

# Ultimate

## Highly Flexible - Rapid Setting Floor & Wall Tile Adhesive

- Genuine S2 flexibility making it highly suitable for a wide range of tiles and substrates
- Developed for application to timber substrates
- Suitable for use on floating floors
- Ideal for use with Underfloor Heating Systems
- Fast track adhesive - suitable for use on green screeds
- Bonds to metal surfaces
- Suitable for use in commercial and heavy traffic environments
- No additives required – simply mix with water

CLASS

**C2 F**

to EN 12004

**S2****Flexible**

to EN 12002

**3 Hours**Walkable /  
Groutable

# TILEMASTER **ULTIMATE**

## Highly Flexible - Rapid Setting Floor & Wall Tile Adhesive

### DESCRIPTION:

Ultimate is a high specification, highly flexible (S2) and rapid setting cement based wall and floor tile adhesive. Developed for fixing to difficult substrates, Ultimate is ideal when fixing to surfaces subject to limited movement and/or vibration. Ultimate is suitable for fixing a large variety of tiles to a large variety of substrates. A fast track adhesive, Ultimate can be used for tiling to green screeds. Its rapid setting capability allows for light foot traffic and grouting after 3 hours. Ultimate is ideal for areas subject to prolonged or permanent wet conditions such as swimming pools. Ultimate can be used internally and externally and it is unaffected by frost after setting.

Ultimate is designed for fixing tiles to surfaces subject to movement and/or vibration. Some types of tiles may not have the structure to absorb movement without cracking, please consult with the supplier of the tiles regarding this matter.

#### TILES:

- ✓ Ceramics
- ✓ Porcelain
- ✓ Marble
- ✓ Travertine
- ✓ Limestone
- ✓ Slate
- ✓ Quartz
- ✓ Granite
- ✓ Composite
- ✓ Terracotta
- ✓ Mosaics
- ✓ Quarry

#### 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:

Before starting, all substrates must be clean, dry and strong enough to support the weight of the tiles, tile adhesive and grout. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion.

### APPLICATION:

Only mix small quantities at a time until you have become accustomed to the fast setting nature of the product. Always mix powder to water and mix to a smooth, lump free consistency. As an approximate guide for powder to water ratio, 20kg of powder requires approximately 3.6 – 4.0 litres of water. Never add water after initial mixing, as this will impair the strength of the adhesive. Product that has started to set must be discarded.

On a flat, even substrate where dry conditions exist, apply adhesive to substrate as a thin floated coat at a uniform thickness of 3mm – 6mm and then comb out using a suitable notched trowel. Bed tiles into adhesive using a twisting action ensuring full coverage of adhesive between tile and substrate. When tiling to floors, wet areas such as showers and swimming pools, or in external locations - achieving a solid bed usually requires the back of the tiles to be buttered with adhesive immediately prior to placing tiles into the ribbed bed so no voids are left beneath the tile. Ensure the adhesive is still moist and there is full coverage when tiles are pressed into place with a twist action. Adhesive should also be applied to the back of deep studded tiles to cover the studs. When fixing large format tiles it is highly recommended to skim the back of the tile with a thin 1mm layer of adhesive. This will significantly improve the bond strength. Where substrate conditions do not allow thin bed fixing, Ultimate adhesive can be applied to maximum bed thickness of 15mm.

Clean surplus adhesive from the tiles and joints as soon as possible as set adhesive will prove very difficult to remove later. Clean tools immediately after use with clean water.

### GROUTING:

Do not start grouting until the adhesive has set. This time can vary depending on temperature and site conditions. Impervious surfaces may extend the set time. In ideal conditions grouting can begin after 3 hours. If you are tiling an area of limited movement or underfloor heating you must use a flexible grout. Our Grout 3000 and Flexigrout range are highly recommended. When using Ultimate adhesive to tile a substrate subject to significant movement and/or vibration, Grout 3000 and Flexigrout will require the addition of Flexmaster additive in order to increase the flexural properties of the grout.

If you are unsure with any of our instructions please call our Technical Helpline on 01772 456831, we will be happy to assist.

# TILEMASTER **ULTIMATE**

## Highly Flexible - Rapid Setting Floor & Wall Tile Adhesive

### SUBSTRATE PREPARATION GUIDE:

**Concrete & Sand/Cement Screed:** Ultimate adhesive is designed for application to green screed. New screed must be allowed to dry for a minimum of 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 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 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 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 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 Primeplus, both coats diluted 3 parts water to 1 part Primeplus. 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 /m<sup>2</sup>.

**Gypsum Plasterboard:** 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. The combined weight of the tile, tile adhesive and grout should not exceed 32kg /m<sup>2</sup>.

**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 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 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 Primeplus.

**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 Primeplus.

**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 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.

**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 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.

**Concrete Blocks:** Ensure surface is dry and free of contaminants, loose dust and dirt. Prime the surface with one coat of Primeplus diluted 3 parts water to 1 part Primeplus 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. For details on tiling to anhydrite/gypsum screeds with Tilemaster Ultimate adhesive, 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:** 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 tiling.

**Metal Surfaces:** Make sure the surface is dry and free of any contaminants, loose dust and dirt and if required de-grease the surface of the substrate. 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 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 Primeplus diluted 3 parts water to 1 part Primeplus.

# TILEMASTER **ULTIMATE**

## Highly Flexible - Rapid Setting Floor & Wall Tile Adhesive


Standard Conformity	Conforms to BS EN 12004 C2 F S2
Bed Thickness	3mm – 15mm
Coverage	20kg will cover approximately 5 – 6 m <sup>2</sup> at 3mm bed application
Open Time/Working Time	Approximately 30 minutes at 20°C
Before Grouting	Approximately 3 hours depending on temperature and substrate The set time will be increased by lower temperatures and reduced at higher temperatures * Tiling onto an impervious substrate with a non-porous tile will increase the set time
Storage	Store unopened, clear of the ground in cool, dry conditions
Shelf Life	Stored correctly this product has a shelf life of 6 months
Colours	Grey and White
Pack Sizes	5kg, 10kg and 20kg
Note	All work must be carried out in accordance with British Standard Code of Practice for floor and wall tiling BS5385

### HEALTH AND SAFETY

Tilemaster Ultimate Adhesive 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.

 <b>13</b>	
Tilemaster Adhesives Ltd., Unit 4, Tomlinson Point, Tomlinson Road, Leyland, Lancs, PR25 2DY	
<b>EN 12004:2007 + A1:2012</b> Improved fast setting highly deformable cementitious adhesive	
Transverse Deformation	>5mm
<b>Bond Strength, as:</b>	
• early tensile adhesion strength	>0.5 N/mm <sup>2</sup>
• initial tensile adhesion strength	>1.0 N/mm <sup>2</sup>
<b>Durability, for:</b>	
• tensile adhesion strength after heat ageing	>1.0 N/mm <sup>2</sup>
• tensile adhesion strength after water immersion	>1.0 N/mm <sup>2</sup>
• tensile adhesion strength after freeze/thaw cycles	>1.0 N/mm <sup>2</sup>

### 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](http://www.tilemasteradhesives.co.uk)