

# Portland Cement

CEM I 52,5N

#### **CEMCOR Portland Cement is a versatile,** high performance cement.

Quality assured with third party certification and CE & UKCA marking, CEMCOR Portland Cement is suitable for a variety of applications from conventional concretes, mortars and renders to specialised pre-cast units, soil stabilisation and adhesives.

#### **Quality**

The quality of all Portland Cement produced by CEMCOR is guaranteed to meet the full requirements of BS EN 197-1 and is independently certified by the British Standards Institute.

The product is CE and UKCA marked for use in the United Kingdom and EU.

#### **Applications**

CEMCOR Portland Cement is particularly suitable for:

- Applications where high performance at 7 and 28 days is required.
- Ready-mixed concrete and mortars.
- Pre-cast concrete units.
- Foundations.
- Soil stabilisation.
- Adhesives.

CEMCOR Portland Cement is also versatile for use with a range of admixtures or fly ash and GGBS, allowing flexibility to tailor the concrete to meet specific requirements. For best performance, concrete, mortars and grouts containing CEMCOR Portland Cement must be specified and used correctly.

#### **Test Certificates**

Covering the key physical and chemical parameters, product test data is available on a weekly basis.

#### Storage

Bulk cement should be stored in dry conditions to prevent premature deterioration of the product or of the reducing agent incorporated for control of soluble chromium (VI).

#### Health & Safety

Cement is irritating to eyes, respiratory system and skin. A detailed Safety Data sheet is available from CEMCOR on request or for download from **www.CEMCOR.com** 

#### Advice & Information

Further information and advice on this product and the wider CEMCOR range is available at **www.cemcor.com** or by calling **028 8676 7200**.





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#### **Typical Properties**

The requirements of BS EN 197-1 for CEM I 52,5N Portland cement are below compared with typical performance data. The following data is for guidance only, not to be used for specification purposes. Additional information is available from CEMCOR on request.

### Physical Properties

Property		Requirement	Typical Range
Surface Area (m²/kg)	)	-	360 - 420
Initial Setting Time (mins)		≥ 45	130 - 170
Soundness (mm)		≤ 10	0 - 2.0
Compressive Strengt			
	2 Day	≥ 20.0	29.0 - 35.0
	7 Day		47.0 - 55.0
	28 Day	≥ 52.5	60.0 - 66.0

## Chemical Properties

Element	Symbol	Unit	Requirement	Range
Silica	SiO2	%		18.0 - 22.0
Alumina	Al <sub>2</sub> O <sub>3</sub>	%		4.0 - 6.0
Iron	Fe <sub>2</sub> O <sub>3</sub>	%		2.0 - 3.0
Calcium	CaO	%		60.0 - 66.0
Sulphur	SO3	%	≤ 4.0	3.1 - 3.5
Chloride	Cl	%	≤ 0.10	0.01 - 0.07

## Other Properties

Element	Symbol	Unit	Requirement	Range
Tricalcium Aluminate	C3A	%		9.0 - 11.0
Loss on ignition		%	≤ 5.0	1.0 - 3.5
Insoluble Residue		%	≤ 5.0	0 - 1.0
Alkali	Eq Na₂O	%		0.5 - 0.75

