



CERTIFICATE NO: CM70094

Date of issue: 14 May 2021

# PRODUCT CERTIFICATE

## IKO Armourplan PVC Membrane System



### KEY INFORMATION

#### 1 CERTIFICATE HOLDER DETAILS

##### Asphaltech Waterproofing Products Ltd

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New Zealand

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#### 2 PRODUCT CERTIFICATION BODY

##### Bureau Veritas Australia Pty Ltd

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Australia

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##### Bureau Veritas Australia Pty Ltd

The complaints process for this certificate  
can be found here:  
[www.bureauveritas.com.au/your-feedback](http://www.bureauveritas.com.au/your-feedback)

#### 3 SUMMARY OF DESCRIPTION OF BUILDING METHOD OR PRODUCT

The IKO Armourplan PVC Membrane System is a range of polyester-reinforced single-ply polyvinyl chloride (PVC) membranes:

- Armourplan® SG - A polyester fleece-backed membrane for bonded roofing systems.
- Armourplan® PSG - Glass tissue reinforced polyester fleece-backed PVC membrane suitable for both flat and sloping roofs.
- Armourplan® SM - A polyester reinforced membrane for mechanically fastened roofing systems.
- Armourplan® P - A heavy duty polyester reinforced membrane for use in a wide range of roofing applications on both flat and sloping roofs. This membrane can be mechanically fixed, adhered or ballasted.

The IKO Armourplan PVC Membrane System may also incorporate thermal insulation:

- IKO enertherm MG — polyisocyanurate board with mineral glass tissue facings on both sides
- IKO enertherm ALU — polyisocyanurate board coated on both sides with a multi-layer gastight aluminium complex
- IKO enertherm GOLD - 100 % CFC, HCFC or HFC-free insulation board with a rigid polyisocyanurate foam core, clad on both sides with a multi-layer gastight aluminium complex.

*Continuation of description can be found in item 9. Supporting Information about Description of Building Product or Method.*

*Matters that should be taken into account in the use or application of the building method or product can be found in item 6. Conditions and Limitations of Use.*

#### 4 SUMMARY OF INTENDED USE OF BUILDING METHOD OR PRODUCT

The IKO Armourplan PVC Membrane System is a roof and deck waterproofing membrane, and with insulation, contributes to the thermal resistance of the building envelope. It can be applied to warm, cold or inverted roofs.

*Continuation of intended use can be found in item 10. Supporting Information about Intended use of Building Product or Method.*

#### 5 BUILDING CODE PROVISIONS

*The performance clauses of the New Zealand Building Code that are relevant to the intended use and with which the building method or product complies or contributes to (where used as part of a system).*

**B1 Structure:** B1.3.1, B1.3.2, B1.3.3 (b), (h), (q), B1.3.4

**B2 Durability:** B2.3.1 (a), (when concealed\*) or B2.3.1 (b) (not concealed), B2.3.2 (when concealed)

**E2 External Moisture:** E2.3.1 (contributes to), E2.3.2, E2.3.7

**F2 Hazardous Building Materials:** F2.3.1

**H1 Energy Efficiency:** H1.3.1 (contributes to)

\* Concealed means when used as a substrate, or incorporated in a ballasted, or inverted insulated roof and when protected from UV light.

*How the building method or product complies or contributes can be found in item 12. Basis for Certification. Any qualifications on the extent of that compliance can be found in item 6. Conditions and Limitations of use.*



This certificate is issued by an independent certification body accredited by JAS-ANZ, the product certification accreditation body appointed by the Chief Executive of the Ministry of Business, Innovation and Employment under the Building Act 2004. The Ministry does not in any way warrant, guarantee, or represent that the building method or product that is the subject of this certificate conforms with the New Zealand Building Code, nor accept any liability arising out of the use of the building method or product. The Ministry disclaims to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages, and costs arising as a result of the use of the building method(s) or product(s) referred to in this certificate.

This certificate may only be reproduced in its entirety. It is advised to check that this certificate is currently valid and not withdrawn or suspended by referring to the Register of Product Certificates on the Building Performance website <http://www.building.govt.nz>.  
CERTIFICATE V1.3

# PRODUCT CERTIFICATE

## IKO Armourplan PVC Membrane System

### 6 CONDITIONS AND LIMITATIONS OF USE

1. The IKO Armourplan PVC Membrane System is certified for use on buildings:
  - a) situated:
    - i) in Wind Zones, up to, and including Extra High (as defined in NZS 3604:2011), and within the scope limitations of NZBC Acceptable Solution E2/AS1 para 1.1 with regards to building height, or
    - ii) in wind pressures up to a maximum design differential ultimate limit state (ULS) of 9 kPa for fully bonded membranes or a ULS wind pressure determined by specific design for mechanically fastened membranes, and
  - b) where the roof or deck pitch is pitched or nominally flat (1:80) and
  - c) where the sub-structure is:
    - i) timber designed in accordance with NZS3604:2011 as a light roof, or
    - ii) concrete or other specifically designed sub-structure designed in accordance with verification method B1/VM1 (Amendment 15) using the structural design actions in AS/NZS1170:2002, and
  - d) where the substrate for the membrane is:
    - i) timber - plywood (CCA H3.2 treated) or OSB, or
    - ii) Concrete (cast in-situ or pre-cast), or
    - iii) Metal - aluminium or galvanised steel (including composite cold store roofing panels), and
  - e) where the membrane is subject to pedestrian traffic other than for installation and general maintenance either Armourplan Walkway shall be used or additional protection provided to the membrane.
2. The IKO Armourplan PVC Membrane System shall:
  - a) be designed and installed in accordance with the IKO Systems Guidelines V9, May 2017, and A Specifier's Design Guide to Polymeric Single Ply Roofing, IKO0715, July 2015, and
  - b) be installed by Asphaltech Waterproofing Products Ltd approved applicators (contact certificate holder for list of approved applicators).
3. This certification does not include:
  - a) the design and construction of the substrate and movement / control joints, or
  - b) the weather tightness design of all junctions on specifically designed buildings, or
  - c) applications where ancillary components other than those provided by Asphaltech Waterproofing Products Ltd listed in the Technical Literature are substituted with alternative products, except as provided for in Condition #4 below.
4. This certification allows for the substitution by an alternative woodwool slab, PIR insulation board or mineral wool insulating product subject to it complying with Building Code clauses B2 Durability B2.3.1(a) and F2 Hazardous Building Materials F2.3.1 which is supported by evidence such as a Product Certificate (CodeMark), Appraisal issued by a competent organisation or a product technical statement reviewed by a competent person.

NOTE: Together, items 3, 4, 5 and 6 define scope of use.

### 7 HEALTH AND SAFETY INFORMATION

The compliance with any manufacturer's installation instructions, maintenance, OH & S statements, MSDS's and other Health and Safety declarations will provide the necessary Health and Safety Information pertaining to the product.

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### SIGNATURES



Sam Guindi  
Product Certification Manager

For and on behalf of  
Bureau Veritas Australia Pty Ltd



George Griffiths  
Director

For and on behalf of  
Asphaltech Waterproofing Products Ltd

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## IKO Armourplan PVC Membrane System

### SCHEDULE: INFORMATION THAT SUPPORTS KEY INFORMATION

#### 9 SUPPORTING INFORMATION ABOUT DESCRIPTION

- Armourplan® SG is available in either 1.2mm or 1.5mm standard thicknesses.
  - Armourplan® PSG is available in 1.2mm standard thickness.
  - Armourplan® SM is available in either 1.2mm or 1.5mm standard thicknesses.
  - Armourplan® P — can be mechanically fixed, adhered or ballasted. It is available in 1.2mm standard thickness.
- The range of membranes is available in 2 standard colours; mid grey (RAL 7046) and slate grey (RAL7015). Other colours available by special request.

Components of the system include:

- IKO enertherm MG — polyisocyanurate board with mineral glass tissue facings on both sides
- IKO enertherm ALU — polyisocyanurate board coated on both sides with a multi-layer gastight aluminium complex
- IKO enertherm GOLD - 100 % CFC, HCFC or HFC-free insulation board with a rigid polyisocyanurate foam core, clad on both sides with a multi-layer gastight aluminium complex.
- Spectrabond Low Foaming PU Adhesive - for bonding the membrane to the substrate
- IKOpro Sprayfast FMA Adhesive - for bonding the membrane to the substrate
- Armourplan PVC Contact Adhesive — ready-to-use contact adhesive for adhering PVC roofing membranes onto various substrates
- IKOfix Fixing Range — mechanical fixings and pressure plates for attachment of membranes and insulation boards
- IKOfix Toothed Flatbar — steel fixing strips for membrane anchorage on mechanically fastened, inverted and ballasted systems
- Armourplan Membrane Coated Metal — 0.6 mm galvanized steel sheet, coated with 0.6 mm of Armourplan PVC Membrane, for use in detailing
- IKO Systems Torch-On Underlay — a torch-on air and vapour control layer suitable for metal decks
- IKO Systems S-A Underlay — a self-adhesive air and vapour control layer
- Polimar UV Detailing Liquid — a liquid-applied system for complex detailing
- Armourplan Detailing Membrane — homogeneous or glass tissue reinforced PVC membrane for complex detailing
- Armourplan Walkway — PVC membrane with a slip-resisting surface for use in areas of increased pedestrian traffic, such as for maintenance of plant
- Armourplan Cover Strips — glass tissue and polyester scrim reinforced membrane cover strips for jointing coated metals and detailing
- Armourplan Pre-formed Corners — pre-formed internal and external corners
- Armourplan Outlet Pipes
- Armourplan Seam Cleaner — preparation solvent for cleaning PVC roofing membranes as required (eg prior to welding)
- Armourplan PVC Standing Seam Profile — pre-formed PVC profile used to simulate a metal standing seam roof
- Armourplan Drip Details — prefabricated drip details
- Armourplan Chase Termination Details — prefabricated chase termination details
- Membrane Pipe and Post Details — prefabricated bespoke details formed using Armourplan Detailing Membrane
- Armourprep — acetone-based preparation solution for PVC roofing membranes with heavy moisture contamination
- IKOpro High Performance PU Adhesive — for bonding PIR insulation boards to the substrate
- IKOfix Aluminium Clamping Strips — aluminium clamping strips for upstand termination
- IKO Glass Universal Underlay — torch-on air and vapour control layer suitable for use on concrete decks

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- IKO Systems T-O VCL — torch-applied, metal-lined vapour barrier
- IKO Systems S-A VCL — self-adhesive, metal-lined vapour barrier
- Challenger Polyester 180 Sand VCL — suitable for pour-and-roll application
- Spectravap — a polyethylene air and vapour control layer
- IKOpro Systems Bonding Agent — a self-adhesive air and vapour control layer primer
- IKOpro Quick Dry Bitumen Primer — bituminous primer for torch-on and pour-and-roll air and vapour control layer applications
- Armourplan PVC Sealant — for sealing detail terminations
- Spectratex Separation Layer — polyester separation and protection layer

### 10 SUPPORTING INFORMATION ABOUT INTENDED USE

Further details regarding the use of the product can be found in A Specifier's Design Guide to Polymeric Single Ply Roofing, IKO0715, July 2015, and System Installation Guidelines – IKO Armourplan PVC & IKO Polymeric, Issue 4, June 2017.

### 11 SUPPORTING INFORMATION ABOUT CONDITIONS AND LIMITATIONS OF USE

N/A

### 12 BASIS FOR CERTIFICATION

B1 Structure – By analysis and comparison with the requirements of the performance requirements of Building Code performance clauses for B1 using EN Standard 13956:2012 Flexible Sheets for waterproofing – plastic and rubber sheets for roof waterproofing – Definitions and characteristics  
 B2 Durability – By analysis and comparison with Verification Method B2/VM1 using EN 13956:2012  
 E2 External Moisture – By analysis and comparison with the requirements of the relevant performance requirements of Building Code performance clauses for E2 using EN 13956:2012.  
 F2 Hazardous material – By comparison with the performance requirements of Building Code clause F2.3.1.  
 H1 Energy efficiency By analysis and comparison with Acceptable Solution H1/AS1 using EN 13956:2012



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### SUPPORTING DOCUMENTATION FOR CERTIFICATION

1. Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B1 Structure 1st Edition (Amendment 19), 28 November 2019
2. Acceptable Solutions and Verification Methods For New Zealand Building Code Clause B2 Durability (Amendment 12), 28 November 2019
3. Acceptable Solutions and Verification Methods For New Zealand Building Code Clause E2 External moisture 3rd edition (Amendment 10), 5 November 2020
4. Acceptable Solutions and Verification Methods For New Zealand Building Code Clause H1 Energy Efficiency (Amendment 4), 28 November 2019
5. BS EN 13956:2012 Flexible sheets for waterproofing. Plastic and rubber sheets for roof waterproofing. Definitions and characteristics, 12 January 2013
6. BBA Agrément Certificate 05/4287 Product Sheet 1 Armourplan SM Roof Waterproofing System, 2 April 2020
7. BBA Agrément Certificate 05/4287 Product Sheet 2 Armourplan SG Roof Waterproofing System, 4 April 2020
8. BBA Agrément Certificate 05/4287 Product Sheet 3 Armourplan P Roof Waterproofing System, 2 April 2020
9. BBA Agrément Certificate 05/4287 Product Sheet 4 Armourplan PSG Roof Waterproofing System, 2 April 2020
10. BBA Agrément Certificate 15/5283 Product Sheet 3 IKO enertherm ALU and enertherm GOLD Insulation Boards for Flat Roofs, 28 April 2020
11. Constructech - Resistance to dynamical wind loads according to EN 16002:2018, Test Report 20190815-239-4
12. BRE Report - Dynamic wind uplift testing on single ply roofing systems for Apollo Roofing Solutions, Report No. 291-598, 21 January 2014
13. Kiwa - IKO Armourplan SM / Eurofast TLKS/B-45-100 / IKO Enertherm ALU / trapezoidal steel deck, Report No. 0114-L-17/1, 19 May 2017MSDS Spectrabond Low Foaming PU Adhesive, 1 June 2015
14. MSDS IKOpro Sprayfast FMA Adhesive, 1 June 2015
15. IKOpro Sprayfast FMA - Fast-Track Adhesive for Fleece-Backed Roofing Membranes, October 2017
16. IKOpro Sprayfast IBA - Fast-Track, Professional Insulation Bonding Adhesive, October 2017
17. IKOpro Sprayfast PCA - Fast-Track, Multipurpose Adhesive for PVC Roofing Membranes, November 2017
18. A Specifier's Design Guide to Polymeric Single Ply Roofing, IKO0715, July 2015
19. System Installation Guidelines – IKO Armourplan PVC & IKO Polymeric, Issue 4, June 2017

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### 14 CONDITIONS RELATING TO NOTIFICATION

- (a) the certificate holder notifies the product certification body (Bureau Veritas) in writing of any intended change to any of the following particulars:
- (i) the name, address, or contact details of the certificate holder;
  - (ii) any address of a location where a certified product is produced or manufactured;
- (b) the certificate holder notifies the product certification body (Bureau Veritas) in writing of any intended change, modification, or alteration to any of the following:
- (i) the certified building method or product;
  - (ii) the method of its production or manufacture;
  - (iii) the product quality plan prepared in respect of the certified building method or product;
  - (iv) the application or installation instructions for the certified building method or product;
  - (v) any documentation relating to the use and maintenance of the certified building method or product;
- (c) if the certificate holder has any reason to suspect that the certified building method or product does not comply with the Building Code, the certificate holder notifies the product certification body (Bureau Veritas) in writing of the reason for that suspicion:
- (d) if the certificate holder or the product certification body (Bureau Veritas) finds that a certified building method or product that has been released on the market does not comply with the Building Code, the certificate holder discloses that fact in disclosure statements published in a form that is acceptable to the product certification body and to the chief executive:
- (e) if the certificate is suspended or revoked, the certificate holder—
- (i) notifies all customers to whom the building method or product is regularly supplied; and
  - (ii) immediately ceases using the certificate, the mark of conformity, and any reference to the number of the certificate.