

TECHNICAL DATA SHEET

One Coat DPM *Fast*

01/01/24

Kelmore's One Coat DPM *Fast* is a 2 part, epoxy damp proof membrane and residual moisture suppressant. This solvent free product cures in approximately 4½ hours, creating a surface membrane able to withstand moisture in cementitious screeds and concrete up to 98% Relative Humidity (RH) and up to 90% RH in calcium sulphate screeds. By regulating the application thickness, the product can either be used to create a damp proof membrane able to combat rising damp, or to suppress residual moisture. One Coat DPM *Fast* can also be used on heated screeds and once cured has excellent resistance to not only water, but grease, oil, aqueous salt solution and dilute mineral and organic acids.



One Coat DPM *Fast*

Pack Sizes		5kg 10kg
Colour		Blue
Application Temperature (air and background)		≥ 10°C
@20°C	Working time	20 minutes
	Cure time	Approximately 4½ hours
Approximate Coverage	A2 trowel	5kg = 12.5m ² 10kg = 25m ²
	B1 trowel	5kg = 10.5m ² 10kg = 21m ²
	B2 trowel	5kg = 9m ² 10kg = 18m ²

Areas of Use

Floors	Interior	Exterior	Domestic	Commercial	Heated Screeds
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Suitable Backgrounds

Cement:Sand Screed (inc. Heated)	Calcium Sulphate/Anhydrite Screed (inc. Heated)	Kelmores's Moisture Tolerant Levelling and Smoothing Compounds (LevelMore Absolute 30, Pro, and Flex&Fibre)
Concrete	Existing Ceramic, Porcelain, and Natural Stone Tiles	

BACKGROUND AND SURFACE PREPARATION

Ensure the background has sufficient surface strength and is free of any standing water. All surfaces must be clean, sound and free from contaminants that could inhibit adhesion, such as dust, dirt, oil, grease, laitance, and curing agents. Any existing adhesive residues and levelling and smoothing compounds that are not moisture tolerant will need to be completely removed. Concrete or cementitious screeds that have a rough textured or uneven surface should be pre-smoothed with a moisture tolerant Kelmores levelling and smoothing compound.

Guidance notes on suitable floor backgrounds

CEMENT:SAND SCREED: The moisture content of the screed must be confirmed to be no greater than 98% Relative Humidity (RH).

HEATED CEMENT:SAND SCREED: New heated screeds must be commissioned from 3 weeks after screed installation and before work commences. The screed should be heated slowly at a maximum rate of 5°C per day until the maximum operating temperature (as recommended by the heating manufacturer) is reached. Hold this temperature for 3 days before allowing the screed to cool.

All proprietary cementitious screeds should be commissioned and prepared in accordance with the recommendations of the screed manufacturer.

Underfloor heating must be switched off 48 hours prior to applying Kelmores One Coat DPM Fast.

CONCRETE: The moisture content of the concrete must be confirmed to be no greater than 98% Relative Humidity (RH). Power floated concrete should be mechanically prepared by suitable means to provide a clean, sound, micro-textured, dust free surface.

CALCIUM SULPHATE/ANHYDRITE SCREED:

All laitance and surface contaminants must be completely removed. The moisture content of the screed must be confirmed to be no greater than 90% Relative Humidity (RH).

HEATED CALCIUM SULPHATE/ANHYDRITE SCREED:

All laitance and surface contaminants must be completely removed. New heated screeds must be commissioned before commencing work. This can be started from 7 days after the screed has been installed and heat should be introduced slowly and in accordance with the recommendations of the screed manufacturer. The moisture content of the screed must be confirmed to be no greater than 90% Relative Humidity (RH).

Underfloor heating must be switched off at least 48 hours prior to applying Kelmores One Coat DPM Fast.

EXISTING CERAMIC, PORCELAIN, AND NATURAL STONE

TILES: Must be in good condition, free of any contaminants and well bonded to a solid base.

KELMORE'S MOISTURE TOLERANT LEVELLING AND SMOOTHING COMPOUNDS:

LevelMore Absolute 30, LevelMore Pro and LevelMore Flex&Fibre are all moisture tolerant and can be used to pre-smooth subfloors prior to applying Kelmores One Coat DPM Fast.

Mixing

One Coat DPM Fast is a 2 part product, comprising of an epoxy resin and a liquid hardener. Both components are pre-gauged and must only be mixed together in their entirety at this predetermined ratio. Both components are packaged together, a removable insert houses the hardener whilst the resin is in the bottom of the bucket.

Carefully remove the insert and pour all the hardener into the bucket containing the resin before thoroughly mixing the 2 components together using a drill and whisk. To ensure all the hardener has been added, and to render the insert non-hazardous waste for safe disposal, once mixed, coat the inside of the insert with product before scraping back into the bucket and mixing one final time. Ensure the hardener and resin are completely combined and that the colour of the mixed product is consistent and streak free. One Coat DPM Fast is ready for use immediately after mixing.

Mixing the 2 components together creates an exothermic reaction, therefore, to optimise working time, the mixed product should be removed from the bucket as soon as possible, as leaving it in the bucket will exacerbate heat retention and reduce working time.

Application

Application should only be undertaken when temperatures are 10°C or above.

Apply One Coat DPM Fast to the background using an appropriately sized V notched trowel (see table below), held at approximately 60°. The trowel is used to gauge the application thickness of the product and as work proceeds the trowel ridges will need to be flattened and smoothed using a short pile paint roller. To ensure the trowelled product is not pulled from the background into a dry roller, it is imperative that the roller is initially pre-wetted with mixed One Coat DPM Fast prior to flattening and smoothing the ridges.

Substrate	Use where:	Minimum Application Thickness	Trowel Required
Cementitious Screeds and Concrete	Residual moisture is present up to 87% RH	250 microns	A2
	Residual moisture is present up to 98% RH	300 microns	B1
	A DPM needs creating	350 microns	B2
Calcium Sulphate/ Anhydrite	Residual moisture is present up to 90% RH	350 microns	B2

Drying

Drying times will vary dependent on the porosity of the background, ambient temperature and humidity. When tested to the industry standard temperature of 20°C, One Coat DPM Fast will be hard, dry and tack-free after 4½ hours. At this point, One Coat DPM Fast can be primed using PrimeMore Grip in preparation to receive a Kelmores levelling and smoothing compound or tile adhesive. Priming is not necessary if using LevelMore Absolute 30 or LevelMore Pro within 24 hours of applying One Coat DPM Fast. Please be aware that higher temperatures and low humidity will shorten the drying time and lower temperatures and high humidity will extend the drying time.

If upon drying, the surface of the DPM does not appear glossy or pinholes are present, then this would indicate that the product has been drawn too quickly into the background and a 2nd coat of One Coat DPM Fast will need to be applied.

Coverage

Coverage will vary dependent on the texture of the background and the application thickness of the product. As a guide, One Coat DPM Fast, when used on smooth surfaces, will provide the following approximate coverage when using these sized trowels:

Pack Size	A2 Trowel	B1 Trowel	B2 Trowel
5kg	12.5m ²	10.5m ²	9m ²
10kg	25m ²	21m ²	18m ²

NOTE: One Coat DPM Fast should only be used when the temperature (air and background) is 10°C or above. Use when temperatures are in excess of 30°C should be avoided as the set time of the product will be accelerated significantly, making it extremely difficult to use.

CLEANING: All tools should be cleaned immediately after use and before the product cures.

HEALTH AND SAFETY: One Coat DPM Fast is classified as an irritant and may cause sensitisation on repeated skin contact. Wear appropriate PPE when using this product. 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.kelmores.co.uk or alternatively by contacting Kelmores Ltd.

STORAGE AND SHELF LIFE: One Coat DPM Fast must be stored in unopened packaging, off the ground, and in temperatures between 5°C and 25°C. If stored in this way, the shelf life of this product is 24 months.

BS 8203 & BS 5385: One Coat DPM Fast should be used in conjunction with work carried out under the British Codes of Practice for the Installation of Resilient Floor Coverings, or for Wall and Floor Tiling.

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