

PROCEN



bringing materials to *life*™



PORTLAND CEMENT CEM I 52,5N

A general purpose packed Portland cement that complies with the requirements of BS EN 197-1 CEM I 52,5N.

Procem is a quality assured cement with independent third party certification and carries a CE Mark.

Applications

Procem is a packed Portland cement that is suitable for use in civil engineering applications such as structural concrete, piling and screeds.

To achieve optimum performance from Procem in concrete, mortar, render, screed or grout, it is essential that it is correctly specified and used. Attention should be given to an adequate cement content, a water/cement ratio as low as possible consistent with satisfactory placing and thorough compaction and to adequate curing. Reference should be made to the following documents:

BS 8500: *Concrete - Complementary British Standard to BS EN 206-1.*

BS 5628: *Part 3: Code of Practice for the use of Masonry.*

BS EN 13914-1: *Design, preparation and application of external rendering and internal plastering.*

Sulfacrete should be used where increased resistance to sulfates is required.

Properties

- Grey colour.
- Consistent strength meeting all the conformity criteria in BS EN 197-1.
- Compatible with admixtures such as air-entraining agents and workability aids, with cement replacement materials such as fly-ash and ground granulated blastfurnace slag and with pigments. Trial mixes are recommended to determine the optimum mix proportions.

Availability

Procem is available in 25 kg bags throughout the United Kingdom.

Storage

This product should be stored in unopened bags either clear of the ground in cool dry conditions and should be stacked in a safe and stable manner.

Information on the maximum storage period can be found on the bag.



Conditions of Use

- Procem may be used in the range of traditional nominal mixes as for traditional Portland cement.
- To achieve optimum performance from Procem in concrete or other products, it is essential that it is correctly specified and used.
- Recommended mixes are given in the Lafarge Cement Builders' Guide, available from the contacts overleaf.
- As with other cements in building work, there is no substitute for good practice and workmanship. It is essential to use the correct materials, proportion and mix the materials properly, add the correct amount of water, compact, cure and protect as appropriate.
- Normal hot and cold weather practice should also be followed.
- The final finish quality of this material will depend upon the operative having the required skills and a familiarity with the material and its application methods.
- Lafarge Cement UK cannot be held responsible where workmanship has not been carried out in accordance with good practice.
- Manual handling should comply with The Manual Handling Operations Regulations 1992.
- Procem is manufactured from natural products, and slight shade variations may occur. Procem will also have shade variations from differing manufacturing centres.

Technical Support

Further information and advice on this product and the full range of Lafarge Cement products can be obtained through the contacts listed below. Alternatively, step-by-step application videos are available from us on the internet, by scanning the QR code below using your Smartphone or by downloading our iPhone app from the App Store.

Health and Safety

Contact between cement powder and body fluids (eg sweat and eye fluids) may cause irritation, dermatitis or burns. Cement is classified as an irritant under the Chemicals (Hazard Information and Packaging) Regulations.

For further information, including control of soluble hexavalent chromium, refer to the appropriate Lafarge Cement Health and Safety Information Sheets.



Procem is predominantly compounds of calcium silicate and calcium aluminate with a small proportion of gypsum. It is produced by burning or sintering, at a temperature in excess of 1400°C, a finely ground mixture of raw materials which contain predominantly calcium carbonate, aluminium oxide, silica and iron oxide. The cooled clinker formed is ground under controlled conditions with the addition of typically 5% gypsum.

The information in this datasheet is accurate at the time of printing, but Lafarge Cement UK reserve the right to amend details as part of their product development programme.

Typical properties		
Surface area	(m ² /kg)	300 to 450
Setting time – initial	(mins)	80 to 200
EN196-1 Mortar		
– compressive strength		
2 day	(N/mm ²)	25 to 35
7 day	(N/mm ²)	40 to 50
28 day	(N/mm ²)	52 to 65
Apparent particle density	(kg/m ³)	3080 to 3180
Bulk density	Aerated	1000 to 1300
	Settled	1300 to 1450
Colour	L value	57.5 to 68.0
Sulfate	SO ₃ (%)	2.5 to 3.5
Chloride	Cl (%)	Less than 0.10
Alkali	Eq Na ₂ O (%)	< 1.0
Tricalcium Silicate	C ₃ S (%)	40.0 to 60.0
Dicalcium Silicate	C ₂ S (%)	12.5 to 30.0
Tricalcium Aluminate	C ₃ A (%)	7.0 to 12.0
Tetracalcium Aluminoferrite	C ₄ AF (%)	6.0 to 10.0

Further information

Technical helpline

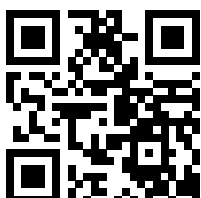
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Customer services

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iPhone App

www.lafarge.co.uk/iphone



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