

# Ready and waiting to help insulate new and existing concrete slabs

Koolfoam has developed an innovative pre-coated Slab Edge insulation panel that is designed for retrofitting against slab edges throughout New Zealand.

The vertical edge of a concrete floor slab can transfer a significant amount of heat.

To address this our technical team has developed an innovative thermal edging solution designed to be retrofitted to new and existing concrete slabs – Koolfoam Slab Edge Insulation.

This clever system has excellent compressive strength, thermal performance, is tough, durable and resistant to moisture.

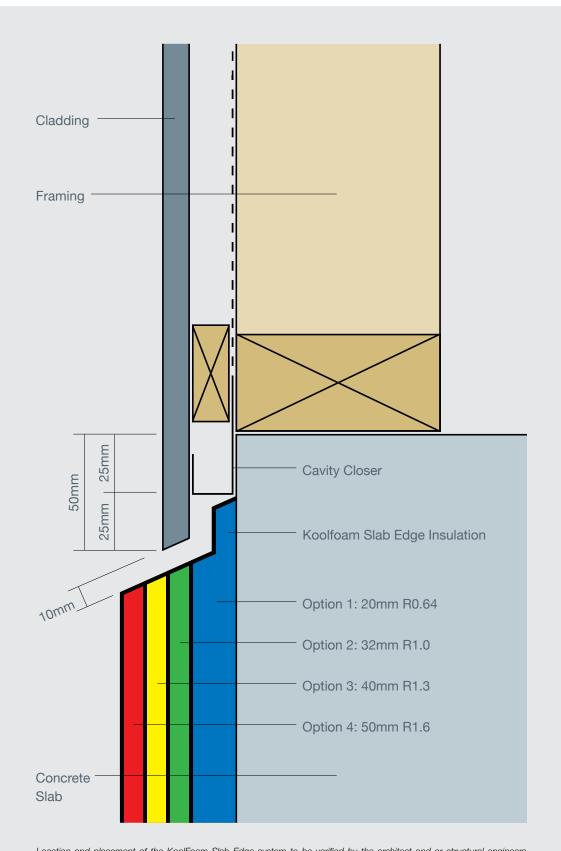
In fact, all new builds are now required to meet the changes to the H1 Energy Efficiency Building Code which mandates concrete slab edge insulation.

# Designed and manufactured here.

Koolfoam Slab Edge Insulation gives you a simple and cost-effective solution, the satisfaction of supporting local and the peace of mind of dealing with a Kiwi company who are designing and manufacturing for New Zealand Building Code standards.



# **Construction details**



Location and placement of the KoolFoam Slab Edge system to be verified by the architect and or structural engineers. Drawings are representative examples only. Application of Koolfoam Slab Edge to be designed in accordance with H1 Energy Efficiency Acceptable Solutions H1/VM1 H1 VM2 or Verification Methods H1/AS1 H1 AS2.

## Instructions

# **Specifications**

### Pre-coated panel sizes

- 2.4m x 300mm x 20mm
- 2.4m x 300mm x 32mm
- 2.4m x 300mm x 40mm
- 2.4m x 300mm x 50mm
- 2.4m x 400mm x 20mm
- 2.4m x 400mm x 32mm
- 2.4m x 400mm x 40mm
- 2.4m x 400mm x 50mm

### R value

- · 20mm: R0.64
- 32mm: R1.0
- 40mm: RI.3
- 50mm: R1.6

### **Compressive Strength**

141kPa at 10% compression

### **Notes**

### Note 1

The Black Pearl edge insulators are not to be cut to width removing the bottom edge coating or the top coated bevelled edge.

### Note 2

Butt joins should not be made tight ensure a 2 to 3mm gap is left between panels.

### Note 3

Once jointing product is dry re-prime the joins with acrylic paint.

### **Pre Coating**

Kikit Plaster - 2mm to 3mm thick smooth finish.

The Black Pearl edge insulators are precoated with Kikit Plaster on three sides. The bottom edge the exterior face and the top 20 degree bevelled edge.

\*See note 1

### **Adhesive**

Tidy up adhesive. 10 litres 3.00 m2 coverage.

### **Joint Sealer**

Solvent free flexiblle paintable silicon suitable for all substrates is recommended.

Silaflex AT is a good option.

### **Paint**

Paint with low LVR acrylic paints 1 x sealer coat 2 x top coats

### **Tools**

- Tape measure
- Hand saw or drop saw
- Extendable knife
- Notched trowel
- Sanding block
- · Broad knife or putty knife
- Sponge
- · Cleaning cloth
- Bucket

### Installation

**Step 1:** Choose the correct panel size.

**Step 2:** Ensure the slab edge is clean, free from dirt dust and anything else that will prevent adequate adhesion of the Black Pearl edge insulator to the concrete.

**Step 3: Layout and Pre-cutting** Measure and pre-cut panels mitring around corners and expressing butt joins on straight runs. Tidy up cut edges with a sanding block.

Panels should be cut with a handsaw.

\*See note 2

### Step 4: Adhesive fixing

Once panels have been pre-cut ensure the exposed black pearl side of the insulator panels is clean and dry.

Pre Paint all of the profiles with 1 x coat of acrylic sealer and 1 x top coat acrylic paint all plastered edges prior to install.

Once paint is dry lay the insulator panel flat and fully supported plaster face down (be careful to not damage the plastered face in this process) and apply the tidy up adhesive to the raw poly face with a notched trowel covering the entire surface.

Press the edge insulator into place, work the molding back and forth to ensure proper adhesion.

Temporary propping may be required to initially support the edge insulator in place.

Once the first one is in place repeat the process for the second panel allowing an even expressed gap between butt joins.

Clean excessive adhesive by wiping away with a damp cloth or sponge while it is still wet.

Particular attention should be paid to the top edge where the insulator meets the cavity closer of the cladding system. No excess build up of protruding adhesive should remain at this point where it could block air flow or drainage from the cladding cavity.

\*See note 3

### **Step 5: Jointing**

Ensure the joins are free of dirt or loose material.

If required place a PEF backing rod in each join.

Apply Silaflex AT or similar to each join filling to the surface then tool or finger smooth.

### **Step 6: Painting**

Prime dry Silaflex joins with acrylic sealer.

Apply 1 x acrylic top coat over joins.

Apply 2 x acrylic top coat over entire plaster surfaces.

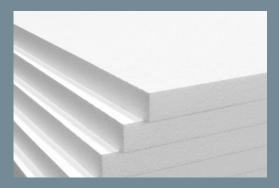
### Step 7: Landscaping

Back fill or pave to appropriate clearance levels required below finished level of exterior cladding.

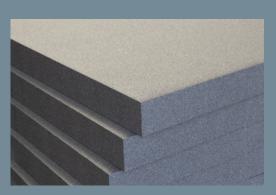
# Other Koolfoam products



Solid Eco Pod



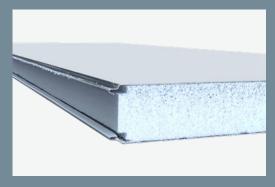
**Under Slab Insulation** 



**Black Pearl** 



**Under Floor Insulation** 



**EPS Z Lock Panels** 

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Expanded Polystyrene Manufacturers