GUIDANCE NOTES

BUILDING WITH MANNOK AIRCRETE AERATED THERMAL BLOCKS

IMPORTANT: MUST BE RETAINED BY SITE FOREMAN FOR REFERENCE AND REVIEW BY EACH TRADES PERSON

Mannok Aircrete Aerated Thermal Blocks offer excellent Thermal Performance, High Compressive Strength and Durability. Due to their structure and lightweight properties they are easy to work with and can be sawn, drilled, chased and cut to shape using ordinary woodworking style tools saving time and minimising waste.

THE FOLLOWING GUIDANCE SHOULD BE STRICTLY ADHERED TO ON SITE BY ALL TRADES.

SITE APPLICATION

BLOCKWORK

Blocks should be laid in a stretcher bond pattern. Full blocks should be placed under lintels or openings. Mannok Aircrete coursing units of the same strength as the wall should be used for closing cavities, at window reveals and for building in over lintels. High walls or long stretches of wall should be temporarily propped in windy conditions

NOTE: DO NOT USE DENSE BRICK INSTEAD OF QUINN LITE COURSING UNITS

MORTAR:

Site Mixed Mortar:	**Below DPC 4:½:1 sand: lime: cement (Designation ii, strength class M6)/** **Above DPC 6:1:1 sand: lime: cement (Designation iii, strength class M4)** Plasticiser may be used as an alternative to lime but as a general rule cement: lime: sand mortar gives a better bond than plasticised mortar of the same strength. Site mixed mortar must conform to the requirements of BS EN 1996 – 2, 2006 and BS 8000 – 3, 2020
Ready To Use Mortar	Designation and strength class as above with the addition of a retarder. Must conform to BS EN 998 – 2, 2016

NOTE: DO NOT USE STRONGER MORTAR MIXES THAN THOSE SPECIFED ABOVE

PLASTERING

Internal:	(1) Wet the block thoroughly to reduce suction. (2) Apply 2:1 sand/cement scud coat with waterproofer to further reduce suction and provide a key for next coat. (3) Apply 6:1 sand/cement coat to a depth of 8-12mm. (4) Skim as normal. Internal plastering should be in accordance with BS EN 13914-2, 2016 and BS 8481, 2006. A medium grain sized sand is ideal. Plasterboard on dabs may be used as an alternative to wet plaster, however additional measures may need to be introduced to provide airtightness.
External:	Traditional sand cement mortar is not recommended where Quinn Lite blocks are used externally. External render should be Weber PRAL D or equal and approved. Weber Rend-aid should be applied prior to applying the finished render. www.uk.weber

WALL TIES FOR CAVITY WALLS:	
General Purpose Mortar:	Type 2 Tie to PD 6697 (Masonry General Purpose) for cavities up to 150mm. Low thermal conductivity Teplo ties are also suitable and are a good option where cavities are greater than 150mm. Further advice on these should be sought from tie manufacturer. www.ancon.co.uk
Thin-joint Mortar:	Where thin-joint mortar is used on the inner leaf, blockwork coursing won't match that of the outer leaf so standard wall ties are not suitable. A spiral or helical tie can be driven into the Mannok Aircrete block at the height coinciding with the bed joint of the outer leaf. Ancon Staifix-Thor Helical TJ2 Wall Tie or equal and approved is suitable. www.ancon.co.uk
Movement Joint:	Internal walls of low-rise buildings and houses do not normally require movement joints and the use of bed joint reinforcement is usually sufficient. Where vertical movement joints are deemed necessary, they should be inserted in accordance with BS EN 1996 – 2, 2006 at max 5m centres.
Bed Joint Reinforcement	Masonry grade bed joint reinforcement should be used in 2 courses above and below openings extending 600mm beyond each side of opening.

LINTELS:

Thermally broken steel lintels are recommended to prevent cold bridging. Concrete lintels can also be used but expanded metal lathing should be placed over the face of the lintel extending 300mm over each edge, before plastering. Lintels should bear onto a full block and should extend past the width of the opening by 225mm. Steel beams should be placed on a concrete padstone.

CUTTING AND CHASING:

Blocks are easily cut using hammer and bolster, consaw, bandsaw or tungsten carbide tipped hand saw (available from Mannok). The use of coursing units reduces the need for cutting and keeps waste to a minimum. Vertical chasing must not exceed one third and horizontal chasing one sixth of the wall thickness. Electrical socket boxes should not be placed back to back in partition walls. A twin blade saw can be used for vertical chasing while a socket box sinker can be used for electrical sockets. An S.D.S. type drill with a flat chisel blade will easily remove excess material.

NOTE : DO NOT USE HEAVY HAMMER ACTION OR PERCUSSION TYPE TOOLS

NOTE : BLOCKS ARE NOT SUITABLE FOR FAIRFACE APPLICATIONS

FIXINGS:

There are a full range of fixing available for Mannok Aircrete blocks for all applications.
Please Contact Masonry Fixing Limited.
Customer Services: Tel +353 1642 6789
https://www.masonryfixings.ie/

SOUND INSULATION

For party wall construction using Mannok Aircrete blocks, advice should be sought from Mannok Technical Department.
www.mannokbuild.com
email: technical@mannokbuild.com

STRUCTURAL PERFORMANCE

Mannok Aircrete Blocks are suitable for a wide range of load bearing applications. Compressive strength requirements will vary in accordance with building regulations.
The block strength is identified by the colour of strapping used to package the blocks. Yellow band - 2.9N (Super), Blue band - 5.2N (Standard), Red band - 7.5N (Seven) and Green Band – 10.4N (High Strength Ten).

For further information:
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