

# MORTAR

The following calculations are based on approximately 0.6m<sup>3</sup> (1.2T) of damp sand, which will lay approximately 1,000 standard bricks. The Lime 'n' Lite and Lime 'n' Grey products are pre-blended cement and lime at 1:1 by volume. All bags are 20kg net weight.

Classification AS3700	Application	Brick / Block Type	Mortar Colour	Mix Design by Volume			Bags per 1,000 standard bricks	
				Cement	Hydrolime	Sand	Cement	Hydrolime
M4	* Retaining walls	* Fired Clay	Grey	1	0.5	4.5	8 x Grey cement	1.25
	* Below ground walls	* Concrete		1	0.25	3	10 x Grey cement	1
	* External above ground walls (within 1km of coastline)	* Limestone	Cream	1	0.5	4.5	8 x Ultra Creme cement	1.25
	* Walls in industrial environments			1	0.25	3	10 x Ultra Creme cement	1
M3	* External above ground walls (1km to 10km from coast, excluding retaining or below ground walls) * Walls in contact with fresh water	* Fired Clay	Grey	1	1	6	6 x Grey cement	3
				1		3	9 x Lime 'n' Grey	0
		* Concrete	Cream	1	1	6	6 x Ultra Creme cement	3
				1		3	9 x Lime 'n' Lite	0
* Limestone	Federation White	1	1	6 (white sand)	6 x Ultra Creme cement	3		
M2	* External above ground walls (further than 10km from coastline, excluding retaining or below ground walls) * Internal above ground walls (non-load bearing)	* Fired Clay	Grey	1	1	6	6 x Grey cement	3
				1		3	9 x Lime 'n' Grey	0
		* Concrete	Cream	1	1	6	6 x Ultra Creme cement	3
				1		3	9 x Lime 'n' Lite	0
* Limestone	Limestone	1	2	9	4 x Ultra Creme cement	3		

**NOTE:**

1. All mortars must be mixed and placed as per AS3700 Masonry Code.
2. Clean, sharp, well-graded sand, free from loam, clay and impurities should be used. The presence of foreign matter will weaken mortar and affect its setting time.
3. Hydrolime contains an air-entraining agent for better workability. The use of additional additives is not required or recommended.
4. Above mix designs do not apply to Calcium Silicate or lightweight Autoclaved Aerated Concrete (AAC) bricks. Refer to brick manufacturer's technical literature for mortar mix design recommendations.
5. For cement bag quantities when compared to standard bricks (230x110x76) - if using Modular bricks (290x90x90), reduce cement bag quantities by 30%.  
For Brikmakers Verti 76 (305x90x76) or equivalent, reduce by 25%. For Brikmakers Verticlay (305x90x162) or equivalent, reduce by 50%.  
For Limestone blocks (500x150x300 on edge), reduce by 50%. For Limestone blocks (500x300x150 on flat), increase by 70%.  
For all other brick or block sizes, please contact BGC Cement on (08) 9334 4555.