

TECHNICAL DATA SHEET

FlexiLevel

Flexible, Fibre Reinforced Self Levelling Floor Compound

PROFESSIONAL FLOORING PRODUCTS

- Apply from 2 50mm in one pour
- Fast setting tile after 3 hours
- Ideal for use above underfloor heating systems
- Ideal for timber substrates
- Apply directly to T & G floorboards
- Simply mix with water
- Protein free
- Pump-able
- Minimum application depth on timber substrates of 4mm.

CLASS **CT-C25-F6**to EN 13813

APPLY FROM **2-50mm**

Walk On After
3 Hours

Tile After 3 Hours

LVT After 24 Hours





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Flexible, Fibre Reinforced Self Levelling Floor Compound

DESCRIPTION:

Tilemaster FlexiLevel is a flexible, fibre reinforced self levelling compound. The specially formulated powder enables the product to be poured to depths between 2mm – 50mm in one application and receive foot traffic after 3 hours.

Tilemaster FlexiLevel has excellent flow and adhesion properties making it suitable for a wide range of both commercial and domestic applications. Tilemaster FlexiLevel is suitable for use over a wide range of substrates including sand/cement screeds, concrete, flooring grade asphalt/bitumen, ceramic / porcelain, porcelain and terrazzo tiles, rigid steel, epoxy damp proof membranes and timber substrates — the minimum application depth onto timber substrates is 4mm.

Tilemaster FlexiLevel is also ideal for encapsulating electric underfloor heating elements and for use over underfloor heated screeds.

Once mixed, Tilemaster FlexiLevel will remain workable for 20 – 30 minutes and it will accept light foot traffic after 3 hours in ideal conditions. Ceramic / porcelain tiles can be applied after 3 hours and decorative floor coverings can be installed after 24 hours.

Under certain conditions, Tilemaster FlexiLevel is suitable for use externally. For further information please contact the Tilemaster Adhesives Technical Helpline for further information.

SUBSTRATES:

- ✓ Sand/Cement Screed
- Concrete
- ✓ Plywood Overlay (6mm min)[▲]
- Electric Underfloor Heating
- Water/Wet System Underfloor Heating
- ✓ Tile Backer Boards
- Existing Ceramic, Porcelain and Natural Stone Tiles*
- Flooring Grade Asphalt & Bitumen*
- Anhydrite Screeds
- ✓ T & G Floorboards
- ✓ Floating Floors⁴
- Existing Vinyl Tiles*
- ✓ Steel/Metal Surfaces*
- ✓ Epoxy DPM*
- Fibreglass*
- **X** Green Screed



Prime with Prime + Grip

Minimum application depth on timber substrates is 4mm

PREPARATION:

Before starting, all substrates must be clean, dry and strong enough to support the weight of the leveller and the final floor covering being applied. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion. Where traces of adhesive residue remain, these must be checked to ensure that they are not softened with water and that they are strong, sound and well adhered to the substrate in order to receive a levelling compound.

The substrate must be confirmed dry by consistent moisture readings; <75% relative humidity (RH) or <0.5% residual moisture content prior to starting. Where a structural damp proof membrane is not present or where rising damp and/or residual moisture results in moisture readings up to 98% RH, a liquid damp proof membrane such as Tilemaster FAST One Coat DPM must be applied before the application of Tilemaster FlexiLevel. Surface laitance should be removed from concrete and sand/cement screed surfaces prior to application.

All substrates require priming prior to the application of Tilemaster FlexiLevel. Priming the substrate will minimize the risk of pinholes forming, allow for the best flow properties and also prolong the working time of the product whilst maintaining a 'wet edge' for a longer period. For recommended priming dilution rates please refer to Page 3 of this data sheet.

Prior to levelling timber substrates ensure that timber boards are securely screwed down and firmly fixed. Where timber substrates are sufficiently rigid but uneven or worn, Tilemaster FlexiLevel can be used to smooth and level the timber substrate prior to over-boarding with plywood overlay or a tile backer board. If following this process, allow Tilemaster FlexiLevel to cure before fitting the overlay boarding.

MIXING AND APPLICATION:

Always mix by adding powder to water. Tilemaster FlexiLevel is mixed with a water content of 5.5-6.0 litres of water per 25kg of Tilemaster FlexiLevel. Pour the pre-measured clean water into a suitable clean mixing vessel. Add the powder component slowly whilst mixing with an electric paddle and continue to mix for a further 2 minutes until a smooth and lump free consistency is obtained. Once mixed do not add further polymer liquid or water. **Exceeding 6.0 litres of water per 25kg will result in water bleed and therefore extended drying times and a weakened mix.**

N.B. Once mixed, Tilemaster FlexiLevel will remain workable in the bucket for 20 - 30 minutes at 20°C.

Pour a small quantity onto the prepared surface and trowel down lightly to a depth between 2mm and 50mm. The use of a spiked roller is recommended immediately in thin applications in order to remove entrapped air and smooth out flow lines. Setting times will depend on atmospheric conditions/temperatures, it will be slowed by lower temperatures and accelerated by higher temperatures.

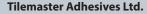
If a depth greater than 50mm is required, allow the first application to dry and prime the surface with Tilemaster Primeplus at a 3:1 ratio before applying a subsequent coat.

Clean tools immediately after use with clean water.

Tilemaster FlexiLevel is ideal for pump application. Mix in accordance with the pump manufacturer's instructions and ensure that regular flow checks are carried out. Ensure the water content is correct and that there is no surface separation.

SETTING AND COVERING:

In ideal conditions, Tilemaster FlexiLevel will accept light foot traffic after 3 hours. Tilemaster FlexiLevel must be left to dry before applying the final decorative surface flooring. This is typically after 3 hours for ceramic / porcelain tiles and 24 hours for decorative flooring such as vinyl, however, this can vary depending on the choice of surface flooring. Thicker applications may require a longer time to dry prior to applying floor coverings. If there is no air flow within site conditions, the drying time may be restricted. The critical moisture content for the flooring in question must be observed.



Unit 4, Tomlinson Point, Tomlinson Road, Leyland, Lancashire, PR25 2DY.

Telephone: 01772 456831



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SUBSTRATE PREPARATION GUIDE:

Concrete: New concrete must be allowed a minimum of 6 weeks drying time. As an approximate guide for drying times, allow 1 day per mm up to an overall depth of 40mm and 2 days per mm for anything above 40mm. Ensure new concrete is confirmed dry via consistent moisture readings across the whole surface. Concrete screeds must have a reading of less than 75% relative humidity (RH) before work can commence. Remove any laitance from the surface mechanically and ensure that mould oil, curing agents and any other contaminants are removed. Remove all dust and dirt ideally by vacuum. Prime surface with Tilemaster Primeplus diluted at a 3:1 ratio (3 parts water to 1 part Tilemaster Primeplus) and allow to dry.

Sand/Cement Screed: New sand/cement screed must be left for a minimum of 4 weeks to dry sufficiently. Ensure new sand/cement screed is confirmed dry via consistent moisture readings across the whole surface. Sand/cement screeds must have a reading of less than 75% relative humidity (RH) before work can commence. Remove any laitance from the surface mechanically and ensure that mould oil, curing agents and any other contaminants are removed. Remove all dust and dirt ideally by vacuum. Prime surface with Tilemaster Primeplus diluted at a 3:1 ratio (3 parts water to 1 part Tilemaster Primeplus) and allow to dry.

Flooring Grade Asphalt/Bitumen: Prior to applying Tilemaster FlexiLevel ensure that the flooring grade asphalt/bitumen is in good condition and that there are no signs of debonding and/or hollowness. Make sure the surface is dry and free of any contaminants, loose dust or dirt. Prime the surface with one coat of Tilemaster Prime + Grip and allow to dry.

Existing Ceramic, Porcelain & Natural Stone Tiles: Prior to applying Tilemaster FlexiLevel ensure the surface is dry and free of any contaminants, loose dust or dirt. Existing tiles that have been previously treated with sealer must be sufficiently cleaned in order to remove any surface treatments by de-greasing. Prime the surface with one coat of Tilemaster Prime+ Grip and allow to dry.

Plywood Overlay: Prior to applying Tilemaster FlexiLevel, ensure that new or existing boards are dry, i.e. conditioned to the environment in which they will be used. Plywood sheets must be a thickness of 6mm (minimum), flooring grade, screwed (not nailed) to the substrate at 6 inch/150mm centres. Ensure there is sufficient ventilation beneath the substrate and that the plywood has been fitted competently and will take the weight of the leveller, adhesive and the final floor covering being applied. Make sure the surface is dry and free of any contaminants, loose dust or dirt.

Tilemaster FlexiLevel must be applied to a minimum depth of 4mm onto plywood overlay substrates.

Existing and/or lightly contaminated plywood requires priming with Tilemaster Primeplus diluted 3 parts water to 1 part Tilemaster Primeplus. New, uncontaminated plywood does not require priming prior to application.

Underfloor Heating Systems: When applying Tilemaster FlexiLevel onto existing underfloor heating, the heating must be switched off 24 hours prior to application to allow the substrate to cool sufficiently. Once the tiling installation has been completed allow a minimum of 7 days for full cure of Tilemaster FlexiLevel before switching the heating on. When doing so, start with a low temperature and gradually increase the temperature on a daily basis by no more than 2°C per day.

When tiling or applying soft flooring on to a new electric element underfloor heating system, Tilemaster Adhesives strongly recommend embedding the electric underfloor heating mat/element into a self levelling compound such as Tilemaster LevelFlex or Rapid Level 30 in order to protect the heating element and to leave a perfect surface on which to apply the flooring finish. When installing levelling compounds above an electric underfloor heating element, the levelling compound must be applied at a minimum depth of 5mm above the heating element. Allow a minimum of 7 days for full cure before switching the heating on, start with a low temperature and gradually increase the temperature on a daily basis by no more than 2°C per day.

Underfloor Heated Screeds must be commissioned prior to tiling or applying a soft flooring finish via the manifold mixing valve, or at the boiler. When switching the system on ensure it is at the minimum operating temperature and maintain this temperature for 3 days. After this, gradually increase the temperature by no more than 5°C per day up to a maximum of 55°C and maintain this temperature for a minimum of 3 days. Once completed, switch the heating system off 48 hours prior to tiling to allow the substrate to cool sufficiently. Alternatively, in cold conditions, reduce the temperature of the screed to below 15°C prior to works commencing.

Once the tiling installation has been completed allow a minimum of 7 days for full cure of Tilemaster FlexiLevel before switching the heating on. When doing so, start with a low temperature and gradually increase the temperature on a daily basis by no more than 2°C per day.

Anhydrite/Gypsum Screed: Anhydrite/Gypsum screeds must be confirmed dry via consistent moisture readings across the whole floor. The residual moisture content of the screed must be less than 0.5%. Alternatively, the relative humidity must be 75% or below. As an approximate guide for drying times, allow 1 day per mm up to an overall depth of 40mm and 2 days per mm for anything above 40mm. The drying of anhydrite/gypsum screeds can be assisted by commissioning the underfloor heating system, for further information, please contact the Tilemaster Adhesives Technical Helpline. All anhydrite/gypsum screeds must be mechanically sanded/abraded in order to remove the laitance from the surface of the screed.

The surface of the anhydrite screed must be primed with 2 coats of Tilemaster Primeplus. The first coat must be diluted 3:1 (3 parts water to 1 part Tilemaster Primeplus) and allowed to dry. Once dry, a second, neat coat of Tilemaster Primeplus must be applied to the surface and allowed to dry.

Tile Backer Board: Prior to applying Tilemaster FlexiLevel ensure the surface is dry and free of any contaminants, loose dust or dirt. Prime surface with Tilemaster Primeplus diluted at a 3:1 ratio (3 parts water to 1 part Tilemaster Primeplus) and allow to dry.

Existing Vinyl Tiles/Sheet Vinyl: Prior to applying Tilemaster FlexiLevel, make sure the existing vinyl tiles/sheet vinyl is firm, stable and well adhered to the substrate to which the vinyl was originally applied to. Ensure the surface is dry and free of any contaminants, loose dust and dirt. Existing vinyl that has been previously treated with sealer must be sufficiently cleaned in order to remove any surface treatments. Prime the surface with one coat of Tilemaster Prime + Grip and allow to dry.

Power Floated Concrete: Ensure the surface has been allowed 7 days to cure. Ensure new concrete is confirmed dry via consistent moisture readings across the whole surface. Concrete screeds must have a reading of less than 75% relative humidity (RH) before work can commence. Power floated concrete can leave a tight surface finish or laitance once it has cured. Remove the top layer and any laitance from the surface mechanically or by acid etching and remove all dust and particles ideally by vacuum. Prime the surface with Tilemaster Primeplus diluted 3 parts water to 1 part Tilemaster Primeplus and allow to dry.

Epoxy Damp Proof Membrane: Ensure the surface is dry and free of any contaminants, loose dust or dirt. Prime the surface with one coat of Tilemaster Prime + Grip and allow to dry.

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Screed classification	CT-C25-F6 to EN13813:2002
Working time @ 20°C	20 – 30 minutes
Time to foot traffic @ 20°C	3 hours
Application thickness	2mm – 50 mm
Compressive strength N/mm² (EN 13892-2)	1 day > 14.0 7 day > 18.0 28 day > 25.0
Flexural strength N/mm² (EN 13892-2)	1 day > 3.0 7 day > 5.0 28 day > 6.0
Coverage	25kg will cover 5.25m² at 3mm thickness
Flow properties using 30mm x 50mm flow ring	135mm – 145 mm
Minimum application temperature	5°C
Shelf life	Stored correctly this product has a shelf life of 6 months
Colour	Grey
Pack size	25 kg
Note	All work must be carried out in accordance with British Standard Code of Practice.

HEALTH AND SAFETY

Tilemaster FlexiLevel contains cement. Irritant to respiratory system. Risk of serious damage to eyes, therefore avoid contact with eyes and prolonged contact with skin. Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Wear suitable gloves (e.g. cotton gloves soaked in nitrile) and eye/face protection. If swallowed, seek medical advice immediately and show this container or label. Keep out of reach of children. Low in chromates.

For further information refer to the Material Safety Data Sheet.

The information contained on this spec sheet is given voluntarily and in good faith. It is to the best of our knowledge true and accurate; however, it may contain information which is inappropriate under certain conditions of use. The company cannot accept responsibility for any loss or damage due to inappropriate use or the possibility of variations of working conditions and of workmanship outside our control.



Tilemaster Adhesives Ltd., Unit 4, Tomlinson Point, Tomlinson Road, Leyland, Lancs, PR25 2DY

EN 13813:2002 CT-C25-F6

Fast drying cement based self – levelling compound for use in interior locations

Reaction to fire	NPD
Release of corrosive substances	СТ
Water permeability	NPD
Water vapour permeability	NPD
Compressive strength	C25
Flexural strength	F6
Wear resistance	NPD
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD

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