

CLASSIFICATION ACCORDING TO EN 12004

Tixobond White is a normal (1) cementitious adhesive (C) with no vertical slip (T) and extended open time (E) of class C1TE.

Tixobond White is CE marked, as declared in **ITT** certificate **N° 25040602/Gi (TUM)** issued by the Technische Universität München laboratory (Germany).

WHERE TO USE

- Bonding of all types and sizes of ceramic tiles (double-fired, single-fired, porcelain, klinker, etc.) for internal applications.
- Bonding of all types of ceramic tiles in general (double-fired, single-fired, porcelain, klinker, small-sized, etc.) for external applications.

Some application examples

- Laying ceramic paper-faced or mesh-backed mosaic, and all types of ceramic tiles on:
 - walls made of cementitious mortar and of cementitious traditional renders;
 - plasterboard walls when rigidly supported;
 - gypsum substrates after treatment with a primer.
- Laying ceramic tiles diagonally or starting from the top and working downwards, without resorting to the use of spacers.
- Bonding tiles with highly-ribbed or deep-set backs.
- Laying tiles on substrates and renders with up to 15 mm of unevenness, without levelling them out beforehand.

TECHNICAL CHARACTERISTICS

Tixobond White is a fine, ultra-white powder made up of cement, well-graded silica sand, synthetic resins and special additives according to a special blend developed in MAPEI's own Research Laboratories.

When **Tixobond White** is blended with water, it becomes a creamy mortar which is easy to spread. It has high bonding and thixotropic characteristics, so that it may be applied on vertical surfaces without dripping or letting the tiles slip, even for heavy tiles.

Tixobond White is characterised by its particularly white colour, and so any excess adhesive in the joint does not significantly affect the final appearance when filled with white grouting mortar.

Tixobond White hardens without significant shrinking and becomes extremely resistant, bonding perfectly to all materials normally used in construction.

RECOMMENDATIONS

Do not use Tixobond White in the following cases:

- on wooden substrates;
- on metallic, rubber, PVC or linoleum surfaces;
- where surfaces must be set to light foot traffic in quick time:
- on non-absorbent substrates.

Tixobond White



Spreading Tixobond White on a substrate



Laying large-sized porcelain tiles on walls



Laying large-sized, double-fired tiles on wall starting at the top and working downwards

APPLICATION PROCEDURE Preparation of the substrates

The substrates must be well cured, mechanically strong, dry and free of loose parts, grease, oil, paint and wax.

Cementitious substrates must not shrink after the tiles have been laid. Therefore, during good weather, renders must be cured for at least 1 week per centimetre of thickness.

If the surfaces are too hot due to exposure to the sun, cool them down with water.

Gypsum substrates must be perfectly dry, sufficiently hard, free of dust and, in all cases, treated with **Primer G** or **Primer SP**. Areas which are subject to high humidity must be treated with **Primer S**.

Preparation of the mix

Blend **Tixobond White** with clean water until a smooth, lump-free paste is obtained. Leave the mix standing for 5-10 minutes, then re-mix it. It is now ready to be applied.

Use 30-32 parts of water for every 100 parts (in weight) of **Tixobond White**, equal to approximately 7.5-8.0 litres for every 25 kg of **Tixobond White**.

If the above indications are carefully followed, **Tixobond White** mix remains workable for at least 8 hours.

Application of the mix

Apply **Tixobond White** with a trowel on the substrate. When choosing the trowel, the basic rule to follow is to choose one which guarantees sufficient buttering of the back of the tile.

To guarantee good bonding, spread a thin layer of **Tixobond White** on the substrate using the smooth edge of the trowel. Immediately after, build up the thickness required according to the type and size of tile, using a suitable notched trowel:

- for mosaic of up to 5x5 cm, a MAPEI No. 4 square-notched trowel is recommended;
- for normal-sized ceramic tiles, a MAPEI No. 5 rhomboid-notched trowel is recommended (consumption 2.5-3 kg/m²);
- for floors, very uneven surfaces or tiles with highly-ribbed backs, a MAPEI No. 6 or No. 10 trowel is recommended (consumption 5-9 kg/m²).

In the case of external floors and finishing materials subject to freezing weather, or in the case of particularly difficult laying conditions, such as when laying tiles larger than 900 cm², **Tixobond White** must also be spread on the back of the tile (double-buttering method).

Laying the tiles

It is not necessary to wet the tiles before they are laid. Only in the case of tile backs which are very dusty do we recommend washing them by dipping them in clean water.

Press firmly on the tiles when laying, to make sure that they make good contact with the adhesive.

The open time of **Tixobond White** is 30 mins. under normal temperature and humidity conditions. Unfavourable conditions (such as direct sunlight, dry wind and high temperatures), or if the substrate is very absorbent, may drastically reduce this time to only a few minutes.

Therefore, repeatedly check that a skin does not form on the surface of the adhesive and that it is still "fresh". If skin forms on the surface, refresh the adhesive by re-spreading it with the trowel. It is unadvisable to wet the adhesive when surface skin forms, because the water forms a film which prevents bonding instead of dissolving it.

If necessary, the tiles must be "adjusted" within 40 minutes of laying, otherwise, it will be difficult to move them.

Coverings laid with **Tixobond White** must not be washed down or exposed to rain for at least 24 hours, and must be protected against freezing weather or direct sunlight for at least 5-7 days after laying.

GROUTING AND SEALING

The tile joints may be grouted after 4-8 hours when laid on walls, with the specific MAPEI cementitious or epoxy grouts, available in different colours.

Expansion joints must be sealed with a suitable MAPEI sealant.

SET TO LIGHT FOOT TRAFFIC

Floors are ready for foot traffic after approx. 24 hours.

READY FOR USE

The surfaces may be put into service after approx. 14 days.

Cleaning

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

CONSUMPTION

Approx. 1.25 kg/m² per mm of thickness.

PACKAGING

Tixobond White is available in 25 kg paper bags.

STORAGE

Tixobond White may be stored for 12 months in original packaging in a dry place.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Tixobond White contains cement that, when in contact with sweat or other bodily fluids, produces an irritant alkaline reaction. Wear protective clothing, gloves and eye face protection.

TECHNICAL DATA (typical values) Conforms to Standard:	- European EN 12004 as C1TE - ISO 13007-1 as C1TE
PRODUCT IDENTITY	
Consistency:	powder
Colour:	white
Bulk density (kg/m³):	1,400
Dry solids content (%):	100
Storage:	12 months in original packaging in a dry place
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packing and Safety Data Sheet
Customs class:	3824 50 90
APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio:	100 parts Tixobond White with 30-32 parts water in weight
Consistency of mix:	creamy paste
Density of the mix (kg/m³):	1,650
pH of mix:	13
Pot life:	over 8 hours
Application temperature range:	from +5°C to +35°C
Open time (according to EN 1346):	30 minutes
Adjustability time:	approx. 40 minutes
Ready for grouting on walls:	after 4-8 hours
Ready for grouting on floors:	after 24 hours
Set to light foot traffic:	after 24 hours
Ready for use:	14 days
FINAL PERFORMANCES	
Bonding strength in compliance with EN 1348 (N/mm²): - initial bonding (after 28 days): - bonding after heat exposure: - bonding after immersion in water: - bonding after freeze/thaw cycles:	1.3 0.9 1.1 1.2
Resistance to alkali:	excellent
Resistance to oils:	excellent (poor to vegetable oils)
Resistance to solvents:	excellent
Temperature when in use:	from -30°C to +90°C





For further information, refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody

who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

All relevant references for the product are available upon request and from www.mapei.com

