



Building
something
great



Blue Circle®



Product Guide

Packaged Products



Health & Safety Advice

Manual Tasks

Manual handling of bags without proper training may result in personal injury.

Wherever possible you should use mechanical aids or share the load with another person.

Warning

Cement based products can be classified as Hazardous.

Information on the composition, common risks, safety advice and first aid instructions are included on the packaging for each product listed in the Product Guide/Handy Hints.

Additional information is also available on the Safety Data Sheets (SDS) for each product.



Please refer to the online SDS for the particular product that you require to use.

boral.com.au/sds-sheets

Contents

Cements

- 4 General Purpose Cement
- 4 Builders Cement
- 4 Off White Cement
- 5 High Early Strength Cement
- 5 Special Purpose Cement
- 5 Southern White Cement

Lime & associated products

- 6 Hydrated Lime
- 6 Premium Clay

Drymixes

- 7 Concrete
- 7 Sand & Cement
- 7 Brickies Mortar
- 7 Quick Set Sand & Cement
- 7 HS Concrete
- 8 Quick Set Concrete
- 8 Rapid Set No Mix Concrete
- 8 Uni Sand
- 8 Uni-Render
- 8 Post Hole Concrete

Additional handyman products

- 9 White Grout
- 9 Whiting
- 10 X-Lime
- 10 All Trade Sponges
- 10 Cemstik

Grouts

- 11 Unigrout

Mix Design & Calculation Chart

- 12 Mix Design & Calculation Chart
- 13 Concrete mortar
- 14 Concrete
- 15 Mortar

Oxides

- 16 Off White Cement Colour Chart
- 16 Grey Cement Colour Chart
- 17 Product Guide

Product Guide

Cements

General Purpose Cement

A general purpose portland cement conforming to AS 3972 type GP. Used in all general concrete, mortar and grouting applications.

Code	Size	Bags per pallet/carton
CPRTT123	2kg	10
CPRTT124	5kg	4
CPCEM102	20kg	72



Builders Cement

A general purpose blended cement conforming to AS 3972 type GB. Used in all general concrete, mortar and grouting applications. Ideally suited for rendering.

Code	Size	Bags per pallet/carton
CPBLM100	20kg	72



Off White Cement

A general purpose portland cement conforming to AS 3972 types GP and HE. Ideally suited to applications that require a lighter coloured mortar.

Code	Size	Bags per pallet/carton
CPCEM104	20kg	72



Cements

High Early Strength Cement

A fine grind high early strength cement conforming to AS 3972 type HE. Used in a wide range of concrete product applications where early strength development is required.

Code	Size	Bags per pallet/carton
CPCEM103	20kg	72



Special Purpose Cement

An engineered cement conforming to AS 3972 types LH and SR and suitable for use in environments where a Low Heat, Sulphate Resisting or Marine cement is required.

Code	Size	Bags per pallet/carton
CPBLM101	20kg	72



Southern White Cement

A general purpose cement conforming to AS 3972 types GP and HE. Ideally suited to applications that require a brilliant white finish.

Code	Size	Bags per pallet/carton
CPRTT195	1kg	10
CPCET101	20kg	72



Product Guide

Lime & associated products

Hydrated Lime

A hydrated lime conforming to AS 1672.1 'Limes for Building'. Used in cement based mortar mixes to enhance plasticity, binding qualities and durability.

Code	Size	Bags per pallet/carton
CPLIZ104	20kg	54



Premium Clay

A superfine air separated Kaolin. Also known as Ball Clay. A superior performing clay material typically for rendering applications.

Code	Size	Bags per pallet/carton
CPCAT102	20kg	60



Drymixes

Concrete

A proportioned mix of aggregate, sand and cement suitable for all general purpose concreting applications where a quality concrete is required.

Code	Size	Bags per pallet/carton
CPDMM100	20kg	72



Sand & Cement

A proportioned mix of graded sand and cement. For general purpose bedding, and landscaping applications.

Code	Size	Bags per pallet/carton
CPRTT180	2kg	10
CPRTT182	5kg	4
CPDMM104	20kg	72



Brickies Mortar

A pre mixed trade quality mortar, suitable for use in most brick and block work.

Code	Size	Bags per pallet/carton
CPDMM105	20kg	72



Quick Set Sand & Cement

A proportioned mix of graded sand, cement and additives for instant repair applications.

Code	Size	Bags per pallet/carton
CPDMM110	20kg	48



HS Concrete

A High Strength 50MPa mix containing quality aggregate, sand and Cement. Suitable for Concrete applications where higher strength is required.

Code	Size	Bags per pallet/carton
CPDMM110	20kg	72



Product Guide

Drymixes

Quick Set Concrete

A proportioned mix of aggregate, sand, cement and additives suitable for all general purpose concreting applications where fast setting characteristics are required.

Code	Size	Bags per pallet/carton
CPDMM101	20kg	72



Rapid Set No Mix Concrete

A pre blended gravel, sand, cement and additive mixture, suitable for post hole applications where lower than normal compressive strength results are acceptable. Cannot be mixed as it flash sets.

Code	Size	Bags per pallet/carton
CPDMM107	20kg	72



Uni Sand

A multi-purpose dried fine sand for use in domestic and commercial applications.

Code	Size	Bags per pallet/carton
CPDMM109	20kg	48



Uni-Render

A universal pre-mixed polymer modified cement render designed for use over new and old brick and block. For both external and internal applications.

Code	Size	Bags per pallet/carton
CPDMM108	20kg	48



Post Hole Concrete

A proportioned mix of aggregate, sand and cement suitable for non-structural post applications.

Code	Size	Bags per pallet/carton
CPDMM102	20kg	72



Additional handyman products

White Grout

A pure white, sterilised, mould resistant, compressible grouting mixture suitable for internal and external wall applications for joints up to 5mm wide.

Code	Size	Bags per pallet/carton
CPRTT197	500g	20
CPRTT199	2kg	10



Whiting

Marking playing areas on athletic and sporting fields (not injurious to eyes). Lifts calcium rates and neutralises high acid PH factors in garden soil. Coating fowl houses and aviaries for hygiene and appearance.

Code	Size	Bags per pallet/carton
CPRTT202	25kg	1



Product Guide

Additional handyman products

X-Lime

Synthetic lime powder for improving placement workability of mortar and plaster.

Code	Size	Bags per pallet/carton
CPRTT203	2kg	8
CPRTT204	10kg	1



All Trades Sponge

Professional, easy to handle sponge. Ideal for tilers, plasterers, renderers, bricklayers and personal household use.

Code	Bags per pallet/carton
CPRTT190	10



Cemstik

Used for bonding cement render/plaster to smooth surfaces or old concrete. Also as an admixture in toppings to repair damaged surfaces or as a sealer and general craft adhesive.

Code	Size	Bags per pallet/carton
CPRTT114	4Lt	4
CPRTT115	20Lt	1



Uni-Grout

Uni-Grout is a general purpose cementitious grout complying with Class A requirements of SAA MP20 part 3. Shrinkage compensation takes place during the setting period. Uni-Grout uses Portland cement as the primary binder and special additives to produce the non-shrink characteristics through gas expansion. The formulation is chloride and iron free.

Code	Size	Bags per pallet/carton
CPGRM102	20kg	48



Product Guide

Mix Design & Calculation Chart



Mortar

- Laying bricks and blocks
- Building stone walls
- Pointing existing brickwork
- Rendering
- Repairing concrete



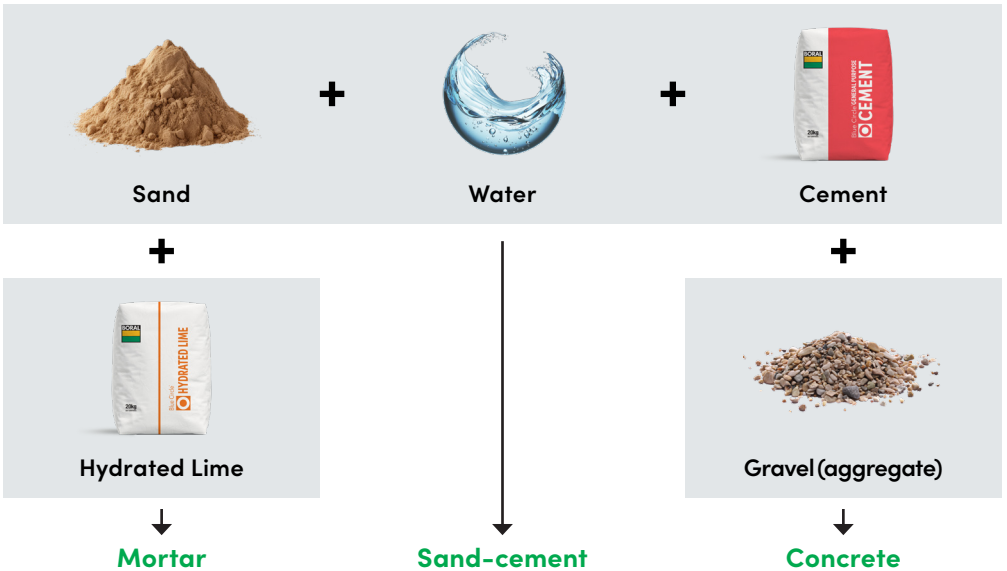
Sand-cement

- Rendering walls
- Topping or capping on walls
- Brickwork below ground level
- Repairing concrete
- Screed for ceramic tiles



Concrete

- Laying paths
- Setting posts
- Creating mowing strips
- Light-duty foundations



Concrete mortar

The Ready Reckoner for concrete is a general guide only. For specific engineering properties refer to AS3600 (Concrete Structures) or consult a professional engineer.

Mixing Raw Materials

Suggested mix proportions by volume.

Materials	Foundations & large masses	General use, paths, floors etc	General use, higher strength
Cement	1	1	1
Sand	3	2.5	2
Stone or gravel	5	4	3

For rectangular slabs, paths and driveways

- First calculate the area:
Area square metres(m²) = length x width (metres)
- Then use the following table:

Area (m ²)	Volume of concrete in cubic metres (m ³) rounded up to the nearest 0.1				
	50*	75*	100*	125*	150*
5	0.3	0.4	0.5	0.7	0.8
10	0.5	0.8	1.0	1.3	1.5
15	0.8	1.2	1.5	1.9	2.3
20	1.0	1.5	2.0	2.5	3.0
25	1.3	1.9	2.5	3.2	3.8
30	1.5	2.3	3.0	3.8	4.5
35	1.8	2.7	3.5	4.4	5.3
40	2.0	3.0	4.0	5.0	6.0
45	2.3	3.4	4.5	5.7	6.8
50	2.5	3.8	5.0	6.3	7.5

*Slab thickness in mm.

- Decide whether to use:
 - Premix concrete from a readymix supplier
 - Bagged cement, sand and stone
 - Bagged concrete

Estimating how much cement, sand and stone to order.

Mix (as per concrete use)			No. 20kg bags of cement	cubic metres (m ³) of sand	cubic metres (m ³) of stone
Cement	Sand	Stone			
1	2	3	16	0.5	0.8
1	2.5	4	13	0.5	0.8
1	3	5	11	0.5	0.9

Product Guide

Concrete

Estimating how many 20kg bags of premix concrete to order (rounded up to the nearest full bag)

Volume Cubic Metre* (m ³)	0.02	0.04	0.06	0.08	0.10
No of bags	3	5	7	9	11

*108 x 20kg bags of Boral Cement Concrete Mix will fill 1 cubic metre (m³).

Post calculations

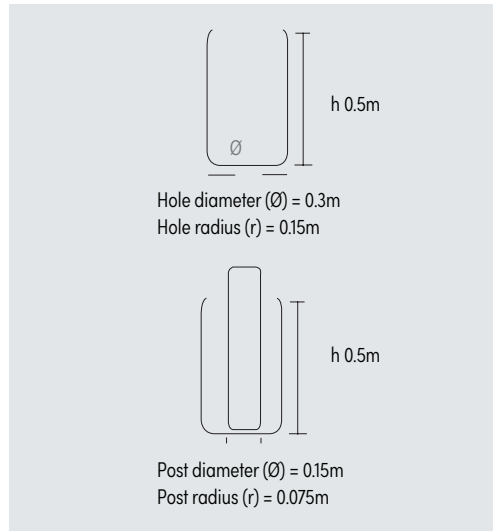
Example below based on the dimension given in the two diagrams

Step 1. Calculate entire hole volume
 Formula: $\pi r^2 h$
 $= 3.14 \times (0.15\text{m} \times 0.15\text{m}) \times 0.5\text{m}$
 Volume = 0.0353m³

Step 2. Calculate volume of post
 Formula: $\pi r^2 h$
 $= 3.14 \times (0.075 \times 0.075) \times 0.5\text{m}$
 Volume = 0.0088m³

Step 3. = Volume Step 1 – Volume Step 2
 $= 0.035\text{m}^3 - 0.0088\text{m}^3$
 $= 0.026\text{m}^3$

Step 4. = Multiply by number of 20kg bags per m³ (108 bags)
 $= 0.026\text{m}^3 \times 108$
 Therefore = 2.8 bags of 20kg
 Concrete Mix required to fix post in hole.



For fence posts and other round excavations

Volume of excavation rounded up to the nearest 0.01 cubic metres (m³) is given below.

Depth of hole (mm)	Cubic metres (m ³) needed. Hole diameter (mm)				
	300mm	400mm	500mm	600mm	700mm
200	0.02	0.03	0.04	0.06	0.08
400	0.03	0.05	0.08	0.12	0.16
600	0.05	0.08	0.12	0.17	0.24
800	0.06	0.10	0.16	0.23	0.31
1000 (1m)	0.08	0.13	0.20	0.29	0.39

Mortar

The Ready Reckoner for concrete is a general guide only. For specific engineering properties refer to AS3600 (Concrete Structures) or consult a professional engineer.

Mixing Raw Materials

Suggested mix proportions by volume.

Materials	General brick and block construction	Marine and aggressive environments
Cement	1	1
Sand	6	4.5
Hydrated lime	1	0.5

Laying Bricks – Estimating How Much to Order

For every 1000 bricks			Bricks without frog		
Cement	Sand	Hydrated lime	No. 20kg bags of cement	Cubic metres (m ³) of sand	No. 20kg bags of hydrated lime
1	1	1	8	0.65	3
1	4.5	0.5	11	0.65	2
1	3	-	16	0.65	-

Buying Premix Bags

Using Brickies Mortar to lay bricks Estimating bags by brick number

No. bricks	200	400	600	800	1000
No of bags	12	24	36	48	60

Which cement for what conditions?

Condition	General Purpose Cement	Builders Cement	Off-White Cement	High Early Strength Cement	Special Purpose Cement
General No specific requirements	✓	✓	✓		
Expose to sulphates (SO₄) <600mg/litre 600-3000mg/litre >3000mg/litre	✓	✓			✓ ✓ ✓
Marine Environment		✓			✓
Early age strength required	✓		✓	✓	
Mass concrete where rapid heat evolution is to be avoided					✓

Product Guide

Oxides

Bayer inorganic pigments add colour to concrete, asphalt and mortar for life.

Blue Circle® New South Wales – Life Style Colour Oxides

Off White Cement – 5% Pigment by weight of the cement content



Tuscany



Terracotta



Sepia



Beach



Sandstone

Grey Cement – 5% Pigment by weight of the cement content



Bayferrox® Black 318



Minox® Black B100



Bayferrox® Brown 660



Bayferrox® Brown 686



Bayferrox® Red 140



Bayferrox® Red 222



Bayferrox® Yellow 420



Bayferrox® Yellow 920

Bayer Minox Oxides are available in 500g, 1kg, 2kg, 4kg and 20kg pails as well as 20/25kg bags.

The colour chart as shown is to be used as a guide only. Shade variations in colour may occur depending on types of raw materials used, water cement ratio and application methods.

Oxides

Product Guide

Product	500gm Pail	1kg Pail	2kg Pail	4kg Pail	20kg Pail	Lifestyle Colours Pails	Large Bags
Bayferrox® Black 318	✓	✓	✓	✓	✓		✓
Bayferrox® Red 222	✓	✓	✓	✓	✓		✓
Bayferrox® Red 140							✓
Bayferrox® Red 110							✓
Bayferrox® Red 130							✓
Bayferrox® Yellow 920	✓	✓	✓	✓	✓		✓
Bayferrox® Yellow 420							✓
Bayferrox® Brown 660	✓	✓	✓	✓	✓		✓
Bayferrox® Brown 686	✓	✓	✓	✓	✓		✓
Bayferrox® Brown 610							✓
Minox Black B100	✓	✓	✓	✓	✓		
Green Oxide	✓						✓
Cobalt Blue		✓					
Marigold 960							✓
Terracotta						✓	✓
Sandstone						✓	✓
Beach						✓	✓
Sepia						✓	✓
Tuscany						✓	✓
BHPL Black							✓
White Oxide Titanium							✓

For product information call 1300 OXIDES (1300 694 337)

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boral.com.au/products/cement-and-lime

Please Note:

The particular circumstances of construction projects, including site conditions, equipment and weather vary significantly in ways that often dictate the use of particular materials and techniques.

This product guide should be viewed as a general reference only. Boral recommends you seek professional advice tailored to your specific construction project before using these products.

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