Heidelberg Materials General Purpose Cement

Technical data sheet

Heidelberg Materials General Purpose cement is a quality assured Portland Limestone cement manufactured to comply with the requirements of EN 197-1. achieving. The strength classes available are 32,5R or 42.5N depending which manufacturing works the General Purpose cement is supplied from.

Heidelberg Materials General Purpose cement is produced using carefully selected raw materials and strict quality control throughout each stage of the manufacturing process to ensure a consistent final product is achieved.

Applications

Heidelberg Materials General Purpose cement is commonly used cement for a wide range of applications. These applications cover but are not limited to general purpose concrete, mortar, render and screeds.

Note - where increased resistance to sulfates is required Heidelberg Materials Low Carbon/Sulfate-Resisting cement should be used.

Quality

Heidelberg Materials General Purpose cement Declaration of Performance (DoP) and UKCA mark can be accessed from **www.heidelbergmaterials.co.uk**

Heidelberg Materials applies a system of factory production control, based on ISO 9001 and defined in BS EN 197-2, independent sampling and testing of cement, known as Assessment and Verification of Constancy of Performance (AVCP) System 1+, This also confirms conformity with all the requirements of BS EN 197-1.

Mix design

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. Reference should be made to the following documents:

- BS 8500 which provides guidance for different types and classes of cement.
- BS EN 998: Specification for mortar for masonry, Rendering and plastering mortar.
- BS EN 13914: Design, preparation and application of external rendering and internal plastering.

On the next page is a guide to typical mixes for concrete and mortar applications.

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General Purpose Concrete	Proportions by volume	General Purpose Concrete	Proportions by volume
Cement	1	Cement	1
Concrete sand	2	Combined sand and coarse aggregate (Ballast)	4
4/20mm aggregate	3		

Mortar designation	Proportions by volume cement : building sand	Mortar class that may be assumed*	Suitable for use in environmental condition
(i)	1:3	M12	Severe (S)
(ii)	1:3 to 1:4	M6	Severe (S)
(iii)	1:5 to 1:6	M4	Moderate (M)
(iv)	1:7 to 1:8	M2	Passive (P)

*Mortar class is assumed. The end user is responsible for any required conformity testing to show compliance to the specified mortar class.

Note - small amounts of air-entraining mortar plasticiser may be necessary.

Compatibility

Heidelberg Materials General Purpose 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 guidance is sought from the adnmixture manufacturer and trial mixes are carried out to determine optimum proportions.

Guidance for 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 5°C to 30°C.
- In cold weather, freshly poured concrete/mortar should be protected from low temperatures to avoid frost damage.
- In hot weather and mass concrete pours, there is increased risk of loss of water by evaporation and cracking caused by thermal stresses which could reduce ultimate strength. Therefore, in hot weather conditions protecting it is even more important to protect the concrete from moisture loss during curing.
- Heidelberg Materials Cement cannot be held responsible for poor workmanship.
- Heidelberg Materials General Purpose cement is made from natural materials. Therefore slight variations in colour may occur.
- Heidelberg Materials General Purpose cement produced at different manufacturing works may also have variations in colour.
- To avoid premature deterioration of Heidelberg Materials General Purpose cement please follow the correct storage requirements given over the page.

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Availability

Heidelberg Materials General Purpose cement is supplied in 25 kg bags throughout the UK.

Storage

Bags should be stored unopened, clear of the ground, in cool dry conditions and protected from excessive draft and all sources of moisture. The maximum shelf life of packed General Purpose cement is 6 months and is stated on the bag.

Hexavalent chromium (VI)

The soluble chromium (VI) content is limited to a maximum of 2ppm. The chromium (VI) content is determined in accordance with EN 196-10. The maximum shelf life of packed General Purpose cement is 6 months and is stated on the bag.

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.

Further information

For further advice please contact Heidelberg Materials cement technical support on **0330 123 4525** or **cement@uk.heidelbergmaterials.com**