

ScreedRapide

Product sheet

Product description

A screed additive incorporating accelerating, water reducing and shrinkage compensation compounds to provide a high early strength and drying screed.

ScreedRapide can achieve high resistance to indentation, to meet BS8204-1 Category A (heavy duty) of the BRE Screed Test Classification within 7 days of laying (dependent on temperature and compaction methods).

Uses

New construction or refurbishment of retail units where the screed needs to be trafficked or overlaid quickly.

Screeds incorporating ScreedRapide additive may be laid bonded, unbonded or floating (for weight saving and thermal or sound insulation) and may be used with proprietary underfloor heating systems.

Environment & Health

ScreedRapide is solvent-free and practically odourless. Follow the appropriate Occupational Health and Safety guidelines applicable to the location where the application is undertaken.

For more information, please refer to the safety datasheet.

Damp Proof Membranes

It is essential to ensure that no rising moisture can delay the drying of the ScreedRapide and cause failure of the floor finishes. A damp proof membrane is required on ground floors and may be required on new concrete slabs to seal in excess construction moisture within the base.

Isocrete M-Bond Extra can be used as a combined damp proof membrane and bonding agent for bonded screed constructions.

ScreedRapide can be laid unbonded over most other DPMs on the market (min 50 mm thickness).

Surface Preparation for Bonded Screed

Totally enclosed medium shot blasting or scabbling. All residues must be removed to provide a dry, dust free open textured surface.

Bonding Agent for Bonded Screed

Use M-Bond for low screed thicknesses of 20-25 mm. The screed should be applied whilst the M-Bond is still tacky.

Above 25mm, Isocrete Polymer 70 primer and grout may be used, but note that drying times will be extended as these are water based. For the shortest drying times, bond with Isocrete M-Bond.

Reinforcement

ScreedRapide laid unbonded or floating is to be reinforced throughout with Isocrete PP Fibres (see separate data sheet) and D49 across day joints.

Thickness

Bonded with M-Bond to insitu concrete	Min 20 mm
Bonded with Polymer 70 to insitu conc.	Min 25 mm
Bonded with Polymer 70 to p.c. conc.	Min 30 mm
Unbonded on bituminous DPM	Min 50 mm
Floating on insulation	Min 75 mm

Mix Designs

Portland cement Type CEM 1 Class 42.5N to BS EN 197-1.

(Other Classes of 42.5 or higher may be used but may affect working, hardening and drying times).

Sand to BS 13139, 0/4mm (MP) category 1, with not more than 10% passing 150 micron sieve.

For screeds greater than 75 mm thickness, 6 mm single size coarse aggregate to BS EN 12620.

The amount of water added will vary with the moisture content of the sand. Produce a workable 'earth moist' screed with a ratio for water:cement of approx 0.35:1 to ensure good hydration and quick drying.

Mixing

By forced action mixer.

Sequence of addition as follows:-

1. Percentage of water (if sand & aggregates are dry)
2. 75% of the sand/aggregates
3. Isocrete PP Fibres (if specified)
4. ScreedRapide additive
5. Cement
6. Remaining sand/aggregate
7. Water to provide an earth moist consistency.

Mix designs for nominally 1:4 by volume batches

Weights of materials required – all figures in kgs.

	Thickness	<75 mm	>75 mm
Cement		25	25
Sand		125	95
6 mm aggregate		-	30
ScreedRapide Additive		0.65	0.65
Water (approx)		7.5	7.5
Total		158	158

Bay Sizes and Jointing

Lay ScreedRapide in accordance with BS 8204-1, generally in large areas without forming bays.

Application

Apply immediately after mixing. Ensure full compaction, taking particular care in thicker applications. Finish with a wooden float and steel trowel.

Curing

Cover with polythene sheet after laying & leave for a minimum of 18 hrs before removal to permit drying.

(Optimum strengths are achieved with longer curing times, but longer curing times will also extend the drying times).

To achieve 75% Relative Humidity in the screed as quickly as possible after removal of the polythene, good drying conditions (20°C and 60% ambient humidity) are necessary.

Protection

Ensure adequate protection from other construction trades after installation.

Coverage

ScreedRapide additive is used at 650 g per 25 kg of cement.

At 50mm thickness, the amount of ScreedRapide additive required is 0.45 kg/m² for a 1:4 (by volume) mix.

Storage

6 months in an unopened pack at a temperature of 5-40°C.

Protect from weather and moisture / contaminant ingress.

Packaging

The ScreedRapide additive is supplied in the following packs:

25 kg containing 38 sachets, nominal 650g

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