

# Product Data Sheets

## Trubloc Concrete Products

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All information is based on blocks made to Building Standards 6073: Part 1: 1981 & 1985

Product Properties/ Technical Data	Maplelite /Pumice Insulation Blocks	
	Block Size	
	(4")	(6")
Block Thickness	100mm	140mm
Quantity per pack	44	32
Average Compressive Strength	7N	7N
Average Delivered Block Weight	11.2KG	17.2KG
Average Dry density @ 3% Moisture Content (kg/m) <sup>2</sup>	1000Kg/m <sup>2</sup>	
Thermal Conductivity @ 3% Moisture Content (W/mk)	0.19 W/mK	0.19 W/mK
Thermal Resistance Values (m <sup>2</sup> K/W) @ 3% Moisture Content	0.357 m <sup>2</sup> K/W	0.491 m <sup>2</sup> K/W
National Fire Resistance (hours)	2	3
Sound reduction value (dB)	48	51
Length Allowance	+/-5mm	
Height Allowance	+/- 3mm	
Thickness Allowance	+/- 4 mm	
Dry Shrinkage	0.025% - 0.05%	
Fire Resistance	Produced from class 1 aggregates (BS476)	

### Thermal Conductivity

During a volcanic eruption the molten hard granite froth entraps air in tiny vesicles whilst hardening. The end result is a light, strong and thermally efficient material called **Pumice**. Tests show Pumice to have a K Value of 1.9 W/mK, with the Maplelite 4", having a resistance of 0.526 m<sup>2</sup> K/W (R Value) making it suitable for applications specified by Building Research Establishment Report ("Thermal Insulation: Avoiding Risks 1994") where a value of 0.3W/mK and below is required. Pumice blocks are suitable for cavity walling and walls below DPC.

### Workability

Pumice blocks are light yet strong, the Maplelite 4" weighs a mere 10kg each and are available in 3.5N and 7N strengths. They are easy to lay, chase and cut. These blocks provide excellent adhesion for traditional render, plastering systems and joinery fixing, the strength and ease of handling also greatly reduces site breakages. The Maplelite range complies with the Health and Safety lifting requirements.

### Sound Insulation

Pumice affords the best compromise between sound absorption and sound transmission. The Mapelite 4" block with 13mm rendering has a sound reduction index averaging 42dB between the frequency ranges of 100 – 3150 Hz

### Fire Resistance

Pumice is a Class 1 aggregate and is classified as non-combustible in accordance with BS:476 Part 4: 1970. Pumice starts to degrade to glass above 1200C thus giving two hour fire resistance on a 4" configuration

### Durability

One of the oldest building materials known to mankind, the Pantheon in Rome was built in 27BC using Pumice. Pumice has Pozzalanic properties and continues to harden year after year without degradation.

### Environmentally Green

Pumice aggregate is quarried on an uninhabitable island, it is the waste volcanic ash of a natural eruption. Pumice is inert and therefore will not react physically or chemically to outside forces