

Description

MK 2000 is a high strength adhesive in powder form for tiles and natural stones, composed of cement, graded aggregates, synthetic resins and special additives. MK 2000 hardens without shrinkage and becomes extremely resistant adhering perfectly on almost all substrates. Classified as C2TE according to EN 12004. Certified by the notified laboratory 0437 and marked with CE. Declaration of Performance (DoP) CPR- 140036. Mixed with 2 kg SBR 50 obtains deformability S1 and with 4 kg becomes S2 according to EN 12002.

Typical Applications

- MK 2000 when mixed only with water is suitable for bonding ceramic tiles and gres porcelain tiles on
- Underfloor heating systems
 - Gypsum boards and renders properly primed
 - Floors and walls in internal and external area applications, such as kitchens, baths, rooftops
 - Existing tiles properly cleaned and primed
 - Tiles inside swimming pools up to 60m MK 2000 mixed with SBR 50 latex is suitable for bonding tiles and natural stones not sensitive to humidity in applications such as:
 - Inside swimming pools and tanks
 - Large sized gres porcelain tiles in both internal & external area applications
 - Public areas with heavy traffic such as shopping centres, hospitals, industries
 - Tiles upon existing tiles in areas with heavy traffic
 - Facades with tiles (dimensions up to 60 x 60)

Application Procedure

Substrate preparation

All the usual cement based substrates are suitable for bonding tiles with MK 2000 as long as they are flat, absorbent, solid, without cracks, free of loose parts, paints, oil, wax, and in general materials which might compromise the adhesion. The application substrate must be free of cracks and not subjected to deformations. In the presence of humidity (external areas, swimming pools, showers) waterproof the substrate with NOVAMIX SC 200 PENETRATE or NOVAMIX SC ELASTIC before the application of the adhesive. If the application area is very warm due to hot weather its advisable to wet the substrate before the application.



In very absorbent but solid substrates the application of PLANOPRIMER is recommended prior to the application of the adhesive. Substrates with inadequate mechanical strength must be primed with NOVAPRIMER or WATER PRIMER EPX. Over non-absorbent substrates such as existing tiles, mar- High performance cement based adhesive for ceramic tiles and natural stones, mosaics, etc, prime with PLANO CONTACT. Repair existing cracks on the substrate by using EPO FLUID. Loose parts on renders and cement screeds must be removed and repaired with RS 110, RC 340, RC 320 FAST or FC 10. Existing paints in walls and floors must be removed and in every case an adhesion test must be held prior to the installation.

Preparing the mix

Mix 6-7 lit of pure water with 25kg MK2000 and stir using a mechanical mixer in low rpm until a smooth and lump free paste is obtained. Let the mix rest for five minutes and stir again. The mix is ready for use. For demanding applications where elasticity is required such as swimming pools, under floor heating systems, large sized tiles, etc, add latex NOVAMIX SBR 50 substituting part of the mixing water depending on the type of application. For information regarding the mixing ratio please contact the Technical Department of our Company.

- ▶ Cement Based
- ▶ One Component
- ▶ Colour: White
- ▶ Suitable for both floors and walls in internal and external areas

Applying the mix

Apply the mix with a notched trowel. The choice of the correct trowel must be according to the general rule that the back of the tile must be covered at least 80% with glue for applications in internal areas with light traffic. For external applications and heavy traffic the whole back 100% of the tile must be covered.

In such cases it is recommended to apply adhesive to both the substrate and the back of the tile (double coat method).

Installing the tiles

To ensure a good coverage during installation press firmly the tiles. The open time of MK 2000 in normal conditions is 30 minutes. All packaging should be stored in protected cool place prior to their application. During extremely hot weather it is advised to use cool water for mixing in order to slightly increase the workability time. Weather conditions like direct sun, drying wind, high temperatures or a very absorbent substrate, can drastically reduce the open time of the adhesive. Always ensure that a superficial "skin" does not form on the surface of the spread adhesive. In case the "skin" is there we must remove it and re-apply the adhesive. Tile adjustments should be carried out on a 40 minutes period. Tiling made with MK 2000 must be protected from strong sun, frost for about 5- 7 days and from rain for at least 24 hours.

- ▶ Suitable for gres pocolain tiles
- ▶ Excellent workability
- ▶ Suitable for demanding applications when mixed with enhancing latex

Grouting

Grouting can take place after the adhesive hardens enough. Use NOVAGROUT F for joints up to 5 mm, NOVAGROUT G for joints from 5-20 mm. For applications that require special health conditions and increased strength it is recommended to use epoxy grout such as NOVAGROUT EPOXY.

Recommendations

- MK 2000 when mixed with water and SBR 50 should not be used in the following cases:
- For adhering tiles upon metallic, wood and PVC surfaces (use NOVACOL 2K ELASTIC)
 - For light color natural stones that are sensitive to rising humidity and reconstructed marbles (use MARMORAPID, MARMOFLEX or NOVACOL 2K ELASTIC)
 - Whenever the surface must be ready for traffic in a short time (use MARMORAPID)
 - Do not exceed the recommended amount of water for mixing and the maximum application of thickness of 10 mm MK 2000 when mixed only with water should not be used in the following cases:
 - Swimming pools bigger than 60m3
 - Applications that require high flexibility. NOVACOL 2K ELASTIC).
 - For light color natural stones and reconstructed and stones i.e. based on polyester which are sensitive to humidity (use MARMORAPID, MARMOFLEX or NOVACOL 2K ELASTIC).
 - In cases we need very quick application and the final surface must be ready for traffic very soon (use MARMORAPID).

Consumption

Bonding ceramic tiles:
Mosaics and small sized tiles: 2,00kg/m²
Normal sizes: 2,50 - 3,00kg/m²
Large sizes (up to 40cm): 4,00kg/m²

Storage

At least 12 months after production date, stored in the original sealed packaging, in dry place and temperature between +50C and +350C.

Packaging

Paper bags of 25kg in pallets of 1250 kg

Cleaning

Tools, containers and tiles can be cleaned with plenty of water while MK 2000 is fresh. If hardening occurs cleaning can be done only with mechanical way.

Product Identification

Consistency	powder
Color	white
Packaging	25 kg paper bag

Mechanical / Physical properties

Chemical base	cement based with chemical additives
Aggregates granulometry	D ₉₅ : 0,6mm
Bulk density of dry mortar	1,4kg/lt
Mixing ratio	6 - 7 lt/25kg
Specific gravity of the mix	~ 1,60 kg/lt

Application data (+23°C and 50% R.H.)

Application temperature range	from +5°C to +35°C
Pot life	4 hours
Application thickness	up to 10 mm
Open time	30 minutes
Adjustability time	40 minutes
Wall grouting	10 - 12 hours
Floor grouting	24 hours
Walkability	24 hours

Consumption	trowel No 2,0 - 1,8 :4 kg/m ²
	trowel No 2,8 - 2,6 :6 kg/m ²
	trowel No 4,0 - 3,6 :8 kg/m ²
	trowel No 5,0 - 4,8 :10 kg/m ²

Final Performances according to EN 12004

Initial tensile strength	≥ 1,0 N/mm ²
After immersion in water	≥ 1,0 N/mm ²
After heat aging (+70°C)	≥ 1,0 N/mm ²
After freeze / thaw cycles	≥ 1,0 N/mm ²
Extended open time	≥ 0,5 N/mm ²
Slippage	≤ 0,5 mm

Warning

The technical data and recommendations contained in this leaflet correspond to the best of our knowledge and experience. All the above mentioned information in any case should be considered as merely indicate and subject to confirmation after long term practical applications. For this reason anyone interested of using the product must be sure before hand that the product 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. We retain the right of renewal of the data of the leaflet without warning.