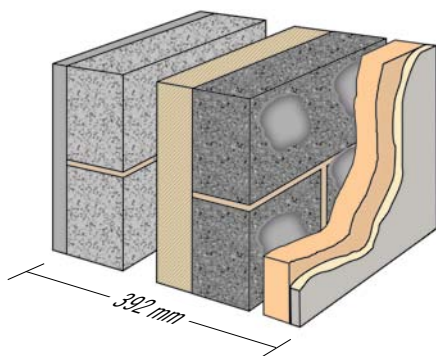


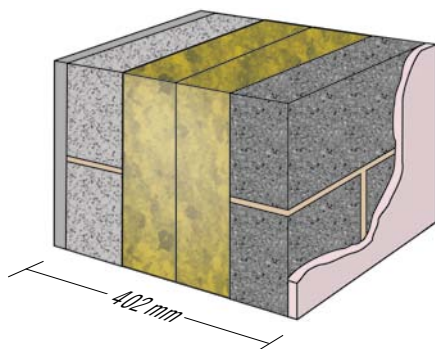
# Stowlite medium dense blocks/bricks 7.3N/mm<sup>2</sup> to BS EN 771-3

## U-Value 0.18



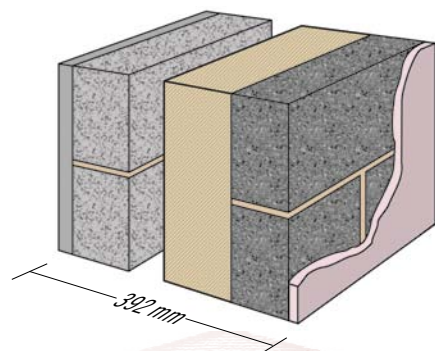
Outside resistance	0.040
19mm sand/cement render ( $\lambda$ 1.00)	0.019
100mm Dense 7.3N/mm <sup>2</sup> ( $\lambda$ 1.43)	0.070
50mm low emissivity cavity	0.640
50mm foil-faced partial fill PIR/PU board ( $\lambda$ 0.022)	2.273
100mm Stowlite 7.3N/mm <sup>2</sup> ( $\lambda$ 0.63)	0.159
15mm dabs	0.170
45mm phenolic insulation ( $\lambda$ 0.020)	2.250
<i>bonded to...</i>	
13mm plasterboard ( $\lambda$ 0.21)	0.062
Inside resistance	<u>0.130</u>
<b>Sum of resistances</b>	<b>5.813 m<sup>2</sup>K/W</b>
Uncorrected U-value	0.172 W/m <sup>2</sup> K
Mortar correction	0.000
Air gap correction	0.002
Wall tie correction – Staifix HRT4-225	<u>0.002</u>
<b>U-VALUE</b>	<b><u>0.176 W/m<sup>2</sup>K</u></b>

## U-Value 0.18



Outside resistance	0.040
19mm sand/cement render ( $\lambda$ 1.00)	0.019
100mm Dense 7.3N/mm <sup>2</sup> ( $\lambda$ 1.43)	0.070
170mm high performance mineral wool ( $\lambda$ 0.032)	5.313
100mm Stowlite 7.3N/mm <sup>2</sup> ( $\lambda$ 0.63)	0.159
13mm dense plaster ( $\lambda$ 0.57)	0.023
Inside resistance	<u>0.130</u>
<b>Sum of resistances</b>	<b>5.754 m<sup>2</sup>K/W</b>
Uncorrected U-value	0.174 W/m <sup>2</sup> K
Mortar correction	0.000
Air gap correction	0.000
Wall tie correction – Ancon ST1-300	<u>0.004</u>
<b>U-VALUE</b>	<b><u>0.178 W/m<sup>2</sup>K</u></b>

## U-Value 0.18



Outside resistance	0.040
19mm sand/cement render ( $\lambda$ 1.00)	0.019
100mm Dense 7.3N/mm <sup>2</sup> ( $\lambda$ 1.43)	0.070
50mm low emissivity cavity	0.640
110mm foil-faced partial fill PIR/PU board ( $\lambda$ 0.022)	5.000
100mm Stowlite 7.3N/mm <sup>2</sup> ( $\lambda$ 0.63)	0.159
13mm dense plaster ( $\lambda$ 0.57)	0.023
Inside resistance	<u>0.130</u>
<b>Sum of resistances</b>	<b>6.081 m<sup>2</sup>K/W</b>
Uncorrected U-value	0.164 W/m <sup>2</sup> K
Mortar correction	0.000
Air gap correction	0.007
Wall tie correction – Ancon ST1-300	<u>0.005</u>
<b>U-VALUE</b>	<b><u>0.176 W/m<sup>2</sup>K</u></b>

7.3N/mm <sup>2</sup> (OVEN-DRY DENSITY approx 1500 kg/m <sup>3</sup> )				
Size mm nominal	approx weight kg	no. per tonne	multiples of	no. per pack
440 × 100 × 215 <sup>†</sup>	14.0	70	44	88
440 × 140 × 215 <sup>†</sup>	19.5	51	32	64
440 × 190 × 215 <sup>†</sup>	27.5 <sup>•</sup>	36	24	48
Coursing bricks				
215 × 100 × 65	2.0	500	128	512
215 × 140 × 65	2.8	360	96	384

<sup>†</sup> Also available in close texture 7.3 N/mm<sup>2</sup>    <sup>‡</sup> To order only

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

The Stowlite concrete block offers the builder an alternative product midway in the range between the dense concrete block and the high performance Fibotherm block. Stowlite blocks are widely used in a number of applications where high insulation is not such a priority. Being lighter than the standard dense block, handling is easier, often making savings on foundations and labour.

Standard Stowlite blocks provide a good finish for rendering. Stowlite blocks are available in close texture finish – please see page 1m for photos and further information.

THERMAL CONDUCTIVITY:  $\lambda^*$

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

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

THERMAL RESISTANCE:

SIZE mm	m <sup>2</sup> K/W at:	m <sup>2</sup> K/W at:
100mm	3% m/c 0.159	5% m/c 0.149
140mm	3% m/c 0.222	5% m/c 0.209
190mm	3% m/c 0.302	5% m/c 0.284

(m/c = moisture content)

WEIGHTED SOUND INSULATION R<sub>w</sub>: \*\*

44 dB (100mm single skin, 200kg/m<sup>2</sup>)

46 dB (140mm single skin, 262kg/m<sup>2</sup>)

48 dB (190mm single skin, 348kg/m<sup>2</sup>)

FIRE RESISTANCE: \*\*\*

100mm (single skin unplastered) 2 hrs

140mm (single skin unplastered) 3 hrs

190mm (single skin unplastered) 6 hrs

TRANSVERSE TESTING: 100mm minimum 3.5kN

\* Calculated from oven dry density

\*\* Calculated using mass law curve - BS8233 (with 2 skins of dense plaster each 25kg/m<sup>2</sup>)

\*\*\* Calculated using table 14 BS5628-3 2005

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

# STOWELL

CONCRETE LIMITED

02/16

www.stowellconcrete.co.uk