Bituthene® 3000/3000 HC

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.

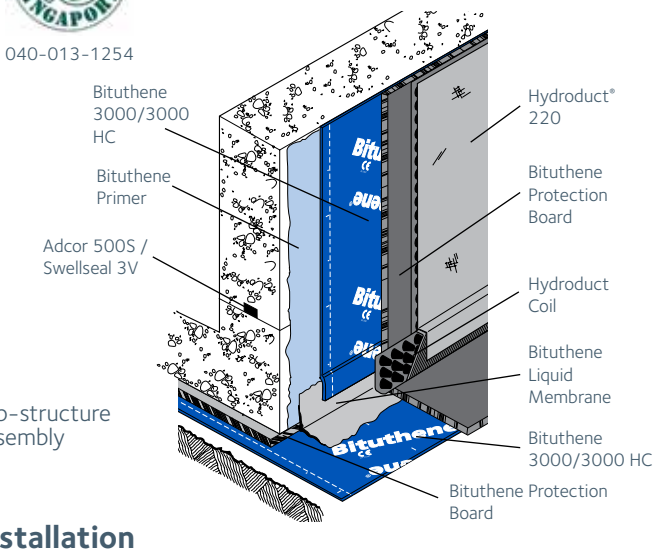
Product Advantages

- 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

Applications

- Basement
- Sub-structures
- Flat decks
- Roof assemblies
- Elevated or grade level podiums
- Plaza decks / Roof gardens / Terraces

040-013-1254



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 Primer applied by brush or roller at a rate of 6-8sq m per 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

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.

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

Please consult your local GCP representative on recommended installation temperature.

Supply

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

the application, Bituthene 3000/3000 HC should be protected from exposure to the weather and physical damage using Bituthene protection boards, insulation or Hydroduct® drainage composites laid dry.

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

Following the application, care should be taken to prevent damage by following trades by using Bituthene protection boards spot bonded with Pak Adhesive or a 25mm screed as horizontal protection. Vertical faces to be protected against damage from backfilling and reinforcement by using Bituthene protection boards spot bonded with Pak Adhesive.

*** For usage in China mainland, please follow China GB code requirement for lapping. For more details, please contact your local GCP representative.

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.

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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