



Colour your mix
with our range of
high quality
oxides



OFF WHITE CEMENT

Light coloured cement for a brighter finish
Use oxide addition for a coloured finish
Conforms to AS3972 Type HE

**CEMENT
AUSTRALIA®**



plus bricks, pavers
& pool building

OFF WHITE CEMENT

- ✓ High early strength and performance
- ✓ Mix with oxides for a decorative, coloured finish
- ✓ Complies with the requirements specified in AS3972 for Type HE cement

cementaustralia.com.au or call 1300 CEMENT (1300 236 368)

MADE
Right Here

**CEMENT
AUSTRALIA®**



Off White Cement provides many building and construction applications with a wide range of aesthetic, architectural and decorative opportunities.

In addition to offering great design flexibility, Off White Cement complies with the requirements specified in Australian Standard AS3972 for Type HE cement. Off White is a consistently high quality cement product that features good mixing and blending capabilities, along with proven high early strength and performance.

Applications include:

- ✓ Architectural colour finishes in buildings, bridges, retaining walls/barriers etc.
- ✓ Pre-cast blocks, pavers, walls, columns, panels and floors
- ✓ Coloured mortars and render
- ✓ Decorative pavements and terrazzo
- ✓ Grout and tiling, as well as pool finishes

SUGGESTED MORTAR/RENDER MIX RATIOS (BY VOLUME)

Application	Off White Cement	Sand	Lime
High Durability Mortar (eg retaining walls)	1	3	0 - 0.25
Maximum Bond Mortar (eg structural brickwork)	1	4.5	0.5
General Purpose Mortar	1	6	1
Wall Render	1	3	0

Note: This information is a guide only, specific advice for your project should be obtained for the materials you are using.

Additives such as air entrainers, thickening agents or plasticisers can be used, and always in accordance with the manufacturers recommendations.

HOW TO USE



STEP 1 Combine cement, clean aggregate and sand in correct proportion in a non-porous vessel. Large jobs require a concrete mixer.



STEP 2 Add drinkable water gradually and mix thoroughly. Use enough water to make a workable mix. Excess water ruins good concrete.



STEP 3 Use product immediately after mixing. Keep concrete moist for 7 days for best results.

HANDLING AND LIMITATIONS

Where specific properties such as rapid setting or high early strength are required a more specialised cement should be considered.

The 'shelf life' of cement products is dependent on the storage conditions.

It is necessary for bagged 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.

Cement products are highly alkaline materials and are significantly affected by exposure to water.

To view all product limitations, storage & handling tips please visit cementaustralia.com.au

Item Code 14031

Cement Australia

Off White

Cement 20kg



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.

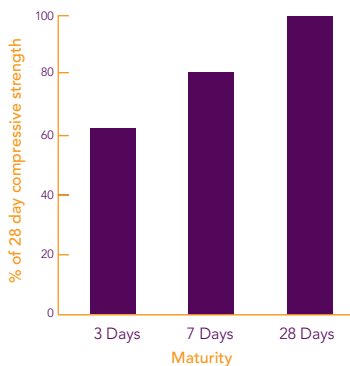


Concrete Properties

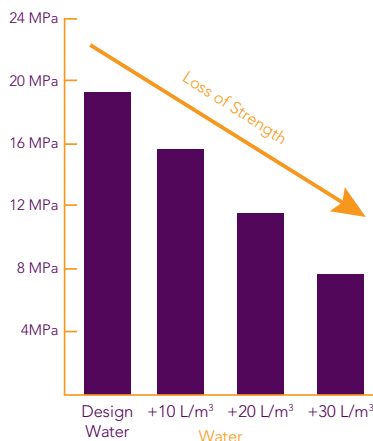
Compressive Strength Development

Compressive 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.

Concrete Compressive Strength Development



Effect of Excess Water Addition on Concrete Compressive Strength



OFF WHITE CEMENT

Cement Australia Off White Cement is a quality product that imparts proven high early strength and performance. Off White Cement complies with the requirements specified in Australian Standard AS3972 for Type HE cement.

Caution should be taken when specifying Type HE cements for use in mass concrete elements as peak temperatures and heat generation can be greater than that achieved with either Type GP or GB cements.

Off White Cement Properties

The following table details the relevant specified requirements of AS3972 and the indicative values achieved by Off White.

Property		AS3972 - 2010 Type HE	Indicative Type HE
Setting Time	Min	45min	60-90 min
	Max	6 hrs	2.0 - 2.5 hrs
Soundness	Max	5 mm	< 2mm
SO ₃	Max	3.50%	< 2.8%
ISO Mortar	3 Day (min)	25 MPa	37-41 MPa
Compressive Strength	7 Day (min)	40 MPa	46-51 MPa
	28 Day (min)	–	60-64 MPa

All testing is conducted in accordance with the relevant Australian Standard test methods, at a NATA registered laboratory.

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.
- Amorphous silica complying with AS3582.3 - Supplementary cementitious materials for use with Portland cement: Amorphous silica.
- 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 this may result in uncontrollable expansion and setting times.

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, to ascertain optimum cement contents for specific classes of concrete.

For further guidance on this issue please refer to AS1379 – The specification and manufacture of concrete and AS3600 – Concrete structures.

Workability

Concrete produced with off white (Type HE) cements may lose workability at a faster rate than concrete produced with Type GP or GB cements. Therefore consideration must be given to transportation distances, placing methods and ambient conditions.

DISCLAIMER

The information contained in this sheet is for general guidance only and should not be relied upon in specific instances. Cement performance results quoted are indicative as cement performance can be heavily influenced by a wide range of factors beyond our control. Users should rely on professional advice according to their particular circumstances. To the extent permissible by law Cement Australia will not be liable for any losses due to reliance on the information in this sheet or for losses due to the misuse of its products.