

Site practice & troubleshooting  
**LAYING 'FROGGED' BRICKS**

The terminology for the indented portion in moulded bricks is reputed to have derived from the indented marks that pit and brickwork ponies left in soft earth -the cleft in their hooves being called a 'frog'.

British Standard Code of Practice BS 8000-3 Workmanship on Building Sites states that;

***“Unless otherwise advised, lay single frog bricks with frog uppermost and double frogged with deeper frog uppermost. Fill all frogs with mortar..... Bricks walls built with frogs down and unfilled are weaker and less resistant to sound transmission. Advice should be sought as to whether bricks laid frog down are acceptable”.***

Many bricklayers prefer to lay bricks frog down as they believe it to be a faster method and it uses less mortar. However the performance of the brickwork can be affected by insufficiently filled frogs.

**Strength and stability**

Compressive strength tests on frogged bricks have traditionally required them to be fully filled with mortar beforehand. The resulting figures are used by engineers in calculating the loads brickwork can support. Brickwork with unfilled frogs will fail at lower loads.

**Sound Insulation**

Building Regulations for England and Wales require dwellings to be constructed to certain standards so as to reduce the levels of transmission of sound between and within dwellings.

For solid masonry walls the resistance to airborne sound depends mainly on the mass per unit area of the wall (density). To maximise this:-

- ◆ fill and seal all masonry joints with mortar.
- ◆ use bricks that extend to the full thickness of the wall.
- ◆ lay brick frog up to achieve required mass per unit area and avoid air paths.

**Fixings to Brick Walls**

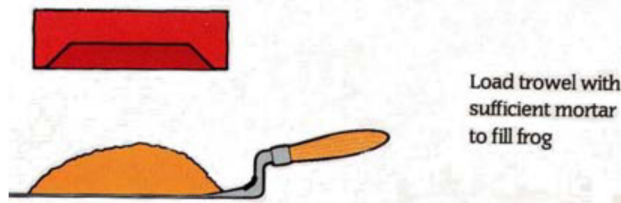
Fixings to walls must be used with care so as not to disrupt the brickwork. The whole structure is less fragile when the voids are fully filled with mortar and there is maximum bonding of all surfaces.

**Aesthetics**

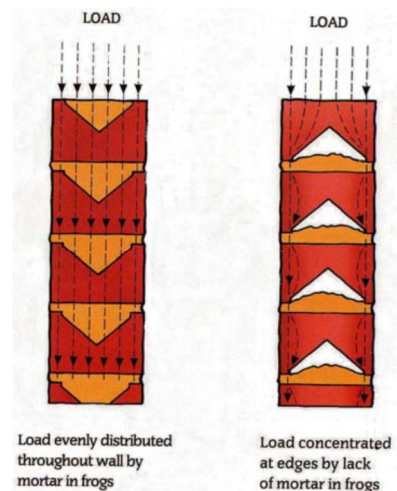
When laid correctly, the creases on the face of handmade or simulated handmade bricks form a 'smile'. Aesthetically it will look better if all the bricks are uniformly laid but will also help to shed water.

**Exceptional circumstances**

In very exceptional circumstances It is possible to lay bricks with the frog down and fully filled but it can be time consuming and suitable for particular details only i.e. if 'handed' bricks are not available for either side of an opening it may be possible to invert some on one side. This may not be acceptable for some textured products.



Load trowel with sufficient mortar to fill frog



Load evenly distributed throughout wall by mortar in frogs

Load concentrated at edges by lack of mortar in frogs

To lay bricks with frogs down and filled, the trowel must be loaded with sufficient mortar and brick and trowel lowered into position.

For further information or advice regarding this topic please contact Ibstock's Design & Technical Helpline on **0844 800 4576** or email [technical@ibstock.co.uk](mailto:technical@ibstock.co.uk)

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