



## CEMENT PRODUCTS - CEM II/A-L 42.5N PREMIUM GRADE CEMENT (BAGGED)

A Portland-limestone cement product manufactured in accordance with, and certified to BS EN 197-1: 2011. This product complies with the requirements for CE marking (Certificate of Conformity No. 0050-CPR-0465) and operates a Factory Production Control system to attestation level 1+. This product conforms to the European Directive 2003/53/EC which stipulates that a cement may not be placed on the market if it contains more than 2ppm soluble Chromium VI. Ferrous Sulphate is used to control the level of Chromium VI.

**This product is marketed as CEM II /A-L 42.5N.**



### Physical Properties

Property	Requirement	Range
Surface Area (m <sup>2</sup> /Kg)	-	360 - 430
Apparent Particle Density (Kg/m <sup>3</sup> )	-	3100 - 3250
Initial Setting Time (mins)	≥ 60 mins	160 - 200
Soundness (mm)	≤ 10 mm	0 - 2.0

### Compressive Strength N/mm<sup>2</sup>

2 day	≥ 10.0	16.0 - 24.0
7 day		28.0 - 34.0
28 day	≥32.5 ≤52.5	44.0 - 50.0

### Chemical Properties

Element (oxide of)	Symbol	Unit	Requirement	Range
Silica	SiO <sub>2</sub>	%		16.0 - 20.0
Aluminium	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
Magnesium	MgO	%		1.0 - 3.0
Sulphur	SO <sub>3</sub>	%	< 3.5	2.65 - 2.85

### Other Properties

Loss on Ignition (%)		%		5.0 - 10.0
Insoluble Residue (%)		%		<5.0
Alkali's	Na <sub>2</sub> eq	%	< 3.5	0.45 - 0.65