

Bituthene® 8000 HC

Advanced self adhesive membrane with unique HDPE composite film that provides superior physical properties and reduced solar gain for use in hot climates.

For waterproofing and lifetime protection of concrete in basements, substructures and buried deck applications.

Description

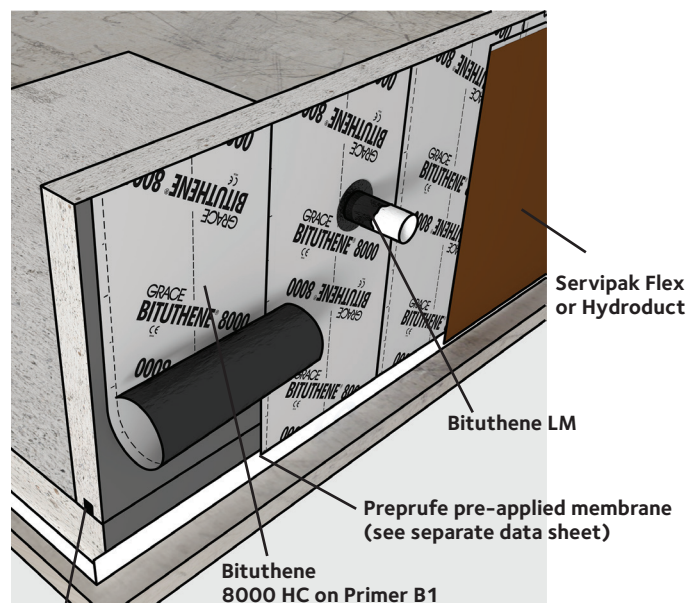
Bituthene® 8000HC is a 1.5 mm thick waterproofing membrane which combines the proven Bituthene adhesive technology with a unique, full width, grey coloured carrier film. It can be used horizontally (above grade deck application) and vertically (below grade basement wall) in conjunction with Preprufe® pre-applied membrane.

To aid identification and to avoid substitution, the membrane is printed with the Bituthene brand, plus an overlap line at each edge to facilitate the 50 mm minimum laps. Bituthene 8000HC 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 8000HC.

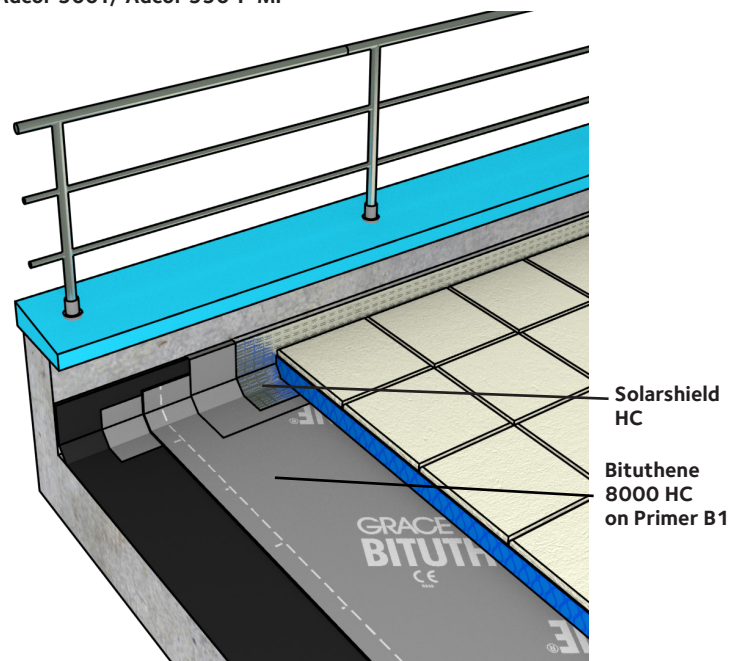
System Compatibility

Bituthene 8000HC is fully compatible with Preprufe® pre-applied membranes, Bituthene LM, and Hydroduct® Sheets for system solutions.

For the same hour installation of membrane & primer, use **quick drying, high coverage Bituthene® Primer B1.**



Adcor 500T/ Adcor 550 T-MI



Advantages

- Hydrostatic head resistance tested at **laps crossing a crack >70 m**
- Resistant to **aggressive Middle East ground conditions**
- Radon & Methane **gas resistant**
- **Grey, solar reflective HDPE film** – reduces solar gain and allows up to 30 days exposure before backfilling.
- **Twin seal laps** (adhesive and film sealing)
- Hot climate grade for elevated temperatures of up to +55°C.
- **Pre-marked overlaps** – ensures the quality of the overlap and saves application time.
- Since 1997, Bituthene 8000HC product application and suitability has been certified by **BBA for water tightness, durability** and gas resistance.



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

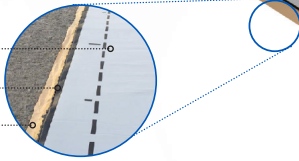
Product Features

WATER, CHEMICAL & GAS RESISTANT

- Waterproof
- Chemically resistant - provides effective external protection against aggressive soils and ground water.
- Methane, carbon dioxide and radon gas protection.



Edge to
Edge Film
Compound
Release
Paper



MEMBRANE FILM

- Full width, edge to edge film for highest waterproofing integrity
- Superior compatibility with adhesive for best lap and continuity of performance
- High conformability and strength
- High Density Polyethylene (HDPE)
- Unique composite film - engineered for strength, flexibility and a smooth finish.
- Solar reflective - over 20% reduction of solar heat absorption.
- Pre-marked overlap.

PROPRIETARY ADHESIVE

Advanced self adhesive formulation unique to GCP

- Allows immediate repositioning, improving the quality and speed of installation
- Durable intimate bond that prevents water migration

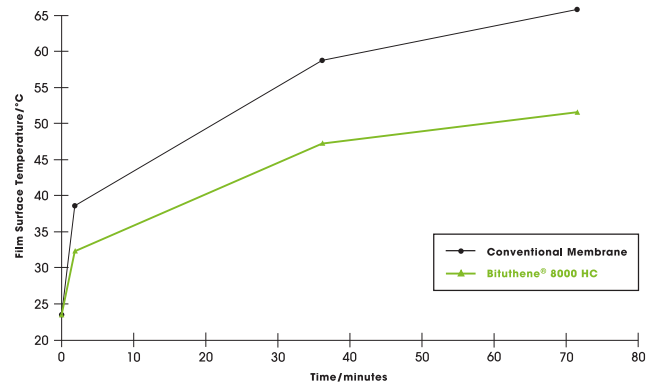
“Twin seal system”: Best resistance to water and continuity of protection



1. Edge bead allows adhesive to adhesive sealing - double strength of adhesion to seal, attributed to the flexibility of the compound.

2. Adhesive to film - full width film provides high resistance to water pressure even at the lap.

Comparison of Solar Heat Gain over Time on Exposed Membrane Samples



Applications – Above and Below Ground



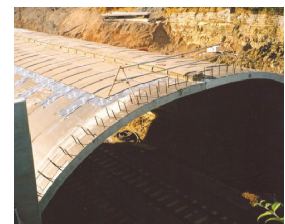
Basements



Roofs & Podium Decks



Tunnels



Installation

For detailed retaining wall installation refer to **Bituthene Retaining Wall Application Method Statement**.

For detailed deck installation refer to **Bituthene Buried Deck Waterproofing Application Method Statement**.

For primer and protection board selection consult your GCP representative.

Repairs, Protection & Drainage

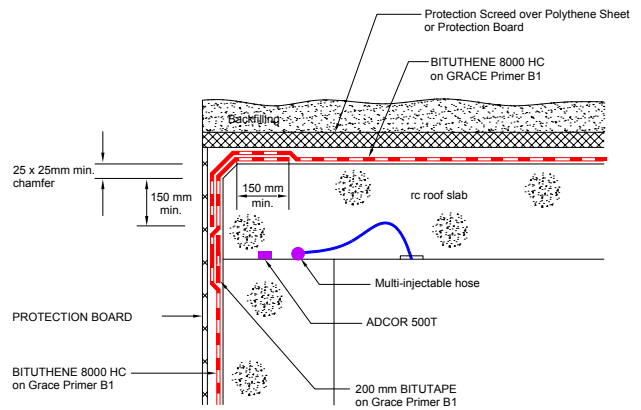
- Damaged areas to be repaired with an oversize patch applied to a clean dry surface extending 100 mm beyond damage and firmly rolled.
- Protect Bituthene® membranes immediately after application to avoid damage from other trades, construction materials or backfill, using only **Servipak® Flex** protection boards. Consult your local GCP representative for advice on protection thickness.
- If the area around the substructure can be drained to a low level outlet then GCP recommends the Hydroduct® range of drainage membranes.

Limitation

Bituthene® 8000HC is not intended for permanent exposure. Exposed areas of membrane at upstands etc, should be covered with Solarshield® HC. For vertical application use termination bar if the membrane is left exposed (the exposure should not exceed 30 days). Protect the exposed membrane from other trades and site conditions.

Performance and Quality

Bituthene® 8000HC complies with the following international 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). The manufacturing location is under ISO 9001 and ISO 14001 and is subject to a European independent audit to ensure the highest quality.



RC Wall to Roof Slab Connection Detail - Vertical External Corner

Full range of construction details available on request

Complete System Specification

For detailed specification clause on Bituthene® 8000HC system contact your local GCP representative.

Health and Safety

There is no legal requirement for a Safety Data Sheet for Bituthene 8000 HC and Servipak® Flex. Refer to product carton for additional safety information. For health and safety questions on these products please contact GCP Applied Technologies For Bituthene® Primer B1 and Bituthene® LM 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.

BITUTHENE® LM

Liquid detailing membrane provides water tightness continuity

- Full compatibility with Bituthene® membrane.
- Ease of application.
- Performance in the most difficult details.

SERVIPAK® FLEX PROTECTION BOARDS

Formulated to protect your waterproofing investment

- Flexible but tough.
- Speed of application.
- High impact resistance.

GCP PRIMERS

Specially formulated to perform with the Bituthene® range, offering exceptional coverage rate

- Low cost per square metre.
- Speed of application.

PREPRUFE® PRE-APPLIED MEMBRANES

Used below basement slabs and behind confined walls for a fully bonded waterproofing to all structural surfaces

- Full compatibility with Bituthene® membrane.
- Speed and ease of application.
- No protection needed


Supply

Bituthene 8000HC	1 m x 20 m roll (20 sq m) Weight 39 kg
Storage	Store upright in dry conditions below +40°C
Bituthene Primer B1	25 litre units
Coverage	8-10 sq m per litre *
Drying time	30-40 mins
Ancillary Products	
Adcor 500T	6 x 5 m rolls
Adcor 550 T-MI	8 x 5 m rolls
Bituthene LM	5.7 litre packs
Servipak Flex	Available in 3, 4 & 6 mm thicknesses **
Bitustik 4000	150 mm x 12 m roll
Solarshield HC	1 m x 10 m roll
* Depending upon method of application, surface porosity and ambient temperature	
** Please refer to Servipak Flex data sheet	

Physical Properties

	Typical Value	Test Method
Hydrostatic Head Resistance (note 1)	> 70 m	ASTM D5385-93
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.

	Grace Construction Products Ltd / Emirates Chemicals LLC Jebel Ali Free Zone, PO Box 5006, Dubai, UAE 13 13/F070
	EN 13967 Bituthene® 8000HC Flexible Sheets for Waterproofing, Type T Reaction to fire: E Watertightness: Pass at 60 kPa

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 1849-2
Width Carrier Sheet (m) - MDV	0.987 ± 0.007	EN 1848-2	Mass per unit area (g/m²) - MDV	1679 ± 90	EN 1849-2
Width Overall (roll) (m) - MDV	1.000 ± 0.005	EN 1848-2	Durability of water tightness against ageing/ degradation (at 60 kPa)	Pass	EN 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 Method B EN 1928 Method B
Resistance to impact (Al-board (mm) - MLV)	150 -Pass	EN 12691	Durability of tensile properties against chemicals	Pass	EN 13967 Annex C
Resistance to impact (base EPS (mm) - MLV)	750 -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	20-Pass	EN 12730
Joint strength (N/50mm) - MLV	190	EN 12317-2	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	150.000 ± 30%	EN 1931 Method B	Tensile properties - unreinforced sheets (Elongation %) - MLV	Long ¹ 20 Trans ² 3	EN 12311-2 Method B
Water vapour transmission (sD in m) - MDV	250 ± 0%	EN 1931 Method B	Reaction to fire (Class; test conditions)	E	EN 13501-1
Resistance to deformation under load	NA	EN 13967 Annex B			

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 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.

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