

# Preprufe® 800PA

# Self-adhesive Preprufe membrane for basement walls in open excavations

# Description

Preprufe® 800PA is a cold-applied, self-adhesive waterproofing membrane, composed of a reinforced cross-laminated HDPE film, and a synthetic non-bituminous adhesive. Preprufe 800PA incorporates the Preprufe Advanced Bond Technology™.

# **Principal Applications**

New and remedial waterproofing for:

- Basement walls of all basement grades to BS 8102: 2009
- Below-ground car parks
- Underground RC reservoirs and tanks
- · Industrial plants
- · Radon and methane gas protection
- · Protection from water, damp and gas of critical substructures

### Installation

Preprufe 800PA can be applied to cementitious and metal substrates.

Available in two versions: Preprufe 800PA application temperature between +5°C and +40°C, Preprufe 800PA LT application temperature between -5°C and + 25°C. The substrate should be clean, free of grease, release agents and protrusions or voids. Irregularities greater than 3 mm should be removed or filled with GCP Betec® NSM range of products.

All surfaces should be primed with one coat of GCP's solvent based quick drying, damp and green concrete tolerant primer Preprufe® SC1. Primer colour is green to ensure proper coverage, to aid identification and to avoid substitution. See separate data sheet.

# **Advantages**

- **Non-bituminous** synthetic self adhesive membrane based on Preprufe technology.
- Adhesion excellent concrete adhesion at all temperatures.
- **Productivity** 1.2 metre wide roll for increased worker efficiency.
- Fully bonded eliminates water migration to prevent water tracking between membrane and substrate.
- **Elastomeric** accommodates movements and bridges concrete shrinkage cracks.
- **Superior performance** high strength, elongation, tear resistant properties.
- Water and vapour barrier provides protection for all basements which need to be leak free.
- Gas resistant methane, carbon dioxide and radon gas protection in excess of the standard membrane requirements in BRE Reports 211 (radon) and 212 (methane and carbon dioxide).

5Plus **( €** 0836

Before starting the application, cut Preprufe 800PA to length, according to the height of the application area. Peel back the first 30 cm of the release liner. Position the membrane and apply the adhesive face from top to the bottom removing completely the release liner. Preprufe 800PA should be brushed or rolled onto the primed surface to ensure good initial bond and to exclude trapped air. Adjacent rolls are aligned using printed lines overlapped 50 mm minimum at side and ends and well rolled with a firm pressure, using a lap roller to ensure complete adhesion and continuity between the layers.

On high walls it may be necessary to batten fix the membrane to prevent slippage. Remove the batten after backfilling and before the positioning of any flashing (if needed). For other substrates such as plastic or wood consult GCP Applied Technologies.

#### **Details**

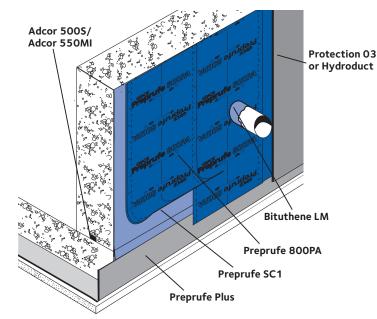
Internal and external corners and edges must be reinforced with pre-cut strips of 300 mm wide Preprufe 800PA. To seal penetrations such as service pipes, lightning conductors, etc., use Bituthene® LM around the penetration with a fillet to provide a watertight seal with Preprufe 800PA membrane.

#### Repairs, Protection & Drainage

Preprufe 800PA film has an internal grey/black layer. When damage occurs, the grey/black layer is exposed on the white surface. Damaged areas to be repaired with an oversize patch applied to a clean, dry surface extending 100 mm beyond damage and firmly rolled.

Protect Preprufe 800PA membrane immediately after application to avoid damage from other trades, construction materials or backfill, using only GCP Protection 03 boards.

Preprufe 800PA must not be exposed for more than 30 days. If the area around the substructure can be drained to a low level outlet then GCP recommends the Hydroduct range of drainage membranes.



Details shown are typical illustrations only and not working drawings. For assistance with working drawings and additional technical advice please contact GCP Technical Services.

Supply			
Preprufe 800PA	1.2 m x 35 m roll		
Weight	35 kg / roll		
Minimum overlap	50 mm		
Storage	Store upright in dry conditions below +30°C		
Preprufe SC1	5 and 20 litre can		
Coverage	10 - 12 sq m per litre depending upon method of application, surface porosity and ambient temperature		
Ancillary Products			
Bituthene LM	5.7 litre packs		
Protection 03 board	3 mm x 0.9 m x 2.03 m (± 6%)		
Adcor 500S	6 x 5 m rolls		
Hydroduct	See separate Drainage Sheets data sheet		

Equipment by Others: Lap Roller

Note: As per specification and/or local site requirements a low VOC, water-based primer Bituthene Primer W2 can be used as an alternative to Preprufe SC1 primer

Physical Properties					
	Typical Value	Test Method			
Peel Strength at 23°C, min	3.2 N/mm	ASTM D 903 Modified3			
Radon Diffusion Coefficient	2.1 x 10-12 m²/s	CTU K124/02/95			
Methane permeability	111.0 ml/m2/d/atm	ISO 15105-1			

#### Declared values according to EN 13967 **Declared Value Property** Test Method Preprufe 800PA **800PA LT** Visible defects - MDV EN 1850-2 None None Straightness - MDV EN 1848-2 Length (m) - MDV 35.10 ± 0.25 35.10 ± 0.25 EN 1848-2 Thickness (mm) - MDV $0.8 \pm 0.07$ $0.8 \pm 0.07$ EN 1849-2 Width Carrier Sheet (m) 1.206 ±0.006 1.206 ±0.006 EN 1848-2 - MDV Mass per unit area 735 + 50735 + 50FN 1849-2 (g/m²) - MDV Water tightness to liquid Pass Pass FN 1928 Resistance to impact > 150 > 150 FN 12691 Resistance to tearing (Nail **Shank)** - unreinforced sheets EN 12310-1 > 155 > 155 (N) - MLV Joint strength (N/50mm) EN 12317-2 ≥ 250 > 220 - MLV EN 1931 380.000 ± Water vapour transmission 380.000 + 30% $(\mu = sD/d) - MDV$ 30% Method B

# Storage & Transportation

The rolls of Preprufe 800PA are to be transported only in boxes packed upright on shrink-wrapped pallets and must be stored upright on site. The stacking of membrane is not allowed. Before installation, the membrane has to be protected from direct sunlight and moisture. Punctual or lineal loading and exposure to solvent vapour shall be avoided.

# **Specification Clause**

Refer to clause J40 297.

# **Health and Safety**

There is no legal requirement for a Safety Data Sheet for Preprufe 800PA. For health and safety questions on this product please contact GCP Applied Technologies. For Bituthene Primer W2, Preprufe SC1 primer and Bituthene LM read the product label and Safety Data Sheet (SDS) before use. Users must comply with all risk and safety phrases. SDS's can be obtained from GCP Applied Technologies or from our web site at gcpat.com.



GCP Applied Technologies (UK) Limited lpswich Road, Slough, Berkshire SL1 4EQ United Kingdom

Preprufe® 800PA Flexible Sheets for Waterproofing,

Declared values according to EN 13967					
Property	Declared Value		Test		
Preprufe	800PA	800PA LT	Method		
Durability of water tightness against ageing/ degradation (at 60 kPa)	Pass	Pass	EN 1296 EN 1928 Method B		
Durability of water tightness against chemicals (at 60 kPa)	Pass	Pass	EN 1847 Method B EN 1928 Method B		
Compatibility with bitumen	Pass	Pass	EN 1548		
Resistance to static loading	≥ 20 - Pass	≥ 20 - Pass	EN 12730		
Tensile properties - unreinforced sheets (N/50mm) - MLV	Long¹ ≥ 430 Trans² ≥ 430	Long¹ ≥ 430 Trans² ≥ 430	EN 12311-2 Method A		
Tensile properties - unreinforced sheets (Elongation %) - MLV	Long¹ ≥ 280 Trans² ≥ 280	Long¹ ≥ 180 Trans² ≥ 180	EN 12311-2 Method A		
Reaction to fire (Class; test conditions)	E	E	EN 13501-1		

Footnotes: 1. Longitudinal - related to the roll direction 2. Transversal - related to the roll direction 3. MDV: Manufacturer Declared Value 4. MLV: Manufactured Limiting Value All declared values shown in this data sheet are based on test results determined under laboratory conditions and with the product sample taken directly from stock in its original packing without any alteration or modification of its component parts.

# gcpat.com | Customer Service: Tel +44 (0)1753 490000 | Fax +44 (0)1753 490001

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warran't the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

Preprufe, Adcor and Bituthene are a trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2018 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140 USA

In the UK, Ipswich Road, Slough, Berkshire, SL1 4EQ, UK

GCP0082\_0118 Preprufe-800PA\_UK

