

Thin-Joint System



Multi Plates
Face Size
630mm x 350mm

Jumbo Bloks
Face Size
630mm x 250mm

Celcon Plus Blocks
Face Size
630mm x 215mm

The H+H Thin-Joint System combines the range of high quality accurately dimensioned aircrete blocks with Celfix, a specially developed thin layer mortar. H+H's Thin-Joint range of aircrete products is made up from Celcon Plus Blocks, Jumbo Bloks and Multi Plates



Aircrete's unique characteristics make it ideal for the construction of cavity external walls as well as internal separating walls, partitions and foundations. With its combination of strength, resistance to moisture ingress and thermal insulation, it may also be used for external leaves and solid wall construction.

H+H aircrete combines superb thermal and sound insulation qualities, with impressive load bearing capabilities. Simple to work with, it has the additional benefits of being light weight with a high resistance to water penetration, fire, frost and sulfate attack.

Applications

- Cavity walls (internal and external leaf)
- Solid walls
- Partition walls
- Separating walls
- Flanking walls
- Multi storey buildings

Benefits

- Fast setting mortar
- No mortar 'swimming' allowing continuous laying
- Ease of mixing and laying mortar
- Dimensionally highly accurate blocks
- First fix trades can be brought forward
- Larger block formats used

Thin-Joint System

| Predicted weighted sound reduction index R_w (dB) | | | | | | | | | |
|-----------------------------------------------------|---------------------|----------|---------------|-------------------------------|----------|---------------|---------------|----------|---------------|
| Block Thickness (mm) | Unfinished Surfaces | | | Finished both sides with 13mm | | | | | |
| | Solar | Standard | High Strength | Lightweight Plaster | | | Dense Plaster | | |
| | | | | Solar | Standard | High Strength | Solar | Standard | High Strength |
| 100 | 37.0 | 39.6 | 41.8 | 40.6 | 42.6 | 44.4 | 44.4 | 45.8 | 47.2 |
| 140 | 41.1 | 43.6 | 46.0 | 43.8 | 45.8 | 47.8 | 46.7 | 48.4 | 50.0 |
| 215 | 46.2 | 48.8 | 51.0 | 48.1 | 50.3 | 52.2 | 50.2 | 52.1 | 53.8 |
| 275 | 49.2 | 51.7 | 54.0 | 50.6 | 52.9 | 55.0 | 52.4 | 54.4 | 56.2 |
| 300 | 50.2 | 52.8 | 55.0 | 51.6 | 53.9 | 55.9 | 53.2 | 55.3 | 57.1 |

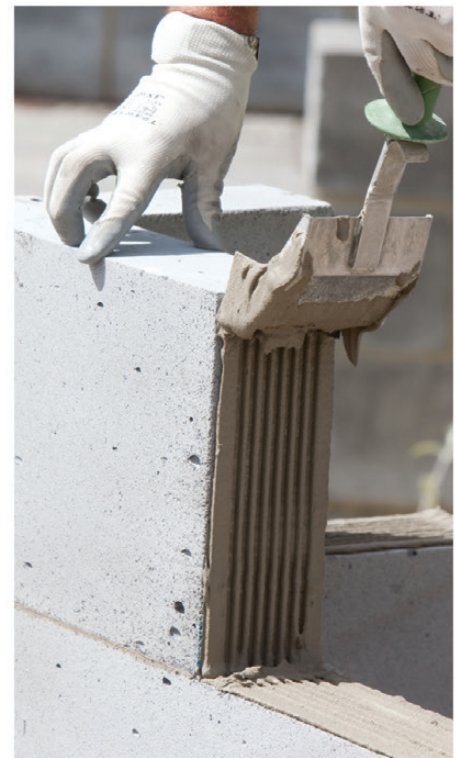
| Fire Resistance table (hours) | | | | | |
|-------------------------------------------------|------------|-----|-----|-----|--|
| Block Thickness (mm) | (Criteria) | 100 | 140 | 215 | |
| Solar Grade | | | | | |
| Non-loadbearing | (EI) | 4 | 4 | 4 | |
| Loadbearing | (REI) | 1 | 2 | 4 | |
| Standard, High and Super Strength Grades | | | | | |
| Non-loadbearing | (EI) | 4 | 4 | 6 | |
| Loadbearing | (REI) | 2 | 3 | 6 | |

| Celfix Mortar – Approximate yield per 25kg bag – 2mm joints | | | | | |
|----------------------------------------------------------------------|--------------------------|------|------|------|--|
| Block Thickness (mm) | | 100 | 140 | 215 | |
| Plus Block 630 x 215mm (7.29 blocks/m ² laid) | m ² blockwork | 6.86 | 4.90 | 3.19 | |
| | No. of blocks | 50.0 | 35.7 | 23.2 | |
| Jumbo Block 630 x 250mm (6.28 blocks/m ² laid) | m ² blockwork | 7.65 | 5.46 | - | |
| | No. of blocks | 48.0 | 34.2 | - | |
| Multi Plates 630 x 350mm (4.50 blocks/m ² laid) | m ² blockwork | 9.60 | - | - | |
| | No. of blocks | 43.1 | - | - | |

* Representative sample of block sizes only

Please note that these figures are based on experience of 'typical' yield figures for a single bag of 25kg Celfix when constructing Thin-Joint blockwork on site. These yields will vary with site requirements and operative technique or ability.

| Characteristic compressive strength, f_k , of masonry (to BS5628:Pt1) for H+H blocks | | | | | | | |
|----------------------------------------------------------------------------------------|--------|------|---------------------------------------------------------------------------|-------------------|---------------------------|----------------------------|----------------------------------|
| Block | | | Celfix thin layer mortar Block type (declared compressive strength) | | | | Designation (iii) / M4 mortar |
| Thickness | Height | H/t | Solar (2.9) | Standard (3.6) | High Strength (7.3) | Super Strength (8.7) | Aggregate Block (10.4) |
| 100mm | 215mm | 2.15 | 2.8 | 3.5 | 6.8 | 7.7 | 8.2 |
| | 250mm | 2.50 | 2.8 | 3.5 | 6.8 | 7.7 | |
| | 350mm | 3.50 | 2.8 | 3.5 | 6.8 | 7.7 | |
| 140mm | 215mm | 1.54 | 2.3 | 2.9 | 5.7 | 6.4 | 6.8 |
| | 250mm | 1.79 | 2.6 | 3.2 | 6.3 | 7.1 | |
| 200mm | 215mm | 1.08 | 1.9 | 2.3 | 4.6 | 5.2 | |
| 215mm | 140mm | 0.65 | 1.5 | 1.8 | 3.5 | 4.0 | 5.3 |



For further information and to check our most up-to-date product range please visit our website www.hhcelcon.co.uk or contact the following departments:

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