

THE MORTAR & SCREED COMPANY

LTD

THE OAKLANDS, ADMASTON, TELFORD, SHROPSHIRE, TF50AN
TEL: 01952 224202 FAX: 01952 223932

Product Data Sheet No. 6

Rapid 3 & Rapid 5 Screed

Introduction

The Mortar & Screed Company Ltd.'s Rapid range of screed has been designed to give increased early strength, by accelerating the drying time of the screed allowing faster traffic access onto the screed.

Rapid screeds have the introduction of additives which are easily dispersed during the mixing process. By means of electrostatic repulsion and steric hindrance 'Rapid 3 & 5' allows the release of trapped water in the matrix to maximise the hydration of the cement thereby giving faster drying times, increased strength and lower porosity.

Rapid by its function of water reduction will also reduce the occurrence of drying shrinkage in the screed.

There are 2 variations of the Rapid screed:

- Rapid 3
3mm / day drying time
- Rapid 5
5mm/ day drying time

Benefits: Rapid 3 & Rapid 5

- Faster acceptance of foot traffic to the screed
- Reduces waiting time to final finishing trades
- Easier screed placing and compaction
- Reduced shrinkage of the screed
- Strong and durable surface
- Low porosity
- Can be used with screed pumps
- Quality controlled
- No on-site mixing required
- Faster placing of floor finishes

Constituents & Manufacture

All constituent materials used in the production of the whole range of our products are carefully selected, accurately proportioned to ensure a consistently finished product. Admixtures are used to ensure the screed remains workable for a predetermined amount of time, usually 10 hours to fulfil site requirements.

Performance and Strength

When specified correctly and used in accordance to Codes of Practice the screed supplied will last the design life of the build.

Both of our Rapid screeds provide excellent durability due to the carefully selected materials used and accurately proportioned mixing.

Our screed will provide a consistence that would be extremely difficult to replicate with site mixed material.

Screed should never be used as a wearing surface.

Screed Product	Rapid 3	Rapid 3	Rapid 5	Rapid 5
BS EN 13813	1:3	1:4	1:3	1:4
Minimum Compressive Strength (Nmm ²)	35	25	35	25
Minimum Flexural Strength (Nmm ²)	4	3	4	3

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Density

Typical Results	Density (kg/mm ²)
Fresh Wet Sample	1800 - 2000
Dried & Cured	2000 - 2200

Application Types

(Bonded)

Bonded screed must be a minimum thickness of 25mm. The bond quality depends on the diligence used in the preparation work carried out. The concrete substrate must be swept clear of any dust and other contaminants such as oils, grease, soil, lime or gypsum based products must be removed. Before the screed is placed and appropriate bonding agent must be applied to the substrate, ensuring it has not dried prior to laying the screed. Scrabbling the surface is recommended as best practice.

(Unbonded)

Where it is not possible to achieve a complete bond between the screed and substrate a plastic membrane should be used to seal to substrate. The minimum depth should be 35mm and if under floor heating pipes are installed the depth should be increase to 25mm above the pipework.

(Floating)

Screed laid over insulation usually for sound or thermal benefit must be a minimum of 65mm or 75mm where under floor heating is used. All pipe work must be firmly secured and pressure tested prior to laying the screed.

Freeze Thaw Resistance

In freezing conditions adequate precautions must be taken to prevent freeze thaw.

Delivery and Storage

Screed can be supplied loose or in a bulk bag and also collected directly from our plants. Bulk bags are used where screed needs to be unloaded in areas where the bulk delivery vehicles cannot access. When bulk bags are placed they should be split open to prevent compaction within the bags. Screed kept in the bags for extended periods can cause compaction and the screed will start to hydrate and set. Screed can also be pumped however when using a pump it is advisable to inform us when placing an order. Loose screed should be laid on a plastic sheet to prevent the screed from becoming contaminated and drying out too quickly. Protection from excessive rain, frost and extreme heat is necessary.

Never tip a new load of screed on top of the remains of a previous load.

Specialist Screeds

Our specialist screeds have been developed for higher performance requirements, such as, greater strength, reduced drying periods, improved compaction compared with traditional screed and reduced risk of shrinkage and cracking. All our specialist screeds have the addition of polypropylene fibres

Economics

The below table shows an average coverage with a variance of screed depths.

Screed Depth	Coverage M ² /Tonne	Screed Depth	Coverage M ² /Tonne
40	11	60	7.5
45	10	65	7
50	9	70	6.5
55	8.2	75	6

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Drying times

In good conditions, using Rapid 3 you should allow 3mm thickness per day up to 50mm. Where screed depths are greater than 50mm you should double the drying time and allow 1.5mm thickness per day.

In good conditions, using Rapid 5 you should allow 5mm thickness per day up to 50mm. Where screed depths are greater than 50mm you should double the drying time and allow 2.5mm thickness per day.

When the substrate has high moisture content the drying times will be increased. High humidity and low temperatures can also extend drying times. Light foot traffic – 3 days, site traffic – 7 days.

Curing

After laying screed, curing is recommended by covering the screed with a plastic sheet to help retain the moisture within the screed. It is also advised to dampen down the screed before covering, however never saturate the screed as this will be detrimental to the screeds performance.

Placing an Order

When ordering, please be aware of the required screed type, quantity in tonnes or cubic metres and your preferred time of delivery.

Prices

Prices will vary according to mix designs, quantity and delivery locations. For a precise quotation please call our sales office on 01952-254101.

Health & Safety Information

Contact with wet cement can cause serious burns and can lead to contact dermatitis. All who may come into contact with wet

cementitious mortar must read and understand our safety data sheet use the correct personal protection equipment.

Please refer to our screed safety data sheet.

Further Requirements

If you require any further information or technical support with any of our range of products please do not hesitate to contact us on 01952254101 or info@mortarandscreed.co.uk.