



# PVC SINGLE PLY ROOFING AND WATERPROOFING SYSTEMS



[IKOGROUP.CO.UK](http://IKOGROUP.CO.UK)

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# WE ARE IKO

With more than 140 years' manufacturing experience, IKO is firmly established as the UK's market leader in the design, manufacture and installation of roofing, waterproofing and insulation systems, along with our fast-growing highways maintenance range. This hard-earned reputation has been built on a foundation of high-quality products, exemplary customer service and an unwavering commitment to driving positive change and protecting what matters to our people and the planet.

With this comes a responsibility to continue investing in our product solutions, our manufacturing facilities and our extensive team of experts to deliver excellence at every level.



# CHAMPION OF UK MANUFACTURING

As the only UK manufacturer of single ply PVC membranes, we offer a complete range of single ply roofing and waterproofing systems and complementary components to deliver high-performance, long-lasting flat roof solutions.

Tried and trusted in the roofing industry, IKO Armourplan membranes are robust and reliable systems manufactured in our state-of-the-art production facility in Chesterfield, which has BS EN ISO 9001, BS EN ISO 14001 and BES 6001 accreditations. As well as manufacturing single ply membranes to the highest quality standards and minimising our environmental effect, we also support you in the project design.

We can provide you with specification advice, technical drawings, wind uplift and thermal calculations, site visits and post-project support, such as maintenance and comprehensive guarantees – a comprehensive service that is all free of charge.





# IKO ARMOURPLAN REINFORCED PVC ROOFING MEMBRANES

**Suitable for use on a wide range of roofing applications, including specialist installations.**

IKO Armourplan PVC roofing membranes have been independently approved by the British Board of Agrément (BBA No. 05/4287) and provide durable and dependable roof waterproofing with a service life of up to 40 years.

**IKO Armourplan systems offer many benefits including:**

- ✓ Exceptional mechanical performance
- ✓ Long service life
- ✓ Choice of colours
- ✓ High UV resistance
- ✓ Sleek finish
- ✓ Secure seam welding quality
- ✓ Complete range of fixings and accessories
- ✓ Proven track record



# THE IKO ARMOURPLAN RANGE

The IKO Armourplan range consists of versatile membranes that provide exceptional mechanical performance and weld joint strength, and can be mechanically fixed, adhered or ballasted. The membranes are suitable for warm, cold or ballasted roof systems and come in two standard colours; mid grey (RAL 7046) and slate grey (RAL 7015). However, other colours are available upon request\*.

*\*Minimum volumes and extended lead times required for non-standard colours.*



## MEMBRANES

### IKO Armourplan P

A polyester reinforced membrane for use in a wide range of roofing applications on both flat and sloping roofs. IKO Armourplan P offers enhanced mechanical properties and is completely UV-stable throughout. This membrane can also be used as the upstand detailing membrane on IKO Armourplan P and PSG systems. Available in 1.2mm standard thickness.

### IKO Armourplan SM

A polyester reinforced membrane for mechanically fastened roofing systems. It is also used as the upstand detailing membrane on IKO Armourplan SM and SG systems.

Available in either 1.2mm or 1.5mm standard thicknesses.

### IKO Armourplan PSG

A glass tissue reinforced polyester fleece-backed PVC membrane suitable for both flat and sloping roofs. Adhered onto most common substrates using IKO adhesives. The membrane is completely UV-stable throughout.

Available in 1.2mm standard thickness.

### IKO Armourplan SG

A polyester fleece-backed membrane for bonded roofing systems. The membrane is bonded to the substrate using IKO adhesives.

Available in either 1.2mm or 1.5mm standard thicknesses.

### IKO Armourplan GB

A heavy-duty glass tissue reinforced fleece-backed PVC membrane specifically designed for buried roof systems.

Available in 1.5mm standard thickness.

### IKO Armourplan D

Un-reinforced homogenous membrane for complex detailing.

### IKO Armourplan G

Glass tissue reinforced PVC membrane for complex detailing.

### IKO Armourplan Walkway

PVC membrane with slip resisting surface for use on walkways.

# A SINGLE SYSTEM PROVIDER

With IKO, you benefit from a full roofing system from one single UK-based supplier. IKO offers a complete range of complementary accessories and mechanical fastening systems as well as responsive on-site deliveries, to ensure you have everything you need, when you need it.

## INSULATION

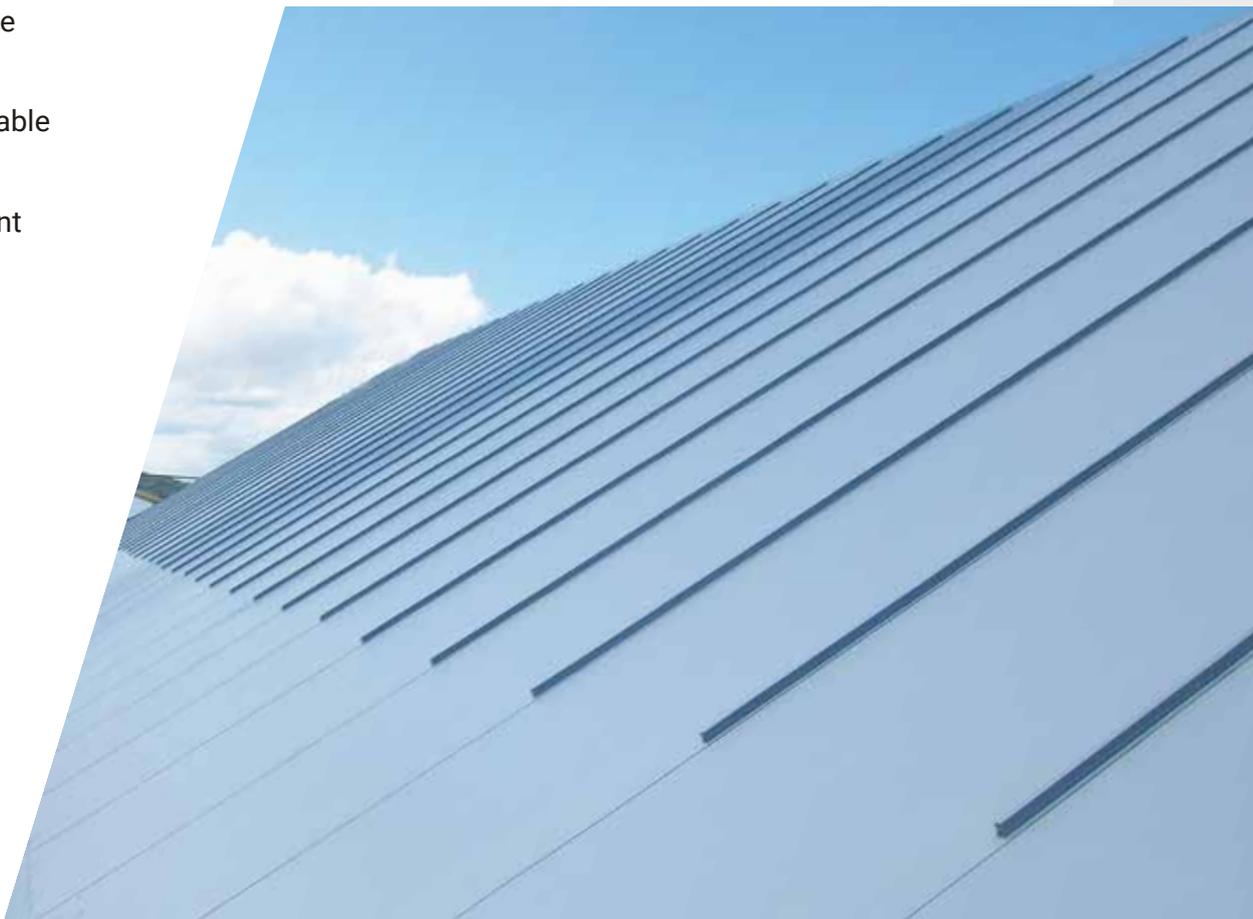
Our enertherm insulation solutions are manufactured in the UK at our site in Alconbury, Cambridgeshire, with options available to suit any project – from solutions that are thermally efficient to those that offer market-leading compressive strength.

### IKO enertherm PIR

IKO enertherm PIR insulation boards are available in a range of thicknesses and with a choice of facings, including mineral glass tissue and tri-ply aluminium multi-layer complex.

Benefits include:

- High performance
- Lightweight
- Dimensionally stable
- Rot resistant
- Thermally efficient



## IKO enertherm GOLD

IKO enertherm GOLD is an insulation board with a rigid polyisocyanurate foam core, clad on both sides with a multi-layer gastight aluminium complex.

Benefits include:

- 100% CFC, HCFC or HFC-free
- Comprehensive technical support throughout project
- Full U-Value, CRA design
- Guarantee and peace of mind
- Improved compressive strength
- No shrinking or cold bridging, allowing for longer service life

## IKO enertherm tapered insulation

IKO enertherm PIR Tapered Insulation Board is manufactured with a polyisocyanurate foam core, laminated on both sides with a multi-layer gastight aluminium complex facing. IKO's tapered boards can provide falls across a flat roof in accordance with British Standard BS 6229:2018 (Flat roofs with continuously supported flexible waterproof coverings). Project-specific roof designs can be provided by IKO's in-house design team.

Benefits include:

- 100% CFC, HCFC, and HFC-free
- Tapered design service
- Technical support from survey to inspection
- Wide range of board thicknesses available, starting at 30mm
- Standard falls available, other design falls can be manufactured depending on project requirements
- Multi-layer gastight aluminium complex facing, offering greater thermal efficiency
- Compatible with bituminous membrane, single ply, mastic asphalt and cold applied liquid systems
- Top quality multi-layer lamination

# ANCILLARY PRODUCTS

IKO supplies a comprehensive range of complementary ancillaries for IKO Armourplan systems.

## Primers, adhesives and cleaners

From preparing the substrate to cleaning and bonding membranes and insulation, this range helps to ensure optimum installation and long-lasting waterproofing performance.

## Detailing and outlets

These prefabricated products are ideal for forming common roof details. Included in the range are various dimensions of rainwater outlet, preformed internal and external corners and rolls of homogenous detailing membrane.

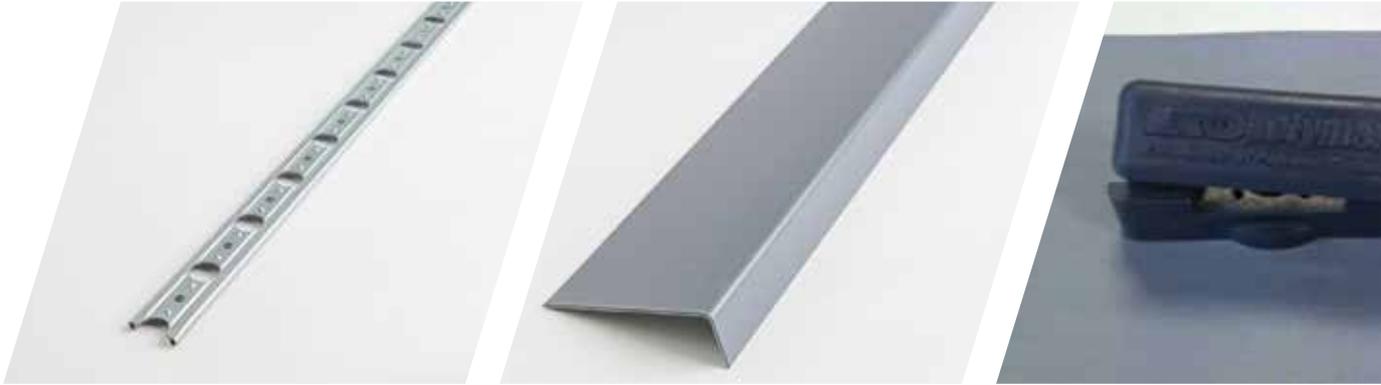
## Mechanical fixings and restraint bars

IKOfix is a range of high-quality mechanical fastening systems, including fixings, restraint strips, peelstop bars and flatbars. These solutions enable insulation and waterproof membranes to be fixed to a variety of substrates, such as steel, concrete or timber flat roofs.

## Membrane coated metal

IKO Armourplan PVC Membrane Coated Metal and IKO Armourflow Rainwater Management help to form perimeter details quickly and effectively, including drip edges and upstands.

Other complementary products include IKO Armourfold's bespoke gutter lining system, IKO Spectratex Geotextile Separation Layer, IKO Armourplan Standing Seam Profiles and IKO Strike PVC lightning conductor clips..



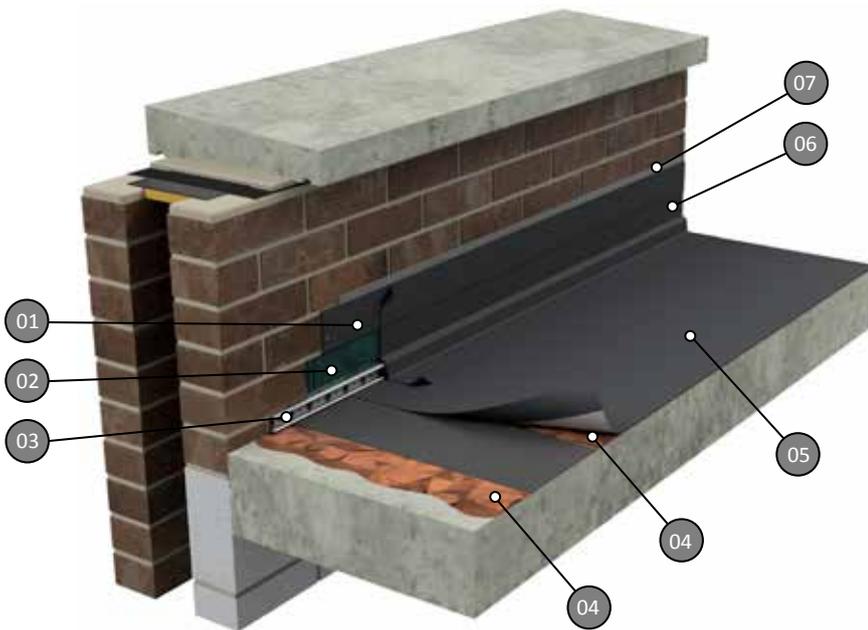
For more information on the membranes, including their benefits, or for a full range of ancillary products, visit the IKO website: [www.ikogroup.co.uk](http://www.ikogroup.co.uk) or contact IKO's Technical Services team on **01257 255771** or [polymeric.technical.uk@iko.com](mailto:polymeric.technical.uk@iko.com)

# TYPICAL IKO ARMOURPLAN BUILD-UPS

The following drawings represent typical roof build-ups. IKO's Technical Services Team can advise on specific design elements required for individual projects.

For specialist applications or build-up advice, please contact one of our experts on 01257 255771 or email on [polymeric.technical.uk@iko.com](mailto:polymeric.technical.uk@iko.com).

## ADHERED COLD ROOF SYSTEM



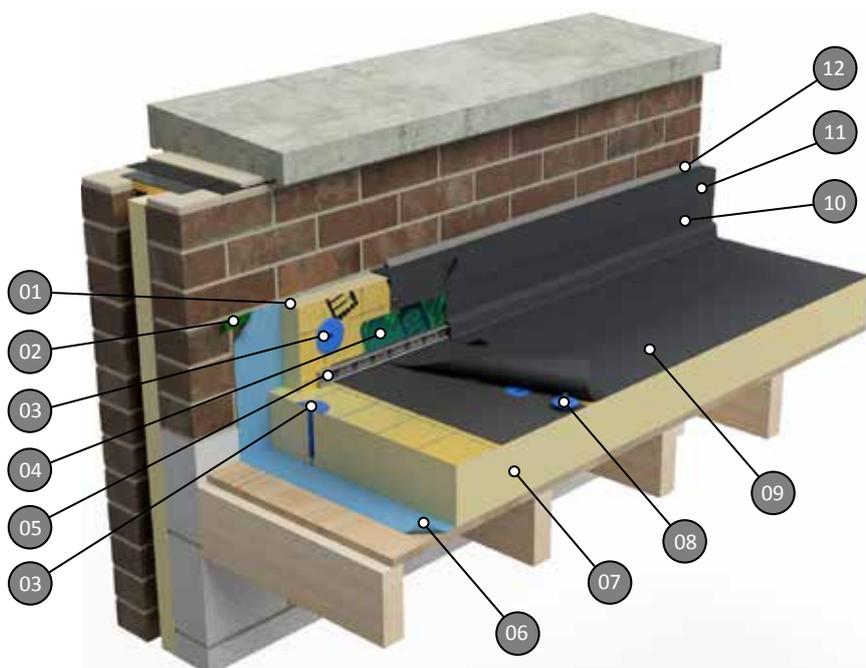
1. Armourplan Coated Chase Metal
2. IKO PVC Contact Adhesive
3. IKOfix Peel Stop Bar
4. Spectrabond LFPU Membrane Adhesive
5. IKO Armourplan SG/PSG
6. IKO Armourplan SM/P Upstand Membrane
7. IKO PVC Sealant

## MECHANICALLY FASTENED COLD ROOF SYSTEM



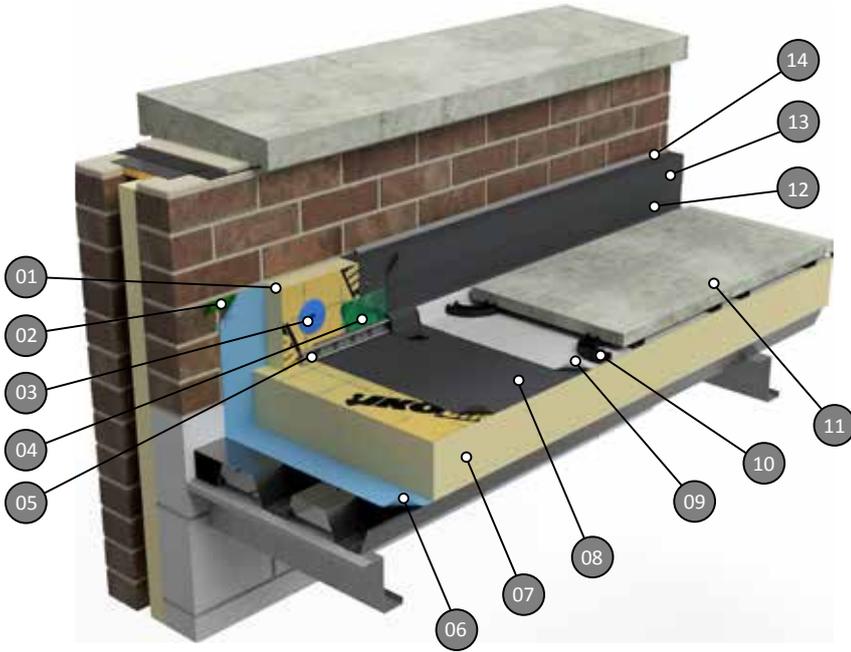
1. Armourplan Coated Chase Metal
2. IKO PVC Contact Adhesive
3. IKOfix Toothed Flat Bar
4. IKOfix Membrane Pressure Plate and Fixings
5. IKO Armourplan SM/P
6. IKO Armourplan SM/P Upstand Membrane
7. IKO PVC Sealant

## MECHANICALLY FASTENED WARM ROOF SYSTEM



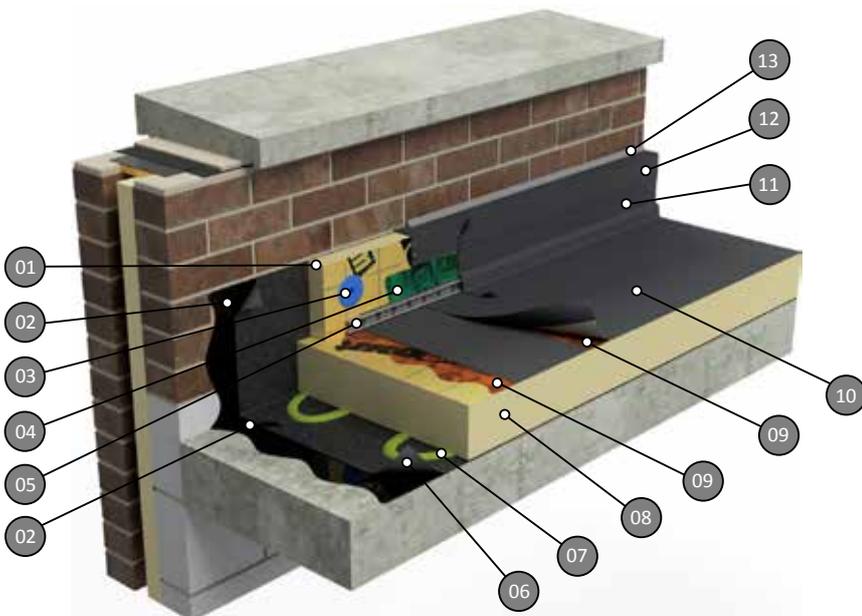
1. IKO enertherm Upstand Insulation
2. Spectravap Jointing Tape
3. IKOfix Insulation Tube and Fixing
4. IKO PVC Contact Adhesive
5. IKOfix Toothed Flat Bar
6. Spectravap AVCL
7. IKO Enertherm Insulation
8. IKOfix Membrane Tube and Fixings
9. IKO Armourplan SM/P Membrane
10. IKO Armourplan SM/P Upstand Membrane
11. IKO Armourplan Coated Chase Metal
12. IKO PVC Sealant

## BALLAST WARM ROOF SYSTEM



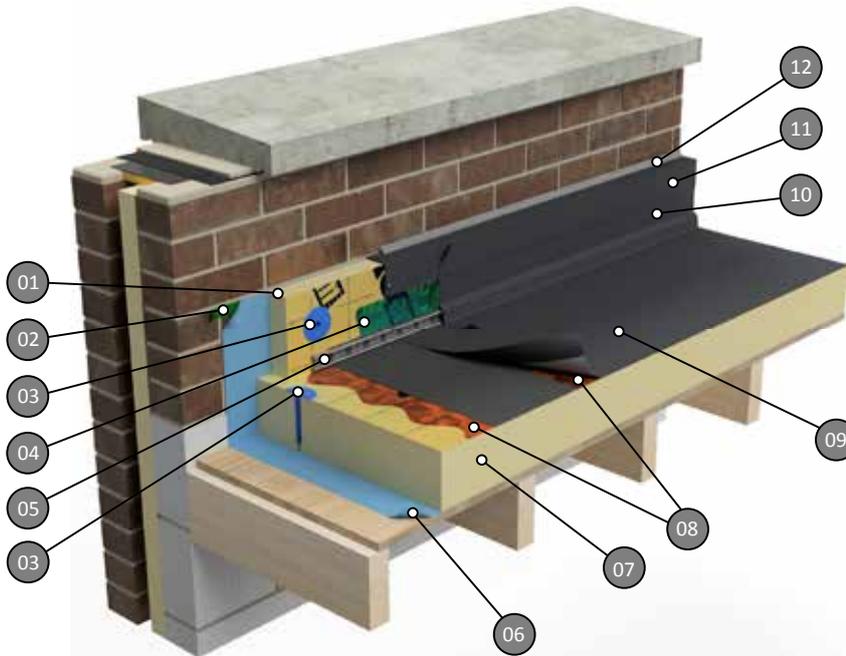
1. IKO enertherm Upstand Insulation
2. Spectravap Jointing Tape
3. IKOfix Insulation Tube and Fixing
4. IKO PVC Contact Adhesive
5. IKOfix Toothed Flat Bar
6. Spectravap AVCL
7. IKO enertherm Insulation
8. IKO Armourplan Membrane
9. IKO Spectratex Protective Fleece
10. Paving Support Pad
11. Ballast
12. IKO Armourplan SM/P Upstand Membrane
13. IKO Armourplan Coated Chase Metal
14. IKO PVC Sealant

## ADHERED WARM ROOF SYSTEM



1. IKO enertherm Upstand Insulation
2. IKOpro Bitumen Primer
3. IKOfix Insulation Tube and Fixing
4. IKO PVC Contact Adhesive
5. IKOfix Peel Stop Bar
6. IKO Ultra Bituminous AVCL
7. IKOpro HPPU Insulation Adhesive
8. IKO enertherm Insulation
9. Spectrabond LFPU Membrane Adhesive
10. IKO Armourplan SG/PSG Membrane
11. IKO Armourplan SM/P Upstand Membrane
12. IKO Armourplan Coated Chase Metal
13. IKO PVC Sealant

## HYBRID WARM ROOF SYSTEM



1. IKO enertherm Upstand Insulation
2. Spectravap Jointing Tape
3. IKOfix Insulation Tube and Fixing
4. IKO PVC Contact Adhesive
5. IKOfix Peel Stop Bar
6. Spectravap AVCL
7. IKO enertherm Insulation
8. Spectrabond LFPU Membrane Adhesive
9. IKO Armourplan SG/PSG Membrane
10. IKO Armourplan SM/P Upstand Membrane
11. Armourplan Coated Chase Metal
12. IKO PVC Sealant



# IKO IN ACTION

## CASE STUDIES

### Commercial

#### EUROPEAN SPACE AGENCY CONFERENCE CENTRE

#### Project description

This roofing project was for the European Space Agency's international conference centre in Oxfordshire. Designed to provide a hub for space-based collaboration and innovation, the 1100m<sup>2</sup> space included a 300-seater conference hall, breakout meeting spaces, café and showcase areas.

#### Challenges

Thermal performance, fire performance, acoustic performance and compressive strength performance were priorities for this project. IKO worked with the client and contractor, Roofline, to provide performance calculations that showed how these critical considerations would be addressed.

To achieve target U-values, an IKO enertherm PIR system was chosen – this also delivered on stringent compressive strength requirements, at 175Kpa per m<sup>2</sup>. The IKO enertherm insulation solution was also part of a design strategy to reduce operational energy consumption, enabling the client to meet key sustainability targets.

#### Innovative approach

From the outset, the contractor received a high level of technical input and expertise from IKO. Taking responsibility for the full system build-up, IKO delivered a robust single ply roofing solution from thermal performance right through to the waterproofing layer.

The project was regularly audited by IKO technical engineers, with a detailed report submitted to the client upon each inspection. Despite a number of adjustments that needed to be made to meet the bespoke requirements, a high-quality installation was delivered that exceeded all expectations. Featuring a low energy design, the finished building achieved BREEAM Excellent and B energy rating.









# **IKO IN ACTION**

## **CASE STUDIES**

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### **Residential**

### **APARTMENTS DEVELOPMENT BEARSDEN**

#### **Project description**

This 800m<sup>2</sup> project was for a housebuilder in Bearsden, greater Glasgow, and involved a fully built-up PVC single ply system from IKO, including the IKO Armourplan system and 140mm PIR insulation.

#### **Challenges**

The project had a number of challenges in terms of location and logistics. As the project was next to a railway line, careful planning was needed to ensure smooth and safe operation, including taking measures to minimise the possibility of debris blowing off site and onto the railway line.

#### **Innovative approach**

Throughout the extensive works, the project was closely monitored by IKO Technical Engineers, to ensure the installation was in line with the specification and met the requirements of IKO's single point guarantee.

Safety nets were used to secure lightweight materials, such as the insulation on the roof, to ensure there was no disruption to either the train service or site operations during the project.



Access to the site was also restricted, with vehicles having to navigate a low and narrow bridge. LS Contracts worked with IKO to have materials delivered to a storage location in Bellshill. These materials were then loaded into smaller vehicles and transferred to site. Although this required additional time and effort, it ensured a seamless and timely supply of materials to site and prevented delays or issues in the long-term. The project was completed to a high standard and to the client's satisfaction.

# PROTECTING WHAT MATTERS

As a responsible UK manufacturer of roofing, waterproofing and insulation solutions, we aim to limit the environmental impact of our operations and the lifecycle of our products, from maximising energy efficiency and minimising waste to locally sourcing raw materials and reducing carbon emissions from transportation.

## IKO continues to make significant strides forward

We have committed to a programme of continuous improvements that apply to our ways of working, manufacturing and initiatives to reduce, reuse and recycle materials. For example, we are investing in more sustainable packaging and our waste policy means almost all of our waste is now diverted from landfill. All IKO sites now also run on renewable energy.

Our R&D and product development teams also continue to expand our innovation pipeline of environmentally friendly, sustainably sourced products. We use recycled content across several products, including IKO Hyload Original DPC – a damp proof course system – which is made up of a minimum of 75% recycled content from the manufacture of IKO PVC single ply membranes at our Clay Cross site in Chesterfield.

IKO continues to make significant strides to becoming a more sustainable business, including becoming a Partner of the Supply Chain Sustainability School to build on efforts to increase awareness, educate our people, and share knowledge of sustainable industry practices.

## Meeting our wider Environmental, Social and Governance (ESG) goals

We have introduced a number of initiatives to drive positive change as part of our wider ESG framework, ranging from installing bug hotels and nurturing the talent of the future, to offering mental health support to all IKO people. However, we haven't stopped there – our efforts extend beyond our employees.

Whether it's the people who live in the communities around our manufacturing sites, or those who work, live or learn under our roofing and waterproofing solutions, we aim to protect what matters to them most and create a positive legacy.

[Learn more about our ESG journey](#) 





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