

Cemfloor

Marshall's Cemfloor is made with a cement-based binder and specially formulated additives in conjunction with McGraths Limestone (Cong) Ltd. & Cemexa Technologies of France. It is pump applied due to its fluid consistency. This means that it is easier to lay, covering large surface areas in a day. It is also thinner than conventional screeds making it the natural choice for underfloor heating systems.

Marshall's Cemfloor screed is manufactured to the requirements of BS EN 13813 under a quality scheme certified to ISO 9001 and are regularly tested to the requirements of the latest British Standards. All our raw materials conform to British and European Standards to ensure quality and consistency. Floors are suitable for foot traffic typically in just 24-48 hours.

Marshall's Cemfloor is ideal for a wide range of screed applications. Its class leading thermal conductivity and minimum thickness make it ideal for use with underfloor heating.

WHY CHOOSE MARSHALL'S CEMFLOW?

It can be laid thinner than traditional screed solutions without detriment to its performance so any underfloor heating pipes are closer to the surface (minimum cover to pipes 25mm).
Cemfloor can be laid as a floating construction over most types of rigid insulation board or acoustic foam at a minimum thickness of 35mm in domestic applications. It offers significant program benefits as large floor areas can be laid in one day. Very low shrinkage values mean you need less construction joints than traditional cement based screeds.
It is installed by trained and competent contractors who have been trained to install the product correctly.
Excellent supply network with company trucks and drivers to provide high quality service. All material is wet batched to ensure product consistency.

MARSHALL'S CEMFLOW VS TRADITIONAL SCREED SOLUTIONS

Does not require reinforcement
Does not curl
Doesn't need as many construction joints
You don't need to compact it
You don't need to lay it at 75mm thick
It is batched and mixed of site under strict quality controlled conditions to BS.EN.13813.
It is delivered to site by truck mixer, ready-to-pump.

THE CEMFLOOR PRODUCT RANGE PERFORMANCE

Cemfloor (Domestic and Underfloor Heating)	C20 F4
Cemfloor (Commercial Use)	C25 F5
Cemfloor (High Strength for Special Uses)	C30 F6

Note – C20 F4 is the standard product that will be supplied. Higher strength versions available upon request.

CONSIDERATIONS IN USE

Marshall's Cemfloor can be used in all types of flooring application. The building should be weatherproof before screeding commences. Where applicable, especially on ground floors, there must be a damp-proof membrane below the screed or base. The screed should only be laid when the internal air temperature is between 5°C and 30°C.
Marshall's Cemfloor should be used and installed in accordance with the recommendations given in the Code of Practice: BS 8204. The freshly poured screed is levelled using a dappling bar, ensuring two passes are undertaken 90 degrees to each other.

FLOWING PLACING

The floor should not be subjected to severe draughts, direct sunlight or heating for the first 24-48 hours to prevent rapid drying during this important early stage. Marshall's Cemfloor is sprayed with a water based curing agent with a minimum efficiency of 75% (Adomast Safecure or similar product to be used) after placing. The room in which the screed has been laid should be sealed therefore for a minimum of 24 hours, the room will be suitable for light foot traffic after this period and can be worked on after 72 hours.

BENEFITS

Fast Installation	Due to its self-compacting and fluid characteristics, large surface areas can be laid with Marshall's Cemfloor in just one day – up to 1,000m². Since Marshall's Cemfloor is a cement based screed; fast-track tile adhesives can be used on the screed. In heated floors, tiles can be applied once the heating system has been commissioned fully. For impermeable floor coverings the screed must be allowed to dry out to the required relative humidity as specified by the manufacturer of the floor covering.
High Strength	Stronger than sand cement screed due to full compaction and no voids, Marshall's Cemfloor requires no reinforcement and no manual compaction.
Flexible Choices	New build and renovation work. Unbonded, bonded or floating construction. Residential and commercial. With or without underfloor heating. Wet or dry areas. Offers total flexibility. Mix designs available for all types of construction applications.
Low Shrinkage	Minimal drying shrinkage (less than 0.05%) – Marshall's Cemfloor is less prone to shrinkage than sand cement screeds and therefore requires fewer construction joints. Typically bay sizes of up to 150m² without the need for construction joints.
Surface Finish	Excellent surface regularity to minimum SR2 and capable of receiving floor coverings such as tiles, wood carpet, vinyl and other toppings as listed in BS8203:2001. No sanding or other surface preparation required before applying floor finishes.
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DRYING

The ambient conditions must be suitable for the drying of the screed with low air humidity (preferably 60% RH or less) and good ventilation.
Please note that moisture in the sub-base will impede the drying of the screed. Before floor finishes are laid, the moisture content of the screed should be ascertained to be at, or below the required level. Forced drying of Marshall's Cemfloor is possible if required: after seven days heaters and dehumidifiers may be used to improve drying conditions. Underfloor can be commissioned after 7-days and can also be used to speed up the drying time.
The British standard for testing a base to receive a resilient floor covering is to use a Hair Hygrometer. This non-destructive test, when used strictly to the method defined in BS8203:2001, will give reliable results on Marshall's Cemfloor floor screeds.

FLOOR FINISHES

Any type of floor finish can be applied to the Marshall's Cemfloor screed. The method for surface preparation is the same as for any other type of screed.
All adhesives, DPM's, cementitious based and fast-track systems can be used with no issue.
No surface sanding is required to remove any laitance, however any building residue on the floor must be removed prior to the application of the floor finishes by lightly sanding the floor.
Before floor finishes are laid, the moisture content of the screed should be checked by the floor finish contractor.

TECHNICAL INFORMATION

Minimum Thickness (Standard Product - C20 F4)	Bonded = 25mm
Unbonded Over a Solid Base	Minimum = 30mm Floating over thermal/sound insulation = 35mm = Commercial = 40mm
Cover Over Conduits/Heating Pipes	Minimum = 25mm

SPECIFICATION & TECHNICAL PRODUCT INFORMATION FLOW

Flow Range	230mm–260mm (target for laying – 240mm)
Maintenance of Fluidity	Up to 3 hours – extended workability mixes can be supplied upon request.
Compressive Strength at 28 Days (standard product)	20N/mm ²
Flexural strength at 28 days (standard product)	4N/mm ²
Drying shrinkage at 28 days	0.05%
Thermal conductivity	2.9w/mK +/- 0.2
Fire rating (BS 476: Part 4)	non-combustible
In-Situ Impact Resistance	Category B - standard product Category A - standard product
PH	Less than 10
Fresh Wet Density	Typically 2,100 - 2,200kg/m ³
Dry Density	2,000kg/m ³