Works Method Statement for Laying Block

Method Statement for Block Works in a Quality Management System are given below.

(Use this document to form your own Method Statement)

1. Scope:
The intention of this document is to describe the various steps involved to be carried out to execute the Block works to meet the requirements of Specifications.

2. Relevant Process/Specifications:
Tender Specifications
Superbricks;
Superbricks are made to meet International Standard.
The BL01 (Full Block), BL03 (Half Block) and BL05 (Split Block) constitute the Superbricks range.

3. Plants & Equipments:
Masonry equipments, scaffolding with platform, plumb bob, straight edge, mobile mechanical mixer, and measurement boxes.

4. Procedure:
Prior to the commencement of all construction activities, necessary work permits shall be obtained.
All materials identified for the permanent works shall be approved by the Company, prior to the procurement.
All HSE activities related to the Project, will be based on the Company issued HSE Management System Guidelines.
All quality assurance and quality control activities will be in line with the specified requirements of the
contract

5. Execution:

All materials and workmanship used in block work shall be as per approved specifications. Solid/hollow blocks (standard finish or fair faced) will be procured from approved manufacturer on approval of the material by Company.

**Laying out:**

Mark out where possible, use chalk lines for a guide for the first layer.

All block work shall be fully set out, wide edge up, before lying commences to ensure correct bonding, minimum cutting tolerances and the average thickness of vertical and horizontal joints.

**Preparations:**

Where applicable vertical rebar should be anchored to the foundations at the require spacings specified for the work. Increments of 200mm for Superbricks Blocks; ie. 200, 400 or 600 spacing. Lengths of 120mm should be sufficient for the layer to install the block comfortably. As the height of the wall increases extending rebar shall be applied as specified or if not at least tied with an overlap length of at least 40 the diameter of the rebar.

In most cases; to assist adhesion, blocks should be well soaked before using and the tops of walls left from the previous day’s work shall be dampened before the new work commences.

Plan to build up your corners first and work to the middle of the wall. Alignment and taking your time planning is vital for a successful project.
The Mortar:

Job mix mortar should have a minimum cement to sand mix ratio of 1:3 (subject for Approval) and the strength is not less than 5 + 1N/mm. Mortar should be used within 30 minutes after mixing.

The cement used shall be ordinary Portland cement and sand shall be 02mm crushed/natural sand as specified, (fine to medium).

The materials shall be batched using appropriate boxes and water shall be added to get the desired consistency and workability. A little surfactant like mild dish washing soap is popular with most Masons for smoother working mortar which is added to the bulk water supply.

Batching shall be carried out using mobile mechanical mixer if the quantity is more or by hand mixing if the quantity is less.

Laying the Block:

All bed and vertical joints shall be spread fully with mortar to ensure complete and solid bedding.

Don't forget, wide edge up, retains more mortar for good contact.

Unless otherwise specified masonry bed and perpend joints are to be a nominal 10 mm.

Buttering is the term of applying mortar to the Block and should occur for Vertical and Horizontal joints in one step. The need to infill joints should be avoided as this weakens the joints and likely to cause areas of water ingestion.

“Pointing” or “Racking” of joints shall occur regularly as laying continues. Benefits of smooth racking include better water resistance.

Where raked joints are used they must not be;

(i) deeper than 10 mm; or

(ii) used in saline environments or areas subject to heavy industrial air-borne pollution to prevent settlement material and dust.

Joined surface, for fire walls shall be completely filled.

On internal vertically non-reinforced walls, a layer of expanded metal reinforcement, expanded Mesh, shall be used every fourth course or as specified and also on the construction of previously laid course.
Reinforced walls vertical rebar shall be installed and tied to horizontal rebars. Blocks are cut according to the number of rebar and size used. Consideration should also be taken into account before filling. Unless otherwise specified rebar lengths may be lapped at 450mm, where the rebar is tied at least 3 times evenly spread.

Each block shall be adjusted in its final position in the wall while the mortar is still plastic. All prepared end corners and joints shall be kept true and square, other angles shall be in plumb and bed joints leveled as the work proceeds.

Pointing shall occur while the mortar is still plastic. Tradesmen are encouraged to use sufficient mortar to fill and point all joints in one application. Reapplying mortar should be avoided as much as possible.

All block walls shall be bonded to columns by means of 20 cm long ties, which are previously cast in the concrete or screwed to structure. The ties shall be 8-12 cm embedded in to the wall at the rate of one tie for each two courses or as specified.

The wall mortar shall be cured by spraying water for a minimum period of 3 days.

**Lintels:**

Lintels may be formed in two ways, either insitu or remote from the work. Lintels may be made with Block for consistent looking surfaces. By using the BL03 Block they can be used side on with one side removed to form a 'U' for insertion of rebar forms.
Superbricks Blocks are universal and can be cut for special purposes such as to integrate Bond Beams or Intersections. Here are some examples below.