

# CP680

## POWERply AIR & VAPOUR CONTROL LAYER - SA



### KEY BENEFITS SUMMARY

- Flame free, self-adhesive application
- Excellent low temperature flexibility at -25°C
- Aluminium reinforced
- SBS modified bitumen
- Reliable, environmentally friendly material
- Integrated 'Safe-Seal' laps to enable homogenous, efficient sealing of side laps
- Tested as part of a system to achieve Broof Test 4 fire classification as certified by Warrington fire

### PRODUCT INFORMATION

#### Description

CP680 is a cold-applied, self-adhesive bituminous vapour control layer which is saturated and coated with high quality SBS (Styrene-Butadiene-Styrene) modified bitumen. It has a glass fibre and aluminium composite reinforcement, separating foil on the underside and is finished on the top side with quartz sand. In addition, the product features integrated 'safe-seal' lap technology, facilitating secure, safe and efficient sealing of side-laps.

#### Usage / Purpose

CP680 is designed for use as a high performance vapour barrier, and is ideal for use within cold-applied roofing systems. It is typically used within CPG's self-adhesive or torch-safe specifications and can be applied to a wide range of substrates, including plywood, metal and concrete decks, subject to use of a suitable primer as required.

#### Colour

Dark Grey

#### Packaging

1.08 m x 10.0 m x 2.5 mm roll

#### Availability

Direct from Tremco CPG UK Limited (see bottom of leaflet for address and telephone details).

#### Application

- CP680 should be installed in accordance with manufacturer recommendations and all relevant national standards and codes of practice, including BS 8217: 2005 – the code of practice for reinforced bitumen membranes for roofing.
- Roofing contractors should also be fully conversant with the guidelines set out in the National Federation of Roofing Contractors (NFRC) 'Safe2Torch' campaign.
- If hot air guns are used during application, operatives should be competent, conversant and capable of using such items in a safe and responsible manner. Care must also be

taken when using hot air guns in close proximity to combustible materials, decorative coatings and heat sensitive materials.

#### Preparation

- In order to install CP680 correctly, ensure that the surface is dry, free of oil, fat, dust and other impurities.
- All substrates and detailing areas should be primed with approved primer in order to create a strong bond.
- Primer must be dry prior to application of membrane.
- We recommend that self-adhesive membranes such as CP680 are rolled into position and allowed to settle prior to their application. The membrane should always be installed with a minimum 80 mm joint overlap.
- Ambient and surface temperatures during the application should be at least + 5°C.

#### Installing the Membrane

- When applying CP680 on timber plank decks the membrane should be loosely fitted and mechanically fixed (hidden).
- The amount and position of the fixings (e.g. galvanised roofing nails) depends on the requirements specified in the regulations.
- The width of the joint overlaps should be at least 80 - 100 mm.
- In order to adhere the joint overlaps, the separating foil on the bottom side has to be removed in the area of the longitudinal seam or folded in.
- If a half or a third of distance between rows of fixing material is necessary in the corner or border areas of the roof surface, the fixing rows have to be covered with an off-cut of CP680, which should be at least 100 mm wide.
- To lay CP680 onto a steel deck, the separating foil on the bottom side must be completely removed and the membrane should be adhered with a joint overlap of at least 80 - 100 mm.
- The overlap of the longitudinal seam should also rest on the crown of the steel deck. To obtain air tightness in the area of the cross-seams on profiled

steel-sheets, please consult the relevant national technical standards.

- Irrespective of the sub-construction, all joint overlaps should be generally unrolled with a draw roll.
- To adhere CP680 on mineral building materials (e.g. concrete, plaster etc.) or on dusty, oily and greasy surfaces, priming with appropriate primer is necessary. The surface must also be primed if ambient and surface temperatures are below +5°C.
- Regardless of the surface, a makeshift “emergency sealing” can be achieved in the area of the joint and seam overlap by means of (hot gas) welding. Any subsequent layers should therefore be added one at a time.
- When using CP680 as part of a temporary, provisional or emergency roof it is important to have a minimum slope of 2%. The roof surface should also be checked at regular intervals.
- During the application of CP680 we recommend using a weighted roll bar or tube in order to help provide a uniform, strong bond.
- After application, the installed membrane should be rolled again to remove any entrapped air and further consolidate the bond with the substrate.

### Safe-Seal Lap Methodology

- The product’s 80 mm wide side selvedge consists of two key elements:
  - The first 40 mm of selvedge (the inner element) features a self-adhesive release film which, once removed, enables the adjacent membrane to be securely bonded without the need for heat – only a pressure roller is required.
  - The outer 40 mm of the selvedge is then bonded in a traditional manner using either hot air or naked flame, depending on the type of system being installed.
- This ‘safe-seal’ lap technology not only dramatically reduces the risk of any naked flame or heat penetrating through to a potentially combustible substrate (e.g. insulation), it also allows for more efficient installation as only half of the selvedge needs to be manually welded

### TECHNICAL DATA

PROPERTY	TEST METHOD	RESULT
Length	DIN EN 1848-1	≥ 10.00 m
Width	DIN EN 1848-1	≥ 1.08 m
Straightness	DIN EN 1848-1	< 20 mm/10 m
Mass per Unit Area	DIN EN 1848-1	3.3 (± 5%) kg/m <sup>2</sup>
Thickness	DIN EN 1848-1	2.50 (± 7%) mm
Water Tightness	DIN EN 1928 Method B	passed at 100 kPa
Tensile Properties: Maximum Tensile Force	DIN EN 12311-1	≥ 1000/1000 N
Tensile Properties: Elongation	DIN EN 12311-1	≥ 2/2%
Flow Resistance at Elevated Temperatures	DIN EN 12311-1	≥ +100°C
Flexibility at Low Temperatures	DIN EN 1109	≤ -25°C
Water Vapour Transmission Properties	DIN EN 1931	sd ≥ 1.500 m
Reaction to Fire	DIN EN 11925-2	Class E according to DIN EN 13501-1
Storage	Store in a cool, dry place and protect from direct sunlight	
Shelf Life	24 months when stored as recommended	

using a hot air gun or torch.

- Any overlaps on the mineral chippings must be sealed with a hot air blow dryer (>3000W). All joint overlaps should be unrolled with a draw roll.
- During installation it is important to ensure that a visible bead of bitumen exudes from all side and end laps.

### Installation Note

Please refer to Tremco Specification & Installation Guide for advice at all times.

### Health & Safety Precautions

Safety data sheets must be read and understood before use.

### Technical Service

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

### Guarantee / Warranty

Tremco CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge.

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Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.