

Building Blocks – Technical Information

The 99mm Building Block is manufactured using the basic raw materials of Rapid Hardening Portland Cement, BS12:1991 Class 52.5N, 10mm coarse aggregate and zone 'M' sand, in quantities to produce a high compressive strength. Unit complies with BS 6073 Part 1 1981.

The main use for the block unit is as an infill block in prestressed concrete beam and pot suspended ground floors. Although extensively used as a high strength dense concrete block in masonry walling construction for residential and industrial purposes.

Dimensions:

440 x 215 x 99mm Cored
Tolerances in accordance with BS 6073 1981
Length and Height + 3mm - 5mm
Thickness +/- 4mm maximum
 +/- 2mm average

Density:

Nominal Dry Density 1880 kg/m²

Weights:

Block unit weight at equilibrium density 17.63 kg

Compressive Strength:

Average compressive strength is not less than 7.5 N/mm² at 7 days

Drying Shrinkage:

Satisfactorily, independently tested to BS 6073 Part 1 1981

Thermal Conductivity TCC:

TCC = 1.13W/mK

Wall Ties:

Wall ties should comply with BS 1234:1978. Spacing may be varied

Fixings:

It is recommended to use a 'drill and plug' system for fixings into block units

Plastering:

Block units will accept all proprietary plasters in accordance with manufacturers instructions

Movement Joints:

The recommendation for movement joints within walling using these block units are based on BS 5628 Part 3 1985.

To minimize the effect of movement in walls, movement joints are required at 6 m centers

Fire Resistance:

Blocks are non-combustable. Used in conjunction with prestressed concrete floor beams achieves a fire rating of 1 ½ hours

Condensation:

Not yet independently determined

Frost Resistance:

Not yet independently determined

Sound Insulation:

Complies with the building regulations act 1991 approved document E, wall type 1b & 2b, floor type 1c & 2c with prestressed concrete floor beams and screed topping

Mortars:

Mortars as specified in BS 5628 Part 3 1985 are recommended for external and internal use, above and below ground level, within masonry walling