

## Marshalls Premflow

### FREE FLOW PUMPED SCREED

Marshalls Premflow is made with an anhydrite binder in place of cement and is pump applied due to its fluid consistency. This means that it is easier to lay, covering areas in excess of 1,000m<sup>2</sup> in a day. It is also thinner than conventional screeds making it the natural choice for underfloor heating systems.

Marshalls Premflow screeds are 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 within just 24-48 hours, while drying takes just 40 days, or sooner with force drying (available after only 7 days).

Marshalls Premflow is ideal for a wide range of screed applications. Its high thermal conductivity and minimum thickness make it ideal for use with underfloor heating. Furthermore, because it's free from protein and doesn't harbour potentially harmful bacteria, it's an excellent choice for hospitals and care homes.

### BENEFITS

**Fast installation** - Marshalls Premflow can be laid in areas of up to 2,000m<sup>2</sup> in just one day. It is suitable for foot traffic within 24-48 hours while partitions can be erected just seven days after placing.

**High strength** - Stronger than sand cement screed, Marshalls Premflow 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.

**Low shrinkage** - Marshalls Premflow is less prone to shrinkage than sand cement screeds and therefore requires fewer construction joints.

**More sustainable** - Marshalls Premflow doesn't contain any cement and has an overall recycled content of 35%.

**Excellent Surface Finish** - Surface regularity to SR2 and capable of receiving floor coverings such as tiles, wood carpet, vinyl and other toppings as listed in BS8203:2001.

### WHY CHOOSE MARSHALLS PREMFLOW?

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 30mm).

It can be force dried through the underfloor heating commissioning process as early as 7 days after being installed.

Premflow can be laid as a floating construction over most types of rigid insulation board or acoustic foam at a minimum thickness of 40mm.

It is a sustainable choice with a Calcium Sulphate (Gypsum) binder making a screed with over 35% recycled content and the ability to recycle it at the end of the buildings life.

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 cement based screeds.

It is protein free and will not harbour bacteria.

It can receive foot traffic 48 hours after placing and partitions can be erected 7 days after placing.

It is installed by trained and competent contractors who have been trained to install the product correctly.

Nationwide plant supply network with company trucks and drivers to provide high quality service. All material is wet batched to ensure excellent product consistency.

### MARSHALLS PREMFLOW 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

You can specify strength classes of 25Nmm<sup>2</sup> or 35Nmm<sup>2</sup>

It contains zero cement and is therefore over 35% recycled.

It is batched and mixed off site under strict quality controlled conditions to BS.EN.13813.

It is delivered to site by truck mixer, ready-to-pump.

### APPLICATION

Sub-floor levelling

For use with or without underfloor heating

Unbonded, bonded or floating construction

Ideal for both new build and renovation work

Suitable for all residential and commercial floors carrying pedestrian traffic within BS 8204 classification

It is compatible with the majority of timber frame construction systems due to its density at 40mm thickness (80kg/m<sup>2</sup>).

# Marshalls Premflow

## THE PREMFLOW PRODUCT RANGE

Premflow	CA25 F4
Premflow LL (Low Laitance)	CA25 F4
Premflow Xtra	CA35 F6

Depending upon plant location and materials stocked at that plant, we are also able to offer "Excelio" or "TS15/20" and "Thermio" or "HTC" branded solutions.

## CONSIDERATIONS IN USE

Marshalls Premflow is not suitable as a wearing surface itself or for external or permanently wet areas such as swimming pool surrounds.

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.

Premflow should be used and installed in accordance with the recommendations given in the Code of Practice: BS 8204

## FLOWING PLACING

No curing is required, however the floor should not be subjected to severe draughts, direct sunlight or heating for the first 72 hours to prevent rapid drying during this important early stage.

The room in which the screed has been laid should be sealed therefore for a minimum of 48 hours, the room will be suitable for light foot traffic after this period and can be worked on after 72 hours.

## DRYING

Product may need light sanding to remove any surface laitance. 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 Marshalls Premflow is possible if required: after seven days heaters and dehumidifiers may be used to improve drying conditions.

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 Marshalls Premflow floor screeds.

## FLOOR FINISHES

Any type of floor finish can be applied to a Premflow screed. The method for surface preparation is the same as for any other type of screed.

Consideration should be given to priming which will be necessary if adhesion is required. In order to ensure adhesion of floor coverings a primer that is compatible with the floor covering adhesive must be used.

Special care should be taken when bonding to Premflow.

Anhydrite screeds will react with cement based products and will require a polymer type sealer prior to adhesion. Alternatively there are anhydrite compatible products on the market. If there is any doubt on what is suitable, please seek technical advice from Marshalls.

Any surface laitance should be removed by sanding the surface, ideally 7-10 days after the screed was laid. This will assist the drying process of the screed.

A "low laitance" version is available which removes in excess of 90% of the overall surface laitance of the product. However, it is still recommended that the screed is lightly sanded before priming or application of floor finishes when using this product.

Before floor finishes are laid, the moisture content of the screed should be checked by the floor finish contractor.

# Marshalls Premflow

## TECHNICAL INFORMATION

For detailed information on correct floor build-ups and specification of anhydrite screeds, please consult our binder partners websites directly.

<http://www.gyvlon.co.uk/en/>  
<http://gypsol.co.uk/home>

Minimum thickness (Standard Product - CA25 F4)

Bonded = 25mm

Unbonded over a solid base

Nominal = 35mm

Minimum = 30mm

Floating over thermal / sound insulation = 40mm

Cover over conduits / heating pipes

Minimum = 30mm

## SPECIFICATION & TECHNICAL PRODUCT INFORMATION

Flow range = 230mm–280mm

Maintenance of fluidity = 2 hours

Compressive strength at 28 days (standard product) = CA25F4

Flexural strength at 28 days (standard product) = 4N/mm<sup>2</sup>

Thermal expansion = 0.012mm/moK

Drying shrinkage at 28 days = 0.02%

Thermal conductivity = 2.0w/mK +/- 0.2

Fire rating (BS 476: Part 4) = non-combustible

Drying Time at 20°C 60% RH: Up to 40mm thickness – 1 day/mm.

Over 40mm thickness – 2 day/mm

In-Situ Impact Resistance - Category A

PH: less than 10

Fresh Wet Density: typically 2,200 kg/m<sup>3</sup>

Dry Density: typically 2,000 kg/m<sup>3</sup>