TECHNICAL DATA SHEET

MoreFlex Semi-Rapid S1

13/08/26

A semi-rapid setting, S1 flexible, cementitious wall and floor tile adhesive

Key Features

- Highly polymer modified formulation provides excellent flexibility and bond strength
- Use to fix various types of tiles, including porcelain, ceramic, glass mosaics, and natural stone
- Ideal for fixing all tile formats from mosaics to large format
- Formulated for use on a wide range of backgrounds, including areas with limited movement and vibration

Technical Information

Classification *(EN 12004)*		C2 TE S1
Pack size		20kg
Colour		White and Grey
Water required per 20kg bag		White - Approximately 4.2 litres Grey - Approximately 4.0 litres
Application temperature (air and background)		≥ 5˚C
Bed thickness		Up to 15mm
@20˚C	Grout after Pot life Open time	6 hours 2 hours 30 minutes
Consumption per mm bed thickness		Approximately 1.25kg /m²
Temperature resistance (cured adhesive)		-30˚C to 90˚C
VOC emissions		Very low - Conforms to Eurofins Indoor Air Comfort Gold criteria

Areas of Use

Walls and Floors	Interior and Exterior	Wet and Dry Areas	Domestic and Commercial	Water Piped and Electric Underfloor Heating	Limited Movement/ Vibration

Suitable Tiles

Porcelain	Ceramic	Natural Stone	Glass Mosaics	Terrazzo	Brick Slips

Kelmore®

UK CA CE

EN 12004: C2 TE S1

Background and Surface Preparation

Backgrounds must be sufficiently dry and strong enough to carry the total weight being applied. All surfaces must be clean, sound, flat and free from contaminants that could impair adhesion, such as dust, dirt, oil, grease, laitance, and curing agents. Timber bases must be rigid, stable and adequately ventilated. They should support both static and dynamic loads without deflection and be covered with an appropriate intermediate layer. Moisture sensitive backgrounds in wet areas will need protecting using Kelmore's waterproofing systems.

Suitable Wall Backgrounds					PRIMER REQUIRED
A Cement:Sand Render	A Concrete Blockwork	A Plaster (Finish Coat)	A Plasterboard	A Tile Backer Boards	PrimeMore Universal

Suitable Floor Backgrounds				PRIMER REQUIRED
A Cement:Sand Screed (inc. Heated)	A Concrete	A Tile Backer Boards		PrimeMore Universal
B Asphalt (Flooring Grade)	B Epoxy DPM	B Existing Ceramic, Porcelain, and Natural Stone Tiles	B Existing Vinyl Flooring	PrimeMore Grip
C Calcium Sulphate/Anhydrite Screed (inc. Heated)				PrimeMore CS

A Prime with one coat of PrimeMore Universal diluted 1:3 with water. Depending on the porosity of the background, additional diluted coats may be required.	B Prime with one neat, undiluted coat of PrimeMore Grip.	C Prime with one neat, undiluted coat of PrimeMore CS.

The primer must be allowed to dry before applying tile adhesive.

Guidance Notes on Suitable Wall Backgrounds

Prime the following backgrounds with PrimeMore Universal, diluted 1:3 by volume with clean water (1 part primer to 3 parts water). Depending on the porosity of the background, additional diluted coats may be required. All coats must be touch dry before applying additional coats or tile adhesive.

CEMENT:SAND RENDER

- Must be true and firmly bonded.
- New render must be prevented from rapid drying and be allowed to to air dry for at least 2 weeks.

CONCRETE BLOCKWORK

- Must be true and flat.
- Allow to dry for at least 6 weeks.

PLASTER

- Tiles should only be fixed to a finish coat of plaster.
- Ensure it is dry, sound, free from any loose or weak material and well adhered.
- If both a backing coat and finish coat have been applied, allow to dry for a minimum of 4 weeks.
- Overly trowelled plaster should be brushed down with a stiff brush.
- Maximum permitted tiling weight is 20kg/m^2.

PLASTERBOARD

- Boards fixed to stud frames must be the correct thickness, securely fixed and rigid.
- For boards bonded to solid walls, allow the board adhesive to fully set before tiling.
- Maximum permitted tiling weight is 32kg/m^2.

TILE BACKER BOARDS

- Ensure the boards are installed as instructed by the manufacturer.
- Boards fixed to stud frames must be the correct thickness, securely fixed and rigid.
- For boards bonded to solid walls, allow the adhesive to fully set before tiling, and use mechanical fixings where specified by the manufacturer.
- Proprietary boards have varying weight limits - consult the manufacturer for details.

Guidance Notes on Suitable Floor Backgrounds

Prime the following backgrounds with Prime*More* Universal, diluted 1:3 by volume with clean water (1 part primer to 3 parts water). Depending on the porosity of the background, additional diluted coats may be required. All coats must be touch dry before applying additional coats or tile adhesive.

CEMENT:SAND SCREED

- Allow new screeds to dry for at least 3 weeks.
- Direct fixing of some natural stone tiles will require extended drying times, determined by the screed's thickness and drying conditions.
- For proprietary screeds, follow the manufacturer's recommendations for preparation and drying times.

HEATED CEMENT:SAND SCREED

- New screeds must be commissioned from 3 weeks after screed installation and before work commences.
- Heat slowly at a maximum rate of 5ºC per day until the maximum operating temperature is reached. Hold this temperature for 3 days before allowing the screed to cool to room temperature.
- For proprietary screeds, follow the manufacturer's recommendations for commissioning and preparation.

CONCRETE

- Allow new concrete to cure before being subjected to continuous air drying in good conditions for at least 6 weeks.
- Power floated concrete should be mechanically prepared to achieve a clean, sound, micro-textured, dust-free surface.

TILE BACKER BOARDS

- Must be installed as instructed by the manufacturer and be securely fixed to rigid, suitable, prepared bases.
- Where boards have been installed on solid bases using tile adhesive, ensure the adhesive has fully set before commencing tiling.

Prime the following backgrounds with one neat, undiluted coat of Prime*More* Grip. Allow the primer to dry before applying tile adhesive.

FLOORING GRADE ASPHALT

- Must be hard, sound and firmly adhered.

EPOXY DPM

- Must be a flooring grade that is compatible with cementitious products.
- Ensure it is hard, sound and firmly adhered.

EXISTING CERAMIC, PORCELAIN, AND NATURAL STONE TILES

- Must be in good condition, free from contaminants and well bonded.
- Ensure the existing structure can take the additional weight.

EXISTING VINYL FLOORING

- Only hard vinyl can be tiled over - cushion vinyl must be removed.
- Ensure it is in good condition, free from contaminants and well bonded.

Prime calcium sulphate/anhydrite screeds with one neat, undiluted coat of Prime*More* CS. Allow the primer to dry before applying tile adhesive.

CALCIUM SULPHATE / ANHYDRITE SCREED

- All laitance and surface contaminants must be completely removed.
- The screed must be confirmed adequately dry (≤85% RH).

HEATED CALCIUM SULPHATE / ANHYDRITE SCREED

- All laitance and surface contaminants must be completely removed.
- New heated screeds must be commissioned from 7 days after screed installation and before work commences.
- The screed should be heated slowly and in accordance with the recommendations of the screed manufacturer.
- The screed must be confirmed adequately dry (≤85% RH).

ADDITIONAL INFORMATION

Underfloor Heating: It is recommended that electric underfloor heating cables are fully encapsulated within a suitable Kelmore levelling and smoothing compound.

After completing installations on backgrounds incorporating underfloor heating, the heating system should not be run for 10 days. Following this period, the floor temperature must be gradually raised to its optimal operating temperature, with an increase of no more than 2ºC per day.

Green Cementitious Screed and Concrete: LokStar Membrane can be fitted using More*Flex* S1 adhesives when unheated green screeds and concrete are load bearing.

Mixing

Mix with clean, cold water: white requires approximately 4.2 litres and grey approximately 4.0 litres, per 20kg bag. The amount of water used in the initial mix may be adjusted slightly to obtain the optimum consistency for the specific application, but the adhesive must always remain slump-free.

Pour the water into a clean bucket, then gradually add the powder whilst mixing thoroughly until a smooth, creamy, slump-free consistency is achieved. To maximise pot life, open time and workability, allow the mixed adhesive to stand for 2 minutes, then remix briefly before use.

Application

Apply the mixed adhesive to the wall or floor, then use an appropriately sized notched trowel to form consistent, straight ribs. Fix the tiles within the open time, ensuring good contact with the adhesive. Any adhesive that forms a skin must be removed and replaced with fresh adhesive. Where solid bed fixing is required, the adhesive under or behind the tile should, as far as possible, be free of voids. To achieve this, in addition to trowelling the background, the tile may also require back-buttering or trowelling. Clean any adhesive from the tile face and grout joints before the adhesive has set.

Coverage

Coverage will vary depending on the flatness of the background, the profile of the tile back and the adhesive bed thickness. The table below shows the approximate coverage of a 20kg bag at different solid bed thicknesses.

Solid Bed Thickness	1.5mm	2mm	2.5mm	3mm	4mm	5mm
Approximate Coverage	10.6m²	8m²	6.4m²	5.3m²	4m²	3.2m²

Grouting

Allow the adhesive to sufficiently set before grouting the tiles. When tested to the industry standard temperature of 20°C, More*Flex* Semi-Rapid S1 has been formulated to enable grouting after 6 hours. Please note setting and curing times are subject to site conditions, including temperature, humidity, and tile/background porosity.

Notes:

- Cementitious adhesives should only be used when both air and background temperatures are 5°C or higher. If the temperature falls below 5°C, the chemical reaction required for the adhesive to set is hindered, dramatically slowing the curing process. Normal setting will only resume once temperatures rise. However, if temperatures drop below freezing before the adhesive has fully set, the integrity and performance of the product will be compromised.
- To ensure suitability with highly porous stone, a test should be carried out prior to use.

Cleaning: All tools should be cleaned with water after use and before the product sets.

Health and Safety: Safety Data Sheet is available on our website or on request using the contact details below.

Storage and Shelf Life: When stored in unopened packaging, off the ground, and in cool, dry conditions, this product has a shelf life of 12 months.

BS & EN Standards: Product should be used in accordance with the requirements of the relevant British and European Standards.

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