Fixings for H+H aircrete

TSD 20

Fixing into H+H aircrete is fairly straightforward and plugs, with screws or nails as appropriate, will provide a very secure and reliable fixing.

Direct driven wood screws, with no plug may be used for fixing electrical back boxes and the like, in which case the woodscrews should not be overtightened.

For lightweight fixtures such as light-duty door frames, skirtings, linings and cladding battens, recommended fixings include cut nails, driven skewed into the blockwork (in pairs for Solar), or proprietary helical nails. The nails should be driven to a minimum depth of 50mm into the block.
Typical helical fixings include Helifix TurboFast, SureTwist and TwistFix Twistnail
When fixing battens etc., using helical nails, it may be helpful to drive the fixing through the timber before positioning, to avoid bounce.
Use of standard, or shot fired, nails are not recommended as it is difficult to develop sufficient friction given the aerated structure of the blocks.

Medium-weight fixtures, for example, heavier-duty door frames and battens and small fixtures, should be fixed using proprietary plugs and normal woodscrews. Examples of suitable fixings are….
Rawlplug 4ALL Universal Plug, FIX Expansion Plug, R-FF1-N Frame Fixings
Fischer Expansion plug SX

Heavyweight items such as radiators and cupboards should be fixed using proprietary heavy duty plugs specifically made for use with aircrete or lightweight blocks. Examples of suitable fixings are….
Plasplugs Thermal Block Fixings
Fischer AIrcrete Anchor GB, Turbo aircrete anchor FTP K (metal version available for fire resistance), DuoPower

Expanding metal sleeve bolt fixings are not suitable for aircrete. For extra heavy duty fixings requiring bolts, such as handrails, kitchen cupboards and TV brackets, proprietary metal fixings, such as Fischer Aircrete Anchor FPX-I are available which are internally threaded to receive M6 to M12 bolts. Alternatively, some resin anchors may also be suitable for use in aircrete but, due to their specialist nature, these should only be used after consulting the relevant manufacturer for advice on the specific application to hand.

Installation of fixings should always be in accordance with the recommendations of the relevant fixing manufacturer. However, the following general points of good practice are worth noting.

1. Fixings should be spaced from each other (and from the free edge of a block when this is applicable) at a distance not less than the depth of penetration of the fixings into the block; this should be confirmed with the fixing manufacturer.
2. Fixings should not be over-tightened as this can affect the pull-out strength.
3. It is important that the diameter of holes drilled in the blocks should be such that the plug fits tightly prior to the screw being driven as it is quite easy to over drill a hole into aircrete blocks. We would therefore suggest the following approach:
   i. Do not drill on hammer action, instead use normal drill action
   ii. Use a wood bit as opposed to a masonry bit
   iii. Use bit size slightly smaller than recommended for plug size

   The above should help ensure that the holes are not over-sized for the plug.

The above list of fixings is not exhaustive and specific guidance and advice can be obtained direct from fixings manufacturers, many of whom offer direct advice or a design service. Contact details for those listed are as follows:

Rawlplug	Technical Advisory Service	0141 638 7961	www.rawlplug.co.uk/contact/
Fischer	Technical Hotline	0149 182 7920	technical-uk@fischer.co.uk
Plasplugs	Customer Services	0128 324 5430	plasplugs.co.uk/contact/
Helifix		0208 735 5200	info.helifix.uk@leviat.com
SureTwist	Technical Centre	0127 950 5514	www.tc.surecps-group.com/contact/
TwistFix		0845 123 6006	sales@twistfix.co.uk

H+H UK Limited, Technical Services Department: Tel 01732 880580