

# Estoflex GP

## Flexible Bitumen – Rubber Membrane

### Description

**Estoflex GP** is a one component rubberized bitumen emulsion sealing membrane. It is easy to apply, free of solvents and plasticizers compound. **Estoflex GP** is an elastic watertight membrane.

**Estoflex GP has been tested by SIRIM BHD, in accordance to BS 1881 Part 122:1983, on Water Absorption Test and ASTM D 412, on Elongation & Tensile Strength Test, and complied with the specification in this data sheet.**

### Uses

**Estoflex GP** is designed for used as a damp proof membrane, vapour barrier, waterproof and protective coating. It is used in all cases where leaking and humidity are distressing the construction, waterproofing in civil engineering and building construction, such as: -

- New R.C Roof & Re-roofing
- Basements wall
- Ground water insulation / Wet rooms
- Foundation / Bridge abutment or pier
- Damp proof sandwich membrane in concrete floors
- Vapour barrier to cladding panels
- Repairing the cracks and crazing in asphalt surfaces < 5mm. If otherwise, Estojoint or Estolastic sealant should be used.
- Retaining wall and tunnel

### Advantages

- Ready to use & easy to apply
- Fast drying & waterproof
- Free of solvents / Non flammable
- Permanent flexibility
- Not harmful to environment
- Very good adhesion
- Applicable on fresh concrete
- Low water vapour permeable
- Can be applied to green concrete
- Resistant to sulphate and ground salts

### Standards Compliance

- **BS 1881 Part 122:1983**
- **ASTM D412**

### Physical Properties

Tensile Elongation, ASTM D412	>600 %
Water Absorption, BS 1881, Part 122	<1.0%
Heat Resistance	<100°C no sagging
Cold Resistance	>20°C
Softening Point (R+B)	>120°C
Form	Pasty, thyrrotrophic
Colour	Brown-black (before drying)
Emulsion	Non-ionic
Specific Gravity	1.08kg/litre
pH Value	11
Solid Content	60%
Storage Temperature	Not below freezing point
Application Temperature	Min + 5 °C
Drying Time (20°C + 60%RH)	4 – 6 hours
Fully Dried (1.3mm thick)	< 4 days

### Application Instructions

#### Preparation

Substrate shall be free of dust, grease and pre-wet with water before application.

All grooves, voids and honeycombs should be patched before the application of **Estoflex GP**.

**Estoflex GP** can be applied on damp surface with no standing water.

#### Application

##### (A) As a damp proof & protective coating

**Estoflex GP** shall be applied with brush, rubber squeegee or flat trowel.

The system is comprising of one priming coat (1 part water to 1 part of **Estoflex GP**) and two neat coats. The coating shall be dried before subsequent application.

##### (B) As a waterproofing and vapour proof system

###### Base Screed (for R. C. flat roof)

Base screed with minimum gradient of 1:120, to receive **Estoflex GP**, shall be laid if the floor is uneven and without required gradient, to achieve better waterproofing performance.

## Application of Estoflex GP Waterproofing System

**Estoflex GP** shall be applied with brush, rubber squeegee or flat trowel.

Firstly, apply one priming coat (1 part water to 1 part of **Estoflex GP**) at the rate of 0.36 kg/m<sup>2</sup>.

First neat coat of Estoflex GP shall be applied at the rate of 0.72 kg/m<sup>2</sup>, after the priming coat is dried. Whilst the neat coat is still wet, lay the Estop Fibreglass reinforce fabric and allowed to dry.

Second and third neat coat of **Estoflex GP** shall be applied at the same rate and allowed to dry.

### (C) Heat reflective finish for non-traffic roof (optional)

Apply two coats of bitumen-based aluminium / green colour paint at the rate of 8m<sup>2</sup>/litre/coat as a heat reflecting finish.

### (D) Cement sand protective panel for trafficable roof (optional)

A layer of 35 – 50mm thick protective screed in panel form is recommended. The panel joints shall be filled with Estolastic sealant.

Panel size is recommended to be 1m x 1m. Reinforced with BRC is essential.

## Packing & Size

<b>Estoflex GP</b>	200 litre drum 20 litre pail
<b>Estop Fibreglass</b>	100m <sup>2</sup> roll

## Technical Support

Denka offers a comprehensive range of high performance, high quality of product for both new and existing concrete surfaces. In addition, the company offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

## Storage

**Estoflex GP** should be stored on pallets in dry conditions. Under these conditions, the product will have a shelf life of 12 months.

## Precaution

**Estoflex GP** should not be swallowed or in contact with skin and eyes. Wear suitable protective gloves and goggles.

Splashes on the skin should be removed with water. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

**Estoflex GP** can be added and mix with clean water (not more than 1 litre of clean water to 20 litre **Estoflex GP**) if it is too thick and difficult for application.

## Additional Information

Denka Construction Solutions Malaysia Sdn Bhd and offers a wide range of complementary products, which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.

**Denka Construction Solutions Malaysia Sdn Bhd**  
(Formerly known as Estop Sdn Bhd)

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