

# CEM III/B 32,5 N-SR

## sulfate-resistant cement

### Sulfate-resisting cement



Sulfate-resistant cement with a longer workability period, designed for concreting in sulfur-aggressive environments, also suitable for the production of all types of conventional concretes. It is used particularly for concreting in warm weather and for earth-contact structures.

#### Characteristics

CEM III/B 32,5 N is characterized by a quite slow increase in early strengths, with 7-day-strengths ranging from 17 to 23 MPa and standard strengths after 28 days ranging from 42 to 50 MPa.

#### Use

- deep foundation of constructions (buildings) in contact with aggressive environments
- foundations and structures in contact with the soil
- plain concrete and reinforced concrete of low and middle strength classes
- stabilization layers of roads and motorways
- concrete filler into permanent shuttering

#### Advantages

- its **resistance to sulfate aggression predetermines it to concreting in contact with the soil**
- the **high fineness of the cement** improves the plasticity and pumpability of concrete, facilitates the smoothing of screeds and simplifies the placing of concretes
- **suitable for concreting in warm weather**
- the **standard increase in early strengths** minimizes the risk of cracks in the structure
- the **longer workability period** simplifies the placing of concretes

#### Quality

The quality of cements is supervised by the TSÚS (Building Testing and Research Institute), Bratislava. CEMMAC is a holder of an ISO 9001: 2008 quality management certificate and an ISO 14001: 2004 environmental management certificate.



Essential Properties	Harmonized Standard EN 197-1	CEMMAC CEM III/B 32,5 N-SR
2-day compressive strength (MPa)	—	5 – 10
7-day compressive strength (MPa)	≥ 16	17 – 23
28-day compressive strength (MPa)	≥ 32,5 ≤ 52,5	42 – 50
Initial setting time (min)	≥ 75	250 ± 50
Volume stability (expansion) – Le-Chatelier (mm)	≤ 10	0, - 1,5
SO <sub>3</sub> sulphate content (%)	≤ 4	2,7 ± 0,2
Chloride content (%)	≤ 0,10	0,05 ± 0,03

The content of tricalcium aluminate in this cement is less than 5%.

#### Increase in strengths

