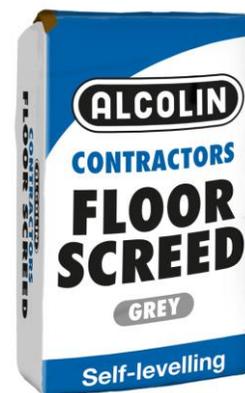




# ALCOLIN CONTRACTORS FLOOR SCREED

## Description

ALCOLIN CONTRACTORS FLOOR SCREED is a cement-based, protein free self-leveling screed which can be used as a single component system with water or as a twin pack system using a liquid additive such as ALCOLIN LATEX BOND for enhanced adhesion, flexural strength and water resistance. It is designed to provide excellent flow properties, self-smoothing characteristics, rapid walk on times and good adhesion to a variety of substrates.



## Features & Benefits

- Low shrinkage, reducing risk of developing hairline cracks
- High compressive strength
- Protein free, resisting microbial attack. Ideal for use in hospitals.
- Excellent self-levelling properties making it easy to achieve desired level finish.

## Applications

ALCOLIN CONTRACTORS FLOOR SCREED is used to prepare, repair and level uneven, internal floors prior to floor-covering installations e.g. laying of carpets, vinyl or tiles, etc. It suitable for application to concrete and sand or cement screeds. It can also be applied to substrates such as anhydrite gypsum screeds, terrazzo, bituminous waterproof membranes, stone tiles, and well bonded quarry and ceramic tiles if using a priming system such as Alcolin Permo-Key Slurry Kit.

## Limitations

- Not suitable as a final wearing surface.
- Not recommended for use as a decorative finish.
- For internal use only. Protect freshly laid surfaces from draughts, direct sunlight and sources of heat.
- Not suitable for areas subject to rising damp or in permanently wet conditions.
- Do not screed over existing structural or movement joints.

## Safety instructions

ALCOLIN CONTRACTORS FLOOR SCREED contains cement, which is alkaline and may cause skin irritation. Do not ingest. Keep away from children and pets. Do not empty into drains. Wear rubber gloves. Avoid contact with eyes. Allow any unused product to dry before disposing of the container. In the event of skin or eye contamination, rinse thoroughly with cold water. Seek medical assistance if irritation or discomfort persists. Refer to our Safety Data Sheets for further toxicological information and comprehensive handling instructions.

## Surface preparation

- The existing flooring should conform to the latest SABS Standards editions: SABS 021 (Code of Practice for the Waterproofing of Buildings including damp-proofing and vapour barrier installation), SANS 10109-2:2004 (Concrete Floors Part 2: Finishes to concrete floors), and supplementary specifications.
- Surfaces must be sound, free from loose dust, grease, wax polish, organic growth or other contaminants.
- **New concrete** must have matured for at least two weeks and must be thoroughly dry before any product application to avoid excessive movement due to shrinkage.
- **Wooden surfaces** (e.g. untreated chipboard, hardboard and plywood), prime with Alcolin Permo-Key Slurry Kit.
- **Porous and friable surfaces** (e.g. sand / cement screeds) must be primed with Alcolin Permo-Key Slurry Kit.
- **Smooth, non-porous surfaces** (e.g. ceramic tiles or power floated and off shutter concrete) should be primed with Alcolin Permo-Key Slurry Kit.
- **Waterproofing bitumous membranes** should always be primed with Alcolin Permo-Key Slurry Kit.
- **Painted and Bitumen surfaces** (not waterproofing membranes) must be stripped clean and chipped to expose 80% of the substrate and then primed with Alcolin Permo-Key Slurry Kit.
- **Residual flooring adhesive** must be scraped leaving only well adhering remnants and primed with Alcolin Permo-Key Slurry Kit.
- It is essential that suitable damp proof membranes be in place to prevent rising damp.
- Underfloor heating should be turned off for at least 48 hours prior to and after application.
- For **Alcolin Permo-Key Slurry Kit** application instructions, refer to its relevant technical data sheet.
- Note: if there are any doubts about the suitability of the substrate condition, tensile pull off tests should be performed.

## Mixing

1. Use a mechanical mixer such as a slow electric drill fitted with a suitable paddle.
2. Add approximately 4L of clean water into a clean container and slowly add 20kg of ALCOLIN CONTRACTORS FLOOR SCREED powder whilst stirring until a smooth lump free consistency is obtained.
3. Stir continuously for  $\pm 2$  minutes.
4. Allow the mixture to stand for 2-3 minutes and stir again.
5. DO NOT ADD MORE WATER.
6. Should a white film appear on the surface on standing, too much water has been added. To rectify, add more ALCOLIN CONTRACTORS FLOOR SCREED until the correct consistency is achieved.
7. The mix must be used within 30 minutes, however best results are achieved if the product is used immediately. Do not mix more adhesive than can be used within this time.

## NOTES:

For enhanced adhesion, flexural strength and water resistance in particularly difficult conditions replace the water addition rate for ALCOLIN CONTRACTORS FLOOR SCREED with approximately 4.4L of ALCOLIN LATEX BOND.

## Directions for use

1. Ensure that surfaces are prepared as above.
2. Pour the mix onto the surface and spread with a plasterer's trowel to the required thickness.
3. A maximum of 10mm can be applied in one application and feathered down to an edge if required. The ideal screed thickness is between 3 to 6mm.
4. ALCOLIN CONTRACTORS FLOOR SCREED is self-smoothing; most trowel marks should disperse. Alternatively, a spiked roller may be used immediately after trowelling to obtain a smooth finish and to remove pin holes from the surface caused by escaping air bubbles formed during mixing. These air bubbles can also cause surface defects such as white spots when they collapse. Avoid excessive rolling as this may result in surface laitance, which will have to be removed when cured.
5. Remove any ridges formed when butting up, or trowel marks remaining, with a sand block after the screed has set.
6. Protect freshly laid surfaces from draughts, direct sunlight and sources of heat. These conditions may lead to rapid drying of the screed preventing the cement from fully hydrating, resulting in a weak, powdery screed which may develop cracks.
7. Working in temperatures below 10°C will retard setting. Temperatures above 30°C will result in accelerated setting of the screed.
8. Install expansion joints in horizontal and vertical directions every linear 5m.

## Bulking up

For thicknesses greater than 10mm, the mixture can be extended by using 1 to 1 part by volume of 3mm granite chippings during the mixing stage. The flow characteristics may be impaired and the floor should be lightly trowelled to a smooth finish. Do not add extra liquid to the mix. Once dry, a standard screed mix may then be applied to improve the finish before using any adhesives.

## Trafficking

Accepts foot traffic after approximately 5 hours at 3mm thickness at normal room temperature.

## Cleaning

Tools can be cleaned with water while still wet. Allow any unused product to dry before discarding in a suitable container.

## Installation of floor coverings

Floor coverings may be installed 18 hours after screed has been laid at room temperature (20°C). At lower temperatures, or with thicker coatings, a longer setting time is required (24-48 hours depending on the conditions). Note some floor coverings or surface coatings may require specific conditioning.

## Storage stability

ALCOLIN CONTRACTORS FLOOR SCREED adhesive must be kept in normal, dry conditions and protected from damp. The product has a shelf life of approximately 9 months if stored, as described above, in its original unopened packaging.

## Product packaging

- 20kg packet

## Product data

### i. Physical data

Type	Cement mixture
Appearance	Fine grey powder
pH	Approx. 11
Solids	100%

### ii. Application data

Pot life	Approx. 30 minutes at 25°C and 50% humidity
Initial set	Approx. 2-3 hours at 25°C and 50% humidity
Walk on time	Approx. 5 hours at 25°C and 50% humidity
Final set	Approx. 24 hours at 25°C and 50% humidity
Coverage	Approx. 4.2m <sup>2</sup> per 20kg packet at 3mm thickness

### iii. Performance data

Moisture resistance	Good
Compressive strength after 28 days	45.0 MPa
Temperature resistance	Up to 100°C

## IMPORTANT NOTES REGARDING MOISTURE & EXPANSION JOINTS:

### 1. MOISTURE

ALCOLIN CONTRACTORS FLOOR SCREED will bond to cement and concrete surfaces, which still contains residual moisture. Moisture sensitive installations such as POLYURETHANE, EPOXY, VINYL, TIMBER, etc. applied to freshly laid screed or a system still containing moisture will require precautionary procedures. Ensure that the manufacturers' instructions for these moisture sensitive systems are strictly adhered to at all-times.

Where suitable vapour barriers or damp proofing membranes have **not** been installed under concrete or cement slabs on the ground and a continuous source of moisture is suspected, moisture-sensitive finishes such as POLYURETHANE, EPOXY, VINYL, TIMBER, etc. should not be installed.

**How dry is dry enough before treating the base cement substrate with a moisture sensitive coating such as POLYURETHANE, EPOXY, VINYL, TIMBER?**

**Rule-of-thumb:** This approach simply estimates a drying time of one month for every 25mm thickness of cement or concrete poured from the completion of the curing process or since the last re-wetting of the slab. Thus, for a 100mm thick slab embedded in the ground drying from one side only (damp proof membrane installed one on side), a minimum drying period of four months would be required. The same thickness of a suspended slab or wall drying from both sides would require only two months.

## SIMPLE TESTS FOR DETERMINING THE PRESENCE OF MOISTURE

### **Plastic sheet test**

A 460mm x 460mm square 0.1-mm-thick plastic sheet is placed on the concrete and sealed around the edges by taping them down to the concrete. After 16 hours the sheet is removed and the area inspected for evidence of moisture. Variations of this test include the use of a 1m x 1m piece of plastic sealed around the edges for 24 hours.

### **Phenolphthalein test**

Apply several drops of a 3% Phenolphthalein solution in grain alcohol at various spots on the slab. If a red color develops in a few minutes, the slab is too wet to begin installation of the finished flooring system.

### **Moisture meters**

The test involves measuring the electrical conductivity of the concrete between two sensing pins, probes or electrodes in contact with the concrete. The electrical resistance between them indicates the moisture content. Instruments should be calibrated for accuracy in the range of 4 to 9% moisture content and be able to measure changes to the nearest 0.5%. Some of the factors which may influence the result include the resistance of the aggregates, chlorides in the concrete, reinforcement and condensation on the surface. The concrete is deemed dry enough when the moisture content is not more than 5.5%.

## **2. EXPANSION JOINTS**

- All expansion and movement joints to extend through the screed. Movement joints should be located in both horizontal & vertical directions at a maximum of 5m intervals for interior applications. Expansion and movement joints must either be left open, or be “grouted” with an elastomeric compound such as Alcolin Expansion Joint Sealer.
- Where practical, the bulk of the depth of the movement joint should be filled with a compressible material such as polyethylene foam strips. It is important that the joint sealant bonds only to the sides of the movement joint
- Do no screed over existing structural movements joints, rather have the new expansion joints coincide with these.

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*The above information is only offered, as a guide to the use of this product. Furthermore, users should satisfy themselves that it is suitable for their needs. Since we have no control over the conditions under which it is used, we cannot accept responsibility for problems caused by the use and/or application of this product.*

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