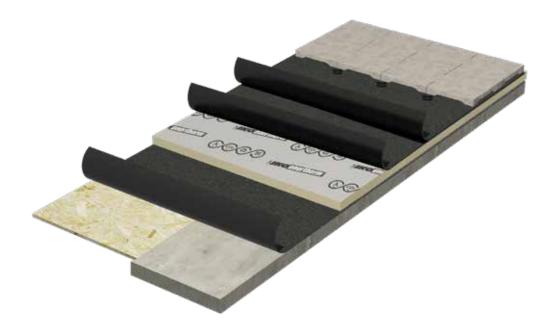


INSTALLATION GUIDELINES

TWO-PLY ROOFING SYSTEM, LOOSE-LAID BALLASTED



Description of the processing of an IKO Circular roofing system, in a two-ply roofing system, laid-loose ballasted.

The IKO circular roofing systems must be made up of the products described in this guideline, including the associated fasteners and fastening method. The systems must always be fastened in accordance with the applicable regulations (for the Netherlands, for example, these are NEN-EN 1991-1-4+C2:2011/NB:2011, NEN 6707, SBR 465.00 and NPR 6708:2013. For general processing guidelines please refer to the Professional guideline for closed roofing systems, version 2018).

The IKO circular roofing systems are required to be removable to the greatest extent practicable at the end of their lifetime, so that they can be taken back by IKO in compliance with the applicable conditions set out in the return certificate. To this end, the systems must be designed for maximum removability. Only where strictly necessary for its water and air proofing function can and may the roof covering be connected to elements (such as skylights, details, etc.), which, based on current knowledge, will not be removable within the system.

The cutting waste of all IKO circular roofing membranes in these systems must be collected separately for subsequent recycling by IKO.

This guideline has been prepared based on currently available technical knowledge and experience, without any warranties regarding concealed elements and without taking into any technologies that have not yet been adequately tested.



TWO-PLY ROOFING SYSTEM, LOOSE-LAID BALLASTED

The two-ply IKO circular roofing system can be applied to suitable substrates of wood, steel and concrete.

VAPOUR BARRIER LAYER:

The substrate should be clean and dry.

As vapour barrier layer, an IKO base P3 T/F ATELIA 10.0 roofing membrane, loose-laid, is used.

Remove the tapes and install the roofing membrane loose laid in stretcher bond with a minimum distance between the transverse overlaps of $\geq 2m$ with a longitudinal overlap of at least 80 mm, transverse overlap of 100 mm The roofing membrane is installed loose laid. Make the overlaps and joints air-proof by torch-on or hot air method. To ensure a good seam joint, a ≥ 5 mm bead of bitumen must extrude from the overlap. Temporary ballasting is required prior to installation of the final waterproofing.

INSULATION:

As insulation, IKO Enertherm ATELIA, loose-laid, is used.

For optimal performance, the boards must be protected from weather conditions and damage.

The IKO enertherm ATELIA insulation boards are carefully packed in plastic foil, but in case of prolonged storage it is recommended to additionally protect the insulation from sunlight and rain

IKO Enertherm ATELIA is available in dimensions 1200 x 1000 mm.

When installing IKO enertherm ATELIA insulation on a noncontinuous support, allowance must be made for the maximum span and cantilever.

IKO enertherm ATELIA insulation boards can be installed in stretcher bond or wild bond. The end joints between adjoining insulation boards must always be staggered by at least 20 cm. When using multiple insulation layers, their joints must be staggered.

Always fit the insulation boards so that they abut against each other, any openings left at the connection details must be sealed with PU foam. Cut off excessive foam after curing. Adapters smaller than 300 mm should be processed only in the centre area of the roof.

On a profiled steel roof, longitudinal seams must be at right angles to the corrugations.

ROOF COVERING, FLAT:

As underlay, IKO base 460P60 ATELIA or IKO base P3 T/F ATELIA is used. The underlay is laid loosely. Longitudinal overlaps of 80 mm transverse overlaps of 100 mm for IKO base 460P60 ATELIA, for IKO base P3 T/F ATELIA longitudinal overlap of 120 mm, and transverse overlap of 150 mm for temporary waterproofing of the underlay. When using IKO base P3 T/F ATELIA, the overlaps and joints can be made waterproof by the hot air or torch-on method.

As cap sheet, IKO powergum 470K14 ATELIA is applied by the torch-on method.

Always process IKO powergum 470K14 ATELIA with a core. IKO powergum 470K14 ATELIA must always be complete torched, whereby a uniform bead of bitumen of approx. 5 mm extrudes from the overlap. Do not torch overlaps separately. Minimum longitudinal overlap is 80 mm, minimum end overlap in a multiple ply system is 100 mm.

ROOF COVERING, UPSTANDS AND DETAILS:

Roof edges, upstands and details should preferably be completely insulated with IKO Enertherm ATELIA insulation boards of minimum thickness, fastening by means of EURO-FAST PP screw-tube combination.

The first ply consists of IKO base P3 T/F ATELIA. To be mechanically fastened into the substructure using EUROFAST PP screw-tube combination fasteners. Overlaps and joints to be made waterproof by torch-on or hot air method.

Apply finishing strip of sufficient width, type IKO powergum 470K14 ATELIA / IKO powergum 4 AW ATELIA, by the torchon method.

In the Netherlands, the finishing strip must be applied without torch in situations that meet the requirements of NEN6050. To this end, use IKO Carrara TECNO SN, mechanically fastened in the overlap; overlaps and joints by the hot air method.

Apply ballast in compliance with applicable regulations (In the Netherlands, for example, these are NEN-EN 1991-1-4+A1+C2:2011/NB:2011, NEN 6707, SBR 465.00 and NPR 6708:2013, dimensionally stable ballast according to the calculation).

Where insulation of roof edges, upstands and details is not possible for technical reasons, please contact your IKO contact for technical advice.



INCORPORATING FIXING PLATES, VENTS, DRAINS, PENETRATIONS, AND THE LIKE:

For drains, vents and other penetrations, IKO powergum drain prefab fixing plates, processed according to the guidelines, must be used

