

TECHNICAL DATA SHEET

INCREASES

Flexmaster

Multi Purpose Flexible Additive & Primer

AS A FLEXIBLE ADDITIVE

- Increases the flexural properties & adhesion properties of tile adhesives & grouts
- Improves the durability & water resistance of tile adhesives & grouts
- Can be added to all Tilemaster adhesives & grouts

AS A PRIMER

- Wall & floor primer for absorbent & non-absorbent surfaces
- Designed to prime, stabilise & seal substrates
- Increases the adhesion of tile adhesives & levellers
- Prolongs the working time of tile adhesives & levellers
- Water based

Flexibility & Durability

ADD TO Adhesives & Grouts

Acrylic Based





TILEMASTER **FLEXMASTER** Multi Purpose Flexible Additive & Primer

DESCRIPTION:

Flexmaster is a highly advanced acrylic based polymer which can be used as a flexible additive and/or a primer. As a flexible additive, Flexmaster increases the flexibility, durability, adhesion properties and water resistance of Tilemaster tile adhesives and grouts. Flexmaster is an essential additive for non-flexible tile adhesives and grouts when fixing to substrates subject to limited movement and/or vibration or excessive temperature change. Flexmaster is sold undiluted and as a result can be adapted/diluted to meet site requirements.

As a primer, Flexmaster is designed to prime, stabilise and seal substrates prior to the application of Tilemaster tile adhesives and self levelling compounds. Flexmaster increases the adhesion and prolongs the working time of tile adhesives and self levelling compounds. Flexmaster can be used on both absorbent and non-absorbent surfaces, internally and externally.

SUBSTRATES:

- ✓ Sand/Cement Screed
- Concrete
- Plywood Overlay (12mm min)
- Chipboard Overlay (18mm min)
- Electric Underfloor Heating
- Water/Wet System
 Underfloor Heating
- Tile Backer Boards
- Tile on Tile
- Flooring Grade Asphalt & Bitumen
- Anhydrite Screeds
- Plaster
- Plasterboard
- Fibre Cement Sheet
- Cement/Sand Render
- ✓ Concrete Brick/Block
- T & G Floorboards
- Floating Floors
- Existing Vinyl Tiles
- Steel/Metal Surfaces
- Fibreglass
- Green Screed

PREPARATION FOR PRIMING:

Surfaces must be sound and free from dust, dirt, grease, oil and any other contaminants. Any laitance or surface treatments must be removed before use. Concrete, sand/cement screeds, anhydrite screeds and power floated concrete must be fully cured and dust removed ideally by vacuum. The temperature of the surface must be above 5°C when the Flexmaster is applied. Underfloor heating must be switched off 2 days before application. Timber and over boarded substrates must be rigidly braced and sufficiently constructed to take domestic loading without movement.

APPLICATION AS A FLEXIBLE ADDITIVE:

Flexmaster can be added to the full range of Tilemaster adhesives and grouts to increase flexibility, durability, adhesion properties and water resistance of cement based products. Flexmaster must be diluted with water prior to mixing with the cement based product. Flexmaster should be diluted accordingly to meet site requirements, a guide is as follows:

1 part Flexmaster to 3 parts water: When added to Grout 3000, Trade FlexiRapid, Rapid Setaflex and Standard Set Setaflex - this dilution rate significantly improves the flexural properties of the product.

1 part Flexmaster to 3 parts water: When added to Tilemaster Rapid Set, Rapid and Standard Extrabond, Wall Grout and Wide Joint Grout - this dilution rate makes the product suitable for use on substrates subject to limited movement and/or vibration such as plywood overlay, timber framework and underfloor heating systems.

1 part Flexmaster to 2 parts water: When added to tile adhesives and grouts that are already classed as flexible products, this dilution rate makes the product suitable for use directly onto substrates with significant movement and/or vibration such as floorboards and floating floors.

When added to Grout 3000 at this dilution rate, Grout 3000 becomes as flexible as Ultimate (S2) adhesive.

For more specific instructions and advice, please contact our technical department on **01772 456831**.

APPLICATION AS A PRIMER:

Shake well before use. Flexmaster should be diluted accordingly for the relevant substrate, see page 3. Apply Flexmaster evenly to the whole surface to be treated with a paint roller, brush or sponge. Do not over apply as this can cause the primer to skin over, only a thin coat is required ensuring that you have 100% coverage. Wash tools after use with warm water.

The drying time of Flexmaster will depend on the porosity of the substrate and the ambient conditions/temperatures. In ideal conditions, Flexmaster will take 30-45 minutes to dry. Once primed, avoid trafficking the primed area.



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SUBSTRATE PREPARATION GUIDE FOR PRIMING:

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. When using Ultimate adhesive, new concrete can be primed and tiled after 7 days. 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 Flexmaster diluted 3 parts water to 1 part Flexmaster 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 or 7 days when using Ultimate adhesive. 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 Flexmaster diluted 3 parts water to 1 part Flexmaster 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 Flexmaster Slurry Mix. The Slurry Mix consists of 1 part water to 1 part Flexmaster 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 tiling.

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 Flexmaster Slurry Mix. The Slurry Mix consists of 1 part water to 1 part Flexmaster 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 tiling.

Gypsum Plaster: New plaster must be allowed to dry for a minimum of 4 weeks. Ensure the surface is dry and free of any contaminants, loose dust or dirt. If the plaster has a polished/shiny surface, brush with a stiff bristle brush to abrade/roughen the surface prior to application. Prime the surface with 2 coats of Flexmaster, both coats diluted 3 parts water to 1 part Flexmaster. Allow the first coat to become touch dry before applying the second coat. The combined weight of the tile, tile adhesive and grout should not exceed 20kg /m².

Gypsum Plasterboard: Ensure the surface is dry and free of any contaminants, loose dust or dirt. Prime the surface with one coat of Flexmaster diluted 3 parts water to 1 part Flexmaster. The combined weight of the tile, tile adhesive and grout should not exceed 32kg /m².

Plywood Overlay: Prior to tiling, 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 tiles, tile adhesive and grout. 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 tiling. Prime the reverse side and edges of the plywood with neat Flexmaster.

Chipboard Overlay: Prior to tiling, 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 tiles, tile adhesive and grout. 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 tiling. Prime the reverse side and edges of the chipboard with neat Flexmaster.

Underfloor Heating Systems: When tiling onto existing underfloor heating you must switch the heating off 48 hours prior to tiling to allow the substrate to cool sufficiently. When tiling has been completed allow 1 week for full cure of tile adhesive and grout 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 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 or Rapid Level 30 in order to protect the heating element and to leave a perfect surface on which to apply tiles. 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. 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 tiling to allow the substrate to cool sufficiently. Alternatively in cold conditions, reduce the temperature of the screed to below 15°C prior to tiling. When tiling has been completed allow 1 week for full cure of tile adhesive and gradually increase the temperature on a daily basis by no more than 2°C per day.

Tongue & Groove Boarding and Floorboards: Prior to tiling, 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 floorboard shat have been sanded or that are highly porous should be primed with one neat coat of Flexmaster. **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.

Concrete Blocks: Ensure surface is dry and free of contaminants, loose dust and dirt. Prime the surface with one coat of Flexmaster diluted 3 parts water to 1 part Flexmaster and allow to dry.

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 tile adhesive for use on anhydrite/gypsum screeds is AnhyFix and our recommended self levelling compound is AnhyLevel. When using these products, prime the surface with one coat of Flexmaster diluted 3 parts water to 1 part Flexmaster and allow to dry. If using another Tilemaster product on anhydrite/gypsum screeds, please contact the Technical Helpline on **01772 456831** for priming instructions.

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

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 Flexmaster Slurry Mix. The Slurry Mix consists of 1 part water to 1 part Flexmaster 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 tiling.

Power Floated Concrete: Ensure the surface has been allowed 7 days to cure. 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 Flexmaster diluted 3 parts water to 1 part Flexmaster.

Tilemaster Adhesives Ltd.

Unit 4, Tomlinson Point, Tomlinson Road, Leyland, Lancashire, PR25 2DY. Telephone: **0845 208 0040** Fax: **0845 208 0041** Technical: **01772 456831**



TILEMASTER **FLEXMASTER Multi Purpose Flexible Additive & Primer**

Pack Sizes	1 litre & 5 litre bottles
Coverage as a Flexible Additive	5 litres of Flexmaster mixed with 3 parts water produces enough flexible additive for >80kg of tile adhesive
Dilution Rates as a Flexible Additive	Vary depending on the application and the cement based product being used. Please refer to the Flexmaster packaging
Coverage as a Primer	1 litre applied neat = $10m^2$ 1 litre diluted with 3 parts water = $40m^2$ 1 litre applied as a slurry coat = $18m^2$
Application Temperature	Between 5°C and 35°C
Drying Time Between Coats	Allow the first coat to become touch dry
Drying Time Before Tiling after Priming	30 – 45 minutes in ideal conditions The drying/curing time will depend on the porosity of the substrate and ambient conditions/temperatures
Storage	Store unopened, clear of the ground in cool, dry conditions
Shelf Life	Stored correctly this product has a shelf life of 12 months
Colour	White & dries translucent
Note	All work must be carried out in accordance with British Standard Code of Practice for floor and wall tiling BS5385

HEALTH AND SAFETY

The components of Flexmaster are not classified as hazardous. However, it is recommended that elementary health precautions be followed, including: wear protective gloves and glasses, ventilate working areas, if there is accidental contact with skin or eyes wash thoroughly with water. Do not allow the paste to dry on the skin. Keep out of reach of children.

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.



www.tilemasteradhesives.co.uk