KERABOND PLUS

Easily trowellable cementitious adhesive with superior bond strength, low slump and high initial grab suitable for most types of ceramic tiles and stone material

CLASSIFICATION IN COMPLIANCE WITH AS ISO 13007-1

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

DESCRIPTION

Kerabond Plus is ideal for use in interior and exterior floor and wall applications for most types of tiles and natural stone (not moisture-sensitive) onto rigid surfaces.
Kerabond Plus contains a very low VOC content that can contribute valuable points towards Green Star™ credits in compliance with the Green Building Council of Australia.

WHERE TO USE

Bonding ceramic mosaics on paper or mesh or most types of ceramic tiles (quarry tiles, single fired and klinker tiles) 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 priming coat of **Primer G, Eco Prim T Plus** or **Eco Prim Grip**
· spot bonding of insulating materials such as expanded polystyrene, expanded polyurethane, rock and glass wool, wood-cement and sound-deadening panels

TECHNICAL CHARACTERISTICS

Kerabond Plus is available in 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 adhesive with good bond 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.
Mixing **Kerabond Plus** with **Isolastic 50** or **Isolastic** in lieu of water will improve the characteristics of the adhesive to meet the requirements of Class S1 and S2 (deformable and highly deformable adhesive) respectively according to AS ISO 13007-1.

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 or linoleum surfaces
- For external installation onto concrete slabs and cementitious screeds of large sized tiles (up to 400 x 400mm) use **Kerabond Plus** mixed with **Isolastic 50**. If using larger sized tiles use **Kerabond Plus** mixed with **Isolastic**
- For installation of tiles onto fibre cement sheet and plasterboard, use **Kerabond Plus** mixed with **Isolastic 50** or **Isolastic** depending on the size of the tile and substrate deformability
- DO NOT use **Kerabond Plus** to install agglomerates, moisture-sensitive stone or stone material subject to staining. Instead install using **Granirapid, Keralastic T** or **Kerapoxy Adhesive**
- When installing light coloured and translucent marble and agglomerates use **Granirapid White** or **Keraquick S1 White**. Please refer to the respective Technical Data Sheets for complete product information.

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 manufacturer's 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 the current Australian Standards. They shall be clean and free of dust, oil, grease, paint, tar, wax, curing agents, primers, 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 such as 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 legislation and Code of Practice.
Neutralise 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 L/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 such as chlorinated rubber, resin or wax sealers. Steel-trowelled finished concrete should be roughened mechanically to remove laitance and provide a good key for tiling. Dampen with water to cool surfaces which have 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 **Eco Prim T Plus.**

PREPARING THE MIX

Kerabond Plus must be mixed with clean water. Pour 4.8 – 5.2 litres of water into a clean mixing container. Using a low speed mixer (300RPM) blend to obtain a homogenous lump-free paste. Let slake for 3 minutes. Remix and the paste is then ready for use. The mix produced in this way is workable for at least 8 hours.
Mixing **Kerabond Plus** with **Isolastic 50** or **Isolastic** in place of water will improve the characteristics of the adhesive to meet the requirements of Class S1 and S2 (deformable and highly deformable adhesive) respectively according to AS ISO 13007.
Mix 5.3 kg of **Isolastic 50** OR 6.4 kg of **Isolastic** and gradually add the 20 kg bag of **Kerabond Plus** powder while slowly mixing.

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. 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 adhesive 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 the open time.
In hot or dry conditions, take precautions to ensure that the adhesive 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 adhesive. Also, using cold water or cooling the latex additive will aid in the installation. Lay tiles before skinning occurs. If skinning occurs, scrape off and replace with fresh adhesive. Place tiles firmly in position with a slight twisting motion to ensure good contact with the adhesive. 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 can be grouted after 4-8 hours and floor joints after 24 hours. Joint grouting with both tight and wide joints should be grouted using MAPEI's range of coloured grouts. **Keracolor SF** (superfine grout for joints up to 4 mm), **Keracolor FF** (for joints up to 6 mm), **Keracolor GG** (for joints 4-15 mm) or **Ultracolor Plus** (high performance, rapid setting, water-repellent premium grout for joints from 2-20 mm).
If the grout joints require chemical resistance use MAPEI's Kerapoxy (a two-component acid resistant epoxy grout) or **Kerapoxy Design** (two component, decorative acid resistant epoxy grout). All MAPEI grouts are available in a vast array of exciting colours. The colour chart can be located on the MAPEI website at www.mapei.com.au or alternatively Freecall 1800 652 666 and request a Colour Grout Chart.

PROTECTION

Tiling installed with **Kerabond Plus** 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. Keep floors free from general traffic for at least 24 hours after installation. Prohibit heavy traffic for 14 days.

READY FOR USE

Tiled surfaces may be put into service after approximately 14 days.

CLEANING

Tools and hands can be cleaned with water while surfaces should be wiped down with a damp cloth. Water should only be used in moderation and after a few hours of drying.

COVERAGE

A 20 kg bag will cover approximately 6 to 7.5 m2 using a 6 x 6 x 6 mm square-notched trowel and 4 to 5 m2 using a 10 x 10 x 10 mm square-notched trowel.
Please Note: Coverages are approximate and are given for estimating purposes only. Actual jobsite coverages may vary according to tile size and thickness, job conditions and setting practices. For coverage values not shown in this table contact MAPEI Technical Services on Freecall 1800 652 666.

PACKAGING

Kerabond Plus is available in Grey and White 20 kg bags.

STORAGE

12 months when stored in a dry, elevated area in the original unopened packaging. PROTECT FROM MOISTURE

SAFETY INSTRUCTIONS FOR THE PREPARATION AND INSTALLATION

For further and complete information about the safe use of our product please refer to the latest version of our Safety Data Sheet available for download from our website at www.mapei.com.au.
PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

In compliance with
- AS ISO 13007 as C2T
- AS ISO 13007 as C2 S1 (if mixed with Isolastic 50)
- AS ISO 13007 as C2 S2 (if mixed with Isolastic

PRODUCT IDENTITY			
Type:	powder		
Colour:	grey or white		
Bulk density (kg/m³):	1300		
Dry solid content (%):	100		
APPLICATION DATA (at +23°C - 50% R.H.)			
Mixing ratio:	100 parts of **Kerabond Plus** with 24-26 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:	thick paste		
Density of mix (kg/m³):	1450		
pH of 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			
Bond Strength (N/mm²):	**Kerabond Plus** mixed with water	**Kerabond Plus** mixed with **Isolastic 50** 26.5%	**Kerabond Plus** mixed with **Isolastic** 32%
Initial bonding after 28 days:	1.6	2.0	2.4
Initial bonding after heat exposure:	1.1	2.5	> 2.5
Bonding after immersion in water:	1.1	1.4	1.6
Bonding after freeze/thaw cycles:	1.2	1.5	1.7
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		

WARNING

Although the technical details and recommendations contained in this Technical 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.
Please refer to the current version of the Technical Data Sheet available from our website at www.mapei.com.au.

LEGAL NOTICE

installation. The most up-to-date TDS can be downloaded from our website www.mapei.com.au ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

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