

Product Data Sheet

CEMSCREED 5

CEMSCREED 5 - A special cement based binder

Description

Cemscreed 5 is a special cement based binder for producing a rapid drying floor screed when mixed with graded aggregates and water. The screed is suitable for foot traffic after 12 hours and is sufficiently dry to receive all types of floor covering after 5 days¹.

Typical Uses

Cemscreed 5 is used to produce bonded, unbonded and floating screeds in internal situations where early foot traffic and quick drying is required e.g. to allow floor coverings, ceramic tiles and natural stone tiles to be laid with short installation times.

Advantages

- Delivered factory-produced under procedures certified to BSEN ISO 9001
- Accessible to foot traffic within 12 hours
- Quick drying allowing the floor coverings to be laid after 5 days¹
- Ceramic tiles can be laid after 1 day and natural stone tiles after 2 days
- Can be used for the rapid repair of existing floor screeds
- Suitable for use over under-floor heating systems
- Can be delivered in weather proof vacuum packed plastic bags, which extend the shelf life of the product with respect to product performance and chromium VI compliance

(1) At 23°C and 50% relative humidity. Tested using dried sand. All moisture testing completed using carbide method.

Performance Characteristics

Property	Typical Performance
Fresh wet density	2100 – 2200kg/m ³
Set air dried density	2000 – 2100kg/m ³
Flexural strength 28 days ²	5MPa
Compressive strength 28 days ²	30MPa
Working time	Approx. 1 hour
Open to foot traffic ¹	12 hours
Laying of ceramic tiles ¹	1 day
Laying of natural stone tiles ¹	2 days
Laying of any flooring ¹	5 days
Application temperatures	5°C – 35°C
Alkali resistance	Excellent
Oil resistance (not vegetable oils)	Excellent
Solvent resistance	Excellent
Moisture content after 5 days ¹	<2.0%

Table 1: Typical physical properties

(1) At 23°C and 50% relative humidity. Tested using dried sand. All moisture testing completed using carbide method.

(2) Tested when fully compacted.

Coverage per Bag

Depth of Screed	Cemscreed 5 (20kg Bag)
25mm	3.5m ²
30mm	3.0 m ²
35mm	2.5m ²
40mm	2.2m ²
50mm	1.7m ²
60mm	1.5m ²

Table 2: Approximate coverage per 20kg bag (based on a sand:binder ratio of 8:1 by weight).

Recommended Thickness

Floor Type	Thickness (mm)
Bonded	10 - 35mm
Unbonded	35- 60mm
Floating	Minimum 55mm
Coverage over conduits and heating pipes	25mm

Table 3: Recommended thickness.

For all floor types abrupt changes in screed thickness must be avoided as these will lead to the formation of cracks.

Application

Substrate Preparation

Bonded Screed

Substrate priming should be carried out using Epoxy Primer blinded with 8/16's grade sand or by two coats of Tarmac Concrete Primer A. Particularly porous or absorbent substrates may require an additional primer coat. Tarmac Concrete Primer A should not be applied to substrates with a temperature of less than 6°C.

Unbonded Screed

Where the screed is unbonded it is recommended that the concrete slab surface is reasonably true and flat prior to applying any membrane including a damp proof membrane.

Floating Screed

For floating screeds a suitable damp proof or separating membrane should be placed over the insulation before applying the screed.

Packaging

Cemscreed 5 is available in nominal 20kg paper or vacuum-packed plastic sacks, palletised and shrink-wrapped. Cemscreed 5 may also be available in 1 tonne bulk bags or bulk tankers.

Mix Proportions

Recommended Dosage	
Cemscreed 5	200-250 kg/m ³
Graded Aggregate 0-8mm in diameter. (0-4mm for thinner sections)	1650-1800 kg/m ³
Water	90-110kg/m ³ for dry aggregate. This includes the water content already contained in aggregate.
Or:	
Cemscreed 5	one 20 kg bag
Aggregate as above	140-160 kg
Water	8-10 kg for dry aggregate. This includes the water content already contained in aggregate.
Mix proportion by weight	
1:7	Equivalent to mixing one bag with 140kg of agg.
1:8	Equivalent to mixing one bag with 160kg of agg.

Mixing and Laying

The screed should be mixed to a damp earth consistency using a suitable mixer. It is important that the screed is not over watered as this will increase the drying time and cause bleed on the surface of the screed. Do not mix by hand other than for small repair jobs. Always use clean equipment and do not use other cements, lime or screed additives.

The sand used should be a good quality 0/8 screeding sand. For thin sections a 0/4 good quality screeding sand can be used. The water used should comply for BS EN 1008.

The working time of the mixed screed is approximately 1 hour at 20°C, therefore the material must be placed, compacted and finished without delay.

The quantity of screed mixed should be limited to allow spreading, tamping and levelling to be completed within the working time.

It is strongly recommended that a 1cm expansion joint be incorporated around the perimeter of the room and around any columns.

Where laying of the screed is interrupted then a day joint should be made by cutting the screed straight down and inserting 3-6mm diameter steel rods 20-30cm long and 20-30cm apart to avoid cracks and inconsistent levels when work is restarted.

Where Cemscreed 5 is used on compressible substrates it must be thick enough so that the weight of the screed will hold the substrate in position and should be reinforced with adequate steel mesh.

Conduits and Heating Pipes

When screeding over conduits or heating pipes there must be a minimum thickness of 25mm of screed above the pipes. In addition reinforcing mesh should be placed over the pipes. Underfloor heating can be gradually introduced 5 days after laying the screed.

Quality Control

All Tarmac CMS Pozament Products are factory blended, tested and packaged to quality control procedures in accordance with BS EN ISO 9001 Series.

Health and Safety

See separate data sheet.

Storage and Shelf Life

6 months in unopened packages under normal warehouse conditions.

When packaged in vacuum packed plastic bags the shelf life of Cemscreed 5 is extended to a minimum of 12 months provided the packaging is undamaged. Due to the weatherproof properties of the vacuum packed plastic bags they can also be stored outside.

Palletised Cemscreed 5 should be stored in cool dry areas clear of the ground, sheeted or under cover and stacked not more than 2 pallets high.

The product should be used on a first in – first out basis.

Information, Prices and Ordering

Masonry and Specialist Screeds Division

For sales enquiries contact: 08701 116116.

For orders contact: 01283 550060.

NB: Please give not less than 48 hours notice.

Further Information:

Please call the Technical Centre on: 08701 116 116.

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