TECHNICAL DATA SHEET

MoreFlex Standard S1

01/02/25

Kelmore's More*Flex* Standard S1 is a highly polymer modified, flexible, standard setting, cementitious tile adhesive for walls and floors. This deformable adhesive has excellent bond strength and flexibility ensuring various types of tiles, such as porcelain, ceramic and most natural stone, can be confidently fixed to a wide range of backgrounds, including those subject to limited movement and vibration. Allowing bed depths up to 15mm, More*Flex* Standard S1 has a long pot life of 4 hours and an excellent open time of 40 minutes, whilst still enabling the tiles to be grouted after 16 hours. Showing its true versatility, this adhesive is suitable for both interior and exterior use, as well as in wet areas, including swimming pools, and it is particularly recommended for fixing large format tiles. More*Flex* Standard S1 has been manufactured to the highest of standards using unique technologies, extensive knowledge and outstanding raw materials. When compared to the production of traditional cementitious adhesives, this results in a significant reduction in CO_2 emissions.

MoreFlex Standard S1

Classification *(EN 12004)*		C2 TE S1
Pack size		20kg
Colours		White and Grey
Water required per 20kg bag		White - Approximately 5.0 litres Grey - Approximately 4.8 litres
Application temperature (air and background)		≥ 5˚C
Bed thickness		Up to 15mm
@20˚C	Grout after Pot life Open time	16 hours 4 hours 40 minutes
Consumption per mm bed thickness		Approximately 1.25kg /m²
Temperature resistance (cured adhesive)		-30˚C to 90˚C

Areas of Use

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

Suitable Tiles

Porcelain	Ceramic	Natural Stone (non-moisture sensitive)	Glass (mosaics only)	Terrazzo	Brick Slips

Kelmore Ltd, The Dell, Berry Way, Chorley, PR7 6RA
Tel: **01257 830511** Email: **technical@kelmore.co.uk**

Kelmore MoreFlex Standard S1

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.

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 inhibit 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 locations will need protecting using Kelmore's waterproofing systems.

Guidance notes on suitable wall backgrounds

Prime the following backgrounds with one coat of PrimeMore Universal diluted 1:3 by volume with clean water (1 part PrimeMore Universal to 3 parts clean water).

Depending on the porosity of the background, additional diluted coats of PrimeMore Universal may be required.

All priming coats must be allowed to dry before applying additional coats and before applying tile adhesive.

CEMENT:SAND RENDER
Must be true and firmly bonded to the background. Prevent from rapid drying and allow to air dry for at least 2 weeks.

CONCRETE BLOCKWORK
Must be true and flat and be allowed to dry for at least 6 weeks.

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

PLASTERBOARD
Boards fixed to timber studwork 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 weight when tiling onto bare plasterboard is 32kg/m^2.

TILE BACKER BOARDS
Ensure the boards are installed as instructed by the manufacturer. Boards fixed to timber studwork should be the correct thickness, securely fixed and rigid. For boards bonded to solid walls, allow the adhesive to fully set before tiling, and use any mechanical fixings as 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 one coat of Prime*More* Universal diluted 1:3 by volume with clean water (1 part Prime*More* Universal to 3 parts clean water).

Depending on the porosity of the background, additional diluted coats of Prime*More* Universal may be required.

All priming coats must be allowed to dry before applying additional coats and before applying tile adhesive.

CEMENT:SAND SCREED
Allow new screeds to dry for at least 3 weeks. Direct fixing of natural stone, agglomerated stone, and terrazzo tiles requires extended drying times, determined by the screed's thickness and the drying conditions. For proprietary screeds, follow the manufacturer's recommendations for preparation and drying times.

HEATED CEMENT:SAND SCREED
New heated screeds must be commissioned from 3 weeks after screed installation and before work commences. Heat slowly at a maximum rate of 5°C per day until the maximum operating temperature is reached. Hold this temperature for 3 days before allowing the screed to cool to room temperature. The underfloor heating should be turned off, or in cold weather, run so that the screed is held at approximately 15°C whilst tiling commences. 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 that 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 of the new tiling.

EXISTING VINYL FLOORING
Only hard vinyl can be tiled over - cushion vinyl is not suitable and will need to 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. Ensure the moisture content of the screed is no greater than 85% Relative Humidity (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.

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Mixing

More*Flex* Standard S1 should be mixed with clean, cold water. White requires approximately 5.0 litres and Grey approximately 4.8 litres per 20kg bag. The amount of water used in the initial mixing can 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 before gradually adding the powder. Mix thoroughly until a smooth, creamy, slump-free consistency is achieved. To maximise the 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 before using a notched trowel to serrate consistent, straight ribs of adhesive. Bed in the tiles within the open time ensuring good contact with the adhesive. The adhesive coverage behind the tile must be sufficient for the given application and specific tile being fixed. Any adhesive that forms a skin must be removed and fresh adhesive reapplied.

Where solid bed fixing is required, as far as possible the adhesive under the tile should be free of voids and fully supported. 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 as work proceeds and before the adhesive has set.

Coverage

Will vary dependent on the flatness of the background, the profile of the tile back and the adhesive bed thickness. To cover 1m^2, approximately 1.25kg of powder will be required for every mm thickness of solid bed adhesive. This equates to the following approximate coverage per 20kg bag:

Adhesive Thickness	1.5mm	2mm	2.5mm	3mm	4mm	5mm
Approximate Coverage	10.6m^2	8m^2	6.4m^2	5.3m^2	4m^2	3.2m^2

Grouting

When tested to the industry standard temperature of 20°C, More*Flex* Standard S1 is formulated to sufficiently harden within 16 hours, allowing for grouting without dislodging the tiles. Please be aware that higher temperatures will shorten the set time and lower temperatures will extend the set time.

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.
- In conditions above 30°C, the product's setting time will be significantly accelerated, which could make it difficult to work with. When use in higher temperatures is unavoidable, steps must be taken to keep the air, background, water, and products as cool as possible.

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

HEALTH AND SAFETY For detailed information, please refer to and follow the advice stated on the SDS (Safety Data Sheet) which can be accessed on our website – www.kelmore.co.uk or alternatively by contacting Kelmore Ltd.

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 5385 More*Flex* Standard S1 should be used in conjunction with work carried out under the British Standard Code of Practice for Wall and Floor Tiling.

All the information supplied by Kelmore Ltd is offered in good faith and is derived from the company's combined knowledge, experience and testing. Without prior notice, due to on-going research and development, the information we offer can be updated at any time. Kelmore's products are developed, tested and manufactured to consistently high standards, however, we accept no liability for any loss or damage which may arise from factors outside of our control, such as site conditions and/or the execution of the work.

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