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TECHNICAL DATA SHEET / 05.2020

MONOPLEX SBS PV 180 S4

Torch-Applied, Polymer Modified Bituminous Underlay

Introduction

MONOPLEX SBS PV 180 S4 is a torch-applied, bituminous underlay which is saturated and coated with high quality SBS (Styrene-Butadiene-Styrene) modified bitumen. It has a 180g/m^2 polyester fleece reinforcement, a thermofusible polyethylene film on the underside and is finished on the top surface with a fine slate.

Product Description

MONOPLEX SBS PV 180 S4 is designed for use as a premium underlay membrane, and is ideal for use as part of a high-performance torch-on roofing system. It can be applied to a wide range of non-combustible substrates, and can also be used as the final, waterproofing layer on certain built-up roofing systems (please consult BÖRNER Technical Services for details).

Product Features

- Torch-applied application
- Robust, durable membrane
- Low temperature flexibility at -15°C
- Rapid, simple application
- SBS modified bitumen
- Tested as part of a system to achieve Broof Test 4 fire classification as certified by Warringtonfire

Application

MONOPLEX SBS PV 180 S4 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. All operatives using torch guns or hot air guns during installation should be competent, conversant and capable of using such items in a safe and responsible manner. Care must also be taken when using torches and hot air guns in close proximity to combustible materials, decorative coatings and heat sensitive materials.

When setting out the field area, rolls should always be laid in the same direction. Side lap width should be at least 8 cm with end laps of at least 10 cm. A minimum 5 cm link with the waterproofing layers at all detailing and upstand abutments must also be achieved, with the completed detailing entirely encapsulating the insulation.

The **MONOPLEX SBS PV 180 S4** membrane must be fully bonded to the prepared substrate by using the torch-on application method, ensuring that a constant flow of bitumen is maintained across the whole width of the roll and that a continuous bead of bitumen (5-15 mm) is exuded from all side and end laps to demonstrate that a good seal has been achieved. The lower surface has a thermofusible film which rapidly melts during the torching operation. When addressing an angle where the membrane will change from a horizontal to a vertical configuration, press the product firmly into place and ensure that a full bond is achieved throughout the detail.

Chemical Resistance

MONOPLEX SBS PV 180 S4 is water-resistant and is resistant to watery solutions of salt, diluted non-oxidising acids and bases. Aliphatic and aromatic hydrocarbons, as well as chlorine hydrocarbons, oils and greases may loosen the product and should therefore be avoided.

Storage

Store in a cool, dry place and protect from direct sunlight.

Health and Safety

Health and Safety should be observed at all times in accordance with HSE and industry guidance. Specific Risk Assessments and Method Statements should be produced by contractors where necessary to ensure Working at Heights, Fire Safety and Manual Handling rules are compliant with current law and regulations. Health and safety data sheets are available for all materials on request from BÖRNER Technical Service Department.

Availability

Product Name	Product Code	Roll Dimensions (m)	Weight (kg/m²)
MONOPLEX SBS PV 180 S4	TN604367	10 x 1.00	4.8

Performance and Key Properties

Properties	Test Method		Declared Performance
Length	DIN EN 1848-1	m	≥ 10.00
Width	DIN EN 1848-1	m	≥ 1.00
Straightness	DIN EN 1848-1	mm/10 m	≤ 20
Mass per unit area	DIN EN 1849-1	kg/m²	4.8 (± 5%)
Thickness	DIN EN 1849-1	mm	4.00 (± 0.2)
Water tightness at 200 kPa test pressure	DIN EN 1928 Method B	-	passed
Tensile properties: maximum tensile force	DIN EN 12311-1	N	≥ 800/600
Tensile properties: elongation	DIN EN 12311-1	%	≥ 35/35
Flexibility at low temperatures	DIN EN 1109	° C	- 15 (± 5 abs)
Flow resistance at elevated temperatures	DIN EN 1110	° C	+ 100 (± 8 abs)
External fire performance	Fire tested as part of a system in accordance with EN 13501-5 and ENV 1187:2002, Broof Test 4 as certified by Warringtonfire*		
Reaction to fire	DIN EN 11925-2	-	Class E according to DIN EN 13501-1

*As outlined in Warringtonfire Classification Report Nos. 19901D & 19901H

Quality Assurance

MONOPLEX SBS PV 180 S4 is manufactured following ISO 9001: 2008 Quality Management System and Environmental Management System approved to ISO 14001: 2004.

Technical Service and Other Products

Specialist advice and information on other compatible products can be found at http://www.borner.ie