IKO ARMOURPLAN iE

PRODUCT INFORMATION

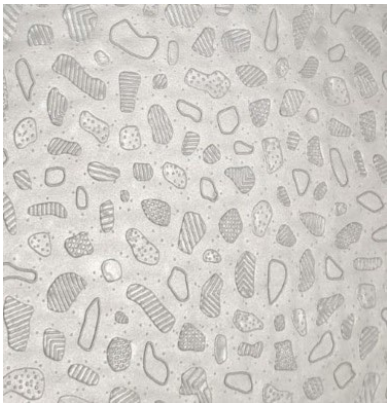
IKO Armourplan iE is a polyester scrim reinforced embossed membrane for mechanically fastened roofing systems on both flat and sloping roofs and is suitable for both new build and refurbishment installations.

The membrane is mechanically fastened using isoweld 3000 system plates, thermally broken tubes and fixings into the deck. Overlaps are securely hot air welded.

FEATURES & BENEFITS

- Good UV resistance and durability
- Good mechanical properties and product performance
- Efficient and safe installation
- Secure seam welding quality
- Aesthetically pleasing finish
- Complete range of fixings and accessories available

Description	IKO Armourplan iE
Thickness	1.2mm
Width	1.50m
Length	20m
Colour	Mid Grey (nearest RAL 7046)
Material	PVC-P
Reinforcement	Woven Polyester Scrim
Product Code	E2015012



INDEPENDENT ACCREDITATION

- CE marked
- Manufactured in accordance with:
  BS EN ISO 14001, ISO 9001 and BES 6001

SPECIFICATION

To complete the installation of IKO Armourplan iE, the system includes a wide range of accessories, including detailing and walkway membrane, cover strips, preformed corners and outlets, standing seam profile, pre- coated metal sheet for forming edge details, IKOfix fastening systems and termination bars, insulation and vapour control layers, adhesives, cleaners, sealants and rooflights.

MECHANICALLY FASTENED APPLICATION

Mechanical fixing with field fastening system
Mechanical fixing of a flat roof with non-penetrating field fastening system.

The roof build up shall be mechanically fastened into the substrate in a regular pattern as denoted by the wind load calculations, using specially coated metal stress plates and suitable fasteners. Fastener installation shall use approved SFS tooling to ensure correct application.

After rolling out IKO Armourplan iE it will be welded to each of the metal plates and loaded by magnet hereafter.

Welding is to be undertaken with an isoweld® 3000 induction machine with search, control and calibration function which can be used in an upright working position.

A separate FI-H hand induction welding tool shall also be required for attachment to upstand and difficult to access corner areas.

The system components shall be tested in accordance with EAD 030351-00-0402.

The number and dimensioning of the fastening elements shall follow the manufacturer's instructions.

All contractors should be approved by SFS Group Fastening Technology Limited and operatives are required to undertake the required onsite training schedule.

Insulation attachment:
Product Reference: Isoweld system fasteners combined with thermally broken sleeves

Membrane attachment:
Product Reference: FI-P-16,0-PVC coated metal stress plate combined with fastener sleeve and fastener.

Setting out:.
As required by the isoweld® 3000 induction membrane system.

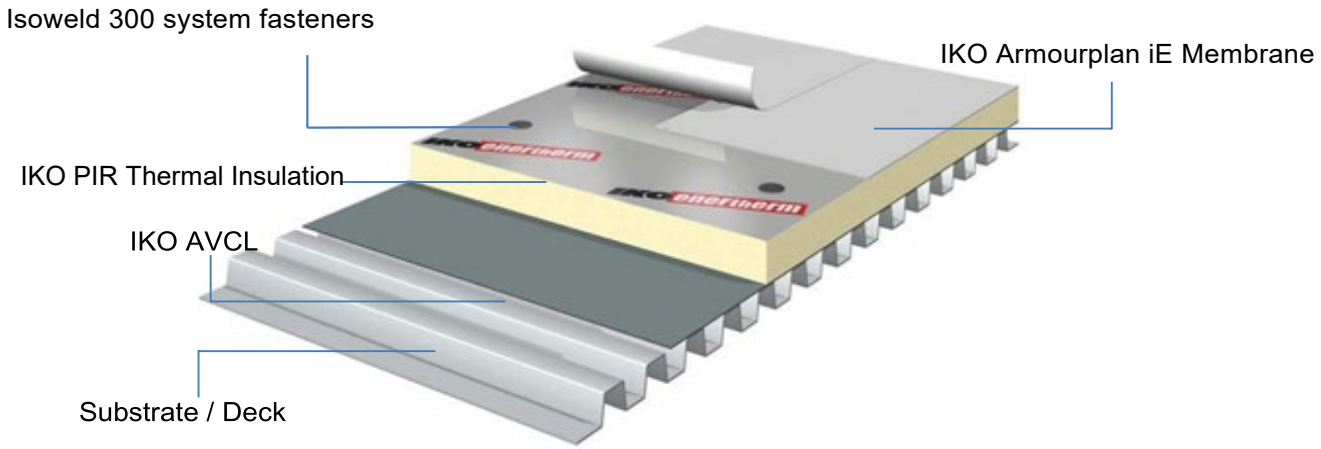
Installing fasteners:
Use manufacturer's / supplier's recommended methods and equipment.
Use SFS tooling for accurate and correct application
Insertion: Correct and consistent.
Fasteners installed in field fix pattern as per the manufacturer's instructions for corner, perimeter and field zones

Laying of membrane:
Loose lay, do not wrinkle or stretch

Sheet overlaps:
As per the manufacturer's instructions.

Welding of plates to membrane:
Welding is to be undertaken with an isoweld® 3000 induction welding machine for the main roof area and the FI-H hand induction welder for perimeter and difficult to access corner areas.

Surface condition at completion:
Fully sealed, smooth, weatherproof and free draining.



TYPICAL PROPERTIES

Characteristic properties	Unit	Method	IKO Armourplan iE
Thickness +10%/- 5%	mm	EN 1849-2	1.20
Length +1%/- 0.5%	m	EN 1848-2	20.00
Width +1%/- 0.5%	m	EN 1848-2	1.5
Weight +10%/- 5%	g/m²	EN 1849-2	1600
Tensile strength (MD/TD)	N/50 mm	EN 12311-2	≥1000
Elongation at break	%	EN 12311-2	≥15
Tear resistance	N	EN 12310-2	≥ 150
Peel strength of joints	N/50 mm	EN 12316-2	≥ 200
Shear strength of joints	N	EN 12317-2	≥ 1000
Hail resistance	m/s	EN 13583	≥ 30
Nail Tear	N	EN 12310-1	≥ 150
Impact Resistance	mm	EN 12691	≥ 1100 Soft ≥ 450 Hard
Static Load	Kg	EN 12730	≥ 20
Dimensional stability 6 hrs at 80°C	%	EN 1107-2	≤ 2
Flexibility at low temperatures	°C	EN 495-5	≤ -30
External exposure to fire		EN 13501	T1 – NPD T2 – Pass T3 – NPD T4 – Pass
Water tightness		EN 1928 method B	Pass
Root Resistance			NPD
Minimum Overlap (Adhered/Ballasted)	mm		N/A
Minimum Overlap (Mechanically Fastened)	mm		80
Minimum welding width (Automatic)	mm		>30
Minimum welding width (Hand Welder)	mm		>60
Welding temperature	°C		385 - 450
Recommended welding speed (Automatic Welder)	m/min		1.8
EC Declaration of conformity with standard			CE Marked

FURTHER PRODUCT INFORMATION

Full product literature, health & safety and technical sheets are available as downloads from our website www.ikogroup.co.uk or on request by email polymeric.marketing@iko.com.