

Substructure Waterproofing - Membranes

Bituthene® 8000 HC

Grey, solar reflective, flexible self-adhesive water and vapour proof membrane for sub-structures in hot climates.

Description

Bituthene® 8000 HC combines the proven Bituthene® adhesive technology with a unique, grey coloured carrier film to provide superior performance and easier installation. It can be used horizontally or vertically to protect basements and other critical sub-structures from the effects of aggressive ground conditions and water tables.

The membrane is printed with the Bituthene® logo to aid identification plus an overlap line at each edge to ensure the 50 mm minimum laps. Bituthene 8000 HC is extremely tough but any accidental damage which would otherwise be missed, is made visible by the black compound showing through the light grey film. This can be simply repaired with a patch of Bituthene 8000 HC.

Installation

All surfaces except those below ground bearing slabs should be primed with one coat of Primer B1 or Primer B3. The drive for continual improvements in performance may result in product modifications. Your Grace representative will be able to provide up-to-date advice.

Advantages

- **Waterproof** - provides protection for all Grades of waterproofing to BS 8102:2009.
- **Chemically resistant** - provides effective external protection against aggressive soils, contaminated ground water and hydrocarbons in suspension.
- **Hot climate grade** - specially formulated for elevated temperatures of up to 55°C.
- **Easier handling in hot weather** - over 20% reduction of solar heat absorption.
- **Superior performance** - 70 m hydrostatic pressure resistance with ultra low moisture transmission rate.
- **Non-metallised film** - not vulnerable to chemical attack.
- **Unique composite film** - engineered for strength, flexibility and a smooth finish.
- **Facilitates quality assured installation** - printed overlap line ensures minimum laps; light grey colour highlights accidental damage for simple patch repairs.
- **System Compatibility** - can be combined with Preprufe® pre-applied membranes, Bituthene® LM, and Hydroduct® Sheets for system solutions.

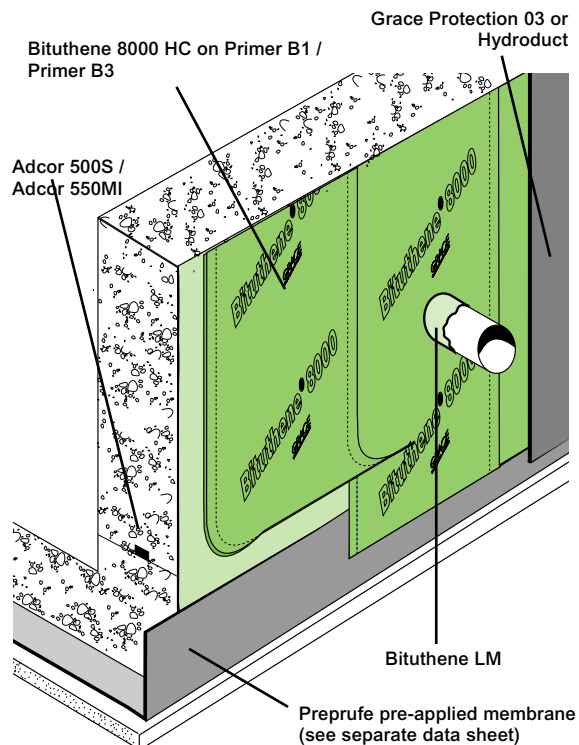
Bituthene 8000 HC shall be laid by peeling back the protective release paper and applying the adhesive face onto the prepared surface.

Bituthene LM to be applied at all internal and external corners, pipe penetrations etc. prior to applying the overall membrane.

Bituthene 8000 HC should be brushed onto the surface to ensure good initial bond and exclude air. Adjacent rolls are aligned using printed lines and 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.

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.
- The membrane should be protected against damage using Grace Protection 03 boards bonded to the membrane using Bitustik 4000 double sided tape or Pak Adhesive and firmly rolled.
- If the area around the substructure can be drained to a low level outlet then Grace 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 Grace Technical Services



Supply

Bituthene® 8000 HC	1m x 20 m roll (20m ²) Weight 39 kg
Storage	Store upright in dry conditions below +40°C
Primer B1 Coverage	5 and 25 litre units
Primer B3 Coverage	7-10 sq m per litre * 20 and 200 litre units
	8-10 sq m per litre *
Ancillary Products	
Adcor® 500S	6 x 5 m rolls
Adcor® 550MI	8 x 5 m rolls
Bituthene LM	5.7 litre packs
Grace Protection 03	3 mm x 2.03m x 0.90m (± 6%)
Bitustik™ 4000	150 mm x 12 m roll
* Depending upon method of application, surface porosity and ambient temperature	

Physical Properties

	Typical Value	Test Method
Hydrostatic Head Resistance (note 1)	> 70 m	ASTM D5385-93
Methane Permeability (note 2)	56.55 ml/m ² .day.atm	Vesaperm Ltd
Radon Diffusion Coefficient	1.2 x 10 ⁻¹² m ² /s	University of Prague

Note 1: Test carried out on an overlap crossing a post formed crack.
Note 2: Typical value for BRE recommended minimum standard (BRE Report 212) is 360 ml/m²/day.

All test results shown in this data sheet are 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.

Declared values according to EN 13967

Property	Declared Value	Test Method	Property	Declared Value	Test Method
Visible defects - MDV	No	EN 1850-2	Straightness - MDV	Pass	EN 1848-2
Length (m) - MDV	20.15 ± 0.15	EN 1848-2	Thickness (mm) - MDV	1.52 ± 0.08	EN 1848-2
Width Carrier Sheet (m) - MDV	0.987 ± 0.007	EN 1848-2	Mass per unit area (g/m ²) - MDV	1670 ± 90	EN 1848-2
Width Overall (roll) (m) - MDV	1.000 ± 0.005	EN 1848-2	Durability of water tightness against ageing/degradation (at 60 kPa)	Pass	EN 12691 EN 1928
Water tightness to liquid water (at 60 kPa)	Pass	EN 1928	Durability of water tightness against chemicals (at 60 kPa)	Pass	EN 12691 EN 1928
Resistance to impact (AI-board) (mm) - MLV	100 - Pass	EN 12691	Durability of tensile properties against chemicals	Pass	EN 13967 Annex C
Resistance to impact (base EPS) (mm) - MLV	1200 - Pass	EN 12691	Compatibility with bitumen	Pass	EN 1548
Resistance to tearing (Nail Shank) - unreinforced sheets (N) - MLV	Long ¹ 110 Trans ² 100	EN 12310-1	Resistance to static loading	Pass	EN 12730
Joint strength (N/50mm) - MLV	190	EN 12317-1	Tensile properties - unreinforced sheets (N/6mm) - MLV	Long ¹ 25 Trans ² 25	EN 12311-2 Method B
Water vapour transmission (μ = sD/d) - MDV	135.000 - 150.000	EN 1931 Method B	Tensile properties - unreinforced sheets (Elongation %) - MLV	Long ¹ 20 Trans ² 13	EN 12311-2 Method B
Resistance to deformation under load	NPD ⁵	EN 13967 Annex B	Reaction to fire (Class; test conditions)	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 5. NPD: No Performance Declared

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Specification

Bituthene 8000 HC preformed membrane with Bituthene LM at corners and penetrations shall be laid onto smooth concrete blinding and/or vertical concrete walls by applying the preformed membrane, sticky side downwards to give well rolled 50 mm overlaps. Vertical or inclined surfaces and suspended slabs to be primed with Primer B1 or Primer B3, applied by roller or brush to achieve an even cover of the surface. Allow to dry before applying the membrane.

Performance

Bituthene 8000 HC complies with the following national standards: BS 8102: 2009, The Building Regulations (as amended) (England and Wales) 2000, The Building Regulations (Northern Ireland) 2000 (as amended), Building Standards (Scotland) Regulations 2004 (as amended).

Health and Safety

There is no legal requirement for a Material Safety Data Sheet for Bituthene 8000 HC and Grace Protection 03. Refer to product carton for additional safety information. For health and safety questions on these products please contact Grace Construction Products Limited.

For Primer B1, Primer B3, Bituthene LM and Pak Adhesive read the product label and Material Safety Data Sheet (MSDS) before use. Users must comply with all risk and safety phrases. MSDS's can be obtained from Grace.

	Grace Construction Products Ltd Ajax Avenue, Slough, Berkshire SL1 4BH United Kingdom 06 06/F017
	EN 13967 Bituthene® 8000 HC Flexible Sheets for Waterproofing, Type T Reaction to fire: E Watertightness: Pass at 60 kPa

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