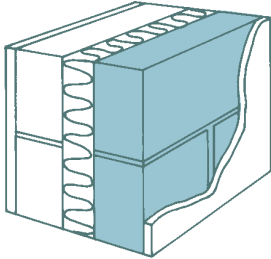


Fibotherm lightweight insulating blocks

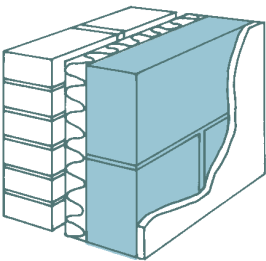
Using Fibotherm insulation blocks with specific types of insulation achieves the following 'U' values expressed in W/m^2K^{**}

OPTION 1 FULL FILL



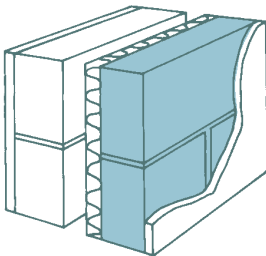
Outside resistance	0.040
100mm block + 19mm render	0.136
100mm Dritherm standard	2.703
100mm Stowell Fibotherm	0.400
12.5mm drylining on Dabbs	0.230
Inside resistance	0.130
Sum of resistances	3.639 m^2K/W
Uncorrected U-value	0.274 W/m^2K
Correction	0.026
U-VALUE	0.300 W/m^2K

OPTION 2 PARTIAL FILL



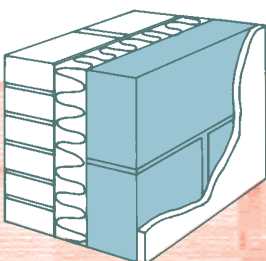
Outside resistance	0.040
105mm brick	0.136
50mm low emissivity cavity	0.644
50mm Kingspan TW50	2.174
100mm Stowell Fibotherm	0.400
12.5mm drylining on Dabbs	0.230
Inside resistance	0.130
Sum of resistances	3.754 m^2K/W
Uncorrected U-value	0.266 W/m^2K
Correction	0.026
U-VALUE	0.292 W/m^2K

OPTION 3 PARTIAL FILL



Outside resistance	0.040
100mm block + 19mm render	0.136
50mm low emissivity cavity	0.644
50mm Kingspan Kooltherm K8	2.380
100mm Stowell Fibotherm	0.400
12.5mm drylining on Dabbs	0.230
Inside resistance	0.130
Sum of resistances	3.960 m^2K/W
Uncorrected U-value	0.252 W/m^2K
Correction	0.026
U-VALUE	0.278 W/m^2K

OPTION 4 FULL FILL



Outside resistance	0.040
105mm brick	0.136
100mm Dritherm 32	3.125
100mm Stowell Fibotherm	0.400
12.5mm drylining on Dabbs	0.230
Inside resistance	0.130
Sum of resistances	4.061 m^2K/W
Uncorrected U-value	0.246 W/m^2K
Correction	0.026
U-VALUE	0.272 W/m^2K

Stowell Fibotherm blocks are ideal for...

- INNER OR OUTER LEAF OF CAVITY WALLS
- PARTITION WALLS

Stowell Fibotherm blocks comply with BS EN 771-3 and offer the following advantages...

- HIGH INSULATION
- LOW SHRINKAGE
- LOW SITE BREAKAGE
- LOW DENSITY
- GOOD FIXABILITY
- EXCELLENT PLASTER KEY

OVEN DRY DENSITY approx 850 kg/m^3

SIZE mm	approx weight kg	number per tonne
440 × 215 × 75	6.7	150
440 × 215 × 100	9.0	110
440 × 215 × 140	12.5	80
440 × 215 × 190	17.2	58

MINIMUM COMPRESSIVE STRENGTH: 3.6 N/mm^2

THERMAL CONDUCTIVITY:

0.25 W/mK^* at 3% m/c (inside skin)
0.28 W/mK^* at 5% m/c (outside skin)

THERMAL RESISTANCE:

SIZE mm	m^2K/W at:	
440 × 215 × 75	3% m/c 0.30	5% m/c 0.27
440 × 215 × 100	3% m/c 0.40	5% m/c 0.36
440 × 215 × 140	3% m/c 0.56	5% m/c 0.50
440 × 215 × 190	3% m/c 0.76	5% m/c 0.68

(m/c = moisture content)

DRYING SHRINKAGE:

0.026% – 0.040%

FIRE RESISTANCE:

Fibotherm blocks are manufactured using Class 1 lightweight aggregates which are processed at approx. 1150°C (melting point in excess of 1250°C).

* Tested by BRE

** For walls, U-value calculations of $0.35 \text{ W/m}^2\text{K}$ or lower must be obtained for new dwellings (L1A) but in practice, to achieve satisfactory SAP rating, walls need to be designed in the region of $0.28 \text{ W/m}^2\text{K}$ to $0.30 \text{ W/m}^2\text{K}$. $0.30 \text{ W/m}^2\text{K}$ is the requirement for work on existing buildings (L1B).

STOWELL

CONCRETE LIMITED

07/09

www.stowellconcrete.co.uk