

INSTACEM POLYMER FLOOR SCREED

Introduction

INSTACEM Polymer Floor Screed is a polymer modified, cement based screed specifically designed to produce a non-shrink, weather resistant, micro fibre reinforced, high strength flooring product. INSTACEM Polymer Floor Screed is factory made to BS EN ISO 9001:2000 is user friendly (just add water) and contains no toxic or harmful chemicals.

Components

A single, fully blended, cement-based system incorporating shrinkage compensating and adhesive components to give water-tight construction and excellent long-term service

Appearance

Grey, cement powder which when water is added forms a soft workable screed. Dries to normal grey cement colour. Can be coloured to order

Uses	Benefits
<ul style="list-style-type: none"> ▪ A floor screed of superior performance to normal sand:cement screed ▪ High tensile and flexural strengths ▪ High compressive strength, abrasion and impact resistance ▪ To produce a hard wearing, finished floor for heavy duty and long term performance ▪ For 'floating' screeds ▪ Low moisture permeability 	<ul style="list-style-type: none"> ▪ Rapid mixing and laying ▪ Dust free ▪ Ease of application and finishing ▪ Waterproof ▪ Stronger bond to base material ▪ Slip resistant ▪ Indoor or outdoor use ▪ Chemically resistant ▪ Will not shrink or crack

Typical technical data

Density 2150kg/m³ crushing strength at 7 days over 20Mpa (N/mm²) at 28 days over 30Mpa. An initial set (Vicat) approximately 4 hours at 20°C and final set (Vicat) approximately 12 hours at 20°C

Yield

Allow 2.2 tonnes per m³ of material required. Allow 44kg/m² at 20mm or 110kg at 50mm thick.

Mixing instructions

Add **INSTACEM Polymer Floor Screed** powder to the required amount of water in a clean mixing container while stirring thoroughly until an easily worked, "soft butter" consistency is obtained. The mix proportions are approximately 10 parts of **INSTACEM Polymer Floor Screed** into 1 part of clean, drinkable quality water. A whole 25kg bag requires approximately 2½ litres of water. Use less water for thick applications or a stiffer consistency. The mixed **INSTACEM Polymer Floor Screed** mix has a pot life of approximately 3 hours at 18 – 20°C

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Preparation

Good surface preparation is essential. All substrates should be mechanically sound and free of surface contaminants. Smooth and dense surfaces must be mechanically abraded by scrubbing or shot blasting to provide a mechanical key. All dust and loose material must be vacuumed off prior to application. Fix all metal beads and any edge strips, battens, expansion and other joints and level out.

Priming and Placing

Porous substrates must be dampened out with clean water, and all priming should be carried out by brushing in a bonding coat of INSTACEM Primer Latex. Lay INSTACEM Polymer Floor Screed onto base while primer coat is still tacky. Ensure no excess primer is left as this will migrate through the screed when working and lead to finishing problems. INSTACEM Polymer Floor Screed has an 'open time' of approximately 40 minutes at 20° C.

Minimum Thickness:

INSTACEM Polymer Floor Screed should be placed at a minimum thickness of 20mm onto unbonded substrates and a minimum of 12mm onto a fully bonded substrate.

Joints:

Contraction and expansion joints should be aligned with respective joints in the concrete base. Construction joints should be aligned to construction joints in the concrete base if the latter are expected to open excessively and cause cracking detrimental to the floor use. Isolation joints should be positioned around the perimeters of the slab and around columns, fixed bases and other protrusions.

Packing:

3 ply paper bags with integral polythene liner contains 25kg net weight. **INSTACEM Polymer Floor Screed** has a shelf life of 12 months if stored in dry conditions.

Independent Test Data

Crack formation	No cracks
Adhesive strength	N/mm ² was 2.13 @ 7 days load resistance
Flexural strength (Prism 4 x 4 x 16cm)	N/mm ² was 7.5 @ 7 days and 12.4 @ 28 days
Compressive strength	N/mm ² was 48.9 @ 7 days and 56.58 @28 days
Workability	Mixing properties – easy to mix Consistency – good, smooth Workability – very good
Abrasion resistance	Taber abrasion type 352 only 0.56gram wt loss – excellent status
Surface hardness	1 day evaluation 3mm indent test – very hard