

Flexi

Portland Limestone Cement



bringing materials to *life*™



Portland Limestone Cement CEM II / B-L 32,5 R

Lafarge Emirates' Portland Limestone Cement (PLC) is produced by inter-grinding of cement clinker, strictly controlled amount of high purity limestone & a small quantity of gypsum. It meets or exceeds all applicable chemical and physical requirements of BS EN 197-1 : 2000 for CEM II / B - L. It can be used in most applications where normal Portland cement is used.

Applications:

PLC is ideal for general purpose use in a wide range of applications: Majority of concrete products, General purpose ready-mix & pre-cast concrete, Mortars of wide variety for brick & block-work, Concrete block manufacturing, Renders & Grouts, Plaster and Floor screeds etc.

Features & benefits:

- Can be used in most applications where normal Portland cement is used.
- The properties of fresh concrete made with Portland Limestone Cement are similar to those of a normal Portland cement concrete but the tendency of bleeding will be significantly reduced.
- Guaranteed premium product with high uniformity & consistent quality.
- Better aesthetic finish: Portland Limestone Cement has a paler colour which is especially suitable for decorative & architectural concrete.
- Higher workability & longer slump retention allows ease of application.
- Lower heat of hydration.
- Environmental friendly: Use of this product is a step forward to the sustainable construction practices.
- The requirements of BS EN 197-1 : 2000 standard are compared to typical performance data for Lafarge Emirates' Portland Limestone Cement in the table.

Requirements of standards and typical properties of Lafarge Emirates' Portland Limestone Cement:

Property	Requirement of BS EN 197-1 : 2000 for CEM II / B - L 32,5 R	Typical values* of Lafarge Emirates' Portland Limestone Cement CEM II / B - L 32,5 R
Silicon Dioxide (SiO ₂)	----	15.00 – 18.00 %
Aluminum Trioxide (Al ₂ O ₃)	----	3.50 – 4.30 %
Ferric Oxide (Fe ₂ O ₃)	----	2.40 – 3.20 %
Calcium Oxide (CaO)	----	59.00 – 62.00 %
Magnesium Oxide (MgO)	----	1.00 – 2.00 %
Sulfate (as SO ₃)	Maximum 3.5 %	2.40 – 2.80 %
Tri Calcium Aluminate (C ₃ A)	----	4.00 – 7.00 %
Equivalent Alkalis	----	0.35 – 0.50 %
Chloride	Maximum 0.10 %	0.01 – 0.05 %
Compressive Strength : 2 days	Minimum 10.0 MPa	14 – 18 MPa
Compressive Strength : 7 days	----	24 – 30 MPa
Compressive Strength : 28 days	Minimum 32.5 MPa	34 – 40 MPa
Initial Setting Time	Minimum 75 minutes	150 – 190 minutes
Final Setting Time	----	200 – 240 minutes
Soundness	Maximum 10 mm	0.00 – 2.00 mm
Fineness	----	400 – 450 m ² /kg
*Values obtained from tests as per BS EN standards.		

Admixture additions: It is recommended to carry out trial mixes to verify admixture compatibility with cement & to find out the optimum admixture dosage.

Test Certificates: Routine product test data covering the key physical and chemical parameters are made available on weekly basis on request.

Availability: Portland Limestone Cement is supplied both in bulk tanker & 50 kg bag.

Storage: Cement should be stored dry to avoid its quality deterioration due to premature hydration and carbonation. Moisture from the air can be as harmful as direct moisture. Cement in bulk should be stored in well-maintained silo with no damp air or moisture ingress. Bags should be stored unopened and clear off the ground in dry conditions and should be stacked in a safe and stable manner.



Other Information

Health and Safety:

Contact between cement powder and body fluids (e.g. sweat and eye fluids) may cause irritation, dermatitis or burns. Wear suitable protective clothing, dust mask, protective goggles, gloves while handling. Immediately wash with plenty of clean water when it comes in contact with eye or skin. Seek immediate medical advice for persistent or severe discomfort.

Technical Support:

Further information or specification advice on PLC and the full range of Lafarge Emirates' products can be obtained through the contacts listed below.

Other Cements

Lafarge emirates Cement also manufactures:

- Portland Cement (OPC)
- Sulfate-Resisting Portland Cement (SRPC)
- Moderate Sulfate Resisting Cement (MSRC)
- Ground Granulated Blast-furnace Slag (GGBS)

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