

# FlexiLevel

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\*
- Simply mix with water
- Protein free

\* Minimum application depth on  
timber substrates is 4mm

CLASS

**CT-25-F6**

to EN 13813

TILE AFTER  
**3**  
HOURS

Ideal for  
Underfloor  
Heating  
Systems



# TILEMASTER **FLEXILEVEL**

## Flexible & Fibre Reinforced, Rapid Setting Self Levelling Floor Compound

### DESCRIPTION:

FlexiLevel is a rapid setting, flexible, fibre reinforced and protein free cement based formulation designed for smoothing and levelling subfloors prior to the installation of floor coverings. FlexiLevel 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 – the minimum application depth on timber substrates is 4mm. FlexiLevel 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 after 24 hours.

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

### SUBSTRATES:

- ✓ Sand/Cement Screed
- ✓ Concrete
- ✓ Plywood Overlay (12mm 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

\* 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, 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 5.4 – 6.0 litres of water to 25kg of FlexiLevel. We suggest starting with 5.4 litres of water which can then be increased to a maximum of 6.0 litres if necessary. FlexiLevel will flow better at 6.0 litres of water, however, do not exceed 6.0 litres of water per bag.

**Exceeding 6.0 litres of water per 25kg 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, FlexiLevel 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. FlexiLevel will normally 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.

FlexiLevel 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:

FlexiLevel 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.

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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 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 FlexiLevel. 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 FlexiLevel. Alternatively prime the surface with one coat of Prime + Grip and allow to dry.

**Plywood Overlay:** Prior to applying FlexiLevel, ensure that new or existing boards are dry, i.e. conditioned to the environment in which they will be used. Plywood must be 12mm (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 FlexiLevel. Prime the reverse side and edges of the plywood with neat Primeplus.

**Chipboard Overlay:** Prior to applying FlexiLevel, 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 FlexiLevel. Prime the reverse side and edges of the chipboard with neat Primeplus.

**Underfloor Heating Systems:** When applying FlexiLevel 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 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 FlexiLevel 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 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.

**Tongue & Groove Boarding and Floorboards:** Prior to applying FlexiLevel, 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 to 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 AnyLevel. For details on self levelling anhydrite/gypsum screeds with FlexiLevel, 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.

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## Flexible & Fibre Reinforced, Rapid Setting Self Levelling Floor Compound


|   |   |
|---|---|
| Screed classification                                     | CT-C25-F6 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<br>N/mm <sup>2</sup> (BS EN 13892-2) | 1 day > 12.0<br>7 day > 20.0<br>28 day > 25.0   |
| Flexural strength<br>N/mm <sup>2</sup> (BS EN 13892-2)    | 28 day > 6.0  |
| Coverage  | 20kg will cover 4.2m <sup>2</sup> at 3mm thickness                                    |
| Flow properties using<br>30mm x 50mm flow ring            | 130 – 150 mm  |
| Minimum application<br>temperature                        | 5°C   |
| Shelf life  | Stored correctly this product has a<br>shelf life of 6 months                         |
| Colour  | Grey  |
| Pack size   | 25 kg   |
| Note  | All work must be carried out in accordance<br>with British Standard Code of Practice. |

### HEALTH AND SAFETY

Tilemaster FlexiLevel 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.

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| Tilemaster Adhesives Ltd.,<br>Unit 4, Tomlinson Point,<br>Tomlinson Road, Leyland,<br>Lancs, PR25 2DY                                 |     |
| <b>EN 13813:2002</b><br><b>CT-C25-F6</b><br>Fast drying cement<br>based self – levelling<br>compound for use<br>in interior locations |     |
| Reaction to fire  | NPD |
| Release of corrosive<br>substances  | CT  |
| Water permeability  | NPD |
| Water vapour<br>permeability  | NPD |
| Compressive strength  | C25 |
| Flexural strength   | F6  |
| Wear resistance   | NPD |
| Sound insulation  | NPD |
| Sound absorption  | NPD |
| Thermal resistance  | NPD |
| Chemical resistance   | NPD |

### Tilemaster Adhesives Ltd.

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