



STUMBELBLOC

BUILDING with STUMBELBLOC BLOCKS – A Guide

1. Ideally, start on a level foundation. If not, you have to fill in a mortar bed – as in a conventional building. However, this restricts you to only a few courses of blocks per day. On a level surface, the foundation can be built using STUMBELBLOCs. They can be reinforced with steel rods and the cavities filled with concrete. Two courses of blocks are recommended for this and, when completed, an effective, strong “ring beam” is created.
2. If the foundation cannot be built with STUMBELBLOC i.e. other bricks are used to create a floor slab – usually as a result of undulation or slope, add 5mm per metre of the floor measurement to accommodate STUMBELBLOC.
3. Use thin bed mortar (in South Africa we recommend Block Grip™) and simply dip the bottom of each block into the mortar (see our instructional video – Making the Block). No mortar is required on the sides or the top.
4. Always dry-stack the first and the second course initially. This creates an equal gap on teeth of the block and sets the required tolerance. The second course should then be removed, dipped in the thin bed mortar and replaced. Ideally, the first course remains dry packed on the foundation. This eliminates cracking.
5. STUMBELBLOC builds in modules of 200mm. Thus, a standard full block is 400mm. A half block is 200mm. Construction distances should therefore be planned accordingly.
6. When building pillars or openings, rotate the flat side of the block and half block for each level
7. Always build in one direction i.e. flat side of the block always in left hand (or the right hand).
8. To create bigger than module door openings, fill the hollow with concrete and cut with a grinder to the frame size. In areas without electricity, build the opening bigger than the frame. Put hoop iron or wire on every second course and build up with brick castings.
9. To create lintels using STUMBELBLOC:
 - a. Insert a soffit plank at the required opening and lay one course of blocks.
 - b. Chop off the centre teeth.
 - c. Lay 2 X 10mm steel rods in the cavities created by the removed teeth and complete the courses to roof level.
 - d. Fill with concrete.
 - e. For light roof bearing in basic dwellings e.g. with corrugated roof, hoop iron may be used instead of a steel bar.
10. To fit the hoop iron to the wall before roof construction, press cement bag 4 courses down into the block cavity. Lay hoop iron and fill with concrete.
11. It is not ideal to plaster the dwelling on the day of construction. Thin-bed mortar should cure for a minimum of 2 days.
12. Finished structures should be rendered or bagged externally with waterproof Skim plaster™ (product of SA)
13. Internal walls may be left bare or, preferably, plastered or rendered.