

the use of Aircrete

BELOW GROUND

The light weight and faster build-speed of Aircrete blocks mean foundations can be constructed quickly, easily and cost-effectively, creating an extremely effective moisture barrier with significant thermal insulation properties.

Their cellular structure and durability make them a recognised alternative in most below-ground situations.

PRODUCTIVITY

In a range of face sizes and thicknesses to match typical cavity wall widths, Aircrete blocks can virtually halve foundation build-time for cavity wall options, offering considerable labour and money savings.

EASE OF USE

Aircrete blocks offer considerable improvements in productivity. They're easy to handle so you can build more courses per day which become stable soon after laying. Solid foundations mean less materials on site and their greater workability means they can easily be cut with a hand saw.

FROST AND SULFATE ATTACK

Because of their resistance to frost damage and sulfate attack, Aircrete blocks are BBA approved for use below DPC level in soil conditions unsuitable for many other types of masonry unit. Continuous freeze-thaw cycle tests have shown no reduction in strength under these conditions and most blocks can be used in soils up to and including Class DS 4 sulfate levels, to BRE Special Digest 1.

STRENGTH

Aircrete foundation blocks are available in a range of strengths to suit most applications:- 2.8N/mm² or 4.0N/mm² for general housing needs, and 7N/mm² for higher rise buildings. A solid foundation of Aircrete blocks provides a good, level platform from which to build brick and block walls.

WATER RESISTANCE

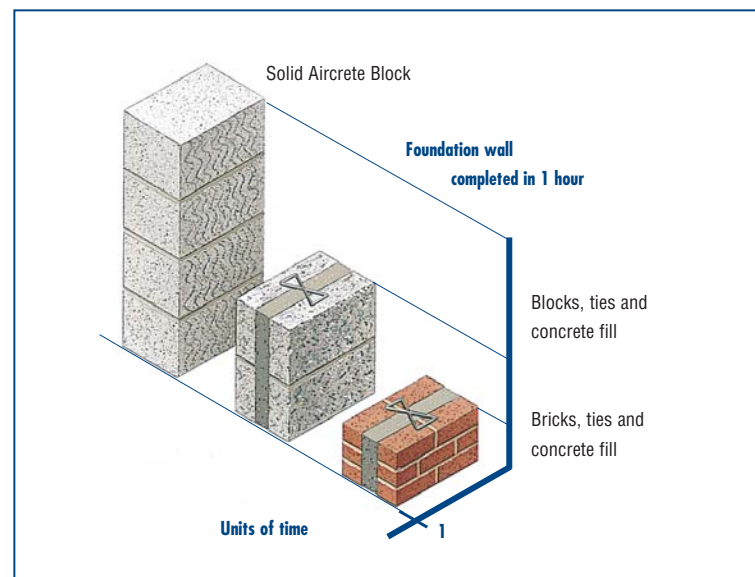
Their unique, micro-cellular structure, with millions of tiny air bubbles that do not interconnect, forms an effective barrier against moisture penetration, resisting passage of water from the surface.

THERMAL PERFORMANCE

Solid Aircrete foundation blocks reduce heat loss through the floor by as much as 25% compared to other forms of construction and, combined with suspended beam and Aircrete block floor system, can achieve up to a 40% saving in floor U values, offering excellent cost savings through the elimination of secondary floor insulation.

PROTECTION & HANDLING ON SITE

Blocks should be unloaded onto a dry, level surface and covered to protect them from inclement weather.



The blocks provide a strong and firm foundation.

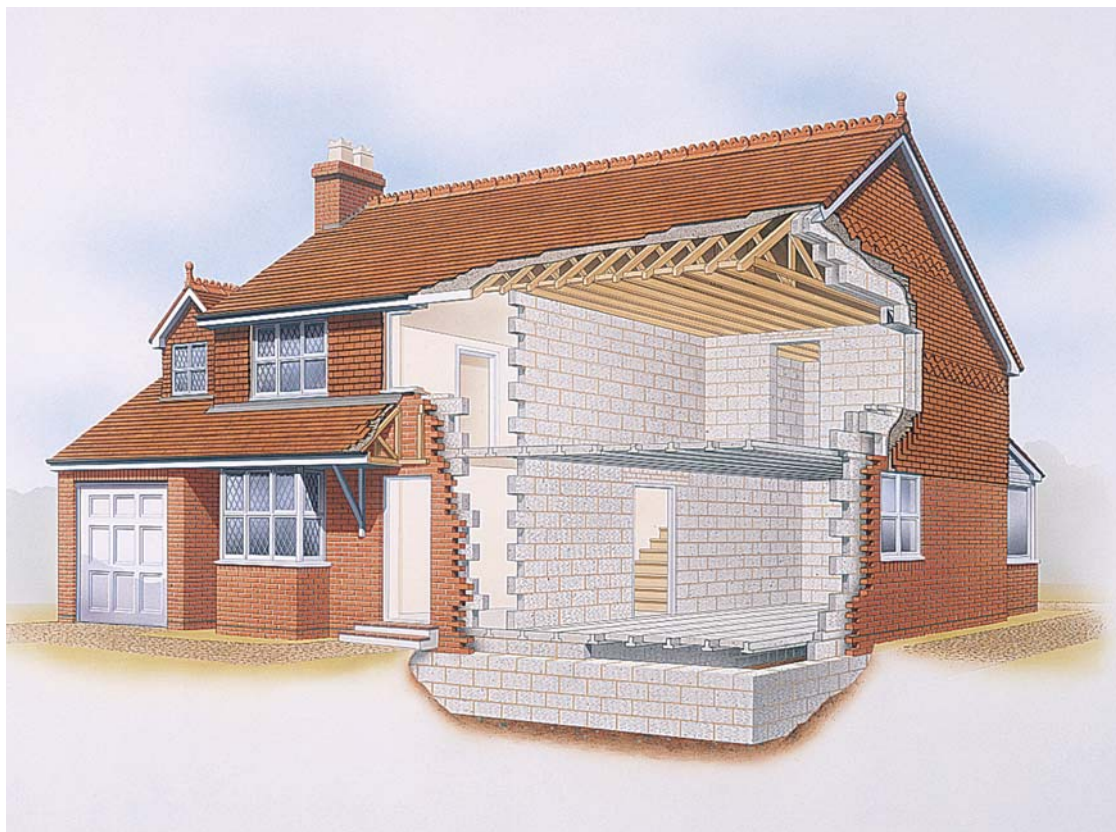
FACTSHEET 1

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QUICK & EASY

The benefits of improved construction times and easier handling have persuaded many of the major housebuilders to use Aircrete blocks for foundations as well as above dpc. Typical of these applications is the Taywood Home's exclusive Goff's Oak development in Hertfordshire.

Design and build developers use Aircrete in recognition of the further benefits of impermeability and superior frost resistance. Indeed, Aircrete foundations are now widely used by smaller builders on one-off houses, including extensions, since attractive time and cost savings are possible regardless of project size.



B.S. Mortar designation	Cement	Lime	Sand
ii	1	1/2	4
ii	1 •	0	4
iii	1	1	6
iii	1	0	6*
iii	1 •	0	5

* Sand with plasticiser

- Masonry cement - has a plasticising agent within the cement mix, therefore lime is not required.

USE AN APPROPRIATE MORTAR MIX

Below DPC level, mortars of designation (ii) or (iii) may be used, according to soil conditions. Above DPC, a mortar not stronger than (iii) should be used.

As a general rule, cement:lime:sand mortars give a stronger bond than plasticised mortars of a similar compressive strength.

FOR MORE INFORMATION

This publication is only intended to be an outline guide to Aircrete products and you are advised to contact the Aircrete Bureau members for comprehensive technical support and guidance, backed by extensive technical literature covering every aspect of designing and working with Aircrete products.



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