

# Produktblad

## Membran BITUTHENE® 4000E

### BITUTHENE® 4000E membrane

Self-adhesive, cross-laminated HDPE waterproofing membrane with enhanced bonding characteristics

#### Description

BITUTHENE® 4000E is a flexible fully bonded waterproof membrane combining a high performance cross laminated, HDPE carrier film with a unique super sticky self-adhesive rubber bitumen compound.

#### Installation

Measures should be taken to ensure all the surfaces are free from ice or frost. All surfaces except those below ground bearing slabs and PREPRUFE® membranes should be primed with one coat of GCP's low VOC, water-based primer BITUTHENE® Primer W2.

BITUTHENE® 4000E membrane shall be laid by peeling back the protective release paper and applying the adhesive face onto the prepared surface, free from ice, frost, condensation or any contaminants which could adversely effect adhesion. Once the membrane is applied, cover with a protection board as soon as possible. On "green" concrete or damp surfaces, cover the membrane immediately.

BITUTHENE® 4000E membrane should be brushed onto the surface to ensure good initial bond and exclude air. Adjacent rolls are aligned and overlapped 75 mm minimum at side and 50 mm ends lap or cut edges 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.

#### Advantages

- **Cold applied** – fast, safe and simple application to substrates especially at low temperatures and saves application time.
- **Suitable for application to "green" concrete** – expedite programme schedules
- **Moisture tolerant primer system** – allows application in damp or marginal weather conditions.
- **Wide application temperature range** – excellent bond to self and substrate from +5 °C to +35 °C.
- **Twin seal laps** – adhesive and film sealing provides enhanced bond and additional security.
- **Cross laminated high density polyethylene carrier film** – provides superior physical properties
- **Pre-marked overlaps** – ensures quality of the overlaps and saves application time

#### Repairs, Protection & Drainage

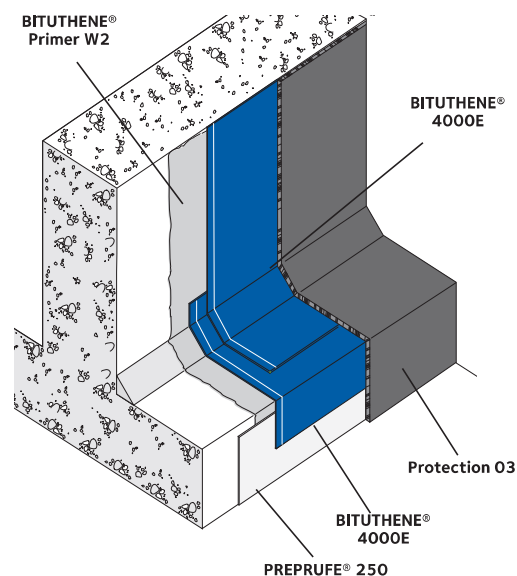
- Damaged areas to be repaired with an oversize patch applied to a clean dry surface extending 100 mm beyond damage and firmly rolled.
- Protect BITUTHENE® membranes immediately after application to avoid damage from other trades, construction materials or backfill, using GCP Protection O3 boards.
- If the area around the substructure can be drained to a low level outlet then GCP recommends the HYDRODUCT® range of drainage membranes.

#### Performance

BITUTHENE® 4000E membrane complies with the following national standards: BS 8102: 2009, and approved by BvB.

#### Health and Safety

There is no legal requirement for a Safety Data Sheet for BITUTHENE® 4000E. For BITUTHENE® Primer S2, BITUTHENE® Primer W2 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.



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

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## Membran BITUTHENE® 4000E

Supply	
<b>BITUTHENE® 4000E</b>	1 m x 20 m roll (20 sq m) Weight 31 kg
Storage	Store upright in dry conditions below +30°C
<b>Bituthene® Primer S2</b>	5 & 20 litre can
<b>Bituthene® Primer W2</b>	5 litre can
Coverage	9-11 sq m per litre application, (depending on surface porosity and ambient temperature)
Ancillary Products	
BITUTHENE® LM	5.7 litre packs
PREPRUFE® DLM	600 ml sausage
Protection® O3 board	3 mm x 0.9 m x 2.03 m (± 6%)
ADCOR® 500S	6 x 5 m rolls
ADCOR® 550MI	8 x 5 m rolls
BITUSTIK™ BT	150 mm x 10 m roll
HYDRODUCT®	Refer to Hydroduct® Vertical Drainage Sheets datasheet

### Equipment by Others: Lap Roller

Note: As per specification and/or local site requirements GCP solvent based primer BITUTHENE® Primer S2 can be used as alternative to BITUTHENE® Primer W2.

Physical Properties		
Property	4000E	Test Method
Colour	Dark grey-black	
Application Temp.	+5°C to +35°C	
Resistance to hydrostatic head	>70 m of water	ASTM D5385



Declared values according to EN 13969		
Property	Declared Value	Test Method
<b>BITUTHENE®</b>	<b>4000E</b>	
<b>Visible defects</b> - MDV	None	EN 1850-2
<b>Straightness</b> - MDV	Pass	EN 1848-2
<b>Length</b> (m) - MDV	20. ± 0.2	EN 1848-2
<b>Thickness</b> (mm) - MDV	1.5 ± 0.08	EN 1849-2
<b>Width Overall (roll)</b> (m) - MDV	1.000 ± 0.010	EN 1848-2
<b>Water tightness to liquid water</b> (at 60 kPa)	Pass	EN 1928
<b>Resistance to impact</b> (Al-board (mm) - MLV)	≥ 150	EN 12691
<b>Resistance to tearing (Nail Shank)</b> - unreinforced sheets (N) - MLV	≥ 110	EN 12310-1
<b>Joint strength</b> (N/50mm) - MLV	≥ 150	EN 12317-2
<b>Water vapour transmission</b> (μ = sD/d) - MDV	90,000 ± 30%	EN 1931 Method B
<b>Durability of water tightness against ageing/ degradation</b> (at 60 kPa)	Pass	EN 1296 EN 1928 Method B
<b>Durability of water tightness against chemicals</b> (at 60 kPa)	Pass	EN 1847 Method B EN 1928 Method B
<b>Resistance to static loading, Kg</b>	≥ 10 - Pass	EN 12730
<b>Tensile properties - unreinforced sheets</b> (N/50mm) - MLV	Long <sup>1</sup> ≥ 200 Trans <sup>2</sup> ≥ 220	EN 12311-2 Method A
<b>Tensile properties - unreinforced sheets</b> (Elongation %) - MLV	Long <sup>1</sup> ≥ 240 Trans <sup>2</sup> ≥ 220	EN 12311-2 Method A
<b>Reaction to fire</b> (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.

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.

Använd alltid skyddsutrustning enligt arbetsplatsens riskbedömning