

OFF WHITE CEMENT



Off White Cement is a special purpose Portland cement manufactured to comply with the Type HE requirements of Australian Standard AS3972 – Portland and blended cements. Off-White Cement is part of the 'Mix Your Own' range from Cement Australia.

MIX YOUR OWN



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

All testing is conducted in accordance with the relevant Australian Standard test methods.

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 construction
- Various exposed aggregate projects

Off White Cement Properties

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

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 - Portland 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.

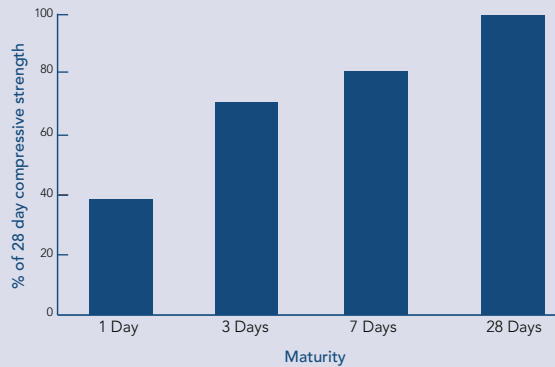
For further information on Off White Cement please contact Cement Australia Packaged Products:
Tel: 1300 CEMENT (1300 236 368) Fax: 1800 CEMENT (1800 236 368) www.cementaustralia.com.au

Concrete Properties

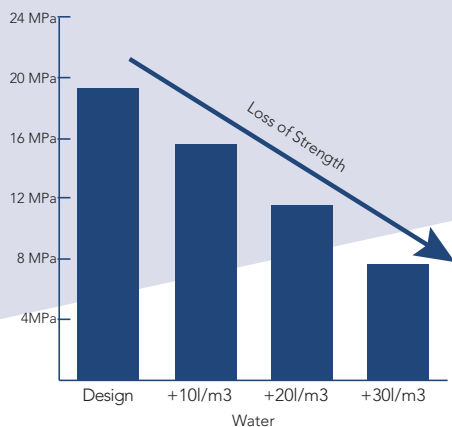
Compressive Strength Development:

Strength development in Portland cement concrete is affected by a number of factors such as the physical and chemical properties of the cement, water cement ratio, admixtures, curing and environmental conditions. The following graph depicts the indicative compressive strength development of concrete containing Off White Cement.

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.

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 warranties and conditions implied by statute or otherwise. 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, Cement Australia's liability is limited, at its discretion, to refunding the cost of the product or resupplying the product or equivalent product.

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 volume)	Off White	Sand	Lime
High Durability Mortar* (eg retaining walls)	1	3	0 - 0.2
Higher Strength Mortar* (eg structural brickwork)	1	4.5	0.5
General Purpose Mortar*	1	6	1
Wall Render	1	3	0

All mortars (*) listed above meet the requirements of AS3700

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

Off White Cement is available in 20kg bags, 1 and 1.2 tonne bulk bags.

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 inside, in dry conditions off the ground and protected from rain, dew or other moisture source. It is recommended to use the oldest products first and only remove the wrapping when required and replacing the wrap when the product is stored. 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. Full Safety, Storage, Handling and Disposal information is available in the specific product Material Safety Data Sheet (MSDS) on www.cementaustralia.com.au

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