



ANLÄGGNINGS- CEMENT BREVIK

PRODUCT INFORMATION

CEM I 42,5 N SR3 MH/LA

CEMENTA
HEIDELBERGCEMENT Group



CEMENT TYPE AND APPLICATION

Anläggningscement Brevik is a CEM I 42,5 N SR3 MH/LA Portland cement manufactured in Brevik (Norway). It is developed for use in mass concrete structures with demands for cement with moderate heat of hydration. Anläggningscement has a low C_3A content and is suitable when improved resistance against harmful attacks caused by high sulfate concentrations in soil and water is required. The low alkali content contributes to increased resistance against harmful alkali silica reactions.

Anläggningscement can be used alone or together with additions such as fly ash, ground granulated blastfurnace slag and silica fume. Technical data can be found on page 2 of this Technical data sheet.



STANDARDS AND CONTROL

Anläggningscement Brevik fulfills the requirements for sulfate resisting Portland cement type SR 3 in EN 197-1 Cement-Part 1: Composition, specifications and conformity criteria for common cements. Notified product certification body No 1111 (Kontrollrådet) has issued the certificate of constancy of performance with certificate No. 1111-CPR-0724. The number of Declaration of Performance is 1111-DoP-N011-0724.

Anläggningscement Brevik is marked for MH (moderate heat of hydration) according to SS 134202:2006 and LA (low alkali) according to SS 134203 with certification and control by Kontrollrådet with certificate No 1111-CPR-0724 according to AMA Nivå 1 for certified products.



PACKAGING, DISTRIBUTION AND STORAGE

Storage in an environment that has an element of moist air or direct contact with ground moisture or water damages the cement very quickly (days, weeks). Anläggningscement Slite must be stored in a dry, sealed silo for a maximum of six months after delivery, as the chromate reduction process gradually loses its effect. The equivalent storage time for unbroken big bags is twelve months after date of packaging. It is always the buyer's responsibility to make sure and be able to show that the storage location is dry and sealed, and that the storage time is observed.



GENERAL TERMS OF DELIVERY

The delivery of Anläggningscement Brevik is subject to ABM 07 and Cementa's Special Terms and Conditions.



SAFETY DURING HANDLING

All cement is dangerous to consume and must be stored out of the reach of children. Cement in the eyes creates a risk of serious eye damage. Moist cement forms calcium hydroxide, which irritates the skin and the respiratory organs. For complete information and instructions on protection, see the Material Safety Data Sheet.



PRODUCT INFORMATION

For the latest updates to the Technical data Sheet, Material Safety Data, EPD and other product information, see our website www.cementa.se.



TECHNICAL DATA

Anläggningscement Brevik fulfills the Technical data below.

On rare occasions the values may deviate from the specified ranges or limits

GUIDELINE VALUES

Property	Target value	Range	Requirement according to SS-EN 197-1
Compressive strength*			
1 day (MPa)	12	± 3	
2 days (MPa)	24	± 3	≥ 10
7 days (MPa)	41	± 4	
28 days (MPa)	54	± 4	≥ 42,5 ≤ 62,5
Setting time (min)	170	± 30	≥ 60

* Measured on standard mortar according to EN 196-1

OTHER TECHNICAL DATA

Property	Value	Range	Requirement according to SS-EN 197-1
Compact density (kg/m ³)	3200	± 20	
Bulk density (kg/m ³)	1250	± 250	
Blaine fineness (m ² /kg)	390	± 30	
Passing 32 µm (%)	73	± 3	
Heat of hydration (j/g)	1 day	170	± 20
	3 days	240	± 20
	7 days	270	± 20
Alkali, Na ₂ O-ekv (%) ²	0,55	± 0,05	≤ 0,6 ²
Sulfates, SO ₃ (%)	2,8	± 0,2	≤ 3,0
C ₃ A, clinker (%)	2,0	± 0,7	≤ 3
Chloride, Cl ⁻ (%)	0,02	± 0,01	≤ 0,10
Water-soluble chromium Cr ⁶⁺ (PPM)	0-2		≤ 2 ³
Brightness (%)	23	± 1	

¹ According to SS 134202

² According to SS 134203

³ Clause 47 of Annex XVII of the REACH Regulation



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