BITUTHENE 3000



BITUTHENE[®] 3000

High performance waterproofing membrane for substructures and flat deck applications

Product Description

BITUTHENE[®] 3000 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

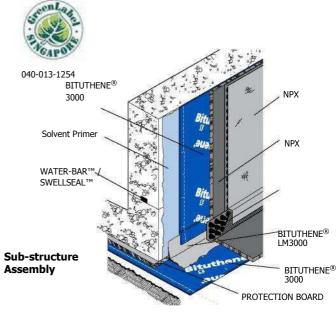
• Self-adhesive rubberised asphalt

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
- **Applications**
- Basement
- · Sub-structures
- Flat decks

- · 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 Solvent Primer applied by brush or roller at a rate of 6-8 m^2 / litre depending on the porosity of the surface, and allow to dry completely before the application of BITUTHENE $^{\circledR}$ 3000.

BITUTHENE® 3000 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

the application, BITUTHENE® 3000 should be protected from exposure to the weather and physical damage using NPX DRAINAGE & PROTECTION BOARD.

Any punctured or damaged areas should be cleaned and patched using BITUTHENE® 3000 with minimum 50mm laps all around.

Following the application, care should be taken to prevent damage by following trades by using protection board spot bonded with $BITUSTIK^{TM}$ Tape Super or a 25mm screed as horizontal protection. Vertical faces to be protected against damage from backfilling and reinforcement by using NPX DRAINAGE & PROTECTION BOARD spot bonded with $BITUSTIK^{TM}$ Tape Super.

The junction between the slab and parapet shall have a fillet of BITUTHENE® LM3000 or other acceptable methods placed firmly into position before using 300mm wide reinforcing corner strips of BITUTHENE® 3000 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.

Application areas:

Tanking: Full waterproofing and DPM and below grade tanking (walls buried below ground). Bituthene 3000 prevents water from entering the wall or building structure from the ground.

- Under horizontal roof & floor concrete slabs. (Inter-slab waterproofing).Bituthene acts as a waterproofing membrane (very tough yet elastic) and due to its Polythene surface, it also acts as a slab separation /slip layer.
- As a combined and full waterproofing system using Bituthene 3000 on vertical walls overlapping Preprufe systems under the slab below.
- On masonry, precast or poured in-situ concrete, Polystyrene faced blocks

Features

- BRANZ appraised; No. 805 (2013 and current)
- Compliant product with E2/AS1 July 2005; section 12.0, 12.2.2.b
- Used in New Zealand for over 35 years
- Compliant with BRANZ bulletin #397, Waterproofing basements; section 5.2.2
- 50 Year durability compliant; "Life of the building" (refer BBA approval).
- BBA approval (British Board of Agreement) #97/3325; March 2000
- All joints sealed by permanent self-adhesive.
- Protected by NPX protection & drainage sheet before backfilling.
- Very high Water vapour resistance 891 MNs/g BS3177.
 Permeance: less than 2 mg/m².s.Pa. ASTM E96[12]
- Bituthene 3000 is a self-adhesive sheet material supplied in a roll form. The release paper is removed and the Bituthene adheres immediately to primed concrete walls. Subsequent sheets are lapped.
- As a sheet material, it provides a consistent thickness across the wall and is not dependant on contractor application variability.
 Once applied, it provides immediate protection and is not affected by rain or site water.
- Use Bituthene & Preprufe waterproofing combination to provide a wall / under-slab protection system that provides complete building integrity.

Producer Statement

Bituthene 3000 complies with the requirements of the NZ building code and any relating acts. Bituthene 3000 complies with E2/AS1 and durability under B2. The conditions under B2 (50years durability for elements that are inaccessible) are accepted and complied with providing all preparation and installation is carried out by Allnex licenced contractors and all product installation details are followed.

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

Quality Assurance is carried out by the manufacturer GCP Applied Technologies who are certified to ISO 9001: 2008 by TUV SUD PSB Pte Ltd.

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. m ² . 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 Allnex representative on recommended installation temperature

Technical Services

For assistance with working drawings for projects and additional technical advice, please contact Allnex Construction Products.

Appraisal

BRANZ Appraisal No: (805) 2018



Date: May 2018 Replaces: October 2016



Allnex Construction Products, a Division of Allnex New Zealand Ltd
Auckland - 14 Industry Road Penrose phone: 095836544. Hamilton - 18 Somerset Street Frankton phone: 07-847-8658
Wellington - 19A Jamaica Drive Grenada North phone: 04-240-0305. Christchurch - 112 Carlyle Street Sydenham phone: 03-366-6802
Customer Service: 0508-882-288 cs.constructionnz@allnex.com

www.allnexconstruction.com



DISCLAIMER: This information appearing in this Document (Details) concerning the product which is the subject of the Document (Product) is either based on present technical knowledge and tests done by allnex or tests done by, and data supplied from third parties including you, the customer. Since the actual use by you and by others of the Product is beyond the control of allnex, no warranty or representation, express or implied is made by allnex regarding the suitability of the Product for your purpose, regarding which you accept full responsibility, in addition, if any of the Details appearing in the Document and he Document allnex recommends that you carry out your own tests as to the suitability of the Product for your purpose, regarding which you accept full responsibility, in addition, if any of the Details appearing in the Document are based upon tests done by, and/or data supplied by any third party, allnex provides no warranties or representations in connection with those Details and you, the customer waives any right you may have against allnex in connection with the accuracy, completeness or otherwise of the Details. The information in this Document is not to be construed as absolutely complete or accurate since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exists or because of applicable laws or the product allnex does not provide any warranty or representation to you that the Product does not infringe the intellectual property rights of any third party. All orders accepted shall be subject to the standard conditions of sale of allnex which are on the back of our invoice. In accepting the Product does not infringe the intellectual property rights of any third party. All orders accepted shall be subject to the standard conditions of sale of allnex which are on the back of our invoice. In acceptance with the requirements and regulations of the relevant supervising government. b.) The Product and must be stored strictly in accordance with

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