

Technical datasheet

Rapidcement CEM I 52.5 R

Portland cement

Composition

Rapidcement is a hydraulic binder according to SS-EN 197-1.

The main components of the cement are Portland cement clinker. Calcium sulfate is added to regulate the setting time as well as limestone as a minor constituent.

A tight quality control during the entire production process ensures a product of constant quality on a high level.

Properties

Properties are listed in the table "Typical data", page 2.

Rapidcement is low in chromium. By adding a chromate reducing agent to the cement the amount of water-soluble chromium VI is below 2 mg/kg.

Application

Rapidcement can be used for the fabrication of concrete according to SS-EN 206 och SS 137003. Further applications include the use as a binder in ready mixed mortars and in ground stabilization.

Rapidcement can be used where rapid strength development is desired, e.g. in prefabricated production where rapid demoulding and early lifting of concrete elements are a requirements, or during castings in low temperature conditions, e.g. during winter.

Quality assurance

Rapidcement conforms to the requirements stated in SS-EN 197-1 and is subjected to a rigorous quality assurance protocol in our laboratories. Additionally, the cement is regularly controlled by the third-party organization SPSC, Lithuania.

Supplier

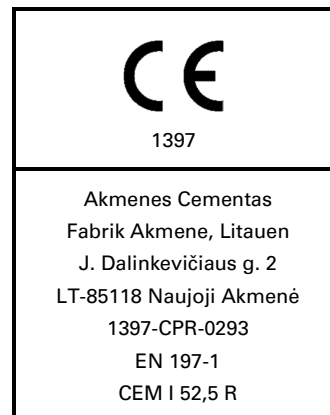
Akmenes Cementas, Akmene, Lithuania (a part of the SCHWENK Building Materials Group).

Storage and storage time

Rapidcement must be stored in dry environment and must be protected from moisture. Storage time is at least two months under dry, moisture free conditions.

Certification

The product is controlled and certified (CE marked) according to EN 197-1 by SPSC, Lithuania.



Contact

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Typical data

Physical data		Required
Fineness (Blaine)	540 m ² /kg	-
Density	3.08 g/cm ³	-
Bulk density	0.95 g/cm ³	-
Setting time	170 min	≥ 45 min ^A
Soundness	1.0 mm	≤ 10 mm ^A
Compressive strength		
1 d	30 MPa	-
2 d	40 MPa	≥ 30 MPa ^A
28 d	63 MPa	≥ 52.5 MPa ^A
Chemical data		Required
Sulfate (SO ₃)	3.5 %	≤ 4.0 % ^A
Alkali content (Na ₂ O _{eqv})	0,8 %	-
Loss of ignition (LOI)	2.8 %	≤ 5.0 % ^A
Chlorid (Cl ⁻)	0.05 %	≤ 0.10 % ^A
Chromium (Cr ^(VI))	< 2.0 mg/kg	< 2.0 mg/kg ^B

Requirements according to:

^A SS-EN 197-1:2011 Cement – Part 1: Composition, specifications and conformity for common cements

^B Directive 2003/53/EC of the European Parliament and of the Council (2003)