slabEdge

An innovative vertical edge insulation solution, fully compliant with the new H1 Building Code changes.

KOOLFOAM

Ready and waiting to help insulate your next build

Energy efficiency and sustainability now govern how homes are designed and built. But when it comes to slab floors, a significant amount of heat transfer can be through the slab's vertical edge.

To address this, changes to the H1 Energy Efficiency Building Code from May 2023 will require edge insulation to be installed on all exterior exposed vertical faces of concrete slabs - from the top edge down to the bottom of the footing.

Koolfoam SlabEdge
Complies with all 2023 H1 Building Code changes.

To help you meet these new standards, our technical team have been hard at work developing a new product – Koolfoam SlabEdge.

This innovative thermal edging solution has excellent compressive strength and thermal performance, is tough, durable and moisture resistant and ready to help you meet the H1 Building Code changes with your next build.

Designed and manufactured here to meet the requirements of all six NZ climate zones.

Because Koolfoam SlabEdge (including the XPS insulation panels) is made right here in New Zealand to the highest of standards, supply chain disruption issues are avoided. Koolfoam SlabEdge 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.

Whatever your questions, Koolfoam SlabEdge is the answer

What is Koolfoam SlabEdge?

Koolfoam SlabEdge is a new product from the innovators at Koolfoam Industries. Made from XPS (Extruded Polystyrene) these panels are designed to be installed to the outside faces of concrete floor slabs for residential and commercial buildings. While the concrete slab is being poured, Koolfoam SlabEdge panels are there to increase insulation.

What is the R-Value of Koolfoam SlabEdge?

Koolfoam SlabEdge has a high thermal conductivity performance. When applied to the full edge of the slab (no gaps or bridging through exposed concrete) Koolfoam SlabEdge delivers an average of R1 to the edge.

Koolfoam SlabEdge is resistant to moisture and retains its R value year after year.

What are the dimensions of each Koolfoam SlabEdge panel and how are they packaged?

Koolfoam SlabEdge come in two heights, to suit a 300mm slab and a 400mm slab. They can also be custom-made if required. Each panel measures 2.4m long and can be cut to fit, if required. Koolfoam SlabEdge panels come in packs and are lightweight and easy to handle.

What is the exterior finish of each Koolfoam SlabEdge panel?

Each panel of Koolfoam SlabEdge comes pre-finished with a concrete plaster outer to give a protective layer to the XPS. This makes for a tough and durable finish that can easily be repaired with standard concrete plaster, if required.

Can Koolfoam SlabEdge be installed to any concrete floor or slab type?

Yes! But it’s best to always verify details with your designer or architect.

Do I need any special installation tools?

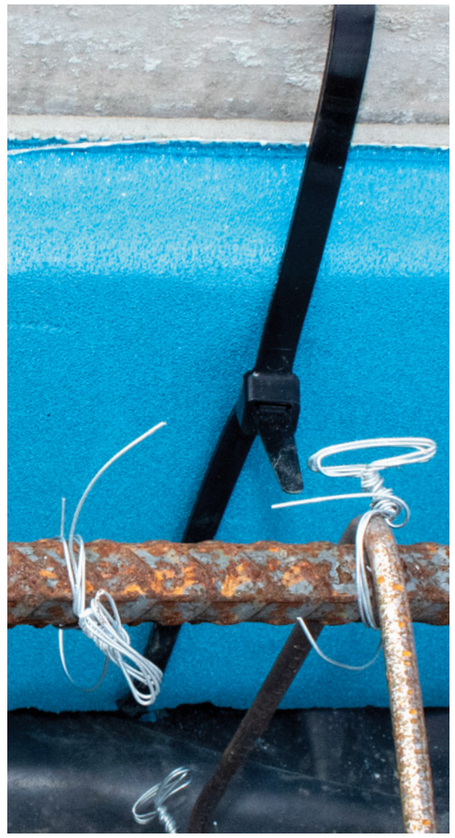
No special tools are needed as Koolfoam SlabEdge fits easily into the foundation boxing. All joiners, corners and cable ties are provided with the Koolfoam SlabEdge system. Koolfoam SlabEdge can be easily cut with a handsaw.

Can Koolfoam SlabEdge be painted?

Koolfoam SlabEdge can be painted but only with acrylic paint.

Are there any maintenance requirements for Koolfoam SlabEdge post instillation?

During construction, it’s essential any trades working close to the Koolfoam SlabEdge are careful not to damage it. Any building owner should be advised that Koolfoam SlabEdge has been used and that care should be taken when working next to the slab – especially with gardening equipment or sharp objects.



How to install Koolfoam SlabEdge

Formwork

Ensure exterior forms are properly braced straight and level and the internal surface is clean and free of debris prior to installing the Koolfoam SlabEdge system.

Koolfoam SlabEdge panel install

Install Koolfoam SlabEdge before installation of steel.

Where possible work away from the corners.

Install the Koolfoam universal corner onto the end of the pre-plastered XPS koolfoam slab edge with MS or polyurethane sealant.

Feed cable ties under exterior forms approximately 1.2 apart.

From the top drop the Koolfoam SlabEdge panel into position with the plastered face towards the exterior form face.

Secure the panel in position with the cable ties ensuring the Koolfoam SlabEdge panel is level with the base of the slab forms.

Push the vertical panel jointer onto the edge of the Koolfoam SlabEdge.

Install the next Koolfoam SlabEdge panel by pushing the panel down from the top or pushing in from the side.

Repeat this process until all the external surfaces of the slab forms are covered with Koolfoam SlabEdge insulation panels.

Cut-away example of Koolfoam SlabEdge

Cutting panels

Cutting Koolfoam SlabEdge panels is easily done with a hand saw.

Measure length required and mark on the plastered face of the panel.

Ensure the panel is supported properly while cutting.

Cut the panel from the plastered face side to ensure a good clean cut and fished edge. Cut panels outside the floor area to keep the floor clean of any debris.

Concrete install

Koolfoam SlabEdge XPS is a very durable insulation product but care must be taken to avoid damage to the Koolfoam SlabEdge panel while pouring concrete.

Pump concrete carefully into Koolfoam SlabEdge footings and vibrate into place avoiding direct vibration contact with the insulation surface. Concrete should be pushed up to the insulation surface to ensure no concrete or slurry gets in between the plastered face of the panel and the concrete forms.

Once the concrete is in place to the top of the forms and is vibrated, cut the cable ties and pull the cable ties out of the wet concrete. Fill and trowel any holes that may be left.

Stripping forms

Strip forms carefully to ensure the pre-plastered surface of the panel is not damaged.

Leverage to remove forms of the face of the Slab edge panel should be avoided.

Finish of SlabEdge Insulation

Check the pre-plastered surface of the panels are clean and free of dirt and paint with acrylic paint with brush, roller or spray with a minimum of two coats.

Repair

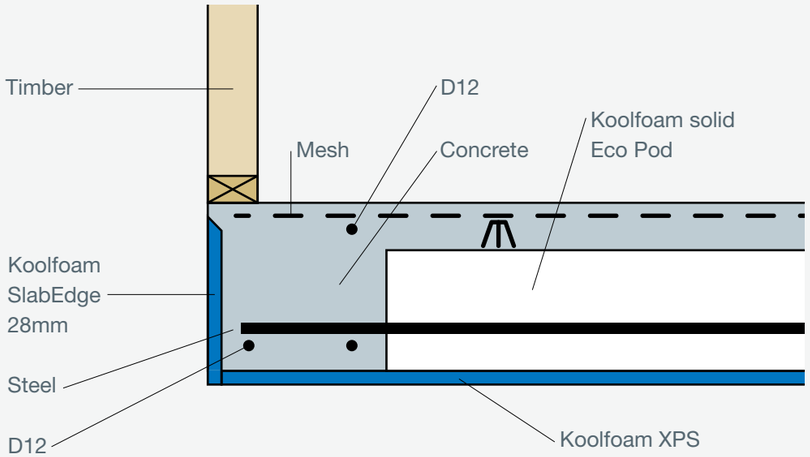
If the plaster surface is damaged it is easily repaired. Repair kits are available from Koolfoam.

During the rest of construction

Ensure that protection of the finished surface of the Koolfoam SlabEdge is provided where required until completion of the build. Particularly protection from impact and sharp objects.

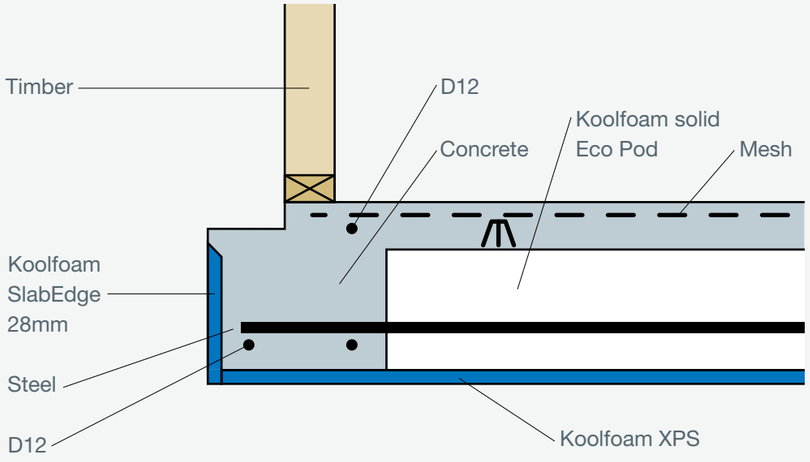
Construction details

STANDARD EDGE - ECO POD



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

EDGE WITH BRICK VANEER - ECO POD



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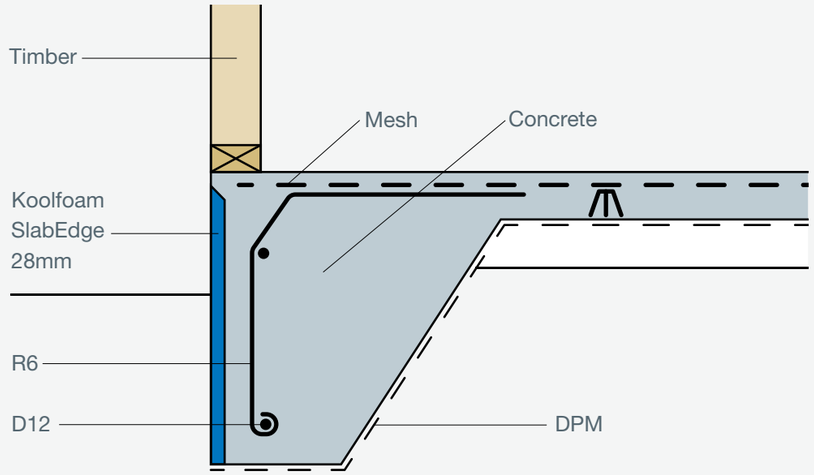
Construction details

STANDARD EDGE - CONCRETE FOOTING



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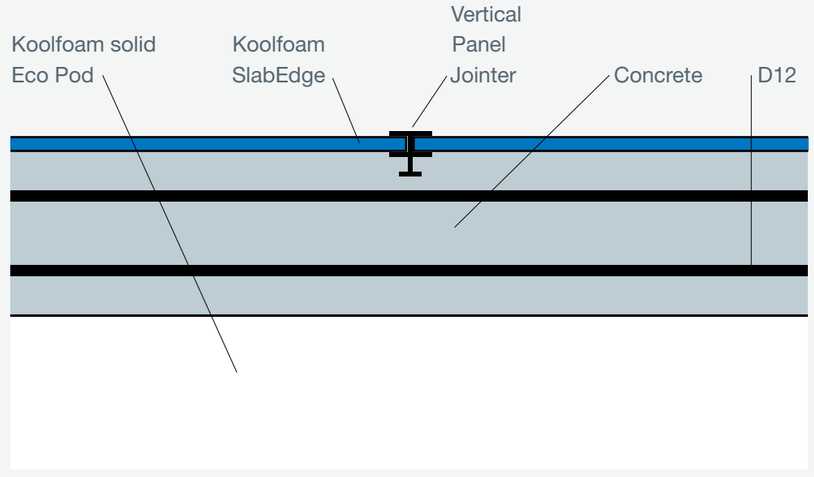
SLABEDGE JOIN



Vertical Panel Jointer

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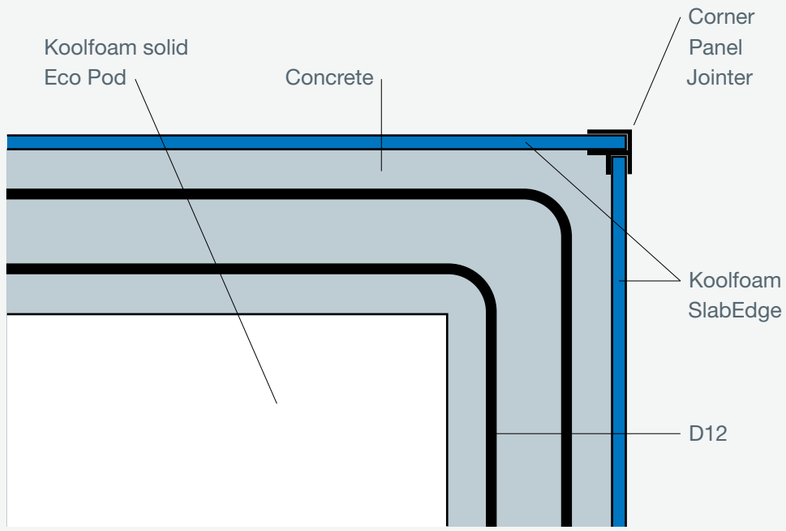
Construction details

EXTERNAL CORNER - ECO POD



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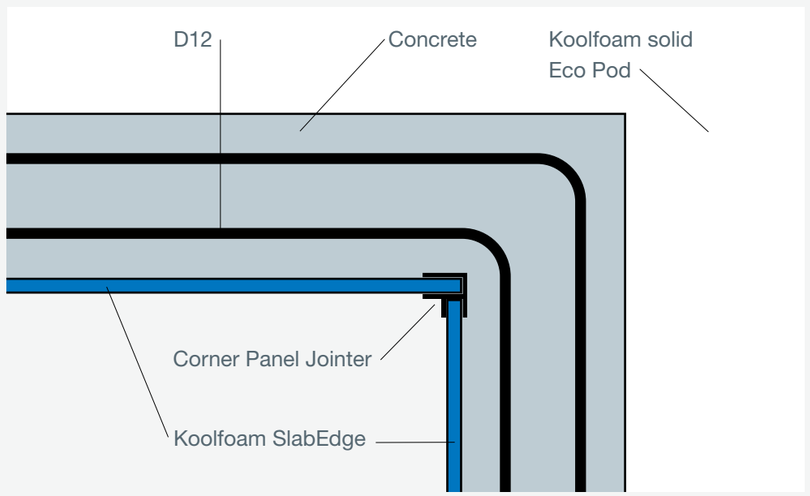
INTERNAL CORNER - ECO POD



Corner Panel Jointer

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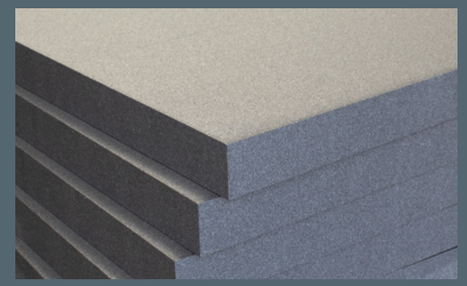
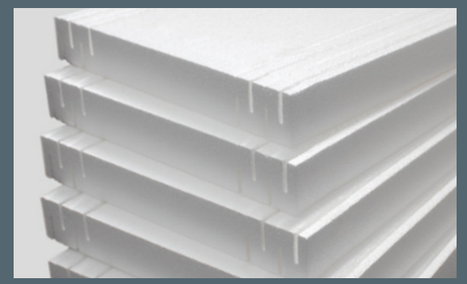
Other Koolfoam products

Solid Eco Pod
Koolfoam Solid Eco Pods are made from a blend of virgin material and recycled EPS from our own production waste and recovered EPS waste from our customers.

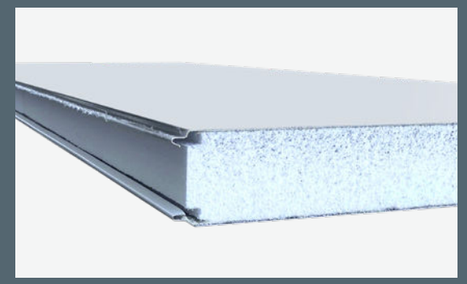
Under Slab Insulation
Koolfoam Under Slab Insulation provides excellent compressive strength, is moisture resistant, has excellent thermal performance and has a 50 year durability.



Black Pearl
Koolfoam Black Pearl is a graphite infused EPS giving it up to 30% greater thermal efficiency above normal EPS.



Under Floor Insulation
Koolfoam Under Floor Insulation comes in 1.2m long panels with concertina cuts for compression fitting. Available in a range of widths from 360mm - 560mm.



EPS Z Lock Panels
EPS Insulated Panels are steel skinned (0.6 mm BMT) polystyrene cored, 100mm thick, 1200mm wide, sandwich panels with a Z-shaped interlocking panel edge.

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