

Technical Leaflet

## CEM II/B-M (S-D) 52,5 N - Duracrete® basic

## **Portland Composite Cement**

**Composition:** SCHWENK Portland Composite Cement CEM II/B-M (S-D) 52,5 N - *Dura*crete® *basic* is a hydraulic

binder according EN 197-1.

The main ingredients of SCHWENK CEM II/B-M (S-D) 52,5 N - *Dura*crete® *basic* are Portland Cement clinker, blastfurnace slag and silica fume of chosen quality. As solidification modulatorcalcium sulp-

hate is added.

By stringent production monitoring during the complete production procedure a uniform quality on

a high level is maintained.

**Properties:** SCHWENK Portland Composite Cement CEM II/B-M (S-D) 52,5 N - *Dura*crete® *basic* combines by the

balanced combination of Portland Cement clinker, blastfurnace slag and chosen silica fume qualities the special properties of silica fume cement with the advantages of foundry cement. The concretes produced with this cement form an extra dense microstructure with high final strength and very good

durableness properties.

SCHWENK CEM II/B-M (S-D) 52,5 N - *Dura*crete® *basic* is low on chromates. By addition of a chromate

reducer the contents of water soluble chromium VI < 2 ppm.

**Application:** SCHWENK Portland Composite Cement CEM II/B-M (S-D) 52,5 N - *Dura*crete® *basic* can be used for

the production of all concretes according DIN EN 206-1/DIN 1045-2.

Mainly the SCHWENK Portland Composite Cement CEM II/B-M (S-D) 52,5 N - *Dura*crete® *basic* is used for concretes, for which high early and final strengths up to a strength class of C100/115 must be reached and/or high requirements for tightness and constancies of the concretes are set.

A preferred field of application for SCHWENK Portland Composite Cement CEM II/B-M (S-D) 52,5 N - *Duracrete® basic* constitute the high performance concretes for various areas (e.g. high building and

bridge building, urban hydraulic engineering, mining).

**Concrete additives:** The addition of concrete additives is permitted according DIN EN 206-1/DIN 1045-2, if they conform

to the relevant regulations or a general technical approval is available. Concrete additives with approval may only be used under the conditions as stated in the approval document. The permissible amount of fly ash according DIN EN 450 is for this cement limited to 15 % of the cement weight.

The addition of silica fume as additive is excluded.

For the production of reinforced concrete according DIN 1045-1 with direct bond as concrete additives only fly ash and silica fume or inert powdered minerals according DIN EN 12620 and

pigments with proved inoffensiveness for tensing steel may be used.

A initial test according DIN EN 206-1/DIN 1045-2 is necessary at addition of concrete admixtures.

Concrete admixtures: The addition of concrete admixtures is permissible according DIN EN206-1/DIN 1045-2, when these

conform to the appropriate standards resp. has a general building authority approval and is used

according to the conditions as stated in the approval.

A initial test according DIN EN 206-1/DIN 1045-2 is necessary at addition of concrete admixtures.

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## CEM II/B-M (S-D) 52,5 N - Duracrete® basic

Quality control: SCHWENK Portland Composite Cement CEM II/B-M (S-D) 52,5 N - Duracrete® basic is subject to

a self monitoring by our in-house laboratories and is externally monitored by the Verein Deutscher

Zementwerke e.V. Düsseldorf.

**Suppliers:** Bernburg, Karlstadt

**Delivery:** As bulk in silo trucks

Storing: SCHWENK Portland Composite Cement CEM II/B-M (S-D) 52,5 N - *Dura*crete® *basic* must be dry

stored and protected against humidity.

Cited standards: DIN EN 197-1 Cement

Part1: Composition, specifications and conformity criteria for common cements

DIN EN 206-1 Concrete

Part1: Specification, performance, production and conformity

DIN 1045-1, 2 Concrete, reinforced and prestressed concrete structures

Part1: Design and construction

Part2: Concrete - Specification, properties, production and conformity -

Application rules for DIN EN 206-1

DIN EN 12620 Aggregates for concrete

**Technical support:** Our application support team informs you regarding all application-technological questions.

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