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# ARDEX WPM 116

## (Shelterbit Fibre Back Base Sheet)

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2.7mm APP bitumen fibre backed base sheet

Excellent elongation: 60% at break

Cold flexibility to  $-5^{\circ}\text{C}$

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# ARDEX WPM 116

## (Shelterbit Fibre Back Base Sheet)

### 2.7mm APP Bitumen Fibre Backed Base Sheet

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#### PRODUCT DESCRIPTION

ARDEX WPM 116 (Shelterbit F.B. Base Sheet) is an A.P.P. (Atactic Polypropylene) Plastomeric type modified bitumen membrane slip or base sheet, consisting of a specially formulated bituminous compound of distilled asphalt modified with selected high grade visco-elastic polymers. The product is reinforced with a combination of fibreglass and non-woven polyester.

ARDEX WPM 116 top surface is embossed and protected by a heat sensitive polythene film. This type of finish for the top surface has been chosen for two specific purposes.

1. To act as a temperature gauge during application. When the film melts it shows that the compound is at the correct temperature.
2. The embossing is to allow the gases to rapidly escape when heated to its correct installation temperature avoiding possible problems of bubbling and blistering, due to gases being trapped between the slip or base sheet and the membrane subsequently applied on top.

The lower surface of the slip or base sheet is an uncoated non-woven polyester mat.

#### PHYSICAL AND CHEMICAL PROPERTIES

##### A.P.P. modified compound

- Excellent elongation.
- Cold flexibility  $-5^{\circ}\text{C}$ .
- Good elastic memory.
- Good mechanical characteristics.
- Good dimensional stability.
- Good puncture resistance.
- Will not decay.

#### USES

ARDEX WPM 116 is always installed as a base sheet in multi-layer systems either loose laid, mechanically fastened (using large headed roofing fasteners under overlap area) or fully adhered with ARDEX WA 98 (Butynol Adhesive).

ARDEX WPM 116 has been specifically designed for applications to heat sensitive substrates such as plywood decks or thermal insulation.

Also can be installed as a base-layer on rough or un-even concrete decks.

#### INSTALLATION

The application of ARDEX WPM 116 should be carried out by an accredited applicator. Installation shall be strictly in accordance with the manufacturer's recommendations.

All surfaces to which the ARDEX Shelterbit systems are installed must be properly prepared prior to installation. All surfaces must be clean, dry, smooth, and free of sharp edges, fines, loose or foreign materials, oil, grease and other materials which may damage the membrane. New concrete must be cured a minimum of 28 days prior to the installation.

ARDEX WPM 116 (Shelterbit Fibre Back Base Sheet) may be fixed on suitably prepared substrates via two methods:

1. Mechanically fixed
2. Fully adhered

**Mechanically fixed system** – this method of installation is generally used over existing membranes, or heat sensitive substrates, such as plywood.

Loose lay ARDEX WPM 116 (Shelterbit Fibre Back Base Sheet) and mechanically fix each sheet in the centre line of the sheet at intervals of not greater than 1 metre within the body of the membrane and at 500mm around the perimeter. The type/dimension of the mechanical fixing and frequency shall be as nominated by the engineer such as to be sufficient to hold under the most extreme wind lift forces likely to be experienced. Using an LPG gas torch, fuse the laps of the ARDEX WPM 116 (Shelterbit Fibre Back Base Sheet) to form a continuous membrane layer.

**Fully adhered system** – apply ARDEX WA 98 (Butynol Adhesive) to all substrate surfaces using a roller at a coverage rate of 2 to 2.5 square metres per litre. Allow the adhesive to become tacky, not less than 5 minutes nor more than 20 minutes, prior to laying the ARDEX WPM 116 (Shelterbit Fibre Back Base Sheet).

Lay ARDEX WPM 116 (Shelterbit Fibre Back Base Sheet) onto the applied adhesive and roll firmly, particularly around sheet edges, to achieve a sound bond. Sheet laps are to be heat torch fused, after a minimum of 1 hour to allow solvents to evaporate.

## SAFETY PRECAUTIONS

ARDEX WPM 116 is non-hazardous, non-dangerous goods.

During installation, exercise caution when working with open flame. Examine all surfaces to which the flame has been applied for smouldering or burning conditions.

Do not use open flame on or near highly combustible materials such as wet adhesive. Follow all local fire codes.

## STORAGE

All rolls of ARDEX WPM116 should be stored in a covered area protected against sunlight and UV radiation. Rolls should be stored in a vertical position on a smooth floor so as not to damage the edges.

## PACKAGING

Roll size: 1.05m x 10m (Fleece is 1.0m wide leaving 50mm selvedge for lap bonding)

Roll weight: Approximately 30kg

Rolls per pallet: 30

## TECHNICAL DATA

The Technical Data shown below are the average results of the Tests, Measurements and Trials, carried out on ARDEX WPM 116.

Characteristics	Standard	Units	Nom.
Length	EN 1848-1	m	10
Width	EN 1848-1	m	1.0
Thickness	EN 1849-1	mm	2.7
Aeric mass	EN 1849-1	kg/m <sup>2</sup>	2.85
Heat stability	EN 1110	°C	110
Cold flexibility	EN 1109	°C	-5
Tensile strength	EN 12311-1		
Ultimate longitudinal		N/5cm	600
Ultimate transverse		N/5cm	350
Elongation at break	EN 12311-1		
Longitudinal		%	60
Transverse		%	60
Tear resistance	EN 12310-1		
Longitudinal		N	100
Transverse		N	100
Reinforcement	Glass fibre	g.s.m.	50
Surface finishes	Lower <sup>1</sup> Top <sup>2</sup>	polyester torch film	

Note 1) Lower surface; the surface which is applied to the structure being waterproofed.

Note 2) Top surface; exposed to underside of covering membrane.

## **DISCLAIMER**

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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