PROCESSING GUIDELINES FOR IKO ENERTHERM FLOOR APPLICATION

Storage

The insulation boards should be stored in such a way as to prevent damage.
The boards also need to be protected from the weather.

Application

IKO enertherm FLOOR

IKO enertherm insulation boards can be mounted both below and above ground bearing slab, floating, beam & block and loft floors. With floor heating, it is absolutely essential to use insulation boards.
The floating covering floor is moveable and has no direct contact with surrounding walls. The floor is separated from the upright wall or partition by means of a vertically fitted IKOFIX EDGING STRIP.
The IKO enertherm ALU insulation board can be fitted under a cement-bound floor system with the use of a DPM (IKO Hyload 1200 DPM) this DPM is highly resistant to chemicals and is suitable for a wide range of cement-bound products. When the IKO enertherm ALU insulation boards are fitted, they should be equipped with PE foil once the joints have been taped over.

Installation Guidelines

SOLID FLOOR BELOW SLAB

Prior to installation, ensure the floor is dry, sound and free from contaminants.

- A thin sand blinding should be laid on top of well compacted hardcore to level site.
- Install a Damp Proof Membrane (DPM – min 300 micron / 1200 gauge polythene) lapping up the wall into the Damp Proof Course (DPC).
- Loose lay the IKO enertherm insulation boards in a break bonded pattern with edges tightly butted.
- Where two layers of IKO enertherm insulation are being installed ensure they are laid break bonded.
- Install a 25mm upstand of IKO enertherm insulation on top of the loose laid boards up the wall
- The upstand should follow around the perimeter of the floor to a height intended floor level.
- Overlay IKO enertherm insulation boards with a minimum 500 gauge polythene sheet to act as a Vapour Control Layer (VCL) and to prevent cement penetrating board joints
- Ensure the sheet is taped at joints with 150mm overlaps and turned up at upstands.
- Lay concrete to finished floor level and allow to dry completely before installing floor finish (approx. 1 day per mm of slab thickness)

SOLID FLOOR ABOVE SLAB

Installation guidelines

- Ensure concrete slab is completely dry (approx. 1 day per mm of slab thickness).
- If a Damp Proof Membrane (DPM) has not been installed below the slab, install DPM above the slab (min 300 micron / 1200 gauge polythene) lapping into the Damp Proof Course (DPC).
- Level the surface with a thin sand blinding to continually support the IKO enertherm insulation boards.
- Lay the IKO enertherm insulation boards in a break bonded pattern with edges tightly butted.
- Where two layers of IKO enertherm insulation are being installed ensure they are laid break bonded.
- Install a 25mm upstand of IKO enertherm insulation on top of the loose laid boards up the wall
- The upstand should follow around the perimeter of the floor to a height intended floor level.
- Overlay IKO enertherm insulation boards with a minimum 500 gauge polythene sheet to act as a Vapour Control Layer (VCL) and to prevent wet screed penetrating board joints.
- Ensure the sheet is taped at joints with 150mm overlaps and turned up at upstands.
- Lay sand and cement screed on top of the VCL to a minimum thickness of 65mm for domestic applications (larger thicknesses may be required for higher floor loadings or non-domestic applications).
- Allow screed to dry completely before installing floor finish.

SUSPENDED BLOCK & BEAM

Installation guidelines

- Install a Damp Proof Membrane (DPM - min 300 micron / 1200 gauge polythene) lapping up the wall into the Damp Proof Course (DPC).
- The surface can be levelled using a thin sand blinding if required.
- Lay the IKO enertherm insulation boards in a break bonded pattern (see below) with edges tightly butted.
- Where two layers of IKO enertherm insulation are being installed ensure they are laid break bonded.
- Install a 25mm upstand of IKO enertherm insulation on top of the loose laid boards up the wall
- The upstand should follow around the perimeter of the floor to a height intended floor level.
- Overlay IKO enertherm insulation boards with a minimum 500 gauge polythene sheet to act as a Vapour Control Layer (VCL) and to prevent wet screed penetrating board joints
- Ensure the sheet is taped at joints with 150mm overlaps and turned up at upstands.
- Lay sand and cement screed on top of the VCL to a minimum thickness of 65mm for domestic applications (larger thicknesses may be required for higher floor loadings or non-domestic applications).
- Allow screed to dry completely before installing floor finish.

SUSPENDED TIMBER FLOOR

Installation Guidelines

From above - prior to the installation of floor boarding

- Measure the exact distance between joists to allow for variances and achieve tightly fitted IKO enertherm insulation boards.
- Cut the IKO enertherm insulation boards to required measurements
- Install 25 x 25mm treated softwood timber battens or galvanised steel saddle clips inside the joists, at the correct height to support the IKO enertherm insulation boards and ensure the boards sit flush with the top of the joists.
- Fit the IKO enertherm insulation board tightly into the joists.
- Fill any gaps between joists and perimeter walls with either cut pieces of insulation board or PU foam.

From below - floor boards fixed over joists

- Measure the exact distance between joists to allow for variances and achieve tightly fitted IKO enertherm insulation boards.
- Cut the IKO enertherm insulation boards to required measurements
- Push the IKO enertherm insulation board up between the joists, ensuring a tight fit and the boards sit flush with the floor boards.
- Install 25 x 25mm treated softwood timber battens or partially driven galvanised nails inside the joists, to support the IKO enertherm insulation boards.
- Fill any gaps between joists and perimeter walls with either cut pieces of IKO enertherm insulation board or PU foam

FLOATING TIMBER FLOOR

Installation Details

- Ensure concrete slab is completely dry (approx. 1 day per mm of slab thickness).
- The surface of the concrete slab should be flat and smooth.
- Block and beam floors should be level and grouted. Levelling screed or a thin layer of cement can provide a level surface.
- This should be completely dry before proceeding (approx. 1 day per mm).
- If a Damp Proof Membrane (DPM) has not been installed, install DPM above the slab or block and beam (min 300 micron / 1200 gauge polythene) lapping into the Damp Proof Course (DPC).
- Treated softwood timber battens should be positioned at doorways, access panels and to support partitions. The size of the battens should ensure the top of the insulation is level with the top of the battens.
- Lay the insulation boards in a break bonded pattern (see below) with edges tightly butted.
- Overlay insulation boards with a minimum 1000 gauge polythene sheet to act as a slip layer and Vapour Control Layer (VCL).
- Timber floor boards e.g. tongue–and–groove 18 mm thick plywood, should then be laid over the IKO enertherm insulation with staggered cross–joints.
- An expansion gap of 2mm per metre run of floor, or a minimum of 10mm overall, should be provided between the floor boards and the perimeter walls.
- Expansion joints should be installed at 2mm gaps per metre run where there are long (5m+) uninterrupted lengths of timber floor boards.
- Before the timber floor boards are interlocked, apply a continuous bead of waterproof wood grade PVA adhesive to the top and bottom of the tongue and groove joints.
- Temporary wedges should be inserted between the walls and floor, to maintain tight joints, until the adhesive has set.
- Replace wedges with strips of cork or polyethylene foam to help prevent cold bridging, skirting may then be fixed.

UNDERFLOOR HEATING (UFH)

Installation Details

Concrete slab

- Ensure concrete slab is completely dry (drying time approx. 1 day per mm of slab thickness).
- If a Damp Proof Membrane (DPM) has not been installed below the slab, install DPM above the slab (min 300 micron / 1200 gauge polythene) lapping into the Damp Proof Course (DPC).
- Level the surface with a thin sand blinding to continually support the IKO enertherm insulation boards.

Suspended block & beam

- Install a Damp Proof Membrane (DPM - min 300 micron / 1200 gauge polythene) lapping up the wall into the Damp Proof Course (DPC).
- The surface can be levelled using a thin sand blinding if required.

Installing IKO enertherm ALU for UFH

- Lay IKO enertherm insulation boards in a break bonded pattern with edges tightly butted.
- Where two layers of IKO enertherm insulation are being installed, ensure they are laid break bonded.
- Install a 25mm upstand of IKO enertherm insulation on top of the loose laid boards up the wall
- The upstand should follow around the perimeter of the floor to a height intended floor level.
- A polythene sheet overlay is required when using IKO enertherm insulation board, we also recommend taping board joints when using a liquid screed.
- Install the underfloor heating system in accordance with the manufacturer's guidelines.
- Pipe retaining clips can be inserted directly through the foil facing into the insulation core.
- Lay sand and cement screed on top of the IKO enertherm insulation boards and underfloor heating system to a minimum thickness of 65mm for domestic applications (larger thicknesses may be required for higher floor loadings or non-domestic applications).
- Allow screed to dry completely before installing floor finish