

Cement Australia Off White Cement is a special purpose Portland cement manufactured to comply with the Type HE requirements of Australian Standard AS3972 – General purpose and blended cements.

### **OFF WHITE CEMENT PROPERTIES**

Property		AS3972	Typical Off White
Setting Time	Initial	45 min Typical Off White	50-90 min
	Final	10 hrs	2.0-3.0 hrs
Soundness	Max	5mm	< 2mm
SO <sub>3</sub> Content	Max	3.50%	< 3%
ISO Mortar Compressive Strength	3 Day (min)	20 MPa	35-38 MPa
	7 Day (min)	30 MPa	42-47 MPa
	28 Day (min)	-	57-61 MPa

All testing is conducted in accordance with the relevant Australian Standards test

#### COMPATIBILITIES

Off White Cement is compatible with:

- Admixtures that comply with AS 1478 Chemical Admixtures for Concrete.
- Fly Ashes complying with AS 3582.1 Supplementary Cementitious Materials for Use with Portland cement: Fly Ash.
- Ground granulated blast furnace slags complying with AS3582.2
  Supplementary cementitious materials for use with Portland cement: Slag ground granulated Iron blast-furnace.
- Other cements complying with AS3972 General purpose and blended cements.

Note: Off White Cement is compatible with both Fly Ash and blast furnace slag, however, it should be recognised that their incorporation can slow early strength development.

Caution: Off White Cement must not be mixed with high alumina cement as it may result in uncontrollable expansion and short setting times.

## **APPLICATIONS**

Off White Cement can be used as a cementitious binder in a broad range of applications but is particularly suited to projects where aesthetics and/or high early strength are primary considerations, including:

- Bricklaying
- Rendering
- Decorative paver manufacturing
- Swimming pool constructions
- Various exposed aggregate projects

# **AVAILABILITY**

Product available in 20kg bags.

For more information call 1300 CEMENT (1300 236 368) or visit www.cementaustralia.com.au





#### CONCRETE PROPERTIES

#### **Compressive Strength Development:**

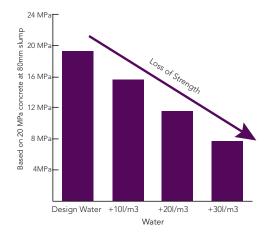
Strength development in Portland cement concrete is affected by a number of factors such as the physical and chemical properties of the cement, water to cement ratio, admixtures, curing and environmental conditions.

The following graph depicts the indicative compressive strength development of Off White Cement concrete over time.

#### COMPRESSIVE STRENGTH DEVELOPMENT



# EFFECT OF EXCESS WATER ADDITION ON CONCRETE COMPRESSIVE STRENGTH



#### Mix Design

The proportioning of constituent materials in a concrete mix is a complicated matter which can be influenced by many factors. We recommend that trials be conducted with the available materials.

#### Workability

Concrete produced with Type HE cements exhibit a slightly faster set time than concrete produced with Type GP or GB cements, therefore, consideration must be given to preparation, placing methods and ambient conditions.

### Mortar/Render Mix Properties

Off White Cement is suitable for use in brick mortars and wall renders. The following table gives a guide to the proportions (by volume) to be used. (Note: This information is a guide only. Specific advice for your project should be obtained for the materials you are using.)

Application Ratios (by volme)	Off White Cement	Sand	Lime
General Purpose Mortar*	1	6	1
Wall Render	1	3	0

Admixtures such as air entrainers, thickening agents or plasticisers can be used but should always be used in accordance with the manufacturer's recommendations.

# STORAGE, HANDLING & SAFETY

- The 'shelf life' of Portland cement products is dependent on the storage conditions. It is necessary for bagged Portland cement to be stored in dry conditions and protected from rain, dew or any other moisture source.
   Bagged cement that has hardened or is lumpy as a result of exposure to moisture should not be used.
- Portland cement products are highly alkaline materials and are significantly affected by exposure to water.

# NOTE:

The Off White Cement Material Safety Data Sheet (MSDS) is available at www.cementaustralia.com.au

#### PRODUCT DISCLAIMER

Recommendations regarding the use of this product are to be taken as a guide only. If in doubt contact Cement Australia Pty Limited ("Cement Australia") or seek professional advice. To the extent permitted by law, Cement Australia excludes all implied warranties, conditions and guarantees imposed by legislation. Cement Australia excludes all liability for loss, damage or injury arising from use of the product (i) otherwise than in accordance with the recommendations or (ii) for purposes other than those for which it is ordinarily acquired. For all other loss, damage or injury arising from the use of this product, to the extent permitted by law Cement Australia's liability is limited, at its discretion, to refunding the cost of the product or resupplying the product or equivalent product.

## **Cement Australia Pty Ltd**

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