



# 'U' value - thermal performance

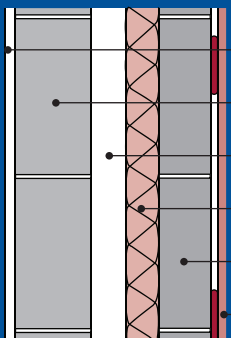
STANDARD RANGE

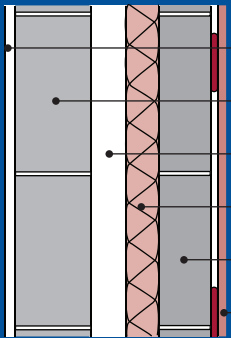
## Part L. Thermal Insulation

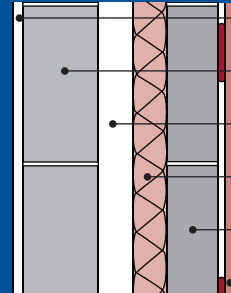
The Government has announced new measures to improve the energy efficiency of buildings. The changes to Part L (conservation of fuel and power) of the Building Regulations for England & Wales are applicable from the 6th of April 2006.

The aim is to meet the requirements of The Energy Performance of Buildings Directive, which aims to further combat climate change and requires buildings to be better insulated and make use of more efficient heating systems. Although the performance values of the building will depend on factors such as air permeability values, fuel type and heating efficiency, it is likely that wall "U" value of around 0.30W/ m<sup>2</sup>k will be required.

Meeting the "U" value of 0.30W/ m<sup>2</sup>k is easy using Mona Precast blocks, the following are a small selection of the many options available.

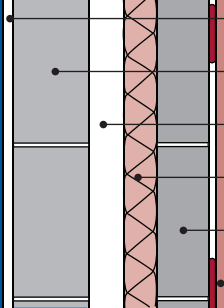
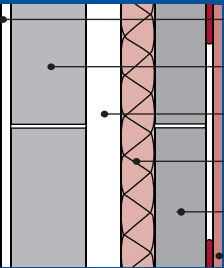
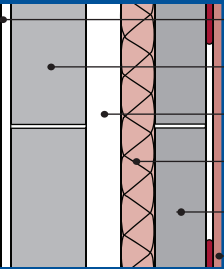
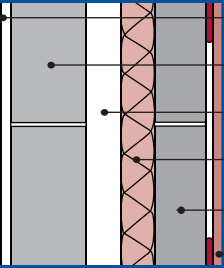
Option 1	U Value = 0.27W/ m <sup>2</sup> k	Partial Fill
	<ul style="list-style-type: none"><li>Outer Finish - Render</li><li>Outer Leaf - GPI Block</li><li>Cavity - 50mm</li><li>Insulation - 50mm Kingspan TW50</li><li>Inner Leaf - GPI Block</li><li>Finish - Plasterboard</li></ul>	

Option 2	U Value = 0.29W/ m <sup>2</sup> k	Partial Fill
	<ul style="list-style-type: none"><li>Outer Finish - Render</li><li>Outer Leaf - Monacrete 100 Block</li><li>Cavity - 50mm</li><li>Insulation - 50mm Kingspan TW50</li><li>Inner Leaf - Monacrete 100 Block</li><li>Finish - Plasterboard</li></ul>	

Option 3	U Value = 0.28W/ m <sup>2</sup> k	Partial Fill
	<ul style="list-style-type: none"><li>Outer Finish - Render</li><li>Outer Leaf - Monalight 100S Block</li><li>Cavity - 50mm</li><li>Insulation - 50mm Kingspan TW50</li><li>Inner Leaf - Monalight 100S Block</li><li>Finish - Plasterboard on Dabs</li></ul>	

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continued

Option 4	U Value = 0.27W/ m <sup>2</sup> k	Partial Fill
	<ul style="list-style-type: none"> <li>Outer Finish - Render</li> <li>Outer Leaf - 100mm GPI Block</li> <li>Cavity - 55mm</li> <li>Insulation - 45mm Kingspan K8</li> <li>Inner Leaf - 100mm GPI Block</li> <li>Finish - Plasterboard</li> </ul>	
Option 5	U Value = 0.16W/ m <sup>2</sup> k	Partial Fill
	<ul style="list-style-type: none"> <li>Outer Finish - Render</li> <li>Outer Leaf - GPI Block</li> <li>Cavity - 50mm</li> <li>Insulation - 100mm Kingspan TW50</li> <li>Inner Leaf - GPI Block</li> <li>Finish - Plasterboard</li> </ul>	
Option 6	U Value = 0.20W/ m <sup>2</sup> k	Partial Fill
	<ul style="list-style-type: none"> <li>Outer Finish - Render</li> <li>Outer Leaf - GPI Block</li> <li>Cavity - 50mm</li> <li>Insulation - 85mm Celotex CG 4000</li> <li>Inner Leaf - GPI Block</li> <li>Finish - Plasterboard</li> </ul>	
Option 7	U Value = 0.20W/ m <sup>2</sup> k	Partial Fill
	<ul style="list-style-type: none"> <li>Outer Finish - Render</li> <li>Outer Leaf - Monalight 100 S Block</li> <li>Cavity - 50mm</li> <li>Insulation - 85mm Celotex CG 4000</li> <li>Inner Leaf - Monalight 100 S Block</li> <li>Finish - Plasterboard</li> </ul>	

Option 8	U Value = 0.20W/ m <sup>2</sup> k	Partial Fill
	Outer Finish	- Render
	Outer Leaf	- GPI Block
	Cavity	- 50mm
	Insulation	- 50mm Celotex CW 4000
	Inner Leaf	- GPI Block
	Finish	- 37.5mm Celotex PL 4025

Option 9	U Value = 0.21W/ m <sup>2</sup> k	Partial Fill
	Outer Finish	- Render
	Outer Leaf	- Monalight 100S Block
	Cavity	- 50mm
	Insulation	- 85mm Celotex CG 4000
	Inner Leaf	- Monalight 100S Block
	Finish	- 37.5mm Celotex PL 4025

Option 10	U Value = 0.29W/ m <sup>2</sup> k	Full Fill
	Outer Finish	- Render
	Outer Leaf	- 100mm GPI Block
	Insulation	- 85mm Dritherm 32
	Inner Leaf	- 100mm GPI Block
	Finish	- Lightweight Plaster

Option 11	U Value = 0.27W/ m <sup>2</sup> k	Full Fill
	Outer Finish	- Render
	Outer Leaf	- Monacrete 100 Block
	Insulation	- 100mm Dritherm 32
	Inner Leaf	- Monacrete 100 Block
	Finish	- Lightweight Plaster

Option 12	U Value = 0.27W/ m <sup>2</sup> k	Full Fill
	Outer Finish	- Brick
	Insulation	- 100mm Dritherm 32
	Inner Leaf	- Monalight 100S Block
	Finish	- Plasterboard on Dabs