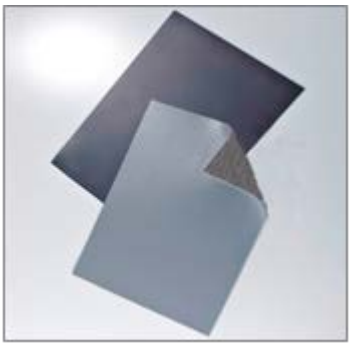
Excellence in Polymer Technology

**Technical Datasheet**
**April 2017**

# Armourplan SG

## Product Details

| | |
|---|---|
| **Description** | Fleece-Backed Membrane |
| **Thickness** | 1.2mm |
| **Width** | 2.12m |
| **Length** | 20m |
| **Colour** | Mid Grey (nearest RAL 7046)<br>Slate Grey (nearest RAL 7015) |
| **Material** | PVC-P |
| **Reinforcement** | Glass tissue |
| **Fleece Backing** | 120gsm non-woven polyester |
| **Product Code** | 84021212 – Mid Grey 1.2mm<br>46121212 – Slate Grey 1.2mm |



## Introduction

- A glass tissue reinforced polyester fleece-backed PVC single ply roofing membrane.
- Used in a wide range of roofing applications on both flat and sloping roofs.
- Suitable for both new build and refurbishment installations, including specialist applications such as simulated metal roofs.
- Can be adhered onto most common substrates using Spectrabond Low Foaming PU adhesive or IKOpro Sprayfast FMA adhesive.
- Forms a sleek finish.

## Features & Benefits

- **BBA Certified 05/4287**
- **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**

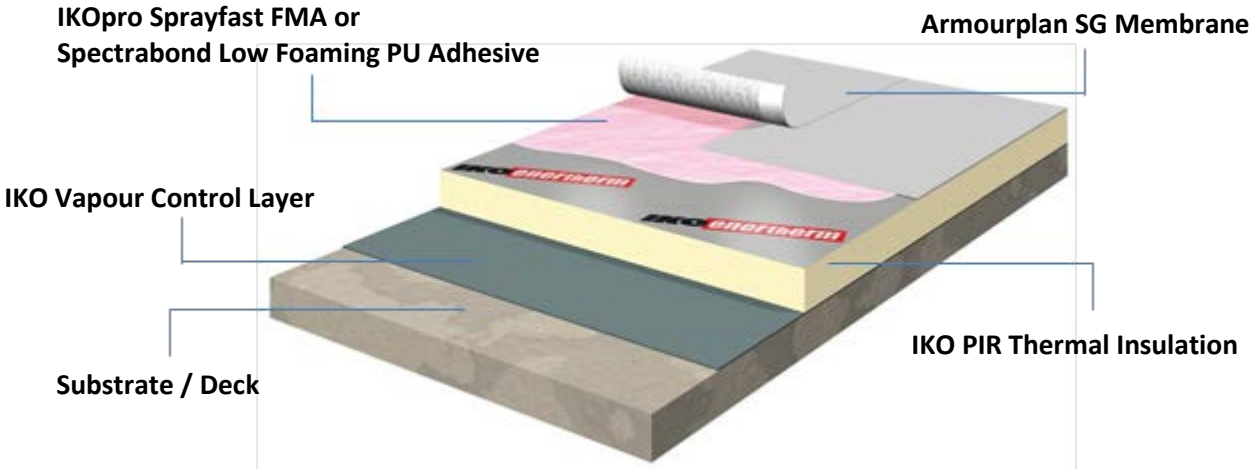
## System Components

To complete the installation of Armourplan SG, 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.

## Certification

- BBA Agrément Certificate No. 05/4287
- CE Marked
- Euro Agrément Procedure
- UBAtc ATG (No. 12/2877)
- SGS / CTG (No. 629)
- Manufactured in accordance with BS EN ISO 14001, ISO 9001 & BES 6001

## Application




1. Before use thoroughly stir the Spectrabond Low Foaming PU Adhesive. Replace the container lid when work is interrupted. If required warm the Spectrabond PU Adhesive container in warm water.
2. Unroll the Armourplan SG over the prepared substrate and fold back approximately half its length.
3. Apply a coat of Spectrabond Low Foaming PU adhesive using a roller or apply Sprayfast FMA adhesive to the substrate surface, priming only the area of roof where the membrane will be laid. *Note: The PU adhesive must be given time to activate prior to applying the membrane. On activation i.e. the point at which the adhesive will afford the highest bond strength, the surface of the adhesive starts to change from pink/red to opaque.*
4. Carefully roll the Armourplan SG into the primed surface.
5. Fold back other half of the roll of Armourplan SG and repeat the procedure.
6. Roll with water filled roller or soft bristled broom to ensure intimate contact between the two surfaces.
7. Unroll the next roll of Armourplan SG, ensuring the end laps are staggered and the side overlaps the previously installed sheet by 60mm.
8. Repeat the adhering process.
9. Fully hot air weld the 60mm side lap and allow to cool completely.

10. Mechanically check the integrity of the cooled weld by running a seam probe or 4mm wide screwdriver (with rounded edges) along the seam applying pressure into the seam.

## Typical Properties

| Characteristic properties | Unit | Method | SG120 | SG150 |
|---|---|---|---|---|
| Thickness +10%/- 5% | mm | EN 1849-2 | 1.20 | 1.50 |
| Length +1%/- 0.5% | m | EN 1848-2 | 20.00 | |
| Width +1%/- 0.5% | m | EN 1848-2 | 2.12 | |
| Weight +10%/- 5% | g/m² | EN 1849-2 | 1650 | 2100 |
| Tensile strength (MD/TD) | N/50 mm | EN 12311-2 | ≥ 650 | |
| Elongation at break | % | EN 12311-2 | ≥ 80 | |
| 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 | ≥650 | |
| Hail resistance | m/s | EN 13583 | ≥ 30 | |
| Nail Tear | N | EN 12310-1 | ≥ 150 | |
| Impact Resistance | mm | EN 12691 | ≥1100 Soft<br>≥ 450 Hard | |
| Static Load | Kg | EN 12730 | ≥ 20 | |
| Dimensional stability 6 hrs at 80°C | % | EN 1107-2 | ≤ 0.5 | |
| Flexibility at low temperatures | °C | EN 495-5 | ≤ -30 | |
| External exposure to fire | | BS EN 476-3 | Ext F.AB | |
| | | EN 13501 | T1 – NPD<br>T2 – NPD<br>T3 – NPD<br>T4 – Pass | |
| Water tightness | | EN 1928 method B | Pass | |
| Root Resistance | | | NPD | |

| | | | |
|---|---|---|---|
| Minimum Overlap | mm | | 60 |
| 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.ikopolymeric.com** or on request by email **polymeric.marketing@iko.com.**



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