Portland cements are predominantly compounds of calcium silicate and calcium aluminate with a small proportion of gypsum. They are 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 given in this technical datasheet is based on our current knowledge and is intended to provide general notes on our products and their uses. Hope Cement endeavours to ensure that the information given is accurate but accepts no liability for its use or its suitability for a particular application because of the product being used by the third party without our supervision.

Hope Cement Limited Registered Office Breedon Quarry, Breedon on the Hill, Derby DE73 8AP
Company Registration Number 8284549. Hope Cement is a Breedon Group company.
VAT No GB 650202879

www.breedongroup.com
PORTLAND CEMENT

PORTLAND CEMENT IS QUALITY ASSURED WITH INDEPENDENT THIRD PARTY CERTIFICATION AND CARRIES A CE MARK. IT OFFERS HIGH LEVELS OF WORKABILITY IN READY-MIXED CONCRETE, MORTARS AND SOIL STABILISATION.

PORTLAND CEMENT is particularly suitable for:
- Applications where 7 & 28 day strength are fundamental to performance.
- Ready-mixed concrete and mortar applications where high levels of workability are desired.
- Soil stabilisation and adhesives.

APPLICATIONS

PORTLAND CEMENT with enhanced properties for ready-mixed concrete, mortar and soil stabilisation.

Concrete, mortars and grouts containing Portland cement must be specified and used correctly for best performance. The cement content must be correct and the water:cement ratio as low as possible consistent with satisfactory placing, thorough compaction and effective curing. The final finish quality of this material will depend upon the operative having the required skills and a familiarisation with the materials and its application methods.

Hope Cement Limited cannot be held responsible where workmanship has not been carried out in accordance with good practice.

PORTLAND CEMENT is manufactured from natural products, and slight shade variations may occur. Portland cement will also have shade variations from differing manufacturing centres.

TECHNICAL SUPPORT

Further information and advice on this product and the full range of Hope Cement products can be obtained through contacting your local representative, or by calling our customer services team on 0845 5201 888.

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.

TYPICAL PROPERTIES

(For guidance only, not to be used for specification purposes)

Surface area (m²/kg) Portland SSA

330 - 360

Setting time – initial (minutes)

60 to 180

BS EN 196-3 Mortar – compressive strength

2 day (N/mm²) 30 to 40

7 day (N/mm²) 45 to 55

28 day (N/mm²) 54 to 68

Apparent particle density (kg/m³)

3080 to 3180

 Bulk density (kg/m³)

Aerated 1000 to 1300

Settled 1300 to 1450

Colour L value

61.0-66.0

Sulfate SO3 (%) 3.0 to 3.6

Chloride Cl (%) Less than 0.10

Alkali Eq Na2O (%) 0.4 to 1.0

Tricalcium Silicate C3S (%) 45.0 to 65.0

Dicalcium Silicate C2S (%) 15.0 to 25.0

Tricalcium Aluminate C3A (%) 7.0 to 12.0

Tetracalcium Aluminoferrite C4AF (%) 6.0 to 10.0

TO DISCUSS YOUR SPECIALISED MIX AND ANY FURTHER REQUIREMENTS, CALL:

0845 5201 888
cement@hopecement.com
www.breedongroup.com