

FAQ's

1. What are the ideal clay brick's specifications?

Bricks can be made to virtually any specification.

Overall strength and water absorption of clay bricks should be as follows

Compressive strengths vary from 5 N/mm² to 125N/mm²

Water absorption varies from 6-26% dependant on brick type

2. What is a frog in a brick? What is its significance?

FROG is an indentation or depression on the top face of a brick made with the insertion of a wooden or metal piece inside the brick mould.

Dimension of frog => L = 10cm w = 4cm & depth = 1 or 2.5 cm

Frog is provided to bricks, to achieve the following objectives;

To form a key for the mortar between two adjacent courses or layer of brickwork so as to increase the lateral strength.

To reduce the weight of the brick.

To provide a place for putting the impression of trade-mark or year of manufacturing of brick.

3. What are the different parts of a Brick?

A brick is given a classification based on how it is laid, and how the exposed face is oriented relative to the face of the finished wall.

Stretcher or Stretching brick - A brick laid flat with its long narrow side exposed.^[8]

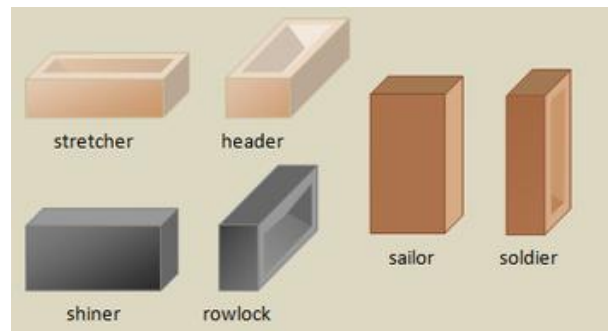
Header or Heading brick - A brick laid flat with its width exposed.^[8]

Soldier - A brick laid vertically with its long narrow side exposed.^[9]

Sailor - A brick laid vertically with the broad face of the brick exposed.^[10]

Rowlock - A brick laid on the long narrow side with the short end of the brick exposed.^[11]

Shiner or Rowlock Stretcher - A brick laid on the long narrow side with the broad face of the brick exposed.



4. What are the constituents of good brick earth?

Constituents of Good Brick Earth

Alumina: It is the chief constituent of every kind of clay. A good brick should contain 20% to 30% of alumina. This constituent imparts plasticity to the clay so that it can be moulded. If alumina is present in excess, with inadequate quantity of sand, the raw bricks shrink and warp during drying /burning and become too hard when burnt.

Silica: It exists in clay either as free or combined. As free sand, it is mechanically mixed with clay. In combine form, it exists in chemical composition with alumina. A good brick material should contain about 50% to 60% of silica. The presence of this constituent prevents cracking, shrinking and warping of raw bricks. It thus imparts uniform shape to the bricks. The durability of bricks depends on the proper proportion of silica in brick material. The excess of silica destroys the cohesion between particles and the bricks become brittle.

Lime: A small quantity of lime not exceeding 5 percent is desirable in good brick material. It should be present in a very finely powdered state because even small particles of the size of a pin-head cause flaking of the bricks. The lime prevents shrinkage of raw bricks. The sand alone is infusible. But it slightly fuses at kiln temperature in presence of lime. Such fused sand works as a hard cementing material for brick particles. The excess of lime causes the brick to melt and hence its shape is lost. The lumps of lime are converted into quick lime after burning and this quick lime slakes and expands in presence of moisture. Such an action results in splitting of bricks into pieces.

Oxide of iron: A small quantity of oxide of iron to the extent of about 5 to 6 percent is desirable in good brick material. It helps as lime to fuse sand. It also imparts red colour to the bricks. The excess of oxide of iron makes the bricks dark blue or blackish. If, on the other hand, the quantity of iron oxide is comparatively less, the bricks will be yellowish in colour.

Magnesia: A small quantity of magnesia in brick material imparts yellow tint to the bricks and decreases shrinkage. However, excess of magnesia leads to the decay of bricks.