

High performance waterproofing membrane for sub-structures and flat deck applications

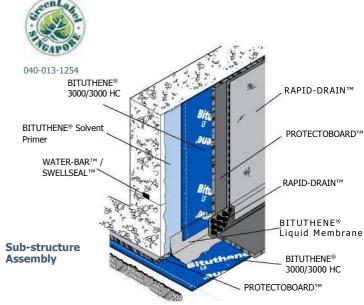
Product Description

BITUTHENE® 3000/3000 HC is a high performance, cold-applied, flexible, preformed waterproof membrane combining a special high performance, cross-laminated, HDPE carrier film with a unique self-adhesive rubber bitumen compound.

Product Advantages

- Waterproof High hydrostatic head resistance.
- High density cross-laminated polyethylene film
 - ✓ Provides dimensional stability
 - ✓ Provides puncture resistance
- Single layer Simple, reliable, low labour cost with the benefit of site programmed installation
- 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)
- Cold-applied
 - ✓ No flame hazard
 - ✓ No heating required
- Self-adhesive rubberised asphalt
 - ✓ Continuity ensured at overlaps
 - ✓ Unique rubber/bitumen formulation allows healing of small punctures
- Factory controlled thickness No variation by site practices
- Chemically-resistant Provides effective external protection against aggressive environments and ozone attack
- Flexible Accommodates minor settlement and shrinkage movement
- Tanking security Combined flexible membrane and waterstop system for security

- Roof assemblies
- Elevated or grade level podiums
- Plaza decks / Roof gardens / Terraces



Installation

Measures should be taken to ensure that all surfaces are free from ice, frost or condensation. Roof slab surfaces must be dry, and free from sharp protrusions, and any hollows to be filled with high strength mortar.

Horizontal and vertical faces must be smooth, regular, dry and free from nails. Prime the horizontal and vertical surfaces with one coat of BITUTHENE® Solvent Primer applied by brush or roller at a rate of 6-8 $\rm m^2$ / litre depending on the porosity of the surface, and allow to dry completely before the application of BITUTHENE® 3000/3000 HC.

BITUTHENE® 3000/3000 HC should be laid by peeling back the protective silicone release paper and applying the self-adhesive face on to the surface to ensure good initial bond.

Adjacent rolls are aligned and overlapped 50mm minimum at side and 50mm at ends, and the overlaps well rolled with a firm pressure using a lap roller to ensure complete adhesion and continuity between the layers.

Following the application and inspection, care should be taken to prevent damage by following trades. As soon as practicable after

Applications

- Basement
- Sub-structures
- Flat decks

Physical Properties

| Property | Typical Values | Test Method |
|---|----------------------|-----------------------|
| Colour | Dark Grey | NA |
| Nominal Thickness* | 1.5mm | NA |
| Tensile Strength Of Membrane | 4N / mm | ASTM D412 modified ** |
| Elongation Of Membrane (To Ultimate Failure Of Rubberised Asphalt) | 200% | ASTM D412 modified ** |
| Lap Adhesion @23°C | 683 N/ m | ASTM D1876 |
| Cycling over crack @-32°C | No effect 100 cycles | ASTM C836 |
| Puncture Resistance Of Membrane | >220N | ASTM E154 |
| Resistance To Hydrostatic Head | 60m | ASTM D5385 |
| Tear Resistance | 23N / mm | ASTM D624 |
| Permeance | 1.9na Pa. m². S | ASTM E96 [12] |

Typical test values represent average values from samples tested. Test methods noted may be modified. * Nominal thickness refers to the thickness of the membrane without release liner.

Please consult your local GCP representative on recommended installation temperature.

the application, BITUTHENE® 3000/3000 HC should be protected from exposure to the weather and physical damage using PROTECTOBOARD $^{\text{TM}}$, insulation or RAPID-DRAIN $^{\text{TM}}$ drainage composites laid dry.

Any punctured or damaged areas should be cleaned and patched using BITUTHENE $\!^{\otimes}$ 3000/3000 HC with minimum 50mm laps all around.

Following the application, care should be taken to prevent damage by following trades by using PROTECTBOARDTM spot bonded with BITUSTIKTM Tape Super or a 25mm screed as horizontal protection. Vertical faces to be protected against damage from backfilling and reinforcement by using PROTECTOBOARDTM spot bonded with BITUSTIKTM Tape Super.

The junction between the slab and parapet shall have a fillet of BITUTHENE® Liquid Membrane or other acceptable methods placed firmly into position before using 300mm wide reinforcing corner strips of BITUTHENE® 3000/3000 HC placed centrally over the axis of the change of direction.

Always apply BITUTHENE® membrane directly to primed or conditioned structural substrates. Insulation, if used, must be applied over the membrane. Do not apply BITUTHENE® membranes over lightweight insulating concrete.

Supply

| Pack Size | 1m x 20m roll (20sqm) |
|--------------|----------------------------|
| Gross Weight | 39kg |
| Storage | Dry conditions below +35°C |

Health and Safety

Refer to relevant Material Safety Data Sheet.

Quality Assurance

GCP Applied Technologies is certified to ISO 9001:2008 by TUV SUD PSB Pte Ltd.

Technical Services

For assistance with working drawings for projects and additional technical advice, please contact GCP Applied Technologies.

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^{**} The test is run at a rate of 100 mm per minute.