



Kerabond Plus



Cement based powder with superior bond strength suitable for all type of tiles and natural stones

CLASSIFICATION IN COMPLIANCE WITH EN 12004 AND EN 12002

Kerabond Plus is an improved (2) slip resistant (T) cementitious adhesive (C) of class C2T.

WHERE TO USE

Interior and exterior floor and wall installations of every type of tiles and natural stones onto rigid substrates.

Some application examples

Bonding ceramic mosaics on paper or mesh, of all types of ceramic tiles (quarry tiles, single fired and klinker tiles, etc.) on:

- ordinary concrete slabs or suspended concrete slabs completely cured and stable;
- conventional renders or cement mortar walls;
- gypsum substrates and anhydrite screeds as long as they are dry and treated with a coat of **Primer G**.
- spot bonding of insulating materials such as expanded polystyrene, expanded polyurethane, rock and glass wool, wood-cement and sound-deadening panels etc.

TECHNICAL CHARACTERISTICS

Kerabond Plus is a grey or white powder composed of cement, fine-graded sand, synthetic resins and special additives according to a formula developed in the MAPEI research laboratories.

Mixed with water, **Kerabond Plus** becomes an easily trowellable mortar with good bonding strength, low slump and a high initial grab allowing it to be applied vertically without any sagging or letting even heavy tiles slip.

Kerabond Plus hardens without noticeable shrinkage to become extremely resistant, adhering perfectly to all the conventional materials used for bonding.

N.B.: *Mixing **Kerabond Plus** with **Isolastic 50** / **Isolastic** in place of water, the characteristics improve in order to meet the requirements of class S1 and S2 (deformable and highly deformable adhesive) respectively according to the European norm EN 12002.*

RECOMMENDATIONS

- Do not apply over presswood, particle board, chipboard, masonite, gypsum floor patching compounds, metal or similar dimensionally unstable substrates.
- Do not apply over vinyl, rubber and linoleum surfaces.
- For external installation onto concrete slabs and cementitious screeds of large sized tile (up to 400x400 mm) use **Kerabond Plus** mixed with **Isolastic 50**. In case of larger size of tiles use **Kerabond Plus** with **Isolastic**.
- For installation of tiles onto marine ply-wood (interior dry floor area only), gypsum wall-boards, pre-cast panels, fibre-cement sheet and floors and walls subjected to movements (due i.e. to the shrinkage or temperature changes) use **Kerabond Plus** with **Isolastic**.
- Do not use **Kerabond Plus** to install agglomerates, sensitive moisture stones or natural stone material subject to stain: use **Granirapid**, **Keralastic** or **Kerapoxy**.
- When installing light coloured and translucent marble, and their agglomerates, use **White Granirapid** or **White Keraquick** (see data sheet for details).

APPLICATION PROCEDURE

Examination

Before work commences, examine the areas to be covered and report any deficiency or adverse conditions in writing to the general contractor, owner, developer or architect. Do not proceed with work until surfaces and conditions comply with the requirements indicated in the current Australian Standards and manufacturers instructions.

Preparing the substrate

All supporting surfaces shall be structurally sound, solid, stable, dry, completely cured, level, plumb and true to a tolerance as per current Australian Standards. They shall be clean and free of dust, oil, grease, paint, tar, wax, curing agent, primer, sealers, release agents or any deleterious substance and debris which may prevent or reduce adhesion.

Completely remove all loosely bonded topping, paint, loose particles and construction debris by mechanical means, ie, shot blasting, scarification, or sanding. When preparing surfaces containing silica sand, use an approved dust mask. Surfaces containing asbestos must be handled in accordance with current Government regulations and Australian Standards.

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

In all cases, the structural design of the floor shall not allow a deflection greater than 1/360 of the span under live or dead loads.

Fibre cement sheeting shall conform to the current Australian Standards quality requirements. It must be installed according to the fibre cement sheeting manufacturer instructions and in strict accordance with current Australian Standards for interior installation.

Cementitious substrates

Cementitious substrates must not be subject to shrinkage after the installation of the tiles. The surface should be true and level and pitched to drains where required. Remove from the concrete slabs any concrete sealers or curing compounds from the surface, eg, chlorinated rubber, resin, wax sealers. Steel trowel finished concrete should be roughened mechanically to remove laitance and provide a good key for tiling. Dampen with water to cool surfaces which has been heated by exposure to sunlight.

Gypsum substrates and anhydrite screeds must be perfectly dry, sound and free from dust.

It's absolutely essential that they are treated with **Primer G** or **Mapeprim SP**.

Areas subjected to high humidity should be primed with **Primer S**.

PREPARING THE MIX

Kerabond Plus must be mixed with clean water to obtain a homogenous paste free of lumps; after 3 minutes of resting, it must be remixed and the paste is then ready for use. Mixing 22.5-25 parts of water should be used per 100 parts (by weight) of **Kerabond Plus**, equal to 4.6-5kg of water per 20kg bag of **Kerabond Plus**. The mix produced in this

way, is workable for at least 8 hours.

Please Note: Mixing **Kerabond Plus** with **Isolastic 50 / Isolastic** in place of water, the characteristics improve in order to meet the requirements of class C2 (improved cementitious adhesive) according to EN 12004 and those of class S1 and S2 (deformable and highly deformable adhesive) respectively according to the European norm EN 12002.

Mix (5.3 kg) **Isolastic 50** (6.4 kg) **Isolastic** and gradually add (20 kg) of **Kerabond Plus** powder while slowly mixing. Use a low speed mixer (approx 300 rpm).

APPLYING THE MIX

Use the recommended notched trowel with sufficient depth to achieve an 80% minimum mortar contact to the back of the tiles for all interior applications. For exterior installations, commercial floor and shower applications achieve coverage in accordance with applicable current Australian Standards. Using the flat or straight edge of the trowel, apply a thin pressure-applied coat to the substrate. Follow immediately with additional material then comb the mortar using the notched side of the trowel to achieve an even setting bed. Do not spread more material than can be covered with tiles within open time.

In hot or dry conditions, take precautions to ensure that the mortar does not flash set. Cooling a concrete slab with water prior to the installation may be beneficial. Remove all excess water prior to applying the mortar. Also, using cold water or cooling the latex additive will aid in the installation. Set tiles before skinning occurs. If skinning occurs, scrape off and replace with fresh mortar. Place tiles firmly in position with a slight twisting motion to ensure good contact with the mortar. Follow immediately with proper and thorough beat-in to flatten ridges or notches into a continuous bed. Make all alignments and adjustments immediately following beat-in. Do not exceed 30-45 minutes.

Do not walk over tiles for at least 24 hours after installation.

Wash tools and hands with water while material is still fresh.

SPOT BONDING INSULATING MATERIAL

Spot bonding of sound deadening or insulating panels should be applied using a float or trowel. The required number and thickness of the spot bonds is determined by the flatness of the surface and weight of the panels.

In these cases too, the open time must be observed, bearing in mind that a few spots of adhesive on heavy panels may require some shoring up, which should only be removed after the **Kerabond Plus** has commenced to set.

GROUTING AND SEALING

Wall joints between the ceramic tiles can be grouted after 4-8 hours and floor joints can be grouted after 24 hours with specific

TECHNICAL DATA (typical values)

In compliance with:

- European EN 12004 as C2T
- European EN 12002 as S1 (if mixed with Isolastic 50)
- European EN 12002 as S2 (if mixed with Isolastic)
- DIN 18156-M
- BS-5980-1980 type 1 class AA
- American ANSI A 118.1-1999
- Canadian 71 GP 30 M type 2

PRODUCT IDENTITY

Type:	powder
Colour:	grey or white
Bulk density (kg/m ³):	1300
Dry solid content: (%):	100
Storage:	12 months in a dry place in original packaging
Hazard classifications according to EC 99/45:	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 and 50% R.H.

Mixing ratio:	100 parts of Kerabond Plus with 23-25 parts by weight of water or 26.5 parts by weight with Isolastic 50 or 32 parts by weight with Isolastic
Consistency of the mix:	very viscous
Density of mix (kg/m ³):	1450
pH of the mix:	13
Pot life:	over 8 hours
Application temperature:	from +5°C to +40°C
Open time:	approx 20 minutes
Ready for grouting on walls:	4-8 hours
Ready for grouting on floors:	24 hours
Set to light foot traffic:	24 hours
Ready for use:	14 days

FINAL PERFORMANCES

Bonding strength in accordance with EN 1348 (N/mm ²):	Kerabond Plus mixed with water	Kerabond Plus mixed with Isolastic 32%	Kerabond Plus mixed with Isolastic 50 26.5%
Initial bonding after 28 days:	1.6	2.4	2.0
Bonding after heat exposure:	1.1	> 2.5	2.5
Bonding after immersion in water:	1.1	1.6	1.4
Bonding after freeze/thaw cycles:	1.2	1.7	1.5
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		

Kerabond Plus



MAPEI cementitious or epoxy grouts. Expansion joints should be sealed with the specific Mapei sealants.

SET FOR LIGHT FOOT TRAFFIC

Floors are set for light foot traffic after approximately 24 hours at +23°C and 50% relative humidity.

READY FOR USE

Floors are ready for use after approximately 14 days for heavy traffic (for example heavy point loading with loaded pallet jacks or similar).

Cleaning

Tools and hands can be cleaned with abundant water, while surfaces should be cleaned with a damp cloth; water should be used only in moderate quantities and after a few hours.

APPROXIMATE COVERAGE

A 20 kg bag covers (6 to 7.50 m²) with a square-notched trowel (6 x 6 x 6 mm) and (4 to 5 m²) with a (6 x 10 x 6 mm) square notched trowel.

NOTE

Coverage's shown are approximate and are given for estimating purposes only. Actual job-site coverage's may vary according to tile size and thickness, job conditions and setting practices. For coverage values not shown in this table, contact MAPEI's Technical Service Department.

PACKAGING

White and Grey Kerabond Plus are supplied in: 20 kg bags.

STORAGE

12 months when stored in a dry place in original packaging.

Note: Protect from moisture.

SAFETY INSTRUCTION FOR THE PREPARATION AND INSTALLATION

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

WARNING

We shall not be liable for incidental and consequential damages, as defined under the uniform commercial code, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. Our liability is expressly limited to replacement of defective goods.

All relevant references of the product are available upon request



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