



Ecoscreed

THE **FLOWING** SCREED SPECIALISTS

Ecoscreed Standard Flowing Screed

Our standard flowing floor screed is produced using the most up to date Alpha Hemi Hydrate binder compound which is an eco-friendly product as it is derived from the de-sulphurisation process at UK coal fired power stations. This is used along with good quality graded sand to produce our flowing screed. We batch mix this product on site to BS EN13813, the European Standard for flowing screeds. We continually check the quality of the mix by carrying out flow tests.

Ecoscreed Standard is pumped into the building to the undersides of our level indicators which have been previously set by laser. Ecoscreed Standard is self-compacting and self-smoothing and provides a highly accurate surface finish. Coupled with the fact that it has extremely low shrinkage at 0.02% and does not crack or curl, our standard product also does not require reinforcement, due to its self-compacting nature.

Our product can be laid at thinner depths than conventional screeds. Up to 300m² of screed can be laid per day at a depth of 50mm, thereby making it highly competitive in overall time and cost savings compared with conventional sand and cement screeds. It should be installed either as an un-bonded screed or as a floating system in both new build and refurbishment projects. Ecoscreed Standard is ideal for use where under floor heating is being installed. The fluid nature of the flowing screed allows full contact with and encapsulation of the heating pipes and floor elements. Ecoscreed Standard is suitable for all types of floor covering but should not be used as the final floor finish.

Applications: (Ambient temperature to be a minimum of 5 degrees centigrade)

Un-bonded:

- Minimum thickness: 30 mm. – Fix 5 to 10 mm border edging strip to all walls.
- Use lapped single sheet polythene not less than 500 gauge.
- Use unfolded polythene on rolls (folds act as crack inducers).
- Tape all overlapped polythene edges including at border edge.

Floating:

- Minimum thickness of 40 mm.
- Polythene to be placed on top of insulation.
- Insulation to be laid in accordance with the manufacturers recommendations.

Under floor heating system.

- Minimum screed thickness clearance over top of heating pipes to be 30 mm.
- Heating pipes should be secured from lifting.

Thin section coverings: If there is a requirement for direct fixing of thin section final finishes, such as vinyl, linoleum, etc. then the floor should be lightly sanded after 24 hours to remove any surface imperfections.

Need for joints:

- Under-floor Heating: Suitable joints to be made.
- Un-bonded: Joints are needed when the length to width ratio is less than 3:1.

Compressive strength: > 10 N/mm² at 1 day; > 20 N/mm² at 28 days.

Flexural strength: 3 N/mm² at 1 day; 5 N/mm² at 28 days.

Yield: 1.85 kg/mm/m²

Reinforcement: No requirement for reinforcement.

Ecoscreed Standard conforms to BS EN 13813 the European Standard For Flowing Screeds.

Drying Times

Under ideal conditions (a warm, well ventilated room) the screed dries at a rate of 1mm/day up to a maximum thickness of 40mm and then at a rate of ½ mm per day for thicknesses above this: eg 50mm thickness = 40 + 20 days = 60 days. Drying times can be improved by the provision of good ventilation, open windows and doors in good weather, the use of closed system dehumidifiers (after 7 days) and by forced drying of the screed using under floor heating. (Please see Force Drying information below). The moisture content of the screed should be 0.5% for impermeable finishes, tiles and timber and 1.0% for carpets.

Force Drying

Forced drying of screed can be accomplished by commissioning under floor heating systems in accordance with BS 1264 : 2001Part 4 Clause 4.4 as early as 7 days after the screed has been placed. Raise system water temperature in 4 – 5°C increments from ambient to 20–25°C, maintain for a minimum of 3 days and then gradually increase the temperature again in 4 – 5°C increments to maximum operating temperature which should be maintained for a further 4 days (water temperature must not exceed 50°C) prior to returning to ambient temperature in readiness to receive floor finishes.

NB Please note it may be necessary to commission the UFH system for greater than the 7 day commissioning period to enhance the drying. The time that is required for force drying is directly proportional to the age and thickness of the screed at the time of commissioning.

In all cases it is important to remember that adequate ventilation is required to maintain good drying conditions.

The screed must be dry before the application of the floor finish and failure to follow this procedure prior to the application of subsequent impermeable resilient floor finishes is likely to lead to failure of the floor finish at a later date.

Once proven to be dry it is important that the surface of the screed be protected from accidental spillages and leaking fixings. Should these occur then the screed will require further drying to attain the required moisture content and in the worst case of full saturation, then the drying times will be as with freshly placed screed leading to possible delays in the construction schedule.

Benefits For the Client, the Architect and the Contractor.

- Maximum strength of up to 30N/mm².
- Fully pumpable system saves time.
- Reduced contract costs through time saved.
- No curling or shrinkage cracking.
- Rapid occupancy of buildings.
- Ideal for under floor heating systems due to self-compaction.
- Eco-friendly.
- No need for reinforcement.
- No mechanical compaction needed.
- Screed laid with minimum joints.
- Mixed fresh on site.
- Metered quantity, you get what you pay for.