

KOREKEY

KORE Key insulation system is designed for application to cavity walls.



Description

The KORE Key System combines partial fill cavity wall insulation and internal insulation to quickly achieve high comfort levels for occupants. The KORE Key partial fill cavity wall insulation system is unique as it is secured to the inner block leaf of the cavity wall by wall ties and a mortar lock key. The system is designed to prevent thermal looping (which is a major contributor to heat loss and severe condensation) while the wall is heating and cooling. Each board is tongued and grooved to form a continuous layer of insulation.

KORE Advantages

Excellent thermal performance, prevents thermal looping, cost competitive, control of surface and interstitial condensation in walls, concrete construction benefits.

U-Values

The U-Value of KORE Key is calculated with the inclusion of the partial fill cavity wall insulation and the internal dry lining insulation. (Calculation Method I.S. EN ISO 6946.)

U-Value	Standard Cavity Block Wall		
	KORE Key Silver (mm)	+	KORE Linear Drylining (mm)
0.27	65mm	+	35mm
0.26	65mm	+	40mm
0.25	70mm	+	40mm
0.24	75mm	+	40mm
0.23	80mm	+	40mm
0.22	85mm	+	40mm
0.21	90mm	+	40mm
0.20	100mm	+	40mm

* It is assumed that cavity walls will be constructed in accordance with the requirements of the 1997 to 2007 Building Regulations. KORE Linear Drylining $\lambda = 0.037W/mK$

THERMAL BRIDGING & AIRTIGHTNESS SOLUTIONS

Roof Junction



Cill Detail



Jamb Detail



Header Detail



For further details on thermal bridging and airtightness at all junctions visit WWW.KORE-SYSTEM.COM

Physical Properties

Properties	Units	Density	
		kg/m ³	15–20 Standard
White EPS			
Thermal Conductivity	W/mK	0.037	0.034
Compressive Strength	kPa	>95	>211
Bending Strength	kPa	>171.70	>377.10
Dimensional Strength	DS(n)	2	2
Silver EPS			
Thermal Conductivity	W/mK	0.030	0.028
Compressive Strength	kPa	>95	>211
Bending Strength	kPa	>171.70	>377.10
Dimensional Strength	DS(n)	2	2

Wall Tie Spacings

	Horizontal Spacing	Vertical Spacing
100–110mm Cavity	750mm	450mm
111–150mm Cavity	450mm	450mm
At unbonded jambs	150mm from opening	300mm

Installation

- It is recommended that the inner leaf of block work is constructed ahead of the outer leaf. The first run of boards may commence below the DPC level to provide floor edge insulation for typical construction.
- After every second course of block work the KORE Key boards are placed tightly against the inner leaf in the cavity and held in place by the wall ties. Always ensure that the tongue is facing upwards and that the mortar key is filled when laying the mortar bed. Vertical joints should be staggered.
- KORE Key boards should be overlapped at corners and secured using wooden skewers. KORE Key should be installed with a minimum residual cavity of 40mm in accordance with TGD Part L.
- When installing the KORE Linear Drylining Panels fix continuous horizontal battens to the wall at ceiling and floor level leaving 20mm clear space. The KORE Linear Drylining Panels are then fixed directly to the inner face of the drywall construction using drywall adhesive.
- To accommodate the battens remove a strip of insulation from the top and bottom of each of the KORE Linear Drylining Panels.
- Apply drywall adhesive to the KORE Linear Drylining Panels and lift into place, applying pressure to achieve a full and secure bond.
- To ensure a fully effective fire stop nail the KORE Linear Drylining Panels to the battens at the top and bottom of the sheet.

CERTIFICATION

KORE Key successfully received IAB Certification proving compliance with Building Regulations 1997–2007. Certificate Number 06/0096.