



Sopro Rapidur® EB 5

Screed accelerator



Powder concentrate used to produce rapid-set screeds allowing early flooring installation. Additive blend to accelerate set of screeds made from Portland cement (CEM I), Portland-slag cement (CEM II)¹⁾ and Portland-limestone cement (CEM II)¹⁾ of strength classes 32.5 or 42.5.²⁾

Hydration process is speeded up through rapid water-binding properties of concentrate constituents.

- Allowing early use of screed
- Good workability
- Allowing early flooring installation
- Also suitable for heated screeds
- Highly economical

Use

Sopro Rapidur® EB 5 is particularly recommended for applications where early use or early flooring installation is required: heated and unheated screeds laid on insulating or separating layers in residential or administrative facilities; bonded screeds laid using Sopro HS 448 bonding slurry with trass in garages, basements, cellars etc.; screeds on balconies and patios for subsequent coating or installation of ceramic or natural stone coverings.

Mixing ratio

5 % of cement weight;
1 x 1.25 kg PE bag per 25 kg bag of CEM I/CEM II cement as specified in Table 1

Working life

Cement screeds to which Sopro Rapidur® EB 5 accelerator is added have a working life of approx. 45 minutes.

Walkable

After 6–10 hours

Ready to receive floor covering

After 3–5 days for subsequent tiling; after achievement of residual moisture content $\leq 1.8\%$ CM for other floor coverings, e.g. linoleum, PVC etc. and wood or parquet flooring

Application temperature

Between +5°C and max. +30°C

Coverage

1 x 1.25 kg PE bag per 25 kg bag of cement

Shelf life

Approx. 12 months, subject to storage on pallet in dry conditions in original unopened containers

Packaging

10 kg box (8 x 1.25 kg PE bags)

¹⁾ For cement types, see Table 1

²⁾ Given the wide variety of cements available on the market that are classed under the specified common types, a suitability test shall be performed prior to screed laying.

Properties

Sopro Rapidur® EB 5 is used in conjunction with cement (see Table 1) to produce reliable, rapid-set binder for screeds that allows early flooring installation. A residual moisture content of 2% is achieved after 3–5 days under normal site conditions. As rapid-set screeds produced with Sopro Rapidur® EB 5 exhibit a considerably greater surface strength and higher loadability than standard cement screeds, they can accommodate normal site traffic, with no risk of damage, after only approx. 3 days.

Substrate preparation

Substrate shall be clean, solid, strong, dimensionally stable and free from any adhesion-impairing substances. All relevant standards, codes of practice, regulations and guidelines, specifically DIN 18353, EN 13813 and DIN 18560, shall apply. Heated screeds are additionally governed by EN 1264-4, the "Building trades co-ordination committee procedures for heated floor constructions" issued by Zentralverband Sanitär Heizung Klima (Sanitary, Heating and Air-Conditioning Federation), St. Augustin/Germany, and ZDB (Federation of the German Construction Industry) data sheets on heated floors. For bonded screed constructions, where necessary mechanically roughen substrate, suction clean, pre-wet and prime with Sopro HSF 748 flexible bonding slurry with trass or Sopro's No.1 flexible tile adhesive. Lay screed wet on wet. For heavier-duty applications, wet-on-wet application to Sopro EPG 522 epoxy primer (or, alternatively, Sopro BH 869 construction resin) is recommended. All relevant standards, guidelines and recommendations shall apply; workmanship shall comply with good practice.

Notes on use with floor heating system

Suitable for heated screeds with max. +55°C flow temperature. Prior to laying tiles or other floor coverings, screed shall be heated up and allowed to cool in accordance with basic procedures required for traditional cement screeds. Heating phase shall commence at earliest 5 days after screed laying. During first heating cycle, a +25°C flow temperature shall be maintained for 3 days. System shall then be set to maximum flow temperature, to be maintained for a further 4 days, before being lowered to laying temperature.

Application

For mortar preparation, use standard screed mixing and pumping equipment.

Place part of gravel sand and cement in mixing drum, add Sopro Rapidur® EB 5 to running mixer, then fill mixing drum with remaining gravel sand.

Add one 1.25 kg bag of Sopro Rapidur® EB 5 for each 25 kg bag of cement. Add water to achieve required application consistency – the damper the gravel sand, the less mixing water added. Mix mortar for at least 2 minutes after addition of all constituents. Do not use any other admixtures.

Screed composition:

0/8 mm gravel sand to EN 13139, "screed mortar" applications, fines content category 1 (max. 3% by weight) in grading range 3 to DIN 1045-2 (A/B 8). Use of 0/16 mm gravel sand is practical for screed thicknesses > 60 mm.

Cement: see table for suitable cements:

Suitable cements to DIN EN 197-1		
Cement type	Name	Notation
CEM I	Portland cement	CEM I
CEM II	Portland-slag cement	CEM II/A-S; CEM II/B-S
CEM II	Portland-limestone cement	CEM II/A-L; CEM II/B-L; CEM II/A-LL; CEM II/B-LL

Specified times

Apply for normal temperature range of +23°C and 50% relative humidity; higher temperatures shorten and lower temperatures lengthen these times.

Readiness for flooring installation

Readiness of screeds for flooring installation is determined by water/cement ratio, screed thickness and ambient conditions on site. Subject to favourable site conditions and maximum nominal thicknesses of 50 mm, readiness for flooring installation stated on Page 1 is generally achieved. As a rule, residual moisture in screed shall be measured with CM tester prior to installation of moisture-sensitive or vapour-proof coverings. Adoption of minimum water/cement ratio is required for early achievement of low residual moisture. As associated stiff consistency may impede screed laying, observance of 0.45–0.50 water/cement ratio in conjunction with plastic consistency is recommended. Care shall be taken (as with all cement screeds) to ensure ready absorption of moisture by rapid-set screeds during early phase after placing. Moisture equilibrium in first weeks after laying is not automatically achieved and depends on ambient humidity/moisture. High internal humidity/moisture levels, e.g. due to plastering or dampening prior to laying works, may first result in expansion/swelling and later in drying shrinkage. Due allowance shall be made for these factors, particularly where rapid-set screeds are laid in damp indoor spaces or outdoors, among other things with regard to layout of joints.

Safety precautions

Labelling in accordance with Regulation (EC) No 1272/2008 (CLP)

GHS05

Signal word: Danger

Contains calcium hydroxide. Exhibits strong alkaline reaction upon contact with moisture/water; protection required for skin and eyes. All standard precautions for the handling of construction materials/chemicals shall be taken.

Hazard statements: H318 Causes serious eye damage.

Precautionary statements: P102 Keep out of reach of children. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water and soap. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor. P332+P313 If skin irritation occurs: Get medical advice/attention.

GHS CODE (German hazardous substances classification): ZP 1 - Low-chromate to Regulation (EC) No 1907/2006, Annex XVII

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