

Pro Flow

Rapid Setting, High Performance,
Flexible, Double Component
Smoothing Compound

PROFESSIONAL FLOORING PRODUCTS

-  Apply from 2mm - 12mm
-  Rapid setting
-  Moisture tolerant - can be used below a DPM
-  Excellent flow and self-levelling properties
-  Excellent adhesion properties without priming most substrates
-  Apply directly to a DPM within 24 hours without priming
-  Suitable for use over old adhesive residues including bitumen
-  Install resilient floor coverings after 4 hours and ceramic tiles after 3 hours
-  Protein free
-  Low odour

Excellent
Adhesion
Without
Priming Most
Substrates

**MOISTURE
TOLERANT**

Walk On After
90 Minutes
Tile After 3 Hours
LVT After 4 Hours



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DESCRIPTION:

Tilemaster Pro Flow is a rapid setting, high performance, flexible, double component smoothing and levelling floor compound. The specially formulated powder component is mixed with a pre-gauged, protein free polymer liquid, giving a free-flowing, shrinkage compensated floor compound that can be applied from depths of 2mm – 12mm in one application.

Tilemaster Pro Flow has excellent flow and adhesion properties, making it suitable for a wide range of both commercial and domestic applications. These unique properties ensure that Tilemaster Pro Flow can be used with confidence without the need to prime the large majority of substrates. Tilemaster Pro Flow is suitable for use over a wide range of substrates and being moisture tolerant it can be used to smooth subfloors prior to the installation of a Tilemaster FAST One Coat DPM. Tilemaster Pro Flow is ideal for encapsulating electric underfloor heating elements and for use over underfloor heated screeds.

Once mixed, Tilemaster Pro Flow will remain workable for 20 - 25 minutes and it will accept light foot traffic after 90 minutes in ideal conditions. Resilient floor coverings can be installed after 4 hours and ceramic tiles can be applied after 3 hours.

AREAS OF USE:

- ✓ Floors
- ✓ Internal
- ✓ Dry Areas
- ✓ Wet Areas
- ✓ Underfloor Heating
- ✓ Limited Movement/ Vibration

SUBSTRATES:

Specific substrate preparation can be found in the Substrate Preparation Guide section and these instructions must be followed before installation commences

- ✓ Steel
- ✓ Sand & Cement Screeds
- ✓ Green Cementitious Screeds
- ✓ Flooring Grade Plywood Overlay
- ✓ Flooring Grade Asphalt
- ✓ Existing Vinyl Tiles
- ✓ Existing Ceramic, Porcelain & Natural Stone Tiles
- ✓ Epoxy DPM
- ✓ Concrete
- ✓ Calcium Sulphate Screeds

PREPARATION:

Before starting, all substrates must be clean, dry and strong enough to support the weight of the compound and the final floor covering being fitted. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion. Where traces of adhesive residue remain, these must be checked to ensure that they are not softened with water and that they are strong, sound and well adhered to the substrate before applying the compound.

When installing moisture sensitive floor coverings, the concrete or sand & cement screed should be confirmed dry by consistent moisture readings; <75% relative humidity (RH) or <0.5% residual moisture when tested in accordance with BS 8203 and BS 5385. Where a structural damp proof membrane is not present or where rising damp and/or residual moisture results in moisture readings up to 98% RH, Tilemaster FAST One Coat DPM must be applied before or after the application of Tilemaster Pro Flow. Surface laitance should be removed from concrete and sand & cement screed surfaces prior to application.

Most substrates do not require priming prior to the application of Tilemaster Pro Flow. Priming the substrate however will minimize the risk of pinholes forming, allow for the best flow properties and also prolong the working time of the product whilst maintaining a 'wet edge' for a longer period. Priming the substrate prior to application whilst not necessary, it is considered "best practice". For recommended priming dilution rates please refer to pages 3 and 4 of this data sheet.

MIXING AND APPLICATION:

Shake the pre-gauged bottle of liquid polymer and pour into a suitable clean mixing bucket. Add the powder component slowly whilst mixing with an electric paddle and continue to mix for a further 2 minutes until a smooth and lump free consistency is obtained. Once mixed do not add further polymer liquid or water.

N.B: Once mixed, Tilemaster Pro Flow will remain workable in the bucket for 20 - 25 minutes at 23°C. Due to the rapid setting properties of Tilemaster Pro Flow, it is important to apply the mixed product without delay.

Pour the compound onto the prepared surface and trowel down lightly to a depth between 2mm and 12mm. The use of a spiked roller is recommended immediately in order to remove entrapped air and smooth out flow lines. The setting time will then depend on atmospheric conditions/temperatures - it will be slowed by lower temperatures and accelerated by higher temperatures.

If the substrate is impervious or if it contains old adhesive residues, Tilemaster Pro Flow should be applied to a minimum overall thickness of 3mm. This is to ensure the uniform drying of the adhesives that are subsequently applied to the Tilemaster Pro Flow, whilst also ensuring that there is no interaction between the new adhesive and old adhesive residues.

Clean tools immediately after use with clean water.

SETTING AND COVERING:

In ideal conditions, Tilemaster Pro Flow will be set to walk on after 90 minutes. Tilemaster Pro Flow must be left to dry before applying the final surface flooring. This is typically after 3 hours when fitting ceramic, porcelain or natural stone tiles and typically 4 hours when fitting PVC, LVT, carpet & textile and sheet vinyl. Thicker applications may require a longer time to dry prior to applying floor coverings. If there is no airflow within site conditions, the drying time may be restricted.

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SUBSTRATE PREPARATION GUIDE:

Preparation of all substrates is crucial to the success and longevity of all installations. All substrates, as stated in BS 8203 and BS 5385, must be rigid, flat, clean, dry and sound and be free of any contaminants. Anything that could compromise adhesion to the substrate, such as dust, dirt, oil, grease, laitance, sealers, waxes and curing agents will need to be mechanically removed. Ensure that all substrates and backgrounds are strong enough to carry the weight of the compound as well as all finished floor coverings and fixing materials.

Most substrates do not require priming prior to the application of Tilemaster Pro Flow. Priming the substrate however will minimise the risk of pinholes forming, allow for the best flow properties and also prolong the working time of the product. Priming the substrate prior to application whilst not necessary, is considered "best practice".

Where priming is necessary, prime the substrate using Tilemaster Primeplus or Prime+ Grip by following the instructions in this TDS.

Pre-Smoothing: Tilemaster Pro Flow can be used to pre-smooth a cement-based floor with a residual moisture reading of >75% RH prior to the installation of an Epoxy DPM such as Tilemaster FAST One Coat DPM. Mechanically remove any laitance, mould oil, curing agents and any other contaminants. Remove all dust and dirt ideally by vacuum.

N.B: Pre-smoothing is not recommended over old adhesive residues, these need to be fully removed prior the application of Pro Flow.

Floors:

Underfloor Heated Screeds: New sand & cement screeds must be allowed to dry for a minimum of 4 weeks. After this drying out period, the underfloor heating system should be turned on at its lowest temperature setting and the screed should be heated slowly at a maximum rate of 5°C per day up to the maximum operating water temperature, as recommended by the heating manufacturer, and maintained at that temperature for a further 3 days before being allowed to cool to room temperature. To commission the underfloor heating properly the flow temperature should not be limited by room thermostats. The room thermostats should be disconnected and the temperatures controlled manually via the manifold mixing valve, or at the boiler.

When applying Tilemaster Pro Flow onto an existing, fully cured and dry heated screed, where the underfloor heating has been previously commissioned and used, you must switch the heating off 48 hours prior to application to allow the substrate to cool sufficiently.

Ensure that the surface is clean, dry and free of any contaminants. Prime the surface with Tilemaster Primeplus, diluted 3 parts water to 1 part Tilemaster Primeplus, and allow to dry. If the substrate is overly porous then further coats of diluted Primeplus may be required.

Once the finished floor covering is installed, the heating system should not be run for at least ten days in order to allow the fixing materials to cure/dry thoroughly. When turning on the heating, start at the lowest temperature possible and then gradually increase the temperature of the system, on the thermostat, by no more than 1°C per day until the required temperature is achieved.

Underfloor Heating (Electric): When tiling, or fitting a resilient floor covering onto a new electric underfloor system, the cables should be encapsulated into Tilemaster Pro Flow. Ensure that the layer of Tilemaster Pro Flow has the required thickness to meet the requirements of the specific floor covering being installed.

N.B. When installing resilient flooring above an electric underfloor heating element, Tilemaster Pro Flow must be applied to allow for 10mm of compound above the element.

Once the floor tiling is installed, the heating system should not be run for at least ten days in order to allow the fixing materials to cure/dry thoroughly. When turning on the heating, start at the lowest temperature possible and then gradually increase the temperature of the system, on the thermostat, by no more than 1°C per day until the required temperature is achieved.

Tile Backer Board Overlay: Tile backer boards must be fixed following the manufacturers' instructions and be of the required thickness and material for the specific application. Ensure that the boards are securely fixed and adequately braced to provide a rigid surface. Prime the surface with Tilemaster Primeplus, diluted 3 parts water to 1 part Tilemaster Primeplus, and allow to dry. If the substrate is overly porous then further coats of diluted Primeplus may be required.

Steel: Ensure that the metal substrate is rigid, clean, dry and free of any contaminants. Prime the surface with one coat of Tilemaster Prime+ Grip and allow to dry.

Sand & Cement Screeds: Ensure that the surface is clean, dry and free of any contaminants. Prime the surface with Tilemaster Primeplus, diluted 3 parts water to 1 part Tilemaster Primeplus, and allow to dry. If the substrate is overly porous then further coats of diluted Primeplus may be required.

Green Cementitious Screeds: New internal screeds must be allowed to dry for a minimum of 7 days in good drying conditions. The substrate must be visibly dry with no standing water or damp patches evident. Ensure the surface is clean, dry and free of any contaminants.

Class 3 Flooring Grade Plywood: Ensure that the timber subfloor is adequately braced, rigid and flat. The plywood must be conditioned to the environment in which it is to be used and be of the required thickness. The plywood must be securely fixed to the subfloor by screw fixing at 100mm centres around the perimeter of the sheet and at 150mm centres elsewhere, staggering the board joints of all plywood sheets. Ensure the surface is clean, dry and free of any contaminants. Prime the surface of the plywood with one coat of Tilemaster Primeplus, diluted 3 parts water to 1 part Tilemaster Primeplus, and allow to dry.

Flooring Grade Asphalt: The asphalt must be of a suitable flooring grade and must be hard, sound, in good condition, and well adhered to the substrate. Ensure the surface is clean, dry and free of any contaminants. Prime the surface with one coat of Tilemaster Prime+ Grip and allow to dry.

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Existing Vinyl Tiles: The existing tiles must be sound, in good condition and be firmly bonded to the original substrate. Remove any loose or damaged tiles and make good. Any surface sealers must be removed along with any other contaminants that could affect adhesion. When the tiles are confirmed clean and dry prime the surface with one coat of Tilemaster Prime+ Grip and allow to dry.

Existing Ceramic, Porcelain & Natural Stone Tiles: Ensure that the substrate is rigid and can take the additional weight of the new floor covering and preparation and fixing materials. The existing tiles must be sound, in good condition and be firmly bonded to the original substrate. Remove any loose or damaged tiles and make good. Any surface sealers must be removed along with any other contaminants that could affect adhesion. When the tiles are confirmed clean and dry prime the surface with one coat of Tilemaster Prime+ Grip and allow to dry.

Epoxy DPM: The Epoxy DPM must be a suitable flooring grade. The DPM must be sound, in good condition, hard and well adhered to the substrate. Ensure the surface is clean, dry and free of any contaminants. Prime the surface with one coat of Tilemaster Prime+ Grip and allow to dry.

Within 24 hours of Tilemaster FAST One Coat DPM being applied, Tilemaster Pro Flow can be applied directly to the surface of the DPM without the need to prime. If 24 hours has elapsed since the application of the Epoxy DPM, prime the surface with one coat of Tilemaster Prime + Grip and allow to dry.

Concrete: Mechanically remove any laitance and other surface contaminants and remove the dust by vacuum. Prime the surface with one coat of Tilemaster Primeplus, diluted 3 parts water to 1 part Tilemaster Primeplus, and allow to dry. If the substrate is overly porous then further coats of diluted Primeplus may be required.

Power floated concrete will require the surface to be mechanically abraded, to open up the pores and to remove any surface contaminants, before priming.

Calcium Sulphate Screeds: Calcium sulphate screeds dry with laitance on the surface. The laitance must be completely removed by mechanically sanding and/or abrading the surface of the screed. After 7 days the underfloor heating (if the screed is heated) can be commissioned. Once commissioned and allowed to cool the screed can then be moisture tested. Calcium sulphate screeds must be confirmed dry via consistent moisture readings across the whole floor.

Tilemaster Pro Flow is suitable for use on calcium sulphate screeds providing the residual moisture content of the screed is below 0.5%, or the relative humidity is 75% or below. Ensure that the surface is clean, dry and free of any contaminants. Prime the surface with Tilemaster Primeplus, diluted 3 parts water to 1 part Tilemaster Primeplus, and allow to dry. If the substrate is overly porous then further coats of diluted Primeplus may be required. When the first coat of Tilemaster Primeplus is touch dry, apply a neat coat of Tilemaster Primeplus to the surface.

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Screed classification	CT-C16-F7 to EN13813:2002
Working time @ 23°C	20 – 25 minutes
Time to foot traffic @ 23°C	90 minutes
Application thickness	2mm – 12mm
Compressive strength N/mm ² (BS EN 13892-2)	1 day > 9.0 7 day > 12.0 28 day > 16.0
Flexural strength N/mm ² (BS EN 13892-2)	1 day > 3.0 7 day > 4.0 28 day > 7.0
Coverage	A 20kg bag and 5.0Ltr liquid unit will cover 5.0m ² at 3mm thickness
Flow properties using 30mm x 50mm flow ring	135mm – 150mm
Minimum application temperature	5°C
Shelf life	Stored correctly the powder component has a shelf life of 6 months and 12 months for the latex liquid
Colour	Powder – Grey Liquid - White
Pack size	Bag - 20kg Liquid – 5 Litres
Note	All work must be carried out in accordance with British Standard Code of Practice.

HEALTH AND SAFETY

Tilemaster Pro Flow 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.

 15 DoP 037	
Tilemaster Adhesives Ltd Kerakoll Group Tomlinson Road Leyland PR25 2DY United Kingdom	
EN 13813:2002 CT-C16-F7 Cementitious screed material for use internally in buildings	
Reaction to fire	NPD
Release of corrosive substances	CT
Water permeability	NPD
Water vapour permeability	NPD
Compressive strength	C16
Flexural strength	F7
Wear resistance	NPD
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD