

### **IKO SPECTRAPLAN TPE MEMBRANE** ADVANCED SINGLE PLY ROOFING SOLUTIONS



IKOGROUP.CO.UK

# **CONTENTS**

- We are IKO 03
- Champion of UK manufacturing 04
- 06 **IKO Spectraplan**
- Simple, speedy installation 08
- **IKO Spectraplan SM** 10
- 12 **IKO Spectraplan SG**
- 13 IKO Spectraplan D (Detailing)
- 14 **Advanced reflective roofing**
- 17 A single system provider
- The single ply system packed with advantages 18
- **Protecting what matters** 20

# **WE ARE IKO**

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

This legacy drives our determination to continually invest in our product solutions, manufacturing facilities and dedicated team of experts to ensure excellence at every level.







## **CHAMPION OF UK MANUFACTURING**

The only UK manufacturer of TPE (Thermoplastic Elastomer) membranes, we offer a complete range of advanced roofing and waterproofing systems and complementary components to deliver high-performance, long-lasting flat roof solutions.

IKO Spectraplan membranes are manufactured in our state-of-the-art production facility in Chesterfield. Our strategically located manufacturing plant means we are best placed to provide customers with a reliable, responsible and responsive service and our UK manufacturer status and strong focus on sustainability cements our position as the roofing supply partner of choice.

We are renowned in the industry for being consultative in our approach and trustworthy in our product offering. Our technical expertise allows us to be agile and offer valuable support, from project conception to completion- and beyond.

We offer consistency and comprehensive guarantees. So, you can rest assured that whatever the size or scope of your project, we have it - and you - covered.





### Certification

IKO strives to maintain the highest of standards by complying with and exceeding the requirements of industry-recognised and respected accreditations.



ISO6001 Responsible Sourcing This standard independently certifies that our products are manufactured with responsibly sourced materials, empowering customers to make informed decisions about social and





environmental aspects. ISO9001 Quality Management System

ISO9001 (Quality Management) reassures customers that by choosing IKO as their supplier their products and support services meet the required quality standards.

**ISO14001 Environment Management** ISO14001 (Environment Management) which highlights IKO's commitment to monitoring and striving to improve where possible, its environmental impact through efficient use of resources, manufacturing processes and waste reduction.

ISO45001 Health & Safety Management ISO45001 (Occupational Health) which demonstrates to customers that they can trust they are partnering with a company that cares about, monitors and maintains excellent standards for its staff.

# **IKO SPECTRAPLAN**

### A high-performance solution for today's construction needs

Incorporating IKO's unique TPE formulation, IKO Spectraplan delivers state-of-the-art waterproofing and roofing protection for the modern built environment.

Our innovative extrusion technology allows uniform thickness control, whilst cutting-edge camera detection identifies the imperfections in the membrane and guarantees the highest quality in every roll that we manufacture.

Underpinning IKO's commitment to quality is a dedication to protecting the environment. At the heart of our facility lies a fully-integrated operation to significantly reduce carbon emissions, whilst all production waste is recycled and reused in keeping with our responsible approach to manufacturing.

### IKO Spectraplan sustainability benefits include:

- Free from plasticisers, (H)CFCs, halogens, such as chlorine and bromine, heavy metals and softeners
- ✓ No solvent preparation required
- White in colour to enhance the solar reflectivity and reduce the urban heat island effect
- The only TPE membrane manufactured in the UK delivering lower transport emissions
- Manufacturing facilities are ISO 9001, 14001 & BES 6001 accredited, demonstrating responsible sourcing and operations

### INTERESTED IN BECOMING A TRAINED IKO SPECTRAPLAN INSTALLER?

We offer hands-on training for contractors at our on-site purposebuilt training centre in Chesterfield. On completion of the training, our highly experienced technical team continue to provide ongoing advice and design support. By choosing IKO as your roofing supplier, you gain access to valuable tools and indispensable expertise to meet both your standards and those of your clients.





# SIMPLE, SPEEDY INSTALLATION

The unique properties of IKO Spectraplan ensure high-quality installations with minimal cleaning and preparation of laps before welding, Its high polymer content enables welding without the need for harsh cleaners.

With approximately 65% polymer content, IKO Spectraplan TPE membranes are compatible with bitumen.

The homogeneous compounds provide excellent tensile strength and elasticity and the membrane is highly resistant to aging and wind uplift. A wide welding window of 200°C to 600°C ensures more reliable overlaps.

IKO Spectraplan roof systems have been classified to achieve Broof(t4) in accordance with EN 13501-5 to enable compliance with Part B of the Building Regulations. It is backed by a full range of compatible accessories, providing comprehensive solutions for various roofing needs. We offer robust guarantees, affirming their quality and reliability.





**Product overview** 

**IKO SPECTRAPLAN SM** Polyester reinforced membrane for mechanically fixed systems.

**IKO SPECTRAPLAN SG** Fleece backed membrane for adhered applications.

**IKO SPECTRAPLAN D** Homogenous membrane for use on complex detailing.



# **IKO SPECTRAPLAN SM**

IKO Spectraplan SM is a polyester scrim reinforced TPE membrane for mechanically fastened roofing systems on both flat and pitched roofs. The roof system can be installed over most substructures, including profiled steel and timber, and it is suitable for both new build and refurbishment installations. The membrane is mechanically fastened in the overlap using IKOfix thermally broken washers and IKOfix fixings into the deck and overlaps are hot air welded.

The same polymer compound is used on both upper and lower sides, and fully encapsulates the polyester reinforcement, ensuring optimum weld quality and excellent mechanical properties.

IKO Spectraplan SM can also be used for ballasted and green roof systems, and available in standard 1.2mm thickness.



### IKO Spectraplan SM typical build ups

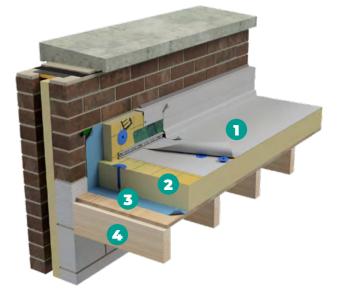
#### Mechanically fastened roofing system

- 1 IKO Spectraplan membrane mechanically fixed
- 2 IKO enertherm GOLD insulation
- 3 Vapour control layer
- Structural deck

### Ballasted roofing system

- Ballast and/or concrete loading coat
- 2 Paving support pads
- 3 IKO Spectraplan membrane mechanically fixed
- IKO enertherm GOLD insulation
- **5** Vapour control layer
- 6 Structural deck







# **IKO SPECTRAPLAN SG**

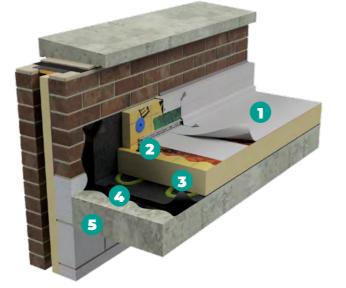
IKO Spectraplan SG is a glass tissue reinforced, polyester fleece-backed TPE single ply roofing membrane, designed for versatile use across both flat and pitched roofs. The membrane forms a sleek and durable skin on various roof types and can be adhered to most common substrates using Spectrabond Low Foaming PU adhesive or IKOpro Sprayfast FMA adhesive.

It is ideal for new build and refurbishment projects. Available in 1.2mm thickness, as standard.

### IKO Spectraplan SG typical build up

#### Adhered roofing system

- **1** Fleece backed IKO Spectraplan membrane
- 2 IKOpro PU Adhesive
- 3 IKO enertherm GOLD insulation
- Vapour control layer
- Structural deck



## IKO SPECTRAPLAN D (DETAILING)

IKO Spectraplan D is a homogeneous detailing membrane designed for complex roofing details. Produced by laminating two identical layers of TPE together, it boasts excellent flexibility and mechanical properties. It can be used in conjunction with IKO Spectraplan SM and IKO Spectraplan SG roofing membranes.

Available in standard 1.5mm thickness, IKO Spectraplan D offers excellent UV resistance and durability, ensuring superior product performance. Its exceptional flexibility makes it ideal for intricate detailing and secure seam welding.



For further guidance, please contact IKO's Technical Services team on 01257 255771 or technical.cc@iko.com





### ADVANCED REFLECTIVE ROOFING FOR COOLER, MORE SUSTAINABLE BUILDINGS

IKO Spectraplan is a white-coloured roofing solution designed with a reflective pigment that effectively reflects sunlight and reduces heat retention. A white roof can stay up to 30°C cooler than a grey roof by reflecting 80% of sunlight compared to only 20%<sup>1</sup>.

Due to its highly-reflective properties, IKO Spectraplan has achieved 91 on the Solar Reflectance Index (SRI). SRI is the measure of solar reflectance and thermal emissivity and determines a material's ability to reflect solar heat, with scores ranging from 0-100<sup>2</sup>.

Using materials with higher SRI values offers several benefits, including cooler indoor temperatures and improved occupant comfort, lower cooling energy demands and emissions, a decrease in the urban heat island effect and extended roof lifespan through reduced heat-related wear<sup>3</sup>.



1 https://heatisland.lbl.gov/coolscience/cool-roofs#Note3

2 https://cleanenergybusinesscouncil.com/solar-energy-glossary/solar-reflectance-index-sri/

3 James, Patrick and Manfren, Massimiliano (2021) Future (p)roof: building resilience of the UK's roofs for a changing climate. In, Building resilience of roofing technologies in a changing climate. Southampton. University of Southampton. (doi:10.5258/SOTON/P1079)





## 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.

### **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. The high-performing and lightweight material is dimensionally stable, rot resistant and thermally efficient

### **IKOfix thermally efficient mechanical attachments**

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

### **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.

### 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.

### Vapour control layer

Designed to protect the membrane from condensation by preventing the passage of inbound airborne moisture.

Other system ancillary products include bespoke gutter lining systems, standing seam profiles and lightning conductor clips.

For more information on the membranes, including their benefits, or for a full range of ancillary products, visit the IKO website: ikogroup.co.uk or contact IKO's Technical Services team on 01257 255771 or technical.cc@iko.com



### THE SINGLE PLY **SYSTEM PACKED** WITH ADVANTAGES

IKO Spectraplan is more than just a single ply system. It exceeds the expectations of both installers and building owners, while also meeting the broader objectives of the construction industry.

### Why choose IKO Spectraplan?

### Minimal environmental impact

IKO Spectraplan's TPE formulation is free from potentially harmful chemical compounds, including, halogens and heavy metals.

### Transparent and short supply chain

As IKO Spectraplan is manufactured in the UK, the emissions of transportation to site are significantly lower than imported roof membranes.

### Safe and secure

IKO Spectraplan is designed to resist even the most extreme natural elements, withstanding all weather conditions.

### Low maintenance

A mild soap solution applied with a soft broom, rubber wiper or pressure washer is all that is required to maintain IKO Spectraplan, as the membrane does not absorb moisture and has a low level of dirt pick-up.

### Peace of mind

The IKO Spectraplan system can only be installed by trained operatives and it comes with guarantees up to 25 years, alongside a BBA life expectancy of 30 years. IKO monitors each installation that carry a single point inspection on completion, to ensure IKO's high standards are being met and that the finished system satisfies the requirements of the guarantee.

### Experts in roofing

IKO is not simply a supplier but a partner. We can provide detailed and bespoke specification advice, technical drawings, wind uplift and thermal calculations, site visits and post-project support, such as maintenance and surveys - a comprehensive service that is all free of charge.



**DID YOU KNOW THAT IKO....** also supplies IKO Spectraplan SM and SG in rolls?

As well as coming in standard lengths, IKO offers an option to purchase rolls between 200m<sup>2</sup> – 1,000m<sup>2</sup>, depending on requirements.

Buying on the roll can offer businesses a number of benefits, including cost savings, lower wastage and zero packaging.





### 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 four of IKO's sites now operate on renewable energy.

Our R&D and product development teams 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 primarily made up of recycled content from the manufacture of IKO 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.

### **Building a lasting legacy**

As a leader in our industry, we acknowledge our responsibility to not only mitigate our environmental footprint but to be a force for positive change in the face of the ensuing climate crisis.

We are steadfast in our efforts to decrease carbon emissions and improve efficiency throughout our operations to better manage climate-related risks. In line with the Paris Agreement, we have established ambitious science-based targets (SBTs) to achieve net zero with a 90% reduction in Scope 1, 2 and 3 carbon emissions by 2050. We have also pledged to achieve a 42% reduction in Scope 1 and 2 by 2030 from our 2022 baseline.

As we continue our transition to a low-carbon economy, we intend to invest further funds and resources into research and partnerships that enhance our adaptive capacity and resilience against climate impacts, ensuring long-term sustainability for our company, our customers and our communities.







**IKO PLC** Coney Green Road Clay Cross Chesterfield S45 9HZ

t: 01257 255771 e: getintouch.uk@iko.com Member of the IKO Group



**IKO Ireland** Unit 502

Northwest Business Park Dublin Ireland D15 CP3V

t: +353 1 88 55 090 e: waterproofing@iko.ie www.iko.ie

#### **IKO Northern Ireland**

2-4 Old Church Road Newtownabbey Co. Antrim BT36 7LU Northern Ireland

t: +44 2890 867079 e: waterproofing@iko-ni.com www.iko-ni.com

Whilst every care is taken to see that the information given in this literature is correct and up to date it is not intended to form part of any contract or give rise to any collateral liability, which is hereby specifically excluded. Intending purchasers of our materials should therefore verify with the company whether any changes in our specification or application details or otherwise have taken place since this literature was issued.

#### **IKOGROUP.CO.UK**