

Materials Required For Brick Construction

3/8" Joints

Running Bond

1:3 Masonry Cement Mortar

100 Square Feet of Brick Wall					1000 Brick			
Wall Thickness	Standard Brick Required	Bags Masonry Cement	Sand (cu. ft.)	Mortar (cu. ft.)	Wall Thickness	Bags Masonry Cement	Sand (cu. ft.)	Mortar (cu. ft.)
4"	675	40	12.0	12.0	4"	6.0	180	18.0
8"	1350	10.0	300	30.0	8"	8.0	24.0	24.0
12"	2025	160	48.0	48.0	12"	8.0	24.0	240

Note: Mortar quantities given allow for 20% waste and all joints filled.

Plaster and Stucco Mortar Requirements (Per 100 Square Feet)

Mix	1:1½		1:2		Mix	1:2½		1:3	
Thickness	Bags Masonry Cement	Sand (cu. ft.)	Bags Masonry Cement	Sand (cu. ft.)	Thickness	Bags Masonry Cement	Sand (cu. ft.)	Bags Masonry Cement	Sand (cu. ft.)
1/4"	1.3	2.0	1.1	2.2	1/4"	1.0	2.5	.9	2.7
3/8"	2.0	2.5	1.7	3.4	3/8"	1.4	3.5	1.2	3.6
1/2"	2.6	3.9	2.2	4.4	1/2"	1.9	4.7	1.7	5.1
5/8"	3.3	4.9	2.8	5.6	5/8"	2.3	5.8	2.1	6.3
3/4"	4.0	6.0	3.3	6.6	3/4"	2.9	7.2	2.5	7.5

Note: 10% allowance for waste. Masonry cement is recommended and approved for paring plaster and stucco.

Materials Required for Concrete Masonry Construction

Wall Thickness	Unit Size (WxHxL)	Per 100 Square Feet		Per 100 Units
		Units	Bags Masonry Cement	Bags Masonry Cement
4"	4 x 4 x 16	225	4.3	2
6"	6 x 4 x 16	225	4.3	2
8"	8 x 4 x 16	225	4.3	2
4"	4 x 8 x 16	112.5	2.8	2.5
6"	6 X 8 X 16	112.5	2.8	2.5
8"	8 x 8 x 16	112.5	2.8	2.5
12"	12 X 8 X 16	112.5	2.8	2.5

Note: Mortar quantities based upon 3/8" joints, face shell bedding, waste allowance.

Mortar Proportion Specification Requirements

Mortar	Type	Proportions by Volume (Cementitious Materials)				Hydrated Lime or Lime Putty	Aggregate Ratio (Measured in Damp, Loose Conditions)
		Portland Cement or Blended Cement	Masonry Cement				
			Type M	Type S	Type N		
Cement-lime	M	1				1/4	
	S	1				Over 1/4 to 1/2	
	N	1				Over 1/2 to 1-1/4	
	O	1				Over 1-1/4 to 2-1/2	
Masonry Cement	M	1			1		Not less than 2-1/4 and not more than 3 times the sum of the separate volumes of cementitious materials.
	M		1				
	S	1/2			1		
	S			1			
	N				1		
	O				1		

Note: Two air-entraining materials shall not be combined in mortar.