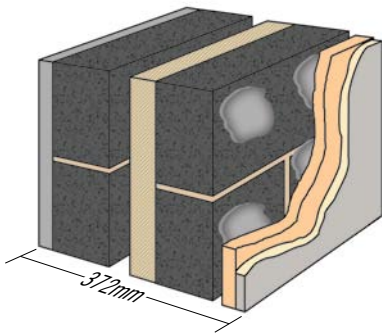


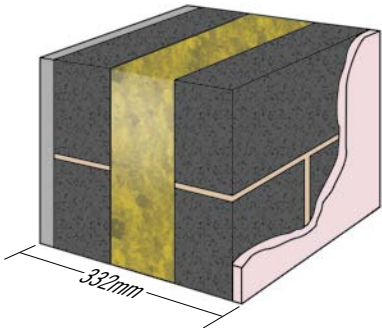
Fibotherm lightweight insulating blocks 3.6N/mm² to BS EN 771-3

U-Value 0.21



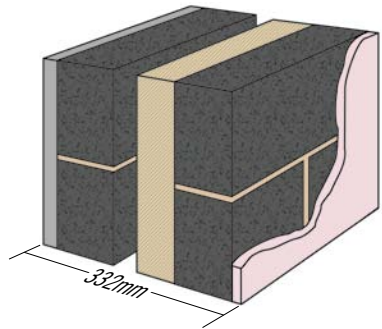
Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Fibotherm 3.6N/mm ² (λ 0.29)	0.345
50mm low emissivity cavity	0.640
50mm foil-faced partial fill PIR/PU board (λ 0.022)	2.273
100mm Fibotherm 3.6N/mm ² (λ 0.27)	0.370
15mm dabs	0.170
25mm phenolic insulation (λ 0.022)	1.136
<i>bonded to...</i>	
13mm plasterboard (λ 0.21)	0.062
Inside resistance	<u>0.130</u>
Sum of resistances	5.185 m²K/W
Uncorrected U-value	0.193 W/m ² K
Mortar correction	0.002
Air gap correction	0.010
Wall tie correction – Staifix HRT4-225	<u>0.001</u>
U-VALUE	0.206 W/m²K

U-Value 0.25



Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Fibotherm 3.6N/mm ² (λ 0.29)	0.345
100mm high performance mineral wool (λ 0.032)	3.125
100mm Fibotherm 3.6N/mm ² (λ 0.27)	0.370
13mm dense plaster (λ 0.57)	0.023
Inside resistance	<u>0.130</u>
Sum of resistances	4.052 m²K/W
Uncorrected U-value	0.247 W/m ² K
Mortar correction	0.002
Air gap correction	0.000
Wall tie correction – Staifix HRT4-225	<u>0.001</u>
U-VALUE	0.250 W/m²K

U-Value 0.27



Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Fibotherm 3.6N/mm ² (λ 0.29)	0.345
50mm low emissivity cavity	0.640
50mm foil-faced partial fill PIR/PU board (λ 0.022)	2.273
100mm Fibotherm 3.6N/mm ² (λ 0.27)	0.370
13mm dense plaster (λ 0.57)	0.023
Inside resistance	<u>0.130</u>
Sum of resistances	3.840 m²K/W
Uncorrected U-value	0.260 W/m ² K
Mortar correction	0.002
Air gap correction	0.010
Wall tie correction – Staifix HRT4-225	<u>0.001</u>
U-VALUE	0.273 W/m²K

Stowell Fibotherm blocks are ideal for...

- INNER OR OUTER LEAF OF CAVITY WALLS
- PARTITION WALLS

Stowell Fibotherm blocks offer the following advantages...

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

THERMAL CONDUCTIVITY: λ^*

0.27 W/mK* at 3% m/c (inside skin)

0.29 W/mK* at 5% m/c (outside skin)

THERMAL RESISTANCE:

SIZE mm	m ² K/W at:	
75mm	3% m/c 0.278	5% m/c 0.259
100mm	3% m/c 0.370	5% m/c 0.345
140mm	3% m/c 0.519	5% m/c 0.483
190mm	3% m/c 0.704	5% m/c 0.655

(m/c = moisture content)

SOUND INSULATION: **

39 dB (A) (75mm single skin, 100kg/m ²)
41 dB (A) (100mm single skin, 125kg/m ²)
42 dB (A) (140mm single skin, 165kg/m ²)
44 dB (A) (190mm single skin, 210kg/m ²)

FIRE RESISTANCE: ***

75mm (single skin unplastered) –
100mm (single skin unplastered) 2 hrs
140mm (single skin unplastered) 3 hrs
190mm (single skin unplastered) 6 hrs

For walls, U-value calculations of 0.30 W/m²K 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 0.25 W/m²K to 0.28 W/m²K. 0.28 W/m²K is the requirement for work on existing buildings (L1B).

* Calculated from oven dry density

** Calculated using mass law curve - BS8233 (with 2 skins of dense plaster each 17kg/m²)

*** Calculated using table 14 BS5628-3 2005

STOWELL

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3.6N/mm² (OVEN-DRY DENSITY approx 850 kg/m³)

Size mm nominal	approx weight kg	No. per tonne	multiples of	no. per pack
440×215×75	6.7	150	56	112
440×215×100	9.0	110	44	88
440×215×140	12.5	80	32	64
440×215×190	17.2	58	20	40
Course adjusters				
65×215×100	1.35	740	128	512
65×215×140	1.9	530	96	384