



## Specification to eliminate or reduce thermal bridge under a Window Sill

Specification: SILL

Product ref: Marmox Thermoblock (Standard Type)

Junction Type: E3

Manufacturer: Marmox UK, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.

01634 835290; Email: <a href="mailto:sales@marmox.co.uk">sales@marmox.co.uk</a>; <a href="http://www.marmox.co.uk/">http://www.marmox.co.uk/</a>.

**Product Use:** Elimination or reduction of the cold bridge from the base of the window frame to the

masonry wall.

Reduction in the  $\psi$  value used in SAP/SBEM or DEAP/NEAP calculations to enable compliance

with UK / Irish building regulations.

**Description:** Marmox Thermoblock is a load-bearing heat-insulating building block consisting of two rows

of load-carrying epoxy-concrete columns of low thermal conductivity bonded to polymer concrete layers reinforced with fibreglass mesh which comprise the upper and lower surfaces.

Thermally insulating Extruded Polystyrene surrounds the columns.

**Properties:** Average  $\lambda$  value of 0.05W/mK (to EN13164/EN13167)

Mean compressive strength of 9.0N/mm<sup>2</sup> (to EN772-1)

Water Absorption <3.5% (to EN771-4).

Authorities: ISO9001 (Bureau Veritas)

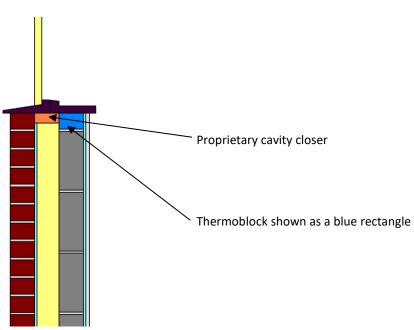
BRE – Certified Thermal Products Scheme, <a href="http://www.bre.co.uk/certifiedthermalproducts/">http://www.bre.co.uk/certifiedthermalproducts/</a>

Fire Safety Report: 16781B (Warrington Fire)

Dimensions: Length = 600mm, Thickness = 65mm or 100mm, Width = 100mm, 140mm or 215mm

Marmox Thermoblock replaces the top 65 or 100mm of the inner leaf directly below the window frame.

## **Typical Detail**







## Specification to eliminate or reduce thermal bridge at base of an External wall with a Flat (Warm) Roof

- A single course of Marmox Thermoblock of the same width as the blocks comprising the inner leaf is fixed on top of those blocks using ordinary bricklayers' mortar.
- The length of Thermoblocks can be cut using a brick saw.
- Thermoblock edges are sealed together with a ribbon of Marmox MSP360 on the stepped edges to provide a waterproof barrier and improve air-tightness.
- The Thermoblocks present a strong and stable base for the window sill but the sill cannot be simply screwed into Thermoblocks below. The sill can be fixed either by: -
- o Adhering it to the row of Thermoblocks with Marmox MSP-360
- Screw fixing the sill through the middle of the Thermoblocks into the concrete blocks underneath. Bolts
  are placed through the Thermoblock approximately <u>halfway across its width</u>.

## Important notes:

- 1. The width of the Thermoblocks should be approximately the same width as the blocks which they are fixed onto.
- 2. **Thermoblocks cannot be stacked** only one single layer is permitted.