

Sopro Rapidur® EB 5 Screed Accelerator 5

Sopro Rapidur® EB 5 is used to produce rapid-set screeds, allowing early flooring installation. This powder concentrate contains an additive blend that serves to accelerate set of Portland cements. The hydration process is speeded up through rapid water-binding properties of concentrate constituents.

- allows early use of screed
- good workability
- allows early flooring installation
- also suitable for heated screeds
- highly economical

Field of Application

Sopro Rapidur® EB 5 is used in conjunction with CEM I Portland cement 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, and they can accommodate normal site traffic, with no risk of damage, after only approx. 3 days. Sopro Rapidur® EB 5 is particularly recommended for applications where early use or early flooring installation are required: heated and unheated screeds laid on insulating or separating layers in residential or administrative facilities; bonded screeds laid using Sopro HE 449 bonding emulsion in garages, basements, cellars etc.; screeds on balconies and patios for subsequent coating or installation of ceramic or natural stone covering.

Substrate

The substrate should be clean, solid, strong, dimensionally stable and free from any adhesion-impairing substances. All relevant standards, codes of practice, regulations and guidelines, specifically DIN 18 353, EN 13 813 and DIN 18 560 apply. Heated screeds are additionally governed by EN 1264-4, the 'Building trades co-ordination committee procedures for heated floor constructions', issued by Sanitary, Heating and Air-Conditioning Federation, St. Augustin/Germany, and ZDB (Federation of the German Construction Industry) data sheets on heated floors.

Use with Under Floor Heating Systems

Suitable for heated screeds with max. +65 °C flow temperature. Prior to laying tiles or other floor coverings, screed should 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 should be maintained for 3 days. System should then be set to maximum flow temperature, to be maintained for a further 4 days, before being lowered to laying temperature (screed temperature: < +15°C).

Application

For mortar preparation, use standard screed mixing and pumping equipment. Place part of gravel sand and Portland cement in mixing drum, add Sopro Rapidur® EB 5 to running mixer, then fill mixing drum with remaining gravel sand. One 1.25 kg Sopro Rapidur® EB 5 should be added 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 13 139, 'screed mortar' applications, fines content category 1 (max. 3 % by wt) 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: CEM I cements to EN 197-1 are suitable.

Final Floor Installation

Readiness of screeds for flooring installation is determined by water/cement ratio, screed thickness and ambient conditions on site. Periods stated under 'Field of Application' generally apply, subject to favourable site conditions and maximum nominal thicknesses of 50 mm. As a rule, residual moisture in screed should 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 must 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. High internal humidity 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 should 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.

Storage

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

Disposal Considerations

Waste treatment methods: Recover if possible. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments. Disposal of hardened product (EC waste code) : 17 01 01. Disposal of not hardened product (EC waste code) : 17 01 01. The suggested European waste code is just based on the composition of the product. According to the specific process or application field a different waste code may be necessary.

Safety

All standard safety precautions for the handling of construction materials/chemicals must be taken. See Sopro Health and Safety Data Sheet for further information.

Contains Calcium Hydroxide. Symbols: **Danger**

Hazard Statements:

H318 Causes serious eye damage.

Precautionary Statements:

P261 Avoid breathing dust.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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/physician.

P102 Keep out of reach of children.

P332+P313 If skin irritation occurs: Get medical advice/attention.

Technical Information

Mixing Ratio	5 % of cement weight; 1 x 1.25 kg PE bag per 25 kg bag of CEM I Portland cement.
Pot 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 Recieve Floor Covering	After 3 – 5 days
Application Temperature	Between +5 °C and max. +30 °C
Specified Times	Apply for normal temperature range of +23 °C and 50 % relative humidity; higher temperatures shorten and lower temperatures lengthen these times.
Requirement	1 x 1.25 kg PE bag per 25 kg bag of CEM I Portland cement
Packaging	10 kg box (8 x 1.25 kg PE bags)



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