

Cementitious Self-Levelling Floor Screed – 10 to 80 mm

DESCRIPTION

CasTech Floor Screed 50 is a pre-blended, cement-based floor screed formulated using special grades of cement, selected aggregates, binders and performance additives. It is designed for the installation of a durable, tension-free and smooth sub-floor surface in a single operation.

It levels and smooths internal concrete sub-floors prior to the installation of final floor coverings such as ceramic tiles, resilient flooring and carpets.

TYPICAL USES

- Creating a level sub-floor on concrete slabs prior to final floor coverings
- Levelling uneven floors in residential, commercial and industrial buildings
- Wearing surface in utility areas (when specified)
- New construction and renovation projects

ADVANTAGES

Features and benefits:

- High strength – high compressive and flexural strength for a durable, long-lasting floor
- Easy application – 10 mm to 80 mm in a single pour
- Excellent flowability – smooth, level surface with minimal effort
- Rapid access – foot traffic after 1 day, full service after 5 days with proper curing
- Polymer modified – enhanced cohesion and reduced risk of cracking
- Ready to use – just add water for consistent results

TYPICAL PROPERTIES

Appearance	Grey powder
Bulk Density (Dry)	~ 2.0 kg/L
Water / Powder Ratio	0.12 – 0.16 (3.5 – 4.0 L per 50 kg bag)
Pot Life / Workability	~ 60 minutes
Compressive Strength (28 days)	25 – 30 N/mm ²
Flexural Strength (28 days)	5 – 6 N/mm ²
Application Thickness	10 – 80 mm (single pour)
Coverage	~ 22 kg/m ² per cm thickness

All values given are typical and subject to normal manufacturing and application tolerances.

SURFACE PREPARATION

The concrete substrate must be sound, structurally stable, rough and completely free of dirt, dust, oil, grease, wax, laitance, paint, coatings and any other contaminants that could act as a bond breaker. Priming the prepared surface with a polymer-based bonding agent (e.g. CasTech Bond SBR) is highly recommended. Apply the screed once the primer has become transparent and touch-dry.

MIXING

- Use clean, potable water only
- Add approximately 3.5 – 4.0 litres of water per 50 kg bag into a clean mixing container
- Gradually add the powder while mixing with a low-speed, high-shear mixer (approx. 500 – 600 rpm)
- Mix for 3 – 5 minutes to a homogeneous, lump-free, fluid consistency
- Do not add extra water after mixing and do not retemper the mix

APPLICATION

- Pour the mixed material immediately onto the prepared substrate
- Spread to the required thickness (10 – 80 mm) using a spike roller to eliminate air bubbles and ensure even distribution
- For large areas, apply in strips or bays not larger than 2 m × 2 m
- For thicknesses above 50 mm, compact in multiple layers
- Cut control joints to at least half the screed depth within 24 hours, spaced approximately every 2 m
- Do not over-trowel, as this can bring laitance to the surface and create a weak layer

Embedded services: minimum cover over underfloor heating pipes or conduits should be 20 mm. A layer of galvanized mesh (19 g or greater) should extend 75 mm on each side of the pipe/conduit with a 75 mm overlap.

Product Data Sheet

CasTech Floor Screed 50

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CURING

Proper curing is essential to prevent plastic shrinkage and random cracking, and to ensure full strength development.

- Commence curing: 24 hours after application
- Foot traffic: after 1 day
- Light vehicle traffic: after 2 days
- Full-service traffic: after 5 days

PACKAGING

50 kg paper bags.

STORAGE AND SHELF LIFE

6 months from the date of manufacture when stored in a dry, cool place in its original, unopened and undamaged packaging.

HEALTH AND SAFETY

Contains cement. Avoid contact with skin and eyes; the mix and dust can cause skin irritation and irritate the mucous membranes.

PPE: Gloves, safety goggles and a dust mask during handling and mixing.

Precautions: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Additional information: Refer to the product Safety Data Sheet (available on request).

TECHNICAL SUPPORT

CasTech provides on-site assistance and consulting services on projects when requested. Technical data sheets on other CasTech products and guidance on their use are available on request.