

Mitton Road – Lancashire

**Architect:**

Avalon Town Planning

Client:

Tony Wright (Self-builder)

Project:

Self-build construction of a single two-bedroom property

Cost of Build:

Anticipated Final Cost -
£420,000

Location:

Whalley, Clitheroe, Lancashire

Type of contract:

Self-build

Build time: 10 months

Executive summary:

H+H Celcon and Jumbo Bloks were specified in this two-bedroom self-build project. The property has been designed to be a 'lifetime home' for Tony and his wife Marilyn, incorporating features such as a lift so their home can adapt for their future needs.

Project Description:

The site posed a number of logistical challenges, primarily the constrained size and shape of the garden plot. Therefore, aircrete's inherent properties of being lightweight and easy to lay and manipulate on site proved ideal for the job.

This was Tony's first time using the Thin-Joint System and he enjoyed the ease of use of the products, as well as being able to re-use some of the excess aircrete blocks to reduce material wastage.

Tony and Marilyn's "lifetime home" is extremely thermally efficient thanks to the use of H+H's aircrete, achieving U-values that are fully compliant with current UK Building Regulations.

Tony's builders were new to using the Thin-Joint System so the project was a learning curve for them, however Tony himself felt confident in using the H+H blocks and would be happy to use them again.

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Reason for choosing

H+H aircrete products:

An insulated concrete formwork method of build was initially considered but discarded because Tony felt it was too specialist. A Structured Insulated Panel (SIP) solution was also looked at however Tony wanted both a robust build and easy to use materials, which led to his decision to specify the Thin-Joint System of construction using H+H Aircrete.

Products used / aircrete specification:

H+H High Strength Jumbo Bloks (7.3Nmm²) and H+H Standard Grade Blocks (3.6Nmm²) with Celfix Mortar, designed specifically for use as part of H+H's Thin Joint System.

Tony used H+H's Standard Grade Blocks below DPC level and at the north facing gable end of the property. H+H High Strength Jumbo Bloks were used elsewhere in the build.

Foundations: Concrete raft foundations were used in the build.

External walls: Render was applied to one external wall. The remaining external walls were clad in reclaimed stone to complement the existing surroundings of the rural Lancashire village.

Roof: Tony's roof is a traditional/cut roof covered in natural slate, again, sensitive to the existing surroundings in Whalley. The easily adaptable nature of this type of roof construction allowed Tony to create a truly distinctive look for his home.

Floor: Web joists were used throughout the property with a Hardy floor. The ground floor has been fully tiled and oak timber has been utilised in the first floor.

"From our point of view, it's been a delight working with Tony and his builders – they've been curious and keen to learn, supportive and proactive."

Anna Williamson,
H+H Area Sales Manager



"I certainly liked used the products and found it relatively easy to build with them. I was also able to use up 'offcuts' from the aircrete blocks.

My builders were also completely new to the Thin-Joint system and the slightly different way of working compared to using traditional dense aggregate blocks. If I was to do it again, I would like to be more 'hands-on' with the actual construction side of things.

We had lots of visits from our H+H area sales representative at the beginning of the build and when I needed to order additional products from H+H, Build Expert Andy was able to assist with the delivery."

Tony Wright (Self-builder)

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Product benefits:

- Easily meets or exceeds Part L and Part E of the Building Regulations
- Simplifies the construction process
- H+H aircrete products use up to 80% recycled material
- Achieves A+ rating in the BRE Green guide

Other benefits included:

- Block-work is highly adaptable, easily allowing for any last minute design changes
- Aircrete achieves an air permeability of $0.12\text{m}^3/\text{hr}/\text{m}^2$
- Has excellent fire resistance with a Class 0 rating for surface spread of flame

H+H aircrete applications

- Internal and external leaf in cavity walls
- Solid walls
- Separating / party walls
- Flanking walls
- Partitions
- Multi-storey
- Foundations

Aircrete is an excellent all round commercial and industrial building material. Used in partition and external walls (both solid and cavity), fire walls and as infill to steel and concrete framed buildings it provides durability, fire resistance and superb thermal and acoustic insulation.

H+H aircrete has exceptional sustainability credentials: not only does it provide excellent thermal and acoustic insulation and contributes to air-tightness but, being manufactured from up to 80% recycled materials, it is sustainable both in manufacture and in use. We also have BES 6001:2008

accreditation for responsible resourcing of materials in addition we have an A+ rating under in the BRE green guide on both cavity and solid external walls. Couple this with H+H UK's rigorous approach to pursuing the highest environmental standards throughout the whole of its business and it's easy to see why this innovative and award-winning system is now firmly established within the UK.

Contact details

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For further information about the subjects covered or the H+H products used in this case study, please visit our website
www.hhcelcon.co.uk