# Bitushield™

Self-adhesive waterproofing sheet membrane finished with mineralized felt for exposed waterproofing detailing.

## Description

Bitushield<sup>M</sup> is a preformed, cold applied, non-woven polyester reinforced protection membrane 3.0mm thick overall, comprising a self-adhesive rubber/bitumen compound protected with a release film, laminated to a robust green mineralised felt with a 75mm wide self-adhesive selvedge in 1.00m x 6.00m long rolls.

## Main Applications

- Protection of Bituthene<sup>®</sup> 5000
- Exposed details of decks waterproofing systems
- Protection and waterproofing of parapets and edges of terraces and balconies
- Finishing of concrete planter boxes

Bitushield is recommended as detailing membrane of other waterproofing systems, suitable for UV exposed application.

It is also suitable as protection of Bituthene 5000 waterproofing membrane under sand carpet and hot rolled asphalt.

# Installation

### Preparation

The installation of Bitushield should only be carried out when the ambient temperature is above +4 °C. The concrete surface must be clean, dry, free from laitance, loose aggregate and other debris and contaminants. Abrupt irregularities greater than 3 mm should be knocked back or filled with a high strength mortar.

## Priming

Horizontal and vertical faces shall be primed with Bituthene Primer S2 applied by brush or roller at a rate of 10–12 sq metre per litre depending on the porosity of the surface, and allowed to dry completely before the application of the Bitushield.

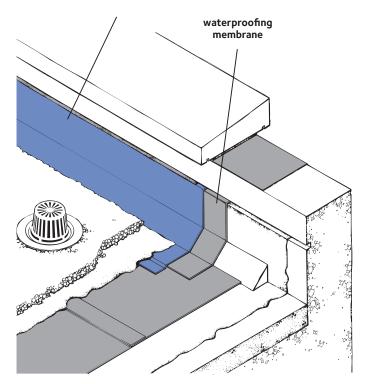
### Temperature

Apply Bitushield only in fair weather when air and surface temperature are above +5  $^{\circ}\text{C}.$ 

## **Advantages**

- **Self adhesive** no heating plant or hot bitumen bedding adhesive required
- **Flexible** easily applied, conforms to changes in profile, accommodates shrinkage cracks up to 0.6 mm
- Robust accepts road laying machinery
- **Pre-formed** guaranteed thickness, not subject to site variation
- **Mesh reinforced** provides dimensional stability and resistance to damage
- **Rubber/bitumen** self-adhesive, to substrate, lap integrity achieved by application of hot finishes

**೧১ភ**Plus



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

Supply	
Bitushield	1.0 m x 6.0 m roll (6 sq m)
Weight of roll	32 kg gross
Storage	Store upright in dry conditions below +30°C
Ancillary Products	
Bituthene Primer S2	5 and 20 litre drums. Coverage depending onmethod of application, surface texture, porosity and ambient temperature 10-12 sq m per litre
Bituthene Mastic	4.5 litre can
Lap Roller	Unit

**Equipment by Others:** Brush or airline for cleaning surface, Stanley knife for cutting Bitushield, soft broom, paint brush or roller for priming.

#### Application

Bitushield shall be laid longitudinally to the deck, to suit the cross falls and to give weathered overlaps. Adjacent rolls are aligned and overlapped 75 mm minimum on lateral adhesive exposed selvedge and the overlaps should be well rolled with a firm pressure using a Lap Roller to ensure complete adhesion and continuity between the layers. Gentle heat between layers will assist in promoting overlap adhesion and is required if not directly surfaced with hot rolled materials. Overlaps should be staggered to avoid more than three layers of membrane at any point.

End laps should be made by wire brushing or scraping away a 75mm band of the mineral finish and lapping the next roll on this prepared surface. The Bitushield should be well rolled paying special attention to lap joints, to ensure complete and continuous adhesion to the primed substrate.

#### Terminations and Day Joints

Permanent edges of the Bitushield should be terminated into a chase below finishes and pointed with Bituthene Mastic. Day joints or temporary stop ends should be left with staggered layers between the membrane and protection layer, and carefully rolled and sealed with a bead of Bituthene Mastic to prevent the entry of moisture under the membrane.

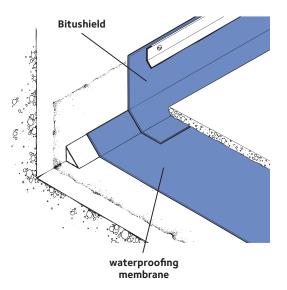
#### Application of Base and Wearing Course

In case of application as protection of Bituthene 5000, base and wearing courses should be applied as soon as possible after a minimum of four hours. Highways Agency Specification for Highway Works 1991, Clause 901.9 states that bituminous material with a temperature greater than 145° C, shall not be laid or deposited on bridge deck waterproofing systems, unless precautions against heat damage have been approved by the engineer. The interface temperature of the sand asphalt should not be permitted to fall below 100°C to ensure good key and adhesion to the Bitushield. It is important that the waterproofing is not allowed to reach temperatures in excess of 145 °C. In practice asphalt laid at higher temperatures (175 - 180°C) cools inunediately to an acceptable 140° C or less interface temperature. In the event of ambient temperatures exceeding 35°C, it may be necessary to lay the sand carpet by hand or to restrict machine operations to specific times of day.

## **Health and Safety**

There is no legal requirement for a Safety Data Sheet (SDS) for Bitushield. For health and safety questions on these products please contact GCP Applied Technologies.

For Bituthene Primer S2 and Bituthene Mastic read the product label and SDS before use. Users must comply with all risk and safety phrases. SDS's can be obtained from GCP Applied Technologies or from our web site at gcpat.com.



## gcpat.com | Customer Service: Tel +44 (0)1753 490000 | Fax +44 (0)1753 490001

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

Servidek and are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2016 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140 USA

In the UK, Ipswich Road, Slough, Berkshire, SL1 4EQ, UK GCP0082\_0816 BITUSHIELD\_UK

