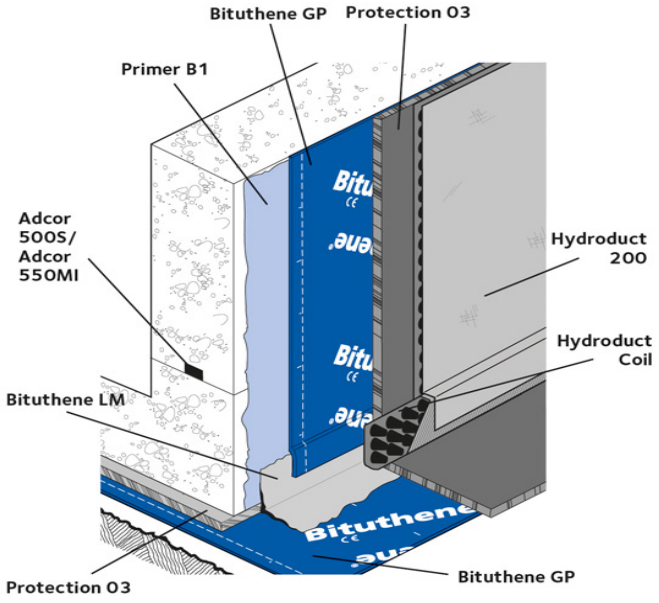
BITUTHENE® GP

Self-adhesive rubber bitumen/HDPE waterproof membrane for low risk applications

Product Description

BITUTHENE® GP is a combination of a high density polyethylene film and a self-adhesive rubber/bitumen compound. It is supplied in rolls 1 mm thick overall, 1 m wide and 25 m long (25 m^2).



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

Installation

The product is for low-risk applications only and is capable of resisting a hydrostatic head up to 1m. All concrete and masonry surfaces to which the membrane is to be applied must have a smooth finish. Surfaces should be clean, dry free of voids and any sharp protrusions. Masonry surfaces must be rendered to provide an even flush surface, if not rendered then all brick or blockwork must be flush pointed. For higher risk applications, we would recommend the use of BITUTHENE® 4000, BITUTHENE® 8000 or PREPRUFE® 800PA.

Minimum ambient application temperature +5 °C. Ensure that all surfaces are clean, dry and free from ice/frost. Surfaces should be smooth, free from voids and protrusions, and any imperfections should be made good using BETEC® NSM mortar.

All surfaces except those below ground bearing slabs should be primed with one coat of Primer B1 applied by brush or roller. BITUTHENE® GP shall be laid by peeling back the protective release paper and applying the adhesive face onto the prepared surface.

BITUTHENE® LM to be applied at necessary internal and external corners, penetrations etc. prior to applying the overall membrane.

BITUTHENE® GP should be brushed onto the surface to ensure good initial bond and exclude air. Adjacent rolls are 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.

For application over damp and green concrete, we would recommend to use BITUTHENE® 4000 or BITUTHENE® 8000 system using damp/green concrete tolerant primer.

Repairs, Protection & Drainage

Damaged areas to be repaired with an oversize patch applied to a clean dry surface extending 100 mm beyond damage and firmly rolled. Protect BITUTHENE® membranes immediately after application to avoid damage from other trades, construction materials or backfill, using only Protection 03 boards. If the area around the substructure can be drained to a low level outlet then GCP recommends the HYDRODUCT® range of drainage membranes.

Advantages

- **Waterproof** - capable of resisting a hydrostatic head when fully supported (up to 1 metre of water)
- **Cold applied** - safe, no flame, no heating, no torch-on equipment, self-adhesive overlap ensure continuity
- **Flexible** - accommodates minor settlement and shrinkage movement
- **Reduces installation risk** - no risk of:
  - **Over heating** - that damages the membrane and affects performance
  - **Under heating** – poor membrane adhesion and lap sealing affects water tightness
- **Rubber/bitumen** - flexibility and resistance to most dilute acids and alkalis
- **Lighter roll** - for ease of application
- **Longer roll** - for less storage

Health and Safety

There is no legal requirement for a Safety Data Sheet for BITUTHENE® GP, Protection 03 board, HYDRODUCT® or waterstops. For Primer B1, BITUTHENE® LM and Pak Adhesive™ read the product carton 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.

Supply

BITUTHENE® GP	1 m x 25 m roll (25 sq m) Weight 30 kg
Storage	Store upright in dry conditions below +30°C
Primer B1	5 & 25 litre drums
Coverage	7-10 sq m per litre application, (depending on 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%)

Equipment by Others: Soft brush, stanley knife; brush or roller for priming. Stiff broom and airline for cleaning surface.

Physical Properties

Property	Typical Value	Test Method
Tear Resistance	Long 91.6 N Trans 89.6 N	MOAT 27:5.4.1
Peel Strength	105.4 N	MOAT 27:5.1.3
Tensile Strength of joints	130.6 N	MOAT 27:5.2.2
Moisture Vapour Permeability	0.39 g/m^2/24 hours	BS 3177: 1959 (75% RH/25°C)
Resistance to hydrostatic head	< 1m of water	ASTM D5385

Declared values according to EN 13967

Property	Declared Value	Test Method	Property	Declared Value	Test Method
Visible defects - MDV	None	EN 1850-2	**Straightness** - MDV	Pass	EN 1848-2
Length (m) - MDV	25.15 ± 0.15	EN 1848-2	**Thickness** (mm) - MDV	1.12 ± 0.08	EN 1849-2
Width Carrier Sheet (m) - MDV	0.987 ±0.007	EN 1848-2	**Mass per unit area** (g/m²) - MDV	1050 ± 90	EN 1849-2
Width Overall (roll) (m) - MDV	1.000 ± 0.010	EN 1848-2	**Durability of water tightness against ageing/degradation** (at 60 kPa)	Pass	EN 1296 EN 1928 Method B

Water tightness to liquid water (at 60 kPa)	Pass	EN 1928	**Durability of water tightness against chemicals** (at 60 kPa)	Pass	EN 1847 EN 1928 Method B
Resistance to impact (Al-board (mm) - MLV)	≥100	EN 12691	**Compatibility with bitumen**	Pass	EN 1548 EN 1928
			Resistance to static loading	≥ 10 - Pass	EN 12730
Resistance to tearing (Nail Shank)- (N) - MLV	Long[1] ≥100 Trans[2] >110	EN 12310-1	**Tensile properties - unreinforced sheets** (N/50mm) - MLV	Long[1] ≥ 200 Trans[2] ≥ 250	EN 12311-2 Method A
Joint strength (N/50mm) - MLV	≥ 130	EN 12317-2	**Tensile properties - unreinforced sheets** (Elongation %) - MLV	Long[1] ≥ 270 Trans[2] ≥ 220	EN 12311-2 Method A
Water vapour transmission (μ= sD/d) - MDV	120,000 ± 30%	EN 1931 Method B	**Reaction to fire** (Class; test conditions)	E	EN 13501-1
Resistance to deformation under load	NPD[5]	As relevant	**Dangerous Substances**	NPD[5]	As relevant

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
5. NPD: No performance determined

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.

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gcpat.uk/solutions/products/bituthene-post-applied-waterproofing/bituthene-gp