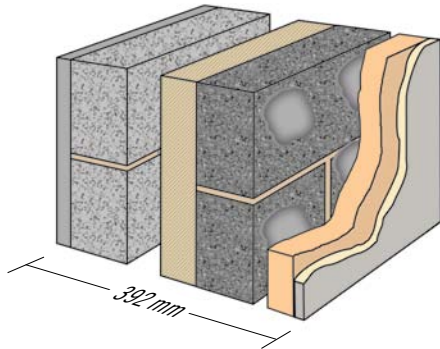


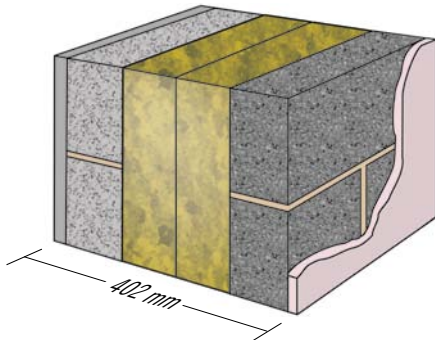
Stowlite medium dense blocks/bricks 10.4N/mm² to BS EN 771-3

U-Value 0.18



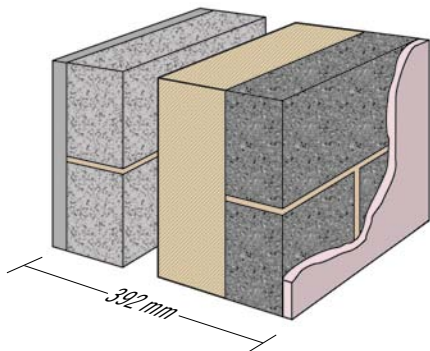
Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Dense 7.3N/mm ² (λ 1.43)	0.070
50mm low emissivity cavity	0.640
50mm foil-faced partial fill PIR/PU board (λ 0.022)	2.273
100mm Stowlite 10.4N/mm ² (λ 0.71)	0.141
15mm dabs	0.170
45mm phenolic insulation (λ 0.022)	2.250
<i>bonded to...</i>	
13mm plasterboard (λ 0.21)	0.062
Inside resistance	<u>0.130</u>
Sum of resistances	5.795 m²K/W
Uncorrected U-value	0.173 W/m ² K
Mortar correction	0.000
Air gap correction	0.002
Wall tie correction – Staifix HRT4-225	<u>0.002</u>
U-VALUE	<u>0.177 W/m²K</u>

U-Value 0.18



Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Dense 7.3N/mm ² (λ 1.43)	0.070
170mm high performance mineral wool (λ 0.032)	5.313
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	5.736 m²K/W
Uncorrected U-value	0.174 W/m ² K
Mortar correction	0.000
Air gap correction	0.000
Wall tie correction – Ancon ST1-300	<u>0.004</u>
U-VALUE	<u>0.178 W/m²K</u>

U-Value 0.18



Outside resistance	0.040
19mm sand/cement render (λ 1.00)	0.019
100mm Dense 7.3N/mm ² (λ 1.43)	0.070
50mm low emissivity cavity	0.640
110mm foil-faced partial fill PIR/PU board (λ 0.022)	5.000
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	6.063 m²K/W
Uncorrected U-value	0.165 W/m ² K
Mortar correction	0.000
Air gap correction	0.007
Wall tie correction – Ancon ST1-300	<u>0.005</u>
U-VALUE	<u>0.177 W/m²K</u>

Stowlite 10.4N/mm² blocks are approximately 22% lighter than the dense block of the same strength and provide a good background for rendering.

THERMAL CONDUCTIVITY: λ^*

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

0.76 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 0.131
140mm	3% m/c 0.197	5% m/c 0.184

(m/c = moisture content)

WEIGHTED SOUND INSULATION R_w : **

44 dB (100mm single skin, 209kg/m²)

46 dB (140mm single skin, 275kg/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 25kg/m²)

*** Calculated using table 14 BS5628-3 2005

STOWELL

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10.4N/mm² (OVEN-DRY DENSITY approx 1600 kg/m³)

Size mm nominal	approx weight kg	no. per tonne	multiples of	no. per pack
440×100×215	15.5	64	44	88
440×140×215	22.0 •	46	32	64
Coursing bricks				
215×100×65	2.3	430	128	512
215×140×65	3.2	310	96	384

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