install agglomerates or moisture sensitive stone. Use **Granirapid**, **Keraquick S1** mixed with **Latex Plus**, **Keralastic** or **Kerapoxy**.
- for total immersion scenarios such as pools or spas

APPLICATION PROCEDURES

Preparation of the substrate

All supporting substrates must be structurally flat, sound, solid, stable, dry, completely cured, level, plumb and true to tolerances as per the relevant Australian Standards. They must be clean, free of dust, oil, grease, paint, tar, wax, curing agents, sealers, release agents or any deleterious substances and debris, which may prevent or reduce adhesion. Completely remove all loosely bonded topping, paint, loose particles and construction debris by mechanical means eg. shot blasting, scarification or sanding.

Neutralise any trace of acid or alkali from the substrate prior to the application of any product.

Cementitious substrates

Cementitious substrates must not be subject to shrinkage after the installation of the tiles therefore concrete slabs should be cured for at least 6 weeks and screed and renders for at least 1 week prior to tiling. The surface should be true and level and pitched to drains where required.

Steel trowelled concrete should be mechanically roughened to remove any laitance and provide a good key for tiling.

Gypsum substrates and anhydrite screeds must be perfectly dry, sound and free from dust. It is absolutely essential that they are treated with **Primer G** or **Mapeprim SP**.

Substrates heated due to exposure to sunlight should be cooled down with water

Preparing the mix

Mix **Adeflex Trade** with clean water until a smooth, lump free paste is obtained. Use a low speed mixer (approx. 300 rpm). Leave the mix to rest for approximately 5 minutes and then re-mix. The adhesive is now ready for use.

Use 6.0 - 6.6 litres of clean water or 7.0-7.6 kg of **Isolastic 50** for every 20 kg bag of **Adeflex Trade**. Mixed this way, **Adeflex Trade** remains workable for at least 8 hours.

Applying the mix

Apply **Adeflex Trade** on to the substrate using a notched trowel with sufficient depth to ensure a coverage as recommended by the current Australian Standards or better.

To maximise adhesion, spread a thin layer of **Adeflex Trade** is onto the substrate using the flat side of the trowel.

Immediately thereafter build up the thickness required using the notched side of the trowel.

In the case of floors subject to heavy traffic and point loads, **Adeflex Trade** should also be spread on to the back of the tile (back-buttering method), in order to ensure complete coverage.

LAYING THE TILES

It is not necessary to wet the tiles before they are laid. Only in the case where the backs of the tiles are very dusty do we recommend washing them by dipping them in clean water and allowing them to dry or wiping them down thoroughly with a damp sponge.

Place the tiles in position following the recommendations of the relevant Australian Standards.

The open time of **Adeflex Trade** is 20 minutes under normal temperature and humidity conditions. Unfavourable conditions, such as direct sunlight, wind and/or high temperatures, or if the substrate is very absorbent, may drastically reduce this time, possibly to only a few minutes.

It is therefore necessary to repeatedly check that a skin has not formed on the surface of the adhesive and that it is still fresh. If a skin forms on the surface, refresh the adhesive by re-spreading it with the trowel. It is inadvisable to wet the adhesive with water once a skin has formed, because instead of dissolving the skin, the water will form an anti-adhesive film.

If necessary the tiles must be adjusted within 30 minutes of installation.

Tiling installed with **Adeflex Trade** must not be washed down or exposed to rain for at least 24 hours and must be protected from frost and strong sunlight for at least 5-7 days.

GROUTING AND SEALING

Joint grouting should be carried out with specific grouts such as **Keracolor** or **Ultracolor Plus** for both light and wide joint tile laying. If the joints need to have good chemical resistance, use **Kerapoxy**, a two-component acid resistant epoxy grouting compound. Where elastic expansion joints are formed, use **Mapesil AC**, a single component silicone sealant.

SET TO LIGHT FOOT TRAFFIC

Floors are ready for light traffic after approximately 24 hours.

READY FOR USE

Surfaces may be put into service after approximately 14 days.

Cleaning

Tools and containers may be cleaned using fresh water while the **Adeflex Trade** is still fresh. Surfaces must be cleaned with a damp cloth before the adhesive sets.

CONSUMPTION

A 20 kg bag of **Adeflex Trade** covers approximately 7.5 - 8.5m² depending on the tile size and substrate. Coverage will vary depending on the site conditions and the application technique.

PACKAGING

Adeflex Trade is available in 20 kg bags.

STORAGE

Adeflex Trade may be stored for 12 months in original packaging in a dry, elevated area.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Adeflex Trade contains cement that when in contact with sweat or other body fluids may cause an irritant alkaline reaction and allergic reactions to those predisposed. It can cause damage to the eyes. During use wear protective gloves and goggles and take the usual precautions for handling chemical products. In case of contact with the eyes or skin wash immediately with plenty of water and seek medical attention. For further and complete information about the safe use of our product please refer to our latest version of the Safety Data Sheet, which is available upon request, or can be downloaded from www.mapei.com.au.

PRODUCT FOR PROFESSIONAL USE.

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| TECHNICAL DATA (typical values) In compliance with: – ISO 13007-1 as C1S1 – ISO 13007-1 as C2S2 when mixed with Isolastic 50 or Isolastic diluted 1:1 with water – European EN 12004 such as C1 S1 – European EN 12004 such as C2 S2 when mixed with Isolastic 50 or Isolastic diluted 1:1 with water | | |
| PRODUCT IDENTITY | | |
| Type: | powder | |
| Colour: | grey | |
| Bulk density (kg/m ³): | 860 | |
| Dry solids content (%): | 100 | |
| APPLICATION DATA (at +23°C and 50% R.H.) | | |
| Mixing ratio: | 100 parts Adeflex Trade with 30 - 33 parts water by weight or 100 parts Adeflex Trade with 35-38 parts Isolastic 50 by weight | |
| Consistency of the mix: | pasty | |
| Density of the mix (kg/m ³): | 1150 | |
| pH of the mix | 13 | |
| Pot life: | > 8 hours | |
| Application temperature: | from +5°C to + 35°C | |
| Open time (according to EN 1346): | 20 minutes | |
| Ready for grouting on walls: | 4-8 hours depending on the absorbency of the back of the tiles | |
| Ready for grouting on floors: | after 24 hours depending on the absorbency of the back of the tiles | |
| Set to light foot traffic: | 24 hours | |
| Ready for use: | 14 days | |
| FINAL PERFORMANCES | | |
| Bonding strength in accordance with EN 1348 (N/mm ²): | Adeflex Trade mixed with water | Adeflex Trade mixed with Isolastic 50 or Isolastic diluted 1:1 with water |
| Initial bonding after 28 days: | 1.1 | 1.7 |
| Bonding after heat exposure: | 1.1 | 2.4 |
| Bonding after immersion in water: | 0.8 | 1.3 |
| Bonding after freeze/thaw cycles: | 1.0 | 1.4 |
| Resistance to alkali: | excellent | |
| Resistance to oil: | excellent (poor to vegetable oil) | |
| Resistance to solvents: | excellent | |

Temperature when in use:

from -30°C to +90°C

LEGAL NOTICE

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The most up-to-date TDS can be downloaded from our website www.mapei.com.

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