IKO enertherm
Flat Roof

PROCESSING GUIDELINES
FOR IKO ENERTHERM FLAT ROOF

Product
IKO enertherm ALU / BGF / MG / BM

Description
IKO enertherm ALU
IKO enertherm ALU is used for the insulation of flat roofs for new construction or refurbishment projects on concrete, steel deck and timber substrate.

IKO enertherm BGF
IKO enertherm BGF is used for the insulation of flat roofs, with torch-on bituminous and single-ply waterproof membranes.

IKO enertherm MG
IKO enertherm MG is used for the insulation of flat roofs in conjunction with single-ply and bituminous waterproof membranes.

IKO enertherm BM
IKO enertherm BM can be used for torch-on bituminous membrane sections or mastic asphalt systems: bituminised sand and talc free glass fibre to be applied facing upwards - or can be used with synthetic roof sections: perforated coated glass fibre to be applied facing upwards.

Storage
Store boards in a flat, dry area off the ground away from mechanical and water damage and sources of ignition. If temporary outdoor storage cannot be avoided then they must be completely protected by use of an opaque polythene sheet or tarpaulin. Boards that have been allowed to get wet should not be used Prior to installation, ensure the area is dry, sound and free from contaminants.

IKO enertherm flat roof fixing instructions

Installing over Concrete Decks

- Concrete decks should be clean, dry, without large projections, steps or gaps, and should be graded to allow correct falls to all rainwater outlets.
- The vapour control layer should be laid over the deck according to the manufacturer's instructions.
- Where one run of the specified vapour control layer laps another, there should be minimum 150 mm side and end overlaps, which should be adequately sealed.
- Turn up the vapour control layer at the edge of the roof to a height appropriate to the specified IKO waterproofing membrane.
- IKO Enertherm Boards should be secured to the deck using mechanical fixings.

- Insulation boards should always be laid break–bonded, either with their long edges at right angles to the edge of, or diagonally across the roof, and with joints lightly butted. There should be no gaps at abutments.
- Roof–light or ventilator kerbs etc. should always be insulated with the same thickness of IKO Enertherm as the general roof area.
- A 25 mm thick IKO Enertherm upstand should be used around the perimeter of the roof on the internal façade of parapets.
- A minimum distance of 300 mm should be maintained between the top of the insulation upstand and the bottom of the horizontal roof insulation.
- For roofs without parapets, a timber edging batten of the same height of the insulation is to be used to fix the fascia board to the gutter system. Please contact the membrane manufacturer for more details.
- The waterproofing membrane is mechanically fixed in accordance with the membrane manufacturer's instructions, over the whole insulated area including any insulation upstands, as soon as possible after laying the insulation boards

Installing over Plywood Decks

- Timber decks should be clean, dry, without large projections, steps or gaps, and should be graded to allow correct falls to all rainwater outlets.
- The vapour control layer should be temporarily stapled or nailed to the deck.
- Where one run of the specified vapour control layer laps another, there should be minimum 150 mm side and end overlaps, which should be adequately sealed.
- Turn up the vapour control layer at the edge of the roof to a height appropriate to the specified IKO waterproofing membrane.
- IKO Enertherm boards should be secured to the deck using mechanical fixings.
- Insulation boards should always be laid break–bonded, either with their long edges at right angles to the edge of, or diagonally across the roof, and with joints lightly butted. There should be no gaps at abutments.
- Joints between insulation boards should not coincide with those between the plywood sheets.
- Roof–light or ventilator kerbs etc. should always be insulated with the same thickness of IKO Enertherm insulation boards as the general roof area.
- A 25 mm thick IKO Enertherm upstand should be used around the perimeter of the roof on the internal façade of parapets. A minimum distance of 300 mm should be maintained between the top of the insulation upstand and the bottom of the horizontal roof insulation. For roofs without parapets, a timber edging batten of the same height of the insulation is to be used to fix the fascia board to the gutter system. Please contact IKO PLC for more details.
- The waterproofing membrane is mechanically fixed in accordance with IKO membrane instructions, over the whole insulated area including any insulation upstands, as soon as possible after laying the insulation boards

Installing over Metal Decks

- Metal decks should be clean, dry, without large projections, steps or gaps, and should be graded to allow correct falls to all rainwater outlets.
- If using a sealed metal deck there is no requirement for a separate vapour control layer.
- If the metal deck is not sealed the vapour control layer should be loose–laid.
- Where one run of the specified vapour control layer laps another, there should be minimum 150 mm side and end overlaps, which should be adequately sealed.
- Turn up the vapour control layer at the edge of the roof to a height appropriate to the specified IKO waterproofing membrane.

- IKO Enertherm insulation boards should be secured to the deck using mechanical fixings e.g.
- Insulation boards should always be laid break–bonded, either with their long edges at right angles to the trough openings, or diagonally across the corrugation line, and with joints lightly butted. There should be no gaps at abutments.
- Roof–light or ventilator kerbs etc. should always be insulated with the same thickness of IKO Enertherm as the general roof area.
- A 25 mm thick IKO Enertherm upstand should be used around the perimeter of the roof on the internal façade of parapets.
- A minimum distance of 300 mm should be maintained between the top of the insulation upstand and the bottom of the horizontal roof insulation.
- For roofs without parapets, a timber edging batten of the same height of the insulation is to be used to fix the fascia board to the gutter system. Please contact IKO PLC for more details.
- The waterproofing membrane is mechanically fixed in accordance with IKO PLC instructions, over the whole insulated area including any nsulation upstands, as soon as possible after laying the insulation boards.

Installing over Existing Flat Roofs

- The existing waterproofing membrane surface should be clean, dry, without large projections, steps or gaps, and should be graded to allow correct falls to all rainwater outlets.
- Where the existing waterproofing membrane is not fit for purpose as a vapour control layer, a separate vapour control layer should be loose–laid over it.
- Where one run of the specified vapour control layer laps another, there should be minimum 150 mm side and end overlaps, which should be adequately sealed.
- Turn up the vapour control layer at the edge of the roof to a height appropriate to the specified new IKO waterproofing membrane.
- IKO Enertherm should be secured to the deck using mechanical fixings.
- Insulation boards should always be laid break–bonded, either with their long edges at right angles to the edge of, or diagonally across the roof, and with joints lightly butted. There should be no gaps at abutments.
- Roof–light or ventilator kerbs etc. should always insulated with the same thickness of IKO Enertherm as the general roof area.
- A 25 mm thick IKO Enertherm upstand should be used around the perimeter of the roof on the internal façade of parapets.
- A minimum distance of 300 mm should be maintained between the top of the insulation upstand and the bottom of the horizontal roof insulation.
- For roofs without parapets, a timber edging batten of the same height of the insulation is to be used to fix the fascia board to the gutter system. Please contact the IKO PLC for more details.
- The waterproofing membrane is installed in accordance with IKO PLC membrane instructions, over the whole insulated area including any insulation upstands, as soon as the insulation boards are laid.

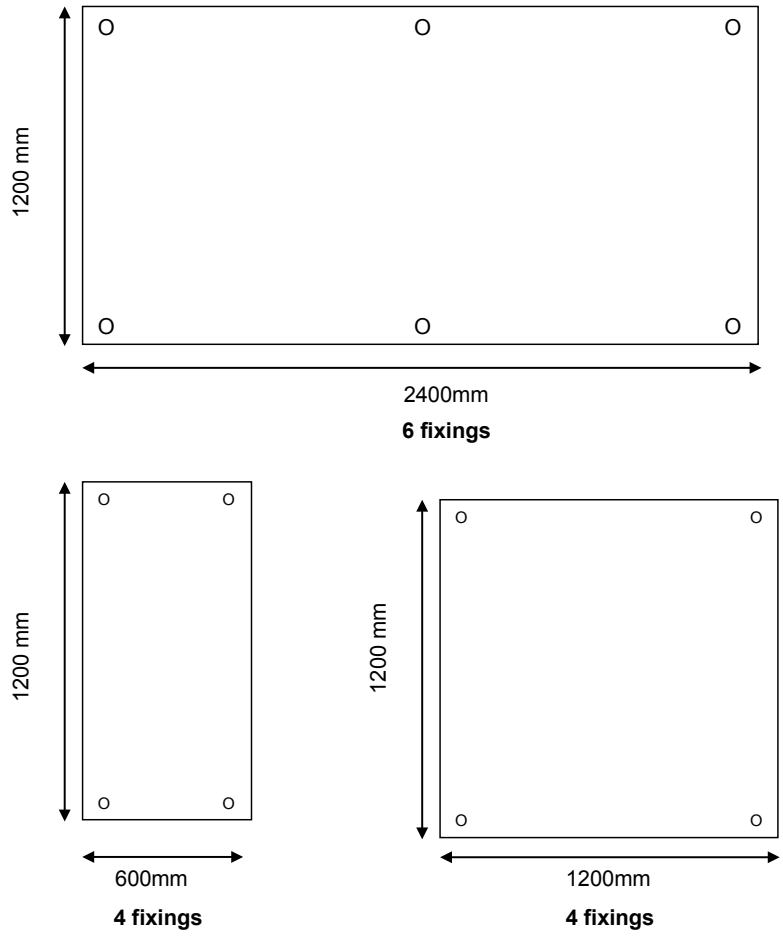
Installing over Existing Composite Panel Roofs

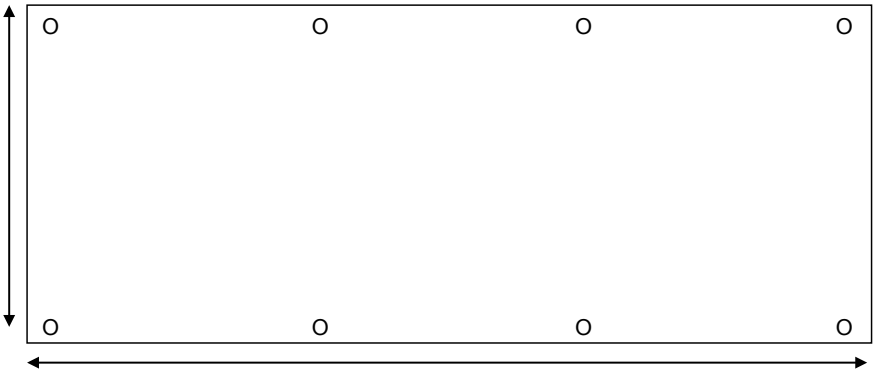
- If the existing profile provides inadequate support for the insulation boards, the existing roof should be over– boarded, e.g. with plywood, prior to their installation.
- IKO Enertherm insulation boards should be secured to the deck using mechanical fixings. Please refer to IKO PLC Technical Advice Service for advice on fixing specification.
- IKO Enertherm insulation boards should always be laid break–bonded and with joints lightly butted. There should be no gaps at abutments. If the existing roof has been over–boarded, then insulation boards should be laid with their long edge at right angles to the edge of, or diagonally across the roof.

If not, they should be laid either with their long edges at right angles to the trough openings, or diagonally across the corrugation line
- Roof–light or ventilator kerbs etc. should always insulated with the same thickness of IKO Enertherm as the general roof area.
- The waterproofing membrane is installed in accordance with IKO PLC instructions, over the whole insulated area including any insulation upstands, as soon as possible after laying the insulation boards.

Mechanical Fixings

- The number of mechanical fixings required to fix IKO Enertherm will vary with the geographical location of the building, the local topography, and the height and width of the roof concerned along with the deck type.
- A minimum of 6 fixings are required to secure boards of IKO Enertherm to the deck. The requirement for additional fixings should be assessed in accordance with BS / I.S. EN 1991-1-4: 2005 + A1: 2010 (National Annex to Eurocode 1. Actions on structures. General Actions. Wind Actions).
- Mechanical fixings must be arranged in an even pattern.
- Fasteners at insulation board edges must be located > 50 mm and < 150 mm from edges and corners of the board and not overlap board joints. Please refer to IKO PLC for recommended fixing patterns.
- Each fixing should incorporate a square or circular plate washer (50 x 50 mm or 50 mm diameter).





- If two layers of insulation are to be installed, the base layer should be mechanically fixed with minimum 1 No. fixing in the centre of the board before fixing the top layer as described above.
- Where alternative mechanical fixing systems are specified, such as bar fixing systems, the specified system must give similar restraint to the insulation board as would be attained by the use of conventional telescopic tube fasteners.

General

- The roof must be adequately protected when building works are being carried out on or over the roof surface.
- This is best achieved by close boarding. The completed roof must not be used for storage of heavy building components such as bricks or air conditioning equipment.
- At the completion of each day's work, or whenever work is interrupted for extended periods of time, a night joint must be made in order to prevent water penetration into the roof construction