

White Portland Cement CEM 1 52,5R

Technical data sheet

White Portland Cement 52,5R is a quality cement manufactured to comply with the requirements of BS EN 197-1. White Portland Cement is recommended for use in concrete, mortar and render with or without pigments. The setting and strength characteristics of Hanson White Portland Cement are similar to Grey Portland cements

Applications

White Portland Cement is naturally chosen for its high degree of light reflection. To obtain white or light coloured concrete specially selected white or light coloured sand and stone aggregates are required. Coloured concretes and renders are achieved by adding pigments specifically designed for the use with Portland cement and Portland cement products.

For extremely white concrete, Titanium Dioxide pigment may be added up to 5% by weight of cement. Typical applications for White Portland Cement include: cast stone, rendering, cladding panels, exposed aggregate finishes, structural concrete, pointing mortars, terrazzo finishes and precast units.

Quality

White Portland Cement is manufactured from specially produced white Portland clinker using carefully selected raw materials avoiding minerals which would colour the final cement. The resultant clinker is ground in ceramic lined mills to ensure an excellent degree of whiteness. Strict quality control throughout each stage of the manufacturing process ensures that a consistent final product is achieved. White Portland Cement is CE marked under the Construction Products Regulations which provides independent third party certification of product conformity. It ensures that in addition to applying a system of factory production control (defined in BS EN 197-2), independent sampling and testing of the cement has confirmed its compliance with all of the requirements of BS EN 197-1. A Declaration of Performance (DoP) and CE mark are available on our website.

Compatibility

White Cement is suitable for use with a wide range of additives and admixtures to extend the properties and uses of concretes, mortars, renders and screeds. It is recommended that trial mixes are carried out to determine compatibility and optimum proportions. Care should be taken to select an admixture which does not adversely affect product colour.

Data and certification

Our technical team provide current data and routine certification of tests for all essential characteristics including compressive strengths of mortar prisms, fineness, setting times, soundness and chemical composition including alkali levels. These are available on a weekly basis and on our website.

Availability

White Portland cement is available across the United Kingdom in both bulk supply and in 25 kg bags.

Product declaration

Parameter	Units	Max limit
Alkali Content (Na ₂ O _{eq})	%	≤0.3
C3A - Sulphate resistance	%	≤5.0
Sulfate	%	≤4.0

Management systems

Heidelberg Materials are approved to the following management systems:

ISO 9001 – Quality management
ISO 14001 – Environmental management
ISO 45001 – Occupational Health and Safety Management

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BES 6001 – Responsible Sourcing of Construction Products
ISO 50001 – Energy Management

Mix design

Concrete mix designs need to be adapted to suit individual circumstances. It is strongly recommended that trial mixes are carried out prior to commencement of work to ensure that the mix design and material combinations meet the requirements of the specification and method of use.

Hexavalent Chromium (VI)

White Portland Cement has a naturally low Chromium content of $\leq 2\text{mg/kg}$ and meets the requirements of Regulation EC 1907/2006 (REACH).

Conditions of use

- Methods to prevent loss of moisture from exposed surfaces of concrete, known as curing, should be employed for at least the first 7 days after casting
- As a general rule, concrete should be placed within the range of 10°C to 30°C.
- In cold weather, freshly poured concrete should be protected from low temperatures to avoid frost damage.
- In hot weather and mass concrete pours, there is increased risk of cracking due to loss of water by evaporation and cracking due thermal stresses which could reduce ultimate strength.
- Hanson Cement is not responsible for defects caused by poor workmanship.
- Hanson White cement is made from natural materials. Therefore slight variations in colour may occur.

Technical support

For further advice please contact the Technical Helpline on 0330 123 2441.

Health and safety

Cement causes skin, eye and respiratory irritation, severe burns and dermatitis. Always wear suitable personal protective equipment (PPE) and refer to the full Material Safety Data Sheet for further information.