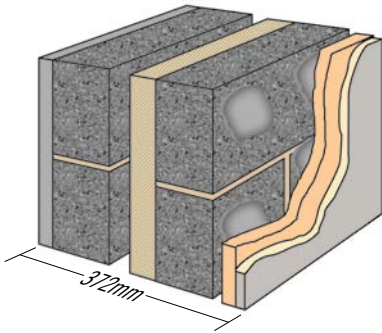


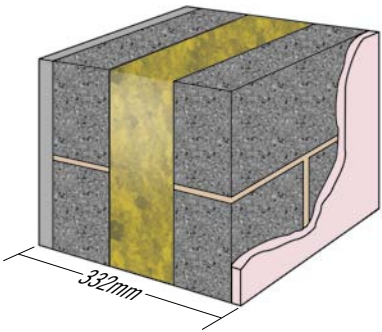
Stowlite lightweight concrete blocks 10.4N/mm² to BS EN 771-3

U-Value 0.22



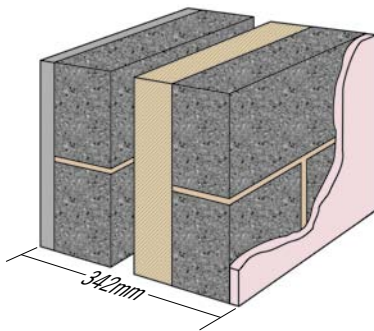
Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Stowlite 10.4N/mm ² (λ 0.75)	0.133
50mm low emissivity cavity	0.640
50mm foil-faced partial fill PIR/PU board (λ 0.022)	2.273
100mm Stowlite 10.4N/mm ² (λ 0.71)	0.141
15mm dabs	0.170
25mm phenolic insulation (λ 0.022)	1.136
<i>bonded to...</i>	
13mm plasterboard (λ 0.21)	0.062
Inside resistance	<u>0.130</u>
Sum of resistances	4.744 m²K/W
Uncorrected U-value	0.211 W/m ² K
Mortar correction	0.000
Air gap correction	0.010
Wall tie correction – Staifix HRT4-225	<u>0.001</u>
U-VALUE	0.222 W/m²K

U-Value 0.28



Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Stowlite 10.4N/mm ² (λ 0.75)	0.133
100mm high performance mineral wool (λ 0.032)	3.125
100mm Stowlite 10.4N/mm ² (λ 0.71)	0.141
13mm dense plaster (λ 0.57)	0.023
Inside resistance	<u>0.130</u>
Sum of resistances	3.611 m²K/W
Uncorrected U-value	0.277 W/m ² K
Mortar correction	0.000
Air gap correction	0.000
Wall tie correction – Staifix HRT4-225	<u>0.001</u>
U-VALUE	0.278 W/m²K

U-Value 0.27



Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Stowlite 10.4N/mm ² (λ 0.75)	0.133
50mm low emissivity cavity	0.640
60mm foil-faced partial fill PIR/PU board (λ 0.022)	2.727
100mm Stowlite 10.4N/mm ² (λ 0.71)	0.141
13mm dense plaster (λ 0.57)	0.023
Inside resistance	<u>0.130</u>
Sum of resistances	3.853 m²K/W
Uncorrected U-value	0.260 W/m ² K
Mortar correction	0.000
Air gap correction	0.010
Wall tie correction – Staifix HRT4-250	<u>0.002</u>
U-VALUE	0.272 W/m²K

Stowlite 10.4N/mm² blocks are approximately 17.5% lighter than the dense block of the same strength and provide a good finish for rendering fixing.

THERMAL CONDUCTIVITY: λ*

0.71 W/mK @ 3% m/c (Inside skin)

0.75 W/mK @ 5% m/c (Outside skin)

THERMAL RESISTANCE:

SIZE mm	m ² K/W at:	m ² K/W at:
100mm	3% m/c 0.141	5% m/c 0.133
140mm	3% m/c 0.197	5% m/c 0.186

(m/c = moisture content)

SOUND INSULATION: **

44 dB (A) (100mm single skin, 195kg/m²)

45 dB (A) (140mm single skin, 260kg/m²)

FIRE RESISTANCE: ***

100mm (single skin unplastered) 2 hrs

140mm (single skin unplastered) 3 hrs

* 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

10.4N/mm ² (OVEN-DRY DENSITY approx 1600 kg/m ³)				
Size mm nominal	approx weight kg	No. per tonne	multiples of	no. per pack
440×215×100	15.5	64	44	88
440×215×140	22.0•	46	32	64
Course adjusters				
65×215×100	2.3	430	128	512
65×215×140	3.2	310	96	384

• Blocks in excess of 20kg – please use with caution after assessing the risks.

All products available ex works. Prices on application. Telephone the sales office for further information and a quotation.

STOWELL

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