

# Portland Limestone Cement

CEM II/A-L 42,5R (Rapid Hardening)

PXZ 844

#### **CEMCOR Portland Limestone Cement is a high quality general purpose Cement.**

Quality assured with third party certification and CE & UKCA Marking, CEMCOR Portland Limestone Cement is a lower carbon, cost effective alternative to traditional CEM I products, suitable for a variety of applications.

#### Quality

The quality of all Portland Limestone 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. The incorporation of limestone fines in the manufacturing process reduces the Portland cement clinker content, resulting in a lower level of carbon intensity than CEM I alternatives while retaining high levels of technical performance.

#### **Applications**

CEMCOR Portland Limestone Cement is particularly suitable for:

- General ready-mixed and site-mixed concretes, mortars, renders, grouts and screed.
- Pre-cast and pre-stressed concrete.
- Suitable for DC-1 and DC-2 exposure classes.

CEMCOR Portland Limestone Cement is also suitable for use with a range of admixtures. For best performance, concrete, mortars and grouts containing CEMCOR Portland Limestone 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 II/A-L 42,5R Portland Limestone 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.

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### Physical Properties

Property		Requirement	Typical Range
Surface Area (m²/kg)		-	420 - 490
Initial Setting Time (mins)		≥60	140 - 180
Soundness (mm)		≤	10 0 - 2.0
Compressive Strength			
	2 Day	≥ 20.0	27.0 - 32.0
	7 Day		43.0 - 50.0
	28 Day	≥ 42.5, ≤ 62.5	55.0 - 62.0

## Chemical Properties

Element	Symbol	Unit	Requirement	Range
Silica	SiO2	%		18.0 - 20.0
Alumina	Al <sub>2</sub> O <sub>3</sub>	%		4.5 - 5.5
Iron	Fe <sub>2</sub> O <sub>3</sub>	%		2.0 - 3.0
Calcium	CaO	%		58.0 - 64.0
Sulphur	SO3	%	≤ 4.0	3.1 - 3.4
Chloride	Cl	%	<b>≤</b> 0.10	0.01 - 0.04

## Other Properties

Element	Symbol	Unit	Requirement	Range
Tricalcium Aluminate	C3A	%		8.0 - 10.0
Loss on ignition		%		1.0 - 3.0
Insoluble Residue		%		0.0 - 1.0
Alkali	Eq Na₂O	%		0.5 - 0.65

