

# Estokote Flexi

## High Performance Polymer Modified Elastomeric Waterproofing Membrane System

### Description

**Estokote Flexi** is a two-component polymer modified waterproof membrane which is supplied in ready mix kits. When mixed, an easily brushable coating is produced. It can simply be applied by a stiff brush, roller, or trowel to obtain the desired thickness.

**Estokote Flexi** consists of special synthetic resin dispersion and a blend of selected cements, graded hard wearing aggregates and additives supplied in powder form to provide exceptional adhesion, resiliency, flexibility, toughness and durability.

**Estokote Flexi has been tested by SIRIM BHD, in accordance to BS 1881 Part 122:1983, on Water Absorption Test and complied with the specification in this data sheet.**

### Uses

**Estokote Flexi** when fully cured provides a seamless elastic waterproof membrane, where a tough elastomeric water tight membrane is required.

It is recommended for use in the following locations:

- R.C. Flat roof & gutter
- Reservoir, swimming pool and water tank
- Basement wall and floor
- Water retaining and excluding structure

### Advantages

- Can be applied to damp substrates
- No primer required
- Elastomeric – able to bridge cracks
- Able to take foot traffic when cured
- Factory pre-blended two component system ensures quality control at site.

### Standards Compliance

- BS 1881 Part 122:1983
- BS 6920 Part 1 & 2
- ASTM D4541
- ASTM D412

### Physical Properties

Pot Life at 35°C	Approx 1 hour
Adhesion to substrate	> 1 N/mm <sup>2</sup>
Shore A Hardness at 25°C, 7 days cure	60
Tensile Strength, N/mm <sup>2</sup> ASTM D412	1.8 N/mm <sup>2</sup>
Elongation at Break ASTM D412	150 %
Hydrostatic Test at water pressure of 0.4 bars for 6 hours	No Penetration
Water Vapour Permeability	< 4 g/m <sup>2</sup> /day
Crack Bridging	Passed
Flexibility 25 mm mandrell	Passed
Setting Time Foot Traffic Light Vehicle	4 hrs ± 1 hr 24 hrs ± 3 hrs
Water Absorption BS1881 Part 122:1983	< 1.0 %

### Application Instructions

#### Preparation

All surfaces which are to receive **Estokote Flexi** coating must be free from oil, grease, wax, dirt or any other form of foreign matter which might affect adhesion. Spelled and deeply disintegrated concrete should be removed to sound concrete and repaired.

#### Mixing

The **Estokote Flexi** liquid concentrate is poured from the plastic container into the metal drum supplied and mixed mechanically with a slow speed drill (350 – 450 rpm). Add the powder component gradually to the liquid avoiding lump formation and mix for 4 – 5 minutes until a smooth consistent mix is achieved. Used the material within the recommended pot life.

#### Application

For best results damp the surface before coating with **Estokote Flexi**. Use **Estokote Brush** for brush application. Apply like a slurry coat using one or two coats as required.

For trowel application, ensure that the substrate is levelled and repaired of any undulations or pot holes.

**Estokote Flexi** should be applied to the recommended coverage as stated:-

It is recommended that general re-surfacing and areas subjected to light foot traffic should receive a **Estokote Flexi** coating of 1 mm thickness ( in two coats ). Additional coatings may be required for areas of moderate to heavy pedestrian conditions. For temperature above 27°C, add water to liquid to adjust the consistency to achieve the coating thickness of 1 mm ( in two coats ). For areas where cracking on substrate is expected, such as movement joints, contraction joints etc, fabric reinforcements are required.

### Cleaning

**Estokote Flexi** should be removed from tools and equipment immediately after use with clean water. Hardened material can only be removed mechanically.

### Over Coating

Allow the coating to be harden for at least 3 days prior subsequence coating if over coated.

For over coating with non-cementitious materials, please refer to Denka Technical Department.

### Protection

The freshly applied waterproof coating shall be protected from rain, dirt, oil grease or other loose materials during its drying time.

The contractor should also take precautions to protect the **Estokote Flexi** coating from any mechanical damage during the construction of other trade of works.

**Estokote Flexi** waterproofing system to floors should be protected from damage by applying a protective screed.

### Curing

Precaution should be taken for applications done directly under sunlight and windy conditions. It should also be protected from direct rain for at least 4 hours.

The finishing coat shall be cured for 3-5 days before other trade shall be proceeded.

### Packing & Size

<b>Estokote Flexi</b>	33 kg pack
<b>Estokote Long Brush</b>	11 inch
<b>Estokote Short Brush</b>	9 inch

### Coverage

<b>Estokote Flexi</b>	1 kg/m <sup>2</sup> /coat
	16.5 m <sup>2</sup> / 2 coats / 33 kg pack

### Technical Support

Denka offers a technical support package to specifiers, end-users and contractors, as well as on site technical assistance.

### Storage

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

If stored in extreme heat locations the shelf life may be reduced.

### Precaution

**Estokote Flexi** is non-toxic but is alkaline in nature. Gloves should be worn. Any splashes to the skin or eyes should be washed off immediately. In the event of prolonged irritation, seek medical advice.

### 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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