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Bricklaying Tips for Building with Timbercrete

Timbercrete bricks and blocks have become a favourite or preferred product for many bricklayers. Timbercrete is half the weight of clay fired bricks or cement masonry, it is easier to cut and can be screwed or nailed into just like timber.

There are no special skills required for laying Timbercrete bricks and blocks, they are simply installed in the same fashion as standard cement masonry products such as dry pressed cement blocks and bricks.

In summary, there are **5** main simple steps to follow in order to achieve a quality successful outcome.

1. **Mortar; Choosing the Correct Mortar Sand.**

It is critically important to choose the correct type of sand that will not result in shrinkage cracks. We recommend using either clean washed sharp sand, such as "Sydney Sand".

The alternative is; an equal blend of 3 Sands ~ one part Sydney Sand, one part Coarse Washed River Sand, and one part Fatty Brickies Sand which is typically high in clay content and fine in particle size.

2. **Fully cured and dry Timbercrete bricks and blocks.**

Timbercrete, like all other cement masonry products are manufactured moist and subsequently cure, shrink and dry out in time. Timbercrete requires approximately 3 months drying (or curing time) for stabilising dimensionally (as do other cement masonry). All Timbercrete bricks and blocks arrive on pallets with a ***Use after Date***. Always make certain that Timbercrete products are installed **after** the ***use after date.***

Palletised Timbercrete bricks and blocks need to be covered during wet weather. If bricks and blocks have become wet, allow them to dry out before installation. Never lay wet Timbercrete bricks and blocks.

3. **Installing Control Joints or Articulation Joints.**

As general rule cement masonry products require greater attention to control joints or articulation joints than fired clay bricks. Timbercrete is no exception to this rule.

Control joints or articulation joints must be installed at intervals of 6 m or less depending on the location of the nearest window or door. The top edge of a door opening or the top and bottom edge of a window opening provides a handy place for a control joint. Walls that contain multiple windows and doors should have a greater number of control joints, spaced at a distance of 4 m or less.

Buildings on reactive soils (with high clay content) typically require more control joints or articulation joints to accommodate ground movement.

4. Clean up.

All cement masonry products must be cleaned as you go rather than being subjected to high pressure and acid cleaning later. This is because unlike clay fired bricks, cement masonry products such as Timbercrete dissolve with acid.

In order not to waste any unnecessary time on wall cleanup it is advisable to lay Timbercrete bricks and blocks carefully so as to minimise mortar smears on the brick face. Time and care taken while laying blocks, leaves a great finished result saving any further costs and cleaning upon completion, and happy satisfied builders and clients.

1. Angle the trowel as you go, so as to cleanly cut away excess bulging mortar.

2. Using a stiff bristle brush, clean off any mortar smears on the face of the bricks once the mortar has dried sufficiently. This can usually occur at the end of the day, starting with the first bricks laid, and depending on the weather conditions. Premature brushing results in messy mud smearing the face of the bricks and an overnight delay in cleaning makes the task very difficult later on.

5. Ironing the Joints.

Special attention needs to be paid to ironing the joints, especially when building with single skin or single leaf blocks. Such walls require special treatment so as to minimise possible water ingress through the mortar joints. In this situation mortar joints are ironed twice.

- The first ironing occurs once the mortar stiffens up a little, this initial ironing is a quick go over to prepare the wall for the final ironing.
- The second ironing occurs during the wall cleanup at the end of the day, this time the mortar has stiffened further, so greater pressure is required. The second ironing improves the water tightness of the joint, while closing over any early occurring micro cracks.

Raked joints are suitable for brick veneer or double brick type constructions only.

For more detailed information on laying Timbercrete bricks and blocks please refer to the “Building with Timbercrete Manual” located on the Timbercrete website.

Timbercrete Mortar Mix Option A

Aalborg ~ "Bricklayer's White Cement"

Grade	*Parts*	*Parts*	*Parts*	*Parts*
	Aalborg Cement/Lime Mix	Sand Type Sydney Fine Washed	Sand Type River Corse Washed	Sand Type Brickies Fattie
M3	1	1.333	1.333	1.333
M3	1	4		
M4	1	1	1	1
M4	1	3		

	Litres	*Litres*	*Litres*	*Litres*	*Total*
	Cement/Lime Mix	Fine Washed	Corse Washed	Fattie	*Litres*
M3	20 L	26.6	26.6	26.6	100
M3	20 L	80			100
M4	20 L	20	20	20	80
M4	20 L	60			80

Density	*1kg/Lt*	*1.6kg/Lt*	*1.6kg/Lt*	*1.6kg/Lt*	
	Batch Weight Per Sack	Batch Weight	Batch Weight	Batch Weight	*Total Weight*
M3	20kg	42.5kg	42.5kg	42.5kg	128kg
M3	20kg	128kg			128kg
M4	20kg	32kg	32kg	32kg	116kg
M4	20kg	96kg			116kg

Timbercrete Mortar Mix Option B

Cement & Lime

Grade	*Parts*	*Parts*	*Parts*	*Parts*	*Parts*
	Cement	Lime	Sand Type Sydney Fine Washed	Sand Type River Corse Washed	Sand Type Brickies Fattie
M3	1	1	2	2	2
M3 to M4	1	1	5		

	Litres	*Litres*	*Litres*	*Litres*	*Litres*	*Total*
	Cement	Lime	Fine Washed	Corse Washed	Fattie	*Litres*
M3	15.4	15.4	30.8	30.8	30.8	123.2
M3 to M4	15.4	15.4	77			107.8

Density	*1.3kg/Lt*	*0.7kg/Lt*	*1.6kg/Lt*	*1.6kg/Lt*	*1.6kg/Lt*	
	Batch Weight	Batch Weight	Batch Weight	Batch Weight	Batch Weight	*Total Weight*
M3	20kg	10.8kg	50kg	50kg	50kg	181kg
M3 to M4	20kg	10.8kg	123kg			154kg