

Safety and Ordering

SAFETY

Avoid direct skin contact with both wet and dry cements. Avoid breathing cement dust by wearing a P1 or P2 dust mask suitable for airborne dust. Wear appropriate protective clothing and footwear.

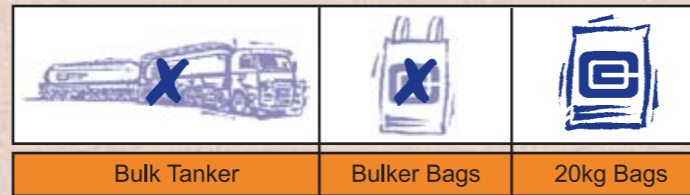
Additional information is available in the form of material safety data sheets on request. Phone 1300-138-996



FIRST AID

In the event of skin contact wash with clean water to minimise possible irritation. If Material gets into eyes wash immediately and repeatedly with eye wash solution or clean water.

Brickies Lite Coastal M4 Cement is available in:



NEED TECHNICAL HELP?

For more information contact Technical Support on our help-line 1300-138-996 or visit our website www.cockburncement.com.au

SALES AND ORDERING:

Customer Service Centre:
(08) 9411 1166

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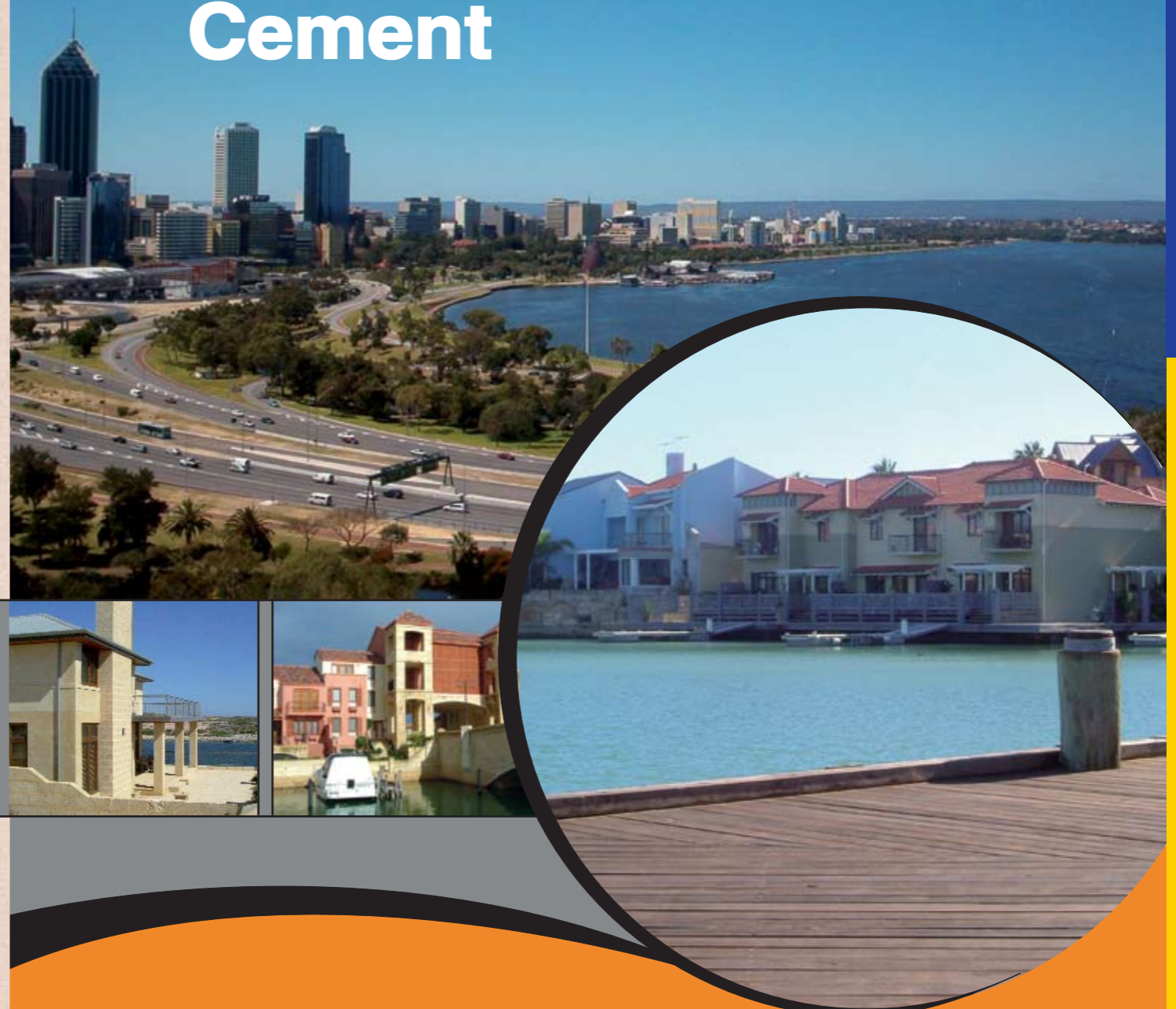
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Brickies Lite Coastal M4[®] Cement



PRODUCT INFORMATION



BRICKIES LITE COASTAL M4

M4 CEMENT

PRODUCT INFORMATION AND PROPERTIES

With building within the coastal zones of WA becoming more and more popular, with the canal regions of Mandurah and the continuing redevelopment of the metropolitan coastal zone, as well as along the entire length of WA's vast coastline, an awareness of the AS3700 Masonry Structures code and how to adhere to it is required.

Cockburn Cement has taken the lead by developing a pre-blended *Cockburn Creme Cement* and *Hylime* product called *Brickies Lite Coastal M4 Cement* to complement the already popular product *Brickies Lite*. *Brickies Lite Coastal M4 Cement* is designed to meet the requirements of the AS3700 "extreme marine environment" classification of masonry durability.

This environment is classified as requiring mortar type M4, which is a highly durable mortar that has the ability to withstand the test of the coastal elements when applied in the correct manner. All M4 mortars should have an ironed joint to ensure the AS3700 standard is met.

In 1998 the M4 mortar classification was amended in the AS3700. This change was made to better control the durability of masonry used within 1km of a breaking surf coastline and 100m of a non-surf coastline such as an estuary or a coastal river zone. It also provides protection for walls in contact with aggressive soils or those constructed below the damp proof course.

Brickies Lite Coastal M4 Cement addresses the problem of variation in site-batched mortars. By using *Brickies Lite Coastal M4 Cement* the possibility of colour variation is greatly reduced while ensuring that the durability of the mortar meets the criteria of the AS3700. Extensive testing has shown that site batched M4 mortars have had a great variation in their results, with instances of failure to reach some of the M4 criteria. Using *Brickies Lite Coastal M4 Cement* ensures that the required results are reached time after time.

If creme M4 mortar is required for your construction, *Brickies Lite Coastal M4 Cement* is the one to use. For a standard 3.5 cubic foot mixer, the 20kg bag means this product will provide the brickies with a 1 bag mix and the right colour, every time. All that is needed is the correct proportions of sand and water.

Mortar Guide

Mix	Masonry Exposure Environment
M4	Retaining walls. External walls located within 1km of a surf coastline or 100m of a non-surf coastline e.g., estuary and coastal river zones. External walls within 1km of significant industry that releases chemical pollutants. Walls below the damp proof course or ground level or in contact with aggressive soils.

Mix Design - Parts by Volume

Mix	Cement	Lime	Brickies Sand
<i>Brickies Lite Coastal M4</i>	1	0	3

Estimated Quantities To Place 1000 std bricks (230L x 110W x 76H)

Mix	Cement (20kg Bags)	Lime (20kg bags)	Brickies Sand (m ³ estimate)
<i>Brickies Lite Coastal M4</i>	10	0	0.6



Render Guide

Mix	Cement	Lime	Brickies Sand
<i>Brickies Lite Coastal M4</i>	1	0	5

Estimated Quantities To Render 100m² @10mm thickness

Mix	Cement (20kg Bags)	Lime (20kg bags)	Brickies Sand (m ³ estimate)
<i>Brickies Lite Coastal M4</i>	13	0	1.2

General Notes

- Use only recommended mortar and plastering sands free from clay and organic contamination.
- Keep water content to the minimum required for mixing and placing. The more water, the lower the strength.
- Use a standard sized vessel e.g., a bucket, to measure all materials.
- Admixtures should only be used according to the manufacturer's instructions.
- Quantities estimated are typical industry usage and will vary according to individual use patterns.
- For additional DIY information please refer to www.cockburncement.com.au.

Chemical Properties - Typical

Parameter	<i>Brickies Lite Coastal M4</i>	Test Method
SiO ₂	19.6%	XRF
Al ₂ O ₃	3.65%	XRF
Fe ₂ O ₃	0.4%	XRF
CaO	64.7%	XRF
MgO	2.9%	XRF
SO ₃	2.3%	XRF
LOI	4.9%	AS2350.2



Brickies Lite Coastal M4 Cement

Premix	Site Mix	Brickwork	Moulded Products	Renders

Physical Properties - Typical

Parameter	<i>Brickies Lite Coastal M4</i>	AS 1316 Limits	Test Method
Water Retentivity	75% Typical	70% (min)	AS2350.18
Air Content	17% Typical	10% (min)	AS2350.16
Initial Set Time	120 mins	75 mins (min)	AS2350.4
Final Set Time	165 mins	12 hrs (max)	AS2350.4
Compressive Strength (1)		AS 1316 Limits	Test Method
7 Day	34 MPa	10 MPa (min)	AS2350.11
28 Day	35 MPa	15 MPa (min)	AS2350.11
Flexural Strength by Bond Wrench (2)		AS 3700 Requirement	Test Method
M4	0.5 MPa	0.2 MPa (min)	AS3700

(1) Ottawa standard sand used for Water Retentivity and Air Content tests.

(2) Test mortars for flexural strength determination were batched in a 3.5 cubic foot mixer with commercially available brickies sand to give an initial flow of 125% to 135% and air content 10% to 14%. Bricks were 16 core Midland Brick Cream. Tested to AS4455 initial rate of absorption 0.8 - 2.5 kg/m²/min and characteristic compressive strength of 15 MPa.