CEM I 52,5 R

UNE-EN 197-1:2000

CHARACTERISTICS

	CHARACTERISTICS	STANDARD	NORMAL
COMPONENTS	as%		
	* Clinker	95-100	96
	* Additional minority component	0-5	4
	Setting regulator, "gypsum"	-	4
	(*) Refers to the nucleus of the cement, setting regulator excluded.		
CHEMICAL	as%		
	Sulphur trioxide (SO_3)	4.0 max.	3.3
	Chlorides (CI-)	0.10 max.	0.01
	Loss on ignition	5.0 max.	3
	Insoluble residue	5.0 max.	0.8
PHYSICHAL	Blaine specific surface (cm^2/g)	-	4,000-4,200
	Le Chatelier expansion (mm)	10 max.	0
	Setting start time (minutes)	45 min.	120
MECHANICAL	MPa		
	Compression after 1 day	-	24-26
	Compression after 2 days	30.0 min.	36-38
	Compression after 7 days	-	48-50
	Compression after 28 days	52.5 min	58-60

SPECIFICATIONS

CEM I Portland cement, with 52.5 R high resistance. Its features make it ideal to be used industrially for the production of prepared concrete and prefabricated elements in the case of maximum resistance being required.

Its specific properties are as follows:

High mechanical resistance

This cement's values as regards resistance to compression at all times following application make it ideal for obtaining highly-resistant concretes, especially when recently applied.

Rapid hardening

This cement's rapid-hardening properties mean that it is suited to the manufacture of prefabricated elements.

Consignment

Bulk

Recommended for the preparation of

·Highly-resistant concrete.
·Mass concrete. reinforced concrete and prestressed concrete with high mechanical resistance at all times following application, and particularly when recently applied.
·Concrete for prefabricated elements.

Unsuitable for the preparation of

·Concrete for works in aggressive atmospheres, water and ground.
·High-volume mass concrete, particularly where large proportions are concerned.
·Concrete for large volumes and pieces of medium-high thickness. ·Compacted dry concrete.

Precautions for application on site

Proper and extensive curing should always take place, particularly in dry climates with high temperatures and wind, in order to prevent rapid desiccation, which causes plastic shrinkage.