

## Compressive Strength

BS EN 771-1 states that the mean compressive strength of a product must be declared by the manufacturer.

When tested, this must not fall below the strength stated by the manufacturer who must also categorise the unit into either:

**Category I** (the probability of failing to achieve the declared strength does not exceed 5%)

Or

**Category II.** (the level of confidence as placed on category I does not apply)

Ibstock products will be Category II.

The orientation of the unit as tested should be indicated, e.g. bed-face or stretcher face etc, and whether voids are intended to be mortar filled.

If the units are intended to be exposed to concentrated loads or for use in seismic areas, any strength result from the batch tested that falls below 80% of the stated strength must be declared.

The test involves sampling 10 bricks at random and sending them to an approved laboratory where the surfaces will be ground smooth if they vary in height more than 1mm per 100mm from a level plane.

Alternatively the unit can be bedded in mortar to achieve a flat plane if grinding would alter the contact area significantly.

The units are then placed in a testing machine, one at a time, a uniformly distributed load is applied and increased continually up to failure. The results are recorded in N/mm<sup>2</sup>.

The mean figure of the 10 is then calculated to ensure compliance with the declared figure.

Note: The BS EN test method, in most instances, but not all, results in a higher strength than the BS3921 method.