

Calight 50

High Alumina Cement

CALIGHT® 50

- Minimum of 50% Al_2O_3
- Refractory applications
- High strength development
- Light in colour
- Can be used to accelerate set in OPC
- Increased early strength
- Produced using high purity Bauxite

Calight® 50 is a calcium aluminate cement with a minimum Al_2O_3 content of 50%. It is produced in a rotary kiln using high purity bauxite and limestone. Due to its very light colour, Calight® 50 can not only be used in refractory applications, but also in further building chemistry where a light colour is needed.

Most often, Calight® 50 is used in combination with Ordinary Portlandcement to accelerate setting times and improve early strength development. A negligible amount of free lime is produced, resulting in an improved resistance against acids and sulphate attack.

When applied in its pure form combined with heat resistant aggregate, Calight® 50 can withstand extremely high temperatures, making it suited for a wide variety of refractory applications.

Technical data

Setting times

(according to Vicat, when combined with OPC at a 1:2 ratio)

Initial set	~	0:50 - 1:10 minutes
Final set	~	1:10 - 1:45 minutes

Temperature development:	:	$\geq 37^\circ\text{C}$
Achieved after	:	$\leq 8:00$ min

Compressive Strength development

(500 grams of Calight® 50 tested with 1350 grams of normalized sand)

Time	Flexural Strength	Compressive Strength
6 hours	$\geq 3,50$	~ 30,00
24 hours	$\geq 6,50$	~ 65,00
72 hours	$\geq 7,50$	~ 70,00