

# Part L 2010

## Thermalite 0.28 U-value solutions for extensions

### Partial fill cavity

Using PIR Polyisocyanurate (0.022 - Xtratherm / Kingspan / Celotex / Ecotherm / Recticel), 102.5mm brick outer leaf

Block Type	Insulation Thickness				Internal Finish
	40mm	45mm	50mm	55mm	
100mm Turbo	0.27	0.26	0.24	0.23	12.5mm plasterboard on dabs
100mm Shield		0.27	0.25	0.24	12.5mm plasterboard on dabs
100mm Hi-Strength 7		0.28	0.26	0.25	12.5mm plasterboard on dabs
100mm Turbo	0.28	0.27	0.25	0.24	13mm lightweight plaster
100mm Shield		0.28	0.26	0.25	13mm lightweight plaster
100mm Hi-Strength 7		0.28	0.27	0.25	13mm lightweight plaster



### Partial fill cavity

Using PIR Polyisocyanurate (0.022 - Xtratherm / Kingspan / Celotex / Ecotherm / Recticel), 100mm Shield outer leaf with render finish

Block Type	Insulation Thickness				Internal Finish
	40mm	45mm	50mm	55mm	
100mm Turbo	0.24	0.23	0.22	0.21	12.5mm plasterboard on dabs
100mm Shield	0.25	0.24	0.23	0.22	12.5mm plasterboard on dabs
100mm Hi-Strength 7	0.26	0.24	0.23	0.22	12.5mm plasterboard on dabs
100mm Turbo	0.25	0.24	0.22	0.21	13mm lightweight plaster
100mm Shield	0.26	0.25	0.23	0.22	13mm lightweight plaster
100mm Hi-Strength 7	0.27	0.25	0.24	0.23	13mm lightweight plaster



### Full fill cavity - 12.5mm plasterboard on dabs

Using mineral wool, 102.5mm brick outer leaf.  
Internal finish - 12.5mm plasterboard on dabs.

Block Type	Insulation Conductivity	Insulation Thickness				
		75mm	80mm	85mm	90mm	100mm
100mm Turbo	0.037				0.28	0.26
	0.036				0.27	0.25
	0.032	0.28	0.27	0.26	0.25	0.23
100mm Shield	0.037					0.27
	0.036				0.28	0.26
	0.032		0.28	0.27	0.26	0.24
100mm Hi-Strength 7	0.037					0.27
	0.036					0.27
	0.032			0.28	0.27	0.25



### Full fill cavity - 12.5mm plasterboard on dabs

Using mineral wool, 100mm Shield outer leaf with render finish.  
Internal finish - 12.5mm plasterboard on dabs.

Block Type	Insulation Conductivity	Insulation Thickness				
		75mm	80mm	85mm	90mm	100mm
100mm Turbo	0.037	0.27	0.26	0.25	0.24	0.23
	0.036	0.27	0.26	0.25	0.24	0.23
	0.032	0.25	0.24	0.23	0.22	0.21
100mm Shield	0.037	0.28	0.27	0.26	0.26	0.24
	0.036	0.28	0.27	0.26	0.25	0.23
	0.032	0.26	0.25	0.24	0.23	0.22
100mm Hi-Strength 7	0.037		0.28	0.27	0.26	0.24
	0.036		0.28	0.27	0.26	0.24
	0.032	0.27	0.26	0.25	0.24	0.22



### Full fill cavity - 13mm lightweight plaster

Using mineral wool, 102.5mm brick outer leaf.  
Internal finish - 13mm lightweight plaster.

Block Type	Insulation Conductivity	Insulation Thickness				
		75mm	80mm	85mm	90mm	100mm
100mm Turbo	0.037				0.28	0.26
	0.036				0.28	0.26
	0.032		0.28	0.27	0.26	0.24
100mm Shield	0.037					0.28
	0.036					0.27
	0.032			0.28	0.27	0.25
100mm Hi-Strength 7	0.037					0.28
	0.036					0.28
	0.032				0.27	0.25



### Full fill cavity - 13mm lightweight plaster

Using mineral wool, 100mm Shield outer leaf with render finish.  
Internal finish - 13mm lightweight plaster.

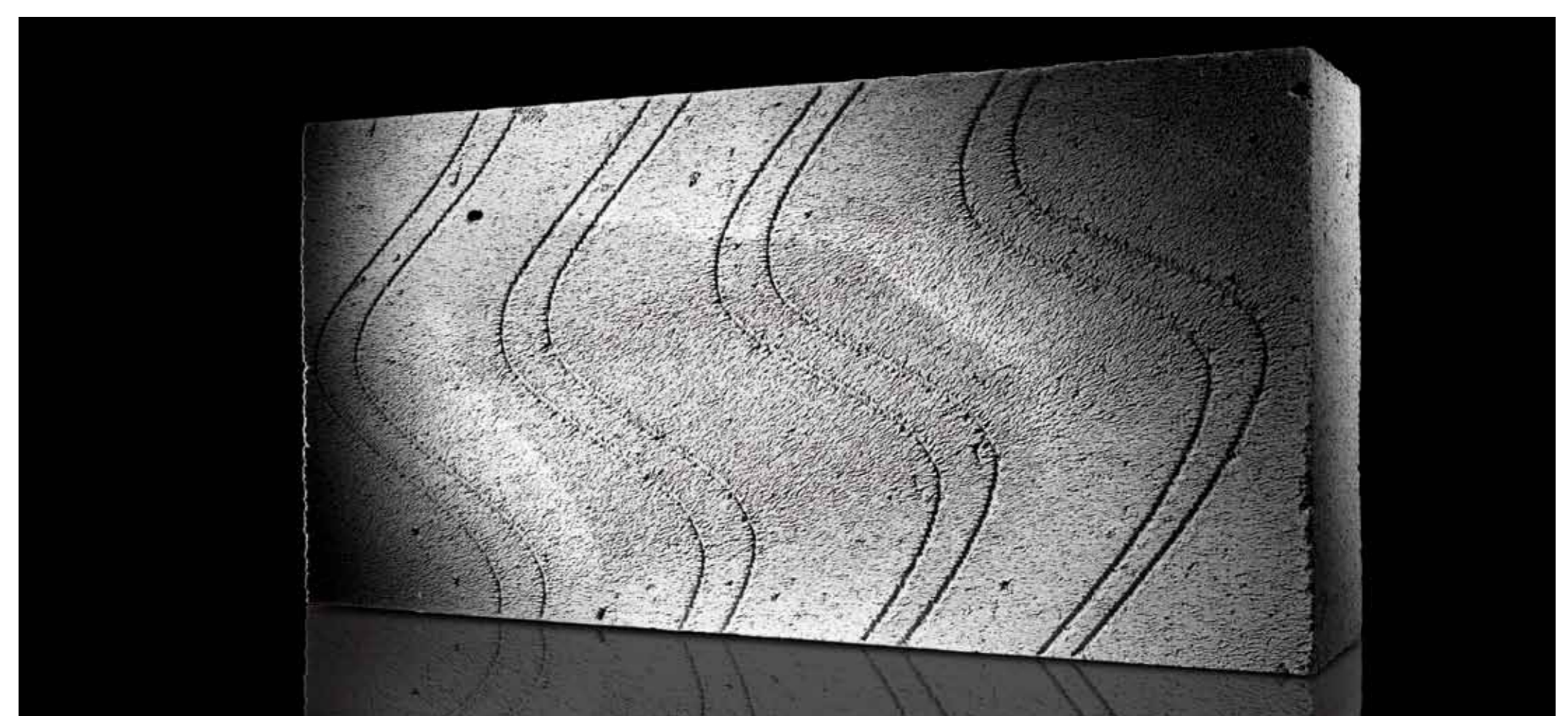
Block Type	Insulation Conductivity	Insulation Thickness				
		75mm	80mm	85mm	90mm	100mm
100mm Turbo	0.037	0.28	0.27	0.26	0.25	0.24
	0.036	0.28	0.27	0.26	0.25	0.23
	0.032	0.26	0.25	0.24	0.23	0.21
100mm Shield	0.037		0.28	0.27	0.26	0.25
	0.036		0.28	0.27	0.26	0.24
	0.032	0.27	0.26	0.25	0.24	0.22
100mm Hi-Strength 7	0.037			0.28	0.27	0.25
	0.036			0.28	0.27	0.25
	0.032	0.27	0.26	0.25	0.24	0.23



### Solid wall

With 19mm render finish.

Block Type	U-values	Insulated plasterboard
215mm Turbo	0.26	50mm Gyproc Thermaline Super
	0.26	52.5mm Kingspan K17
265mm Turbo	0.27	40mm Gyproc Thermaline Super
	0.27	42.5mm Kingspan K17
300mm Turbo	0.25	40mm Gyproc Thermaline Super
	0.25	42.5mm Kingspan K17
190mm Shield	0.25	60mm Gyproc Thermaline Super
	0.25	62.5mm Kingspan K17
190mm Hi-Strength 7	0.26	60mm Gyproc Thermaline Super
	0.26	62.5mm Kingspan K17
215mm Hi-Strength 7	0.26	60mm Gyproc Thermaline Super
	0.26	62.5mm Kingspan K17



**Contact us. Tel: 08705 626500**

email: [thermalitesales@hanson.com](mailto:thermalitesales@hanson.com)

web: [www.hanson.com/uk/thermalite](http://www.hanson.com/uk/thermalite)