

## TECHNICAL DATA SHEET

# Light Weight Adhesive

Flexible, Standard setting wall & floor tile adhesive

### Advantages:

- 60% more coverage than traditional adhesives
- Advanced non-slip properties
- At least 50% lighter per m<sup>2</sup> than traditional adhesives
- Suitable for all types of tiles
- Suitable for all types of substrates
- Contains re-cycled material
- Out performs BS EN 12004 Type C2 TE S1
- Perfect for areas of movement
- Simply add powder to water
- Pourable

### Tiles:

- Porcelain
- Slate
- Vitrified
- Natural Stones
- Quartz
- Mosaics
- Marble
- Composite
- Limestone
- Granite

### Surfaces:

- Plywood
- Plasterboard
- Underfloor Heating
- Anhydrite Screed
- Breeze block
- Concrete/screed
- Asphalt/Bitumen
- Gypsum Plaster
- Old tiled surfaces

TILEMASTER LIGHT WEIGHT ADHESIVE HAS BEEN SPECIALLY ENGINEERED USING LIGHTWEIGHT FILLERS AND SPECIAL ADDITIVES TO GIVE ADVANCED NON-SLIP PROPERTIES, HIGHER YIELD AND COVERAGE THAN TRADITIONAL ADHESIVES. LIGHTER THAN TRADITIONAL SAND BASED ADHESIVES, IT PROVIDES EASY MIXING, EXCELLENT WORKABILITY, NO SLUMP OR SHRINKAGE WHILST MAINTAINING OPTIMUM STRENGTH AND FLEXIBILITY. LIGHT WEIGHT ADHESIVE IS A POLYMER MODIFIED, FLEXIBLE, CEMENT BASED ADHESIVE DEVELOPED FOR FIXING ALL TYPES OF TILES TO SUBSTRATES SUBJECT TO LIMITED MOVEMENT AND/OR VIBRATION. LIGHT WEIGHT ADHESIVE IS SUITABLE FOR BOTH WALLS AND FLOORS, FOR INTERIOR AND EXTERIOR APPLICATIONS AND CAN BE APPLIED TO A THICKNESS OF UP TO 15MM. DUE TO ITS HIGH DEFORMATION CAPABILITY IT WILL ACCOMMODATE CHANGES IN TEMPERATURE AND THE SUBSEQUENT MOVEMENT OF THE SUBSTRATE AND IS IDEAL FOR AREAS OF HEAVY LOADING. THE LIGHT WEIGHT RANGE OF ADHESIVES ARE POURABLE UP TO 15MM THICK AND ARE IDEAL FOR REPAIRING AND LEVELLING UNEVEN FLOOR AND WALL SURFACES PRIOR TO LAYING TILES.

### PREPARATION:

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

For information on preparing all types of surface/substrate prior to tiling, please refer to "Substrates" below.

### APPLICATION:

Do not use when temperatures are below 5°C. Tilemaster Light Weight adhesive should be added to water in a clean container whilst mechanically stirring and mixed thoroughly to give a soft, slump-free, easily worked mortar. The mixing proportions are 15kg powder to 8-9 litres water. Leave the mix to stand for about 3 minutes and then briefly remix. In ideal conditions, Light Weight adhesive will remain workable for 90 minutes, has an open time of 30 minutes and can be grouted after 5 hours. The tiled surface will be able to bear weight after 24 hours.

On flat, even substrate where dry conditions exist, apply a thin contact layer of adhesive at a uniform thickness of 3mm and then rib using a notched trowel or spreader. Where substrate conditions do not allow thin bed fixing, apply Light Weight adhesive up to 15mm in thickness and then rib using the notched side of the trowel. Do not trowel out an area of adhesive greater than can be tiled over within a 15 minute period.

Bed tiles into the adhesive using a twisting action, ensuring full coverage of adhesive between tile and substrate. Ensure there are no hollow spaces or pockets of air below the tile. When applying tiles that have deep studs on the back, we strongly recommend covering the studs with adhesive. When tiling externally, solid bed method of fixing is recommended.



NB. In areas subject to wet conditions, it is recommended to apply a thin skim of adhesive to the back of the tile as well as the uniform bed on the substrate.

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

#### **GROUTING:**

Grouting may proceed as soon as the tile bed is sufficiently firm. This will depend on temperatures and site conditions but is normally around 5 hours. If you are tiling an area of limited movement, or underfloor heating you must use a grout with flexibility, our Flex grout and Grout3000 range are highly recommended. If you are unsure with our instruction in any way please call our Helpline 01257 269243, we will be happy to assist.

#### **SUBSTRATES:**

##### **Concrete/screed:**

Ensure new concrete is confirmed dry via consistent moisture readings across the whole surface. Sand/Cement screeds must have a moisture reading of less than 75% RH before work can commence. If it is a new screed, allow 1 day per mm for drying. Remove any laitance from the surface mechanically and remove all dust ideally by vacuum. Prime the surface with Primeplus diluted 3 parts water to 1 part Primeplus.

**Very porous substrates will require more than one coat.**

##### **Flooring Grade Asphalt/Bitumen:**

Make sure surface is free of loose dirt and dust. Prime the surface with Primeplus diluted 1 part water to 1 part Primeplus mixed with approximately 25% neat cement or adhesive to form a brush on slurry. Setting time of the adhesive will increase slightly.

##### **Ceramic tiles:**

Ensure the surface is free of loose dirt and dust. Prime the surface with Primeplus diluted 1 part water to 1 part Primeplus mixed with approximately 25% neat cement or adhesive to form a brush on slurry. The set time of the adhesive will increase slightly.

##### **Plaster/plasterboard:**

New plaster must be allowed to dry for a minimum of 4 weeks. Make sure the surface is free of loose dirt or dust. Prime surface with 3 parts water to 1 part Primeplus, followed by a second neat coat. It is essential that plasterboard is screwed very firmly, if the board is fixed to a timber frame you must allow for slight movement using an adhesive that is formulated for use on a surface of limited movement or vibration. Light Weight adhesive is suitable for this purpose.

##### **Tile Backer Boards:**

Ensure the boards are fitted competently and will take the weight of tiles and adhesive. Most backer boards will require priming with Primeplus diluted 3 parts water to 1 part Primeplus. Due to the variations of tile backer boards within the industry, we also advise you to check the priming instructions with the board supplier/manufacturer.

##### **Plywood:**

Plywood must be 12mm (minimum), exterior grade, screwed (not nailed) to the substrate at 6 inch/150mm centres. Ensure there is sufficient ventilation beneath the substrate and that the substrate will take the weight of tiles and adhesive. Ensure the surface is free of loose dirt and dust. Prime the surface with Primeplus diluted 3 parts water to 1 part Primeplus.

##### **Underfloor heating:**

When tiling onto existing under floor heating you must switch the heating off 48 hours prior to tiling to allow substrate to cool sufficiently. When tiling has been completed allow 1 week for full cure of adhesive before switching heating on. Start with a low temperature, gradually increasing temperature over 2 weeks.

When tiling on to a new electric element under floor heating system, Tilemaster Adhesives recommend that you use "Levelflex" over the top of the element to give a solid expandable and perfect surface on which to apply tiles. Again, allow one week for full cure before switching the heating on, start with a low temperature, increasing daily over 2 weeks.

##### **Chipboard:**

Chipboard must be a minimum of 18mm and must be screwed (not nailed) every 6 inches/150mm centres to the substrate. Ensure there is enough ventilation beneath substrate and that the chipboard has been fitted competently and will take the weight of tiles and adhesive. Make sure the surface is free of loose dirt and dust. Apply an undiluted coat of Primeplus to all exposed edges and joints and then prime the remainder of the surface with Primeplus diluted 2 parts water to 1 part Primeplus.

##### **T/g boarding and floorboards:**

Existing tongue and groove boards should be screwed down to the joists every 6 inches/150mm 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 free of loose dirt or dust.

Prime the whole surface with neat Primeplus.

Flexmaster additive must be added to Light Weight adhesive diluted 2 parts water to 1 part Flexmaster.

##### **Brick/block:**

Ensure the surface is free of loose dirt and dust. Prime the surface with Primeplus diluted 3 parts water to 1 part Primeplus.

##### **Anhydrite/Gypsum Screed:**

Ensure the Anhydrite/Gypsum screed is confirmed dry via consistent moisture readings across the whole surface. The residual moisture level should be less than 0.5%. If it is a new screed, allow 1 day per mm for drying in ideal conditions. For screeds exceeding 40mm depth, allow 2 days per mm for every mm above 40mm. Remove any laitance from the surface mechanically and remove all dust ideally by vacuum.

Anhydrite/Gypsum screeds must be sealed prior to tiling by applying one coat of Flexmaster diluted three parts water to one part Flexmaster and allow to dry, followed by a second neat coat of Flexmaster.

##### **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 Primeplus diluted 3 parts water to 1 part Primeplus.

##### **Vinyl Tiles/Sheet Vinyl:**

Ensure the existing vinyl tiles/sheet is firm, stable and well adhered to the substrate to which the vinyl was originally applied to. Make sure surface is free of loose dirt and dust. Prime the surface with Primeplus diluted 1 part water to 1 part Primeplus mixed with approximately 25% neat cement or adhesive to form a brush on slurry. Setting time of the adhesive will increase slightly.

##### **Metal:**

Flexmaster admixture must be added to Light Weight adhesive diluted 2 parts water to 1 part Flexmaster. Score the surface to provide a key. Remove grease, loose paint dirt and dust. Prime the surface with Primeplus diluted 1 part water to 1 part Primeplus. The set time of adhesive will increase slightly.

Standard Conformity	Conforms to BS EN 12004 C2 TE S1
Bed Thickness	3mm – 15mm
Coverage	Using a 6mm notch trowel on a flat surface, mixed with 8.5 litres of water, 15kg will cover approximately 9m <sup>2</sup> . Using a 10mm notch trowel, 15kg will cover 6.7m <sup>2</sup>
Open Time/Working Time	Approximately 90 minutes at 20°C
Before Grouting	Approximately 5 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 and protect from excessive drafts.
Shelf Life	Stored correctly this product has a shelf life of 12 months
Colours	White
Pack Sizes	15kg
Note	All work must be carried out in accordance with British Standard Code of Practice for floor and wall tiling BS5385

#### TECHNICAL NOTES:

Light Weight adhesive contains a reducing agent to control the level of Chromium VI. When stored correctly the activity of the reducing agent will be maintained and the product when mixed with water will produce no more than ( 0.0002% ) 2ppm Chromium VI of the total weight of the dry cement. Use of the product after the end of the declared shelf life may increase the risk of an allergic reaction.

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.



**Skyline Building Services Ltd**  
**Old Haigh Foundry Yard**  
**Leyland Mill Lane**  
**Wigan, WN1 2SA**

**www.skylinestone.co.uk**  
**sales@skylinebuildinggroup.co.uk**  
**+44 (0) 1942 824 050**