BITUTHENE® 6000 EIM

Heavy duty, preformed composite membrane combining a self-adhesive rubber/bitumen compound and a tough, puncture-resistant four-ply polyethylene laminate for electrical insulation in critical sub-structures and civil works

Product Description

BITUTHENE® 6000 EIM, whilst designed as a waterproofing membrane for concrete structures, possesses excellent electrical insulation properties. BITUTHENE is composed of a tough, cross-laminated polyethylene film, backed by a self-adhesive rubberised asphalt compound, all of which components provide high resistance to the passage of direct or alternating current.

Features

- Cross-laminated film — provides dimensional stability, high tear strength and puncture resistance.
- Cold applied — no heating, hot mopping or torches.
- Flexible — retains flexibility to accommodate ground movement, structural movements.
- Controlled thickness — factory controlled uniform thickness.
- Chemically-resistant.
- Simple, reliable, low labour cost installation.

BITUTHENE 6000 EIM is composed of 1.4mm of rubberised asphalt compound and 0.2mm, 4 ply cross-laminated polyethylene providing superior puncture and damage resistance. It is important to ensure that the membrane resists damage during installation, and during subsequent construction activities, to provide a continuous barrier to the passage of current. The self-adhesive compound allows easy and safe cold application over large areas, without the need for torching or hot mopping of asphaltic compounds. This is particularly important when work is being carried out in confined spaces or underground, on, for example Mass Transit Rail Station Platforms.

Double layer of BITUTHENE 6000 EIM enables electrical resistivity of up to 6000 x 10^{11} ohm-cm.

Installation

Concrete surfaces shall be dry, free of loose debris and sharp protrusions and hollows. An application of WP-3000 water-based primer is recommended, at the rate of 12 to 15m^2 / litre. A water-based primer is recommended, for safety reasons, when working in enclosed spaces underground. The primer is allowed to dry completely before application of the membrane.

For complete instructions on the application of BITUTHENE membranes, please refer to our general data sheets and contractor guide, available from your local GCP representative.

Supply

BITUTHENE 6000 EIM	1m x 20m roll (20 sq m) Average net weight 40kg
Storage	Store upright in dry conditions below 35°C
Primer WP-3000	18.9 litre pails
Coverage	12 - 15 sq m / litre depending on method of application, surface texture, porosity and ambient temperature
BITUTHENE LM	5.7 litre pails
BITUTHENE Mastic	850cc cartridges, 3 litre pails
BITUTHENE Lap Roller	Unit

Quality Assurance

GCP Applied Technologies is certified to ISO 9002 by TUV SUD PSB Pte Ltd.

Health and Safety

Refer to relevant Material Health and Safety data sheets.

Specification

BITUTHENE 6000 EIM preformed membrane shall be applied onto smooth primed concrete by applying the preformed membrane, sticky side downwards to give well rolled 50mm overlaps, laid strictly in accordance with manufacturer's instructions and supplied by GCP Applied Technologies. For further information, contact your local GCP representative.

Product Warranties

GCP and contractors recognised by GCP as experienced in the application of GCP products will provide warranties for qualified individual projects. Warranty periods offered are dependent on project details and complexity. Contact your local GCP representative for further details.

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

Performance

PROPERTY	TYPICAL VALUES	TEST METHOD
Nominal Thickness*	2 layers of BITUTHENE 6000 EIM to a total thickness of 3.2mm	NA
Elongation	min. 300%	ASTM D412 Modified
Tensile Strength	min. 5000Kpa	ASTM D412 Modified
Volume/Electrical resistivity	min. 5000 x 10^{11} ohm-cm	ASTM D-257

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.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP (Hong Kong) Ltd., 6 On Chuen Street, On Lok Tsuen Ind Area, Fanling, Hong Kong

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