



Tixobond Fine S1

White, super smooth, deformable, cementitious adhesive with extended open time and no vertical slip for the thin bed and thick bed installation of ceramic tiles on walls and floors



SURPASSES THE REQUIREMENTS OF AS 4992.1-2006

Tixobond Fine S1 is a cementitious (C), normal (1) adhesive with no vertical slip (T) and extended open time (E), classified as C1TE.

Tixobond Fine S1 is a deformable adhesive, classified as S1.

WHERE TO USE

For interior and exterior floor and wall installations, suitable for all ceramic tile types, mosaic, 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

For ordinary concrete slabs, suspended concrete slabs and screeds completely cured which have been wood floated or broom finished, such as:

- 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;

- can be used as a thick bed or a thin bed adhesive where an adhesive thickness of up to 15 mm is required;
- suitable for use over MAPEI and/or MAPEI approved waterproofing membranes.

TECHNICAL CHARACTERISTICS

Tixobond Fine S1 is a fine white powder, composed of cement, special fillers, synthetic resins and special additives according to a formula developed in the MAPEI Research Laboratories.

When **Tixobond Fine S1** is blended with water, it becomes a creamy mortar, which has an exceptional pot life and is easy to spread. It has excellent initial bonding and thixotropic properties, allowing it to be applied on vertical substrates surfaces without dripping, sagging or allowing even heavy tiles to slip.

Tixobond Fine S1 has an extended open time, making it ideal for Australian conditions.

Tixobond Fine S1 hardens without appreciable shrinkage and becomes extremely durable, bonding perfectly to most materials normally used in construction.

RECOMMENDATIONS

Do not use **Tixobond Fine S1** in the following cases:

- on wooden substrates;
- on metallic, rubber, PVC or linoleum surfaces;



Tixobond Fine S1

- where a fast setting adhesive is required;
- to install agglomerates or moisture sensitive stone. Use **Granirapid**, **Keralastic** or **Kerapoxy**.

APPLICATION PROCEDURE

Preparation of the substrate

All supporting substrates must be structurally sound, solid, stable, dry, completely cured, level, plumb and true to tolerances as per 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 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 **Tixobond Fine S1** with clean water until a smooth, lump free paste is obtained. Leave the mix to rest for approximately 5 minutes and re-mix. The paste is now ready for use.

Use 6.2-6.6 litres of water for every 20 kg bag of **Tixobond Fine S1**.

Mixed this way **Tixobond Fine S1** remains workable for at least 4 hours.

Applying the mix

Apply **Tixobond Fine S1** 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 **Tixobond Fine S1** on to 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 external floors and finishing materials subject to freezing weather, **Tixobond Fine S1** 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. Place the tiles in position following the recommendations of the relevant Australian Standards.

The open time of **Tixobond Fine S1** is 30 minutes under normal temperature and humidity conditions. Unfavourable conditions (such as direct sunlight, wind and high temperatures), or if the substrate is very absorbent, may drastically reduce this time, possibly 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 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 40 minutes of installation.

Tiling installed with **Tixobond Fine S1** 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

Wall joints can be grouted after 4-8 hours and floor joints can be grouted after 24 hours with the appropriate MAPEI cementitious or epoxy grout which is available in a variety of colours.

Expansion joints should be sealed with a suitable MAPEI sealant.

SET TO LIGHT FOOT TRAFFIC

Floors are ready for light 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 clean water while the **Tixobond Fine S1** 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 Fine S1 is available in 20 kg bags.

STORAGE

Tixobond Fine S1 may be stored for 12 months in original packaging in a dry place.



Spreading Tixobond Fine S1 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

TECHNICAL DATA (typical values)

Conforms to Standard:

- Australian AS 4992.1-2006 as C1TES1
- Lead requirements as low VOC level
- 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 Fine S1 with 31-33 parts water in weight
Consistency of mix:	creamy paste
Density of the mix (kg/m³):	1,550
pH of mix:	13
Pot life:	4 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): <ul style="list-style-type: none">- initial bonding (after 28 days):- bonding after heat exposure:- bonding after immersion in water:- bonding after freeze/thaw cycles:	<ul style="list-style-type: none">22.50.81.2
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

Tixobond Fine S1



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

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Tixobond Fine S1 contains cement that, when in contact with sweat or other bodily fluids, can produce an irritant alkaline reaction.

Wear protective clothing, gloves, dust mask and eye protection.

For further information refer to the Material 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.au