

## THERMAL PROPERTIES

### THERMAL CONDUCTIVITY MATERIAL COMPARISON

MATERIALS	THERMAL CONDUCTIVITY
Mineral wool	0.04 W/m.K
<b>moladi</b> density 1.800 kg/m <sup>3</sup>	<b>0.54 W/m.K</b>
Hollow building blocks	0.792 W/m.K
Glass	0.858 W/m.K
Clay brick masonry	0.9 W/m.K
Dense concrete	2 W/m.K

### THERMAL RESISTANCE COMPARISON

<b>moladi</b> 100 mm wall	THICKNESS (mm)	THERMAL CONDUCTIVITY	THERMAL RESISTANCE
Outside wall surface			0.04
<b>moladi</b> 100 mm	<b>100</b>	<b>0.54</b>	<b>0.185</b>
Inside wall surface			0.12
Total Thermal Resistance			0.345

Clay brick masonry 150 mm	THICKNESS (mm)	THERMAL CONDUCTIVITY	THERMAL RESISTANCE
Outside wall surface			0.04
Plaster 10 mm	100	0.5	0.02
Clay brick 130 mm	130	0.9	0.145
Plaster 10 mm	10	0.5	0.02
Inside wall surface			0.12
Total Thermal Resistance			0.345

### **moladi** THERMAL RESISTANCE EQUIVALENTS

WALLS	THICKNESS (mm)	THERMAL RESISTANCE
<b>moladi</b> 100 mm thick	<b>100</b>	<b>0.345 m<sup>2</sup>K/W</b>
Masonry 150 mm	150	0.345 m <sup>2</sup> K/W
Dense concrete 370 mm	370	0.345 m <sup>2</sup> K/W
WALLS	THICKNESS (mm)	THERMAL RESISTANCE
<b>moladi</b> 150 mm thick	<b>150</b>	<b>0.438 m<sup>2</sup>K/W</b>
Masonry 235 mm	235	0.438 m <sup>2</sup> K/W
Dense concrete 560 mm	560	0.438 m <sup>2</sup> K/W