## **KOREFILL**

# BONDED BEAD CAVITY WALL INSULATION

For New and Existing Homes





### YOUR QUESTIONS ANSWERED

#### What is KORE Fill?

KORE Fill is a bonded bead, complete cavity wall fill insulation system for application in new and existing buildings. KORE Fill is expanded polystyrene and special bonding agent injected in bead form into a cavity to form an insulating mass.

#### Who Installs the KORE Fill Bead?

Only fully trained KORE Fill installers may install the product. Each KORE Fill installer is registered with the Irish Agrement Board (IAB) and undergoes continuous monitoring by both Airpacks Ltd and the IAB.

### How is the Insulation Installed into the Cavity?

For existing buildings KORE Fill is installed from the outside of the building through drill holes. Upon completion the installer will fill the holes. For new buildings the KORE Fill is installed from the inside of the building once the building has been sealed from the elements.

### If the Cavity is Filled what Prevents Moisture Movement?

The natural matrix formed by the bead means that moisture that penetrates the outer leaf will not travel through the cavity to the inner leaf. The water by natural gravity will flow to the weep holes at the bottom of the cavity. The bead bond together in a honeycomb type formation allowing air to circulate and the cavity to breath.

### Can KORE Fill be Installed in Every Cavity?

In general once there is a 40mm cavity KORE Fill can be installed. Each installer will assess every potential project for suitability.

### Is KORE Fill Suitable for Installation in Semi-Detached Houses?

Yes, your installer will insert a special brush during installation to prevent bead from entering the neighbouring wall. The brush is removed when the bead solidifies.

### NEW BUILDING

ENERGY	Full Fill Cavity Wall		
RATING	U-value	KORE Fill Solution	
A1	0.12	200mm Silver + KORE Linear Drylining 40mm White	
A2	0.15	200mm Silver	
A3	0.20	150mm Silver	
B1	0.22	135mm Silver	
B2	0.25	120mm Silver	
В3	0.27	110mm Silver	
C1	0.27	110mm Silver	

**Note:** The thickness of insulating material required to achieve a given u-value can vary depending on the grade of material used and the exact application conditions. For different thickness options and advice please contact our technical department.



Full Fill Cavity Wall
KORE Fill Solution

### **EXISTING BUILDING**

### **Expected Results with KORE Fill Cavity Wall Insulation**

Year House Build	Cavity Width	Expected Insulation Level in Cavity	U-value	KORE Fill Installed	New U-value
1997–2002	100mm	60mm SD EPS	0.45	40mm	0.29
1990–1997	100mm	50mm SD EPS	0.51	50mm	0.29
1980's	80mm	40mm SD EPS	0.59	40mm	0.35
1970's	40mm	None	1.65	40mm	0.55

<sup>\*</sup> Note: Insulation  $\lambda = 0.033W/mK$ 

#### **U-values**

The thermal performance of KORE Fill is only limited by the width of the cavity, the wider the cavity the greater the U-value that can be achieved. (Calculation Method I.S. EN ISO 6946)

Cavity Width KORE Fill (mm)	Render 1300 kg/m³ Block 2000 kg/m³ Block 2000 kg/m³ Plaster 1200 kg/m³	Render 1300 kg/m³ Block 650 kg/m³ Block 2000 kg/m³ Plaster 1200 kg/m³	Brick 1700 kg/m³ Block 2000 kg/m³ Plaster 1200 kg/m³	Brick 1700kg/m³ Block 650 kg/m³ Plaster 1200 kg/m³
100	0.29	0.26	0.29	0.26
105	0.28	0.25	0.28	0.25
110	0.27	0.24	0.26	0.24
115	0.26	0.23	0.25	0.23
120	0.25	0.22	0.25	0.23
125	0.24	0.22	0.25	0.22
130	0.23	0.21	0.23	0.21
135	0.22	0.20	0.22	0.20
140	0.22	0.20	0.21	0.20
145	0.21	0.19	0.21	0.19
150	0.20	0.19	0.20	0.19
155	0.20	0.18	0.20	0.18
160	0.19	0.18	0.19	0.18
165	0.19	0.17	0.18	0.17
170	0.18	0.17	0.18	0.17
175	0.18	0.16	0.17	0.16
180	0.17	0.16	0.17	0.16
185	0.17	0.15	0.17	0.16
190	0.16	0.15	0.16	0.15
195	0.16	0.15	0.16	0.15
200	0.15	0.14	0.15	0.15

Note: It is assumed that cavity walls containing full-fill bonded bead will be constructed in accordance with the requirements of the 1997 to 2007 Building Regulations.



KORE Fill is a bonded bead, complete cavity wall fill insulation system for application in new and existing buildings.

### **Physical Properties**

Properties	Units	
KORE Fill Bead		
Thermal Conductivity	0.033 W/mK	
Density	12 kg/m³	
Bead Size	3–8 mm	

### THE KORE ADVANTAGE

- Excellent U-values achieved
- Immediate savings on heating bills
- Installation complete in one day
- No on-site waste
- Complete fill every time
- Suitable for cavities where insulation is already present
- Suitable for new and existing buildings
- Independently certified
- Environmentally friendly product



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