

Cemstone®

PORTLAND-LIMESTONE CEMENT

BS EN 197-1 – CEM II / A-L 52,5 N

Cemex Cemstone is a factory produced Portland-limestone cement with a lower carbon footprint compared to other types of Portland cements.

Cemex Cemstone provides benefits in a wide range of concrete, mortar, render, screed and grout applications. Incorporating finely ground limestone, Cemex Cemstone contains lower levels of Portland cement clinker than CEM I alternatives meaning a lower level of carbon intensity but with equivalent levels of technical performance. Cemex Cemstone is suitable for use as an alternative to Portland cement in most types of concrete except where aggressive ground conditions demand the use of sulfate resisting cement, when Cemex Extra should be specified.



Features and benefits



Reduced risk of thermal cracking



Improved environmental footprint



Lighter in colour



Consistent, convenient and cost-effective



Improved workability, cohesion and finishing

Availability, delivery & storage

Cemex Bulk Cements are available across the UK.

Delivery is by pressurised bulk tanker in 28-30 tonne shipments and bulk bags ranging from 0.5-1.5 tonnes are available.

All Cemex drivers are fully trained and experienced in the discharging of our vehicles. Please ensure the site is accessible with no obstructions. A pre-delivery inspection can be arranged to assess the site for suitability, just ask.

For further information on the safe delivery of our products please refer to our Information Sheet 'Bulk Cementitious Site Safety Guide' available separately. Silo product identity discs are available on request by calling Customer Services on 0800 353 433.

To avoid premature deterioration of the reducing agent incorporated in the cement for the control of soluble chromium (VI) storage should be in accordance with the recommendations given on our despatch documents.



Usage guidance and concrete properties

Cemex Cemstone can be used to produce all kinds of concrete, mortars, renders, screeds and can be used in civil engineering applications. For application specific guidance please refer to relevant sources.

To produce durable concrete using Cemex Cemstone attention should be paid to the use of the correct materials, mix design and workmanship. BS8500; Concrete, Complementary British Standard to BS EN 206-1 gives guidance for using Cemex Cemstone in concrete in various environmental exposure conditions. There are some environmental exposure conditions in which Cemex Cemstone is not suitable such as where a Design Chemical Class 3 (DC-3) or above is necessary and in some marine environments.

If in doubt please consult a technical consultant or contact Cemex Technical Support.

Cemex Cemstone is compatible with most types of admixtures. Suitable admixtures are available from Cemex Admixtures. In all cases trial mixes of proposed mix designs are recommended. To achieve durable concrete care must be taken to keep water/cement ratio as low as possible.

Once in place concrete requires moisture to develop its full strength and durability and premature drying must be avoided. In normal conditions and at temperatures in excess of 10°C concrete should be cured under damp conditions for 1 to 3 days (covered with a suitable curing membrane or other protection), at temperatures below 10°C this curing time should be doubled. Protection against freezing is required until the concrete reaches a minimum compressive strength of 5MPa.

Health & safety

Contact with wet cement, wet concrete or mortar may cause irritation, dermatitis or severe alkali burns. Contact between cement powder and body fluids (e.g. sweat and eye fluids) may also cause irritation, dermatitis or burns. There is serious risk of damage to the eyes. Wear suitable waterproof protective clothing, gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. After contact with skin, wash immediately with plenty of clean water. Keep out of reach of children.

Contains chromium (VI), may cause allergic reaction, the risk of which is increased if the cement is used beyond the declared storage period shown on despatch documents. A comprehensive SDS is available for all Cemex Portland cements.

Product data

Routine test data including fineness, setting time, soundness, alkali and chloride levels and BS EN 196-1 mortar prism strengths are available in the form of weekly Cement Test Reports. Other test data including chemical analyses are also available on request.

CEM II information

Cemex is committed to continuous improvement in environmental and sustainability performance, particularly through utilising recycled content, minimising landfill waste and improving our energy efficiency.

CEM II cements are factory produced Portland composite cements.

Product properties

Cemex Cemstone has been designed to deliver similar strength and durability performance as Cemex Portland at typical cement contents.

TYPICAL PROPERTIES		CEMSTONE	EXTRA	PORTLAND
EN196-1 Strength	2-day	33.0	24.5	33.0
	7-day	45.5	32.5	45.5
	28-day	59.0	49.0	59.0
Water for Standard Consistence/%H ₂ O		29.0	30.0	29.5
Initial Setting Time/Minutes		120-140	120-140	100-120
Fineness m ² /kg		440-460	430-450	390-410
Declared Maximum Alkali / %Na ₂ O		0.70	0.62	0.75
+SR		No	Yes	No
Colour / CIELab	L*	61.0	59.5	60.0
	a*	-1.2	-1.1	-1.3
	b*	5.9	7.0	6.5

Declared performance and UKCA marking

Cemex UK Bulk Cements conform to the relevant requirements of UK Designated Standard BS EN 197-1 or BS EN 197-5 and are subject to third party accreditation by a UK Approved Body in accordance with the most rigorous level of 'assessment and verification of constancy of performance' (AVCP 1+) specified in the UK Construction Products Regulation.

This provides:

- Independent confirmation that products conform fully to the relevant technical specification
- Regular independent auditing of products by UKAS accredited laboratories
- Regular independent evaluation of test data and appraisal of our Factory Production Control
- Traceability of cement deliveries to their source of manufacture



Declarations of Performance in respect of the essential characteristics of our products are available from our website at cemex.co.uk/ukcamarks.

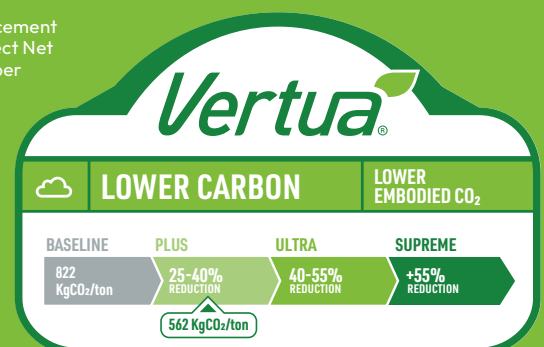
Bulk Cement UKCA mark information can also be found on our despatch documentation as required by the UK Construction Products Regulation.

Vertua - More sustainable by design

The Vertua 'lower carbon' logo and label is shown on selected cement products characterised by their unique composition. These cements contain the highest quality ingredients to reduce the carbon footprint of the finished product.

Cements bearing this sign are guaranteed to **reduce CO₂ emissions in the process of their manufacture by over 25%**, than conventional Portland cement CEM I*. Our cements labelled as **Vertua Ultra have over 40% lower CO₂ emissions** with comparable performance.

*Basis of calculation: GCCA standard value for cement clinker emissions (global weighted average of direct Net emissions of cement clinker) from Getting the Number Right (GNR) in 2000: 862 kg CO₂/t cement clinker. Reference value Cement (CEM I with 95% cement clinker content): 822 kg CO₂/t cement. (GWP figures calculated to recognised standards are available on request) Vertua is a Cemex Group trademark that highlights specific characteristics of Cemex Group products regarding environmental impact as described in the corresponding Fact Label. The Vertua label is not intended as a certification. Cemex defines all labels on industry standards, the data in this label is based on operational performance and cement emissions taken from actual figures. This is subject to change and will be reviewed and updated annually.





Technical Services and Product Support Helpline:

Cemex UK provides support for our products through the dedicated support channels. Routine test data in the form of Weekly Cement Test Reports, Product Conformity Certificates etc are available through our online portal, please contact us for further details and registration.

Product Support:

 **0800 667 827**

 **gb-enquiries@cemex.com**

Bulk Cement Customer Services:

 **0800 353 433**

 **customerservices@cemex.co.uk**

 **cemex.co.uk/bulk-cement-products**

Cemex is a global leader in the building materials industry providing high-quality, innovative products and exceptional service to both customers and the community in the most sustainable and efficient way possible.

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