

# **UNIROOF<sup>®</sup> UNISEAL**

## **SELF ADHESIVE WATERPROOFING MEMBRANES**

### **1000 HC. 1000 HX.**

#### **SPECIFICATION DATA**

**PRODUCT NAME:**  
**UNISEAL SELF ADHESIVE MEMBRANE**

#### **PRODUCT DESCRIPTION**

**UNISEAL** Self Adhesive membranes are cold applied self adhesive membranes for the protection and waterproofing of foundations, below grade concrete, brickwork, basement walls and floors and general tanking and waterproofing applications, especially in tropical climates.

#### **BASIC USE:**

**UNISEAL** membranes have been specially formulated for use as waterproof and protective membrane with wide applications in the construction industry. Their major use is as a waterproofing and damp proof membrane for roofs, walls, floors and basements and to protect below grade concrete from water and aggressive ground water salts.

#### **TECHNICAL DATA**

See TABLE 1.

#### **INSTALLATION**

##### **Surface Preparation**

All surfaces should be dry and free from dust, dirt, oil and loose material. New concrete must have laitance removed and all projections and high spots removed. Local depressions must be filled to make the surface smooth and even, to present a good surface for the application. Where remedial work is being carried out, algae, fungi and dirt must be removed. High pressure water cleaning is recommended. The areas must be treated with a fungicidal wash and left to dry.

##### **Priming**

All surfaces must be primed with either **UNIPRIME** primer for **UNISEAL** or a good quality solvent based primer applied thinly by brush or roller to cover the surface. The primer must be allowed to dry before the application of **UNISEAL**.

#### **LAYING THE MEMBRANE**

For areas sloping to a fall, commence laying the membrane at the lowest point to ensure “weathered” overlaps. Unroll the first meter of **UNISEAL**, pull back the release paper and position the membrane on the surface, pressing it down onto the surface to anchor it firmly. Then by pulling the release paper only and walking backwards the **UNISEAL** is laid onto the substrate. Using a soft brush and working from the centre of the sheet, brush the **UNISEAL**, pushing it onto the surface to create a firm bond to the substrate, ensuring that there are no bubbles or trapped air. Repeat with the adjacent sheet, allowing for the correct overlaps. For below ground applications, a minimum of 75mm at the sides and 100mm for end overlaps must be maintained. All edges and laps should be thoroughly rolled with a hard rubber roller to ensure the joint is water tight and properly adhered. The top of all vertical surfaces of **UNISEAL** should not be less than 150mm above the finished ground level. **UNISEAL** might require a metal strip to be mechanically fastened at the top of the sheet to hold it in place during the finishing of the groundworks. The membrane must be protected against light and mechanical damage with a sand/cement fillet.

For roofing applications, **UNISEAL** should be applied up the parapet wall to at least 150mm above the finished roof level and terminated either into a cut chase or fixed with a mechanical fastening to hold it in position. The membrane must be protected with either a metal flashing or a sand/cement flashing.

#### **PROTECTION OF THE MEMBRANE AND BACKFILL**

**UNISEAL** must be protected to avoid damage by “other trades” or backfill after below ground applications. A good quality protection board should be used to ensure that the membrane is not damaged either by backfilling or the placement of reinforcing bars. The protection board must be cut and close fitted to cover the area of the membrane completely. Alternatively, a sand and cement screed can be laid as a protection layer.

The **UNISEAL** membrane must not be left exposed for long periods. For roofing applications the membrane must be used as part of an inverted roof specification.

# UNISEAL SELF ADHESIVE MEMBRANES

**TABLE 1.**  
**TECHNICAL DATA: 1000 HC. 1000 HX.**  
**PROPERTIES 1.5mm thick.**

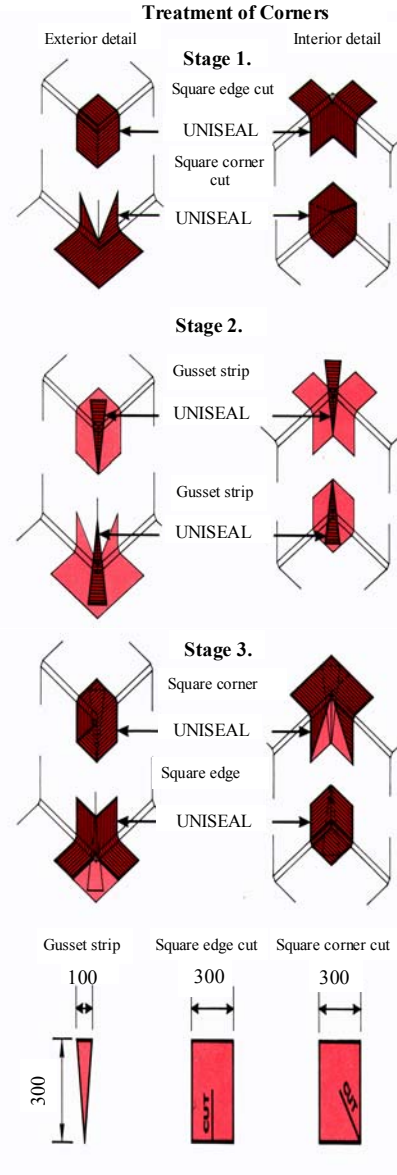
		1000 HC	1000 HX		
Roll Size		1.05 x 19.05m			
Membrane Strength	ASTM D638	2.5 N/mm	5.2 N/mm	Length	
		2.9 N/mm	5.8 N/mm	Width	
Tensile Strength	ASTM D638	25 N/mm <sup>2</sup>	50 N/mm <sup>2</sup>	Length	
		29 N/mm <sup>2</sup>	52 N/mm <sup>2</sup>	Width	
Film Elongation	ASTM D638	400 %	200 %	Length	
		600 %	170%	Width	
Elongation of Compound	ASTM D638	1250%	2000%	Length	
				Width	
Tear	ASTM D1004	130 N/mm	270 N/mm	Length	
		120 N/mm	270 N/mm	Width	
Puncture Resistance	ASTM E154	200 N	300 N	Length	
Water Vapour Perm	ASTM E96	0.2 g/m <sup>2</sup> /24h	0.2 g/m <sup>2</sup> /24h	Length	
Crack Bridging		Will withstand	Up to 0.8mm	Wide substrate racks	
Dimensional Stability	MOAT 5.1.4	+2 % @ 70° C	-0.1 % @ 70° C	Length	
		+1.5 % @ 70° C	-0.2 % @ 70° C	Width	

**DESCRIPTION:**

UNISEAL 1000 HC is a two ply system consisting of a tough LDPE film laminated to a thick layer of modified rubber/ bitumen.

UNISEAL1000 HX is a high performance system consisting of a tough HDPE multiply laminated film backed with a thick layer of elastomeric rubber/bitumen waterproofing compound.

**DISTRIBUTOR:**



**UNIROOF® INTERNATIONAL LIMITED**  
 Worth Corner Turners Hill Road Pound Hill Crawley West Sussex RH10 7SL  
 Tel: + 44 1293 889888 Fax: + 44 1293 883367  
 e-mail: sales@uniroof.com Web Site: www.uniroof.com