

Levelflex

Flexible & Fibre Reinforced, Rapid Setting Self Levelling Floor Compound

- Apply from 2 – 50mm in one pour
- Fast setting - tile after 3 hours
- Ideal for plywood & chipboard overlay
- Ideal for underfloor heating systems
- Apply directly to T & G floorboards
- Apply impervious floor finishes after 24 hours
- Simply mix with water
- Protein free
- Can be used as a wearing surface

CLASS

CT-30-F7

to EN 13813

TILE AFTER

3

HOURS

**APPLY
FROM****2 - 50mm**

TILEMASTER LEVELFLEX

Flexible & Fibre Reinforced, Rapid Setting Self Levelling Floor Compound

DESCRIPTION:

Levelflex is a flexible, fibre reinforced and protein free cement based formulation designed for smoothing and levelling subfloors prior to the installation of floor coverings. Levelflex can be applied from depths of 2mm – 50mm in one application and it is suitable for use on all common substrates including underfloor heating systems and timber substrates. Levelflex is fast setting and therefore ceramic, porcelain and natural stone tiles can be applied after 3 hours and impervious floor finishes such as decorative vinyl, laminate and linoleum after 24 hours.

Under certain conditions, Levelflex is suitable for use externally. For further information please contact technical information on 01772 456831 or email: info@tilemasteradhesives.co.uk for more information.

SUBSTRATES:

- ✓ Sand/Cement Screed
- ✓ Concrete
- ✓ Plywood Overlay (6mm min)
- ✓ Chipboard Overlay (18mm 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
- ✓ Fibre Cement Sheet
- ✓ T & G Floorboards
- ✓ Floating Floors
- ✓ Existing Vinyl Tiles
- ✗ Steel/Metal Surfaces
- ✗ Fibreglass
- ✗ Green Screed

PREPARATION:

Before starting, all substrates must be clean, dry and strong enough to support the weight of the leveller, adhesive and the final floor covering being applied. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion. Where traces of adhesive remain, these must be strong, sound and well adhered to the substrate.

The substrate must be confirmed dry by consistent moisture readings; <75% relative humidity (RH) or <0.5% residual moisture content prior to application. Remove any loose or flaking layers. Laitance should be removed from concrete and sand/cement screed surfaces. Sub-floors directly to earth must have a damp-proof membrane.

MIXING AND APPLICATION:

Mix by adding powder to water, approximately 4.5 – 5.0 litres of water to 20kg of Levelflex. We suggest starting with 4.5 litres of water which can then be increased to a maximum of 5.0 litres if necessary. Levelflex will flow better at 5.0 litres of water, however, do not exceed 5.0 litres of water per bag of Levelflex. **Exceeding 5.0 litres of water per 20kg will result in water bleed and therefore extended drying times and a weakened mix.**

Mix ideally with an electric paddle until you obtain a smooth and lump free consistency. When mixed allow to stand for 2 minutes and stir again before application. Once mixed, Levelflex will remain workable in the bucket for approximately 30 minutes.

Pour a small quantity onto the prepared surface and trowel down lightly to a depth between 2 and 50mm. The use of a spiked roller is recommended in order to remove entrapped air and smooth out flow lines. Levelflex will maintain a "wet edge" for 20 – 30 minutes but depending on the porosity of the substrate and ambient conditions, once applied, the drying process can begin after 15 – 20 minutes. If you wish to build to a greater depth of 50mm, allow to dry and prime between applications.

Levelflex must be left to dry before applying the final decorative surface flooring. This is typically 3 hours for ceramic, porcelain and natural stone tiles and 24 hours for soft flooring such as decorative vinyl and linoleum. The setting time will depend on atmospheric conditions/temperatures, it will be slowed by lower temperatures and accelerated by higher temperatures.

N.B. 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. If in doubt, please call our technical department on 01772 456831.

PUMP APPLICATIONS:

Levelflex is ideal for pump application. Mix in accordance with the pump manufacturer's instructions. Regular flow checks should be carried out. Ensure the water contents are correct and that there is no surface separation.

Flexible & Fibre Reinforced, Rapid Setting Self Levelling Floor Compound

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 50mm and 2 days per mm for anything above 50mm. 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 the surface with Primeplus diluted 3 parts water to 1 part Primeplus and allow to dry. Very porous substrates will require more than one coat.

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 the surface with Primeplus diluted 3 parts water to 1 part Primeplus and allow to dry. Very porous substrates will require more than one coat.

Flooring Grade Asphalt/Bitumen: 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 Primeplus Slurry Mix. The Slurry Mix consists of 1 part water to 1 part Primeplus mixed with approximately 30% by weight of cement based tile adhesive or levelling compound to form a brush on slurry. Allow the Slurry Mix to dry before applying Levelflex. Alternatively prime the surface with one coat of Prime + Grip and allow to dry.

Existing Ceramic, Porcelain & Natural Stone Tiles: 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. Prime the surface with one coat of Primeplus Slurry Mix. The Slurry Mix consists of 1 part water to 1 part Primeplus mixed with approximately 30% by weight of cement based tile adhesive or levelling compound to form a brush on slurry. Allow the Slurry Mix to dry before applying Levelflex. Alternatively prime the surface with one coat of Prime + Grip and allow to dry.

Plywood Overlay: Prior to applying Levelflex, ensure that new or existing boards are dry, i.e. conditioned to the environment in which they will be used. Plywood must be 6mm (minimum), exterior grade, screwed (not nailed) to substrate at 6 inch/150mm centres. Ensure there is sufficient ventilation beneath 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. The top surface of the plywood does not require priming prior to applying Levelflex. Prime the reverse side and edges of the plywood with neat Primeplus.

Chipboard Overlay: Prior to applying Levelflex, ensure that new or existing boards are dry i.e. conditioned to the environment in which they will be used. Chipboard must be a minimum of 18mm and must be screwed (not nailed) to the substrate at 6 inch/150mm centres. Ensure there is enough ventilation beneath the substrate and that the chipboard 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. The top surface of the chipboard does not require priming prior to applying Levelflex. Prime the reverse side and edges of the chipboard with neat Primeplus.

Underfloor Heating Systems: When applying Levelflex onto existing underfloor heating you must switch the heating off 48 hours prior to application to allow the substrate to cool sufficiently. Once the self levelling and the flooring installation has been completed allow 1 week for full cure of Levelflex 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 Levelflex in order to protect the heating element and to leave a perfect surface on which to apply the flooring finish. Again, allow one week 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 should be commissioned prior to tiling or applying a soft flooring finish. Turn on the heating system at a low temperature and heat the screed gradually by no more than 5°C per day until a maximum temperature of 25°C is achieved. Maintain this temperature for 3 days and then switch the heating off 48 hours prior to applying the flooring finish to allow the substrate to cool sufficiently. Alternatively in cold conditions, reduce the temperature of the screed to below 15°C.

Once the self levelling and the flooring installation has been completed allow 1 week for full cure of Levelflex 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.

Tongue & Groove Boarding and Floorboards: Prior to applying Levelflex, ensure that new or existing boards are dry i.e. conditioned to the environment in which they will be used. Existing tongue and groove boards should be screwed to supporting joists at 300mm centres including any cross-noggings if necessary in order to provide a rigid, flat and adequately braced surface. Ensure there is sufficient ventilation beneath the substrate and that the substrate is strong enough to support the weight of the adhesive and tiles being applied. Make sure surface is dry and free of any contaminants, loose dust and dirt. New, clean floorboards do not require priming. Older floorboards that have been sanded or that are highly porous should be primed with one neat coat of Primeplus.

Please Note: Certain manufacturers of chipboard floorboard do not recommend their products for being tiled directly due to the design of their particular board. If in doubt, please consult with the supplier of the board or alternatively contact our Technical Helpline on 01772 456831 for further advice.

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 our Technical Helpline. All anhydrite/gypsum screeds must be mechanically sanded/abraded in order to remove the laitance from the surface of the screed.

Tilemaster Adhesives recommended self levelling compound for use on anhydrite/gypsum screeds is AnhyLevel. For details on self levelling anhydrite/gypsum screeds with Levelflex, please contact the **Technical Helpline on 01772 456831**.

Tile Backer Board: Ensure the surface is dry and free of any contaminants, loose dust or dirt. Prime the surface with one coat of Primeplus diluted 3 parts water to 1 part Primeplus and allow to dry.

Existing Vinyl Tiles/Sheet Vinyl: Existing Vinyl Tiles/Sheet Vinyl: 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. Prime the surface with one coat of Primeplus Slurry Mix. The Slurry Mix consists of 1 part water to 1 part Primeplus mixed with approximately 30% by weight of cement based tile adhesive or levelling compound to form a brush on slurry. Allow the Slurry Mix to dry before commencing. Alternatively prime the surface with one coat of 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 loose top layer and/or laitance once it has cured. Remove the loose top layer and any laitance from the surface mechanically or by acid etching and remove all dust and particles ideally by vacuum. Once all laitance has been removed, prime the surface with one coat of Primeplus diluted 3 parts water to 1 part Primeplus.

TILEMASTER **LEVELFLEX**

Flexible & Fibre Reinforced, Rapid Setting Self Levelling Floor Compound


Screed classification	CT-C30-F7 to BS EN 13813; 2002
Working time @ 20°C	20 – 30 minutes
Time to foot traffic @ 20°C	2 – 3 hours
Application thickness	2 – 50 mm
Compressive strength N/mm ² (BS EN 13892-2)	1 day > 15.0 7 day > 20.0 28 day > 30.0
Flexural strength N/mm ² (BS EN 13892-2)	1 day > 3.0 7 day > 5.0 28 day > 7.0
Coverage	20kg will cover 4.2m ² at 3mm thickness
Flow properties using 30mm x 50mm flow ring	130 – 145 mm
Minimum application temperature	5°C
Shelf life	Stored correctly this product has a shelf life of 6 months
Colour	Grey
Pack size	20 kg
Note	All work must be carried out in accordance with British Standard Code of Practice.

HEALTH AND SAFETY

Tilemaster Levelflex contains cement. Contact with moisture or gauging water sets off an alkaline reaction which may cause skin irritation and/or caustic burns to mucous membranes (e.g. eyes). 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.

 14	
Tilemaster Adhesives Ltd., Unit 4, Tomlinson Point, Tomlinson Road, Leyland, Lancs, PR25 2DY	
EN 13813:2002 CT-C30-F7 Fast drying cement based self – levelling compound for use in interior locations	
Reaction to fire	NPD
Release of corrosive substances	CT
Water permeability	NPD
Water vapour permeability	NPD
Compressive strength	C30
Flexural strength	F7
Wear resistance	NPD
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD

Tilemaster Adhesives Ltd.

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

Telephone: **0845 208 0040** Fax: **0845 208 0041**

Technical: **01772 456831**



www.tilemasteradhesives.co.uk