



# Proofex Engage\*

**Pre-applied HDPE waterproofing membrane which mechanically bonds to poured concrete slabs, remaining in place if settlement of substrate occurs**

## Uses and advantages

- Basement waterproofing protection to grades 2, 3 and 4 as defined in BS8102:1990
- To provide a vapour and waterproof membrane in building and civil engineering structures
- Resistant to attack from chemicals and aggressive ground salts
- Forms a tenacious mechanical bond to poured concrete remaining in place if settlement of the substrate occurs
- Simple application - no primers or protection material required
- Inert product - no risk of a reaction with ponded water prior to concrete being poured
- Durable - withstands inclement weather and resists construction related damage. Can be trafficked immediately after application
- Facilitates flexible construction programming
- Full range of Fosroc hydrophilic and PVC waterstops available to provide complete solution to waterproofing of the structure

## Description

Proofex Engage is a unique patented system comprising a complex cell mesh bonded to a polyethylene membrane which allows poured concrete to interlock with the membrane forming a tenacious mechanical bond.

Proofex Engage is supplied with a selvedge on one side to provide sealed laps.

## Standard compliance

British Standard 8102:1990 - code of practice for 'Protection Of Structures Against Water From the Ground'.

## Typical properties

<b>Tensile strength (peak)</b> <b>(ASTM D412)</b>	: 11.6 N/mm <sup>2</sup>
<b>Elongation (peak)</b> <b>(ASTM D412)</b>	: 648%
<b>Puncture resistance</b> <b>(ASTM E154)</b>	: 672N
<b>Peel Adhesion to mortar</b> <b>(BS4254)</b>	: 74 N / 25 mm wide strip

## Shear strength of Joints (M.O.A.T. No. 27:5.2.2)

<b>Selvedge</b>	: 377 N / 50mm wide strip
<b>Detail Strip</b>	: 506N

## Hydrostatic pressure resistance - up to 70m head of water (ASTM D5385)

<b>Membrane</b>	: No leak after 1 hr.
<b>Selvedge</b>	: No leak after 1 hr.
<b>Detail strip</b>	: No leak after 1 hr.

## Hydrostatic pressure resistance - Non tracking (ASTM D5385 - with a 4-6mm<sup>2</sup> cut in membrane)

<b>60m head of water</b>	: 77mm <sup>2</sup> after 1.5hrs.
<b>70m head of water</b>	: 188mm <sup>2</sup> after 1.5hrs.

## Water vapour permeability

<b>(BS3177)</b>	: 0.08g m <sup>-2</sup> 24 hrs <sup>-1</sup>
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## Application instructions

### Substrate preparation

Horizontal application - the membrane must be applied to smooth prepared concrete or onto a compacted sand blinding on granular fill. The substrate shall be free from loose aggregate or other sharp protrusions. Standing water must be removed to prevent contamination of overlaps and subsequent compromise of waterproof properties.

### Membrane installation

Cut the membrane to a convenient length for installation. Carefully align the membrane and roll it out with the ribbed surface uppermost. Lay the adjacent sheets accurately so they overlap the previous sheet 68mm along the adhesive selvedge. The overlaps should be firmly rolled to ensure complete adhesion between layers.

If cold or damp conditions prevail the selvedge adhesive may be tackified by wiping with Fosroc Solvent 102. Proofex Engage Detail Strip may be gently warmed with a slack flamed gas torch or heat gun to remove moisture and promote initial adhesion in cold or humid conditions.

This procedure may also be used to assist bending Proofex Engage through 90 degrees at the floor to wall junction.

### Vertical Surface Waterproofing

Where vertical surface waterproofing is required, in conjunction with a Proofex Engage slab waterproofing system, two layers of Proofex 12\*† are to be employed. For Proofex 12\*† application details, please see the product data sheet.

# Proofex Engage\*

## Important note

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## Ancillary products

### Proofex LM

A two component applied liquid membrane for sealing around intricate details such as pipe entries, penetrations, pile caps, etc.

### Proofex Engage Detail Strip

A reinforced, double sided waterproof adhesive tape for sealing and jointing roll ends, cut edges and wall to floor detailing, sold in packs of two. It consists of a strong synthetic fibre fabric impregnated and coated both sides with a bitumen rubber adhesive. Each side of the tape is protected by a removable plastic film.

### Proofex LM Mesh

A reinforced mesh used in conjunction with Proofex LM for areas of extreme loading (covings, edges and pipe penetrations).

## Storage

Store in original unopened packaging, in cool dry conditions, away from sunlight.

## Precautions

### Health and safety

There are no known health hazards associated with Proofex Engage in normal use.

Proofex Engage weighs approximately 60kg and should be lifted by a minimum of three site operatives.

## Estimating

### Proofex Engage

<b>Thickness</b>	: 4 to 5mm (0.8mm excluding grid section)
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<b>Roll width</b>	: 1.27m
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<b>Roll length</b>	: 30m
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<b>Edge laps</b>	: 68mm
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<b>End lengths</b>	: Butt jointed
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<b>Roll weight</b>	: 58kg
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### Proofex Engage Detail Strip

<b>Thickness</b>	: 1.5mm
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<b>Roll width</b>	: 200mm
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<b>Roll length</b>	: 10m
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<b>Roll weight</b>	: 4kg
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<b>Pack weight</b>	: 4kg
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### Proofex LM

<b>Average thickness</b>	: 3.3mm
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<b>Pack size</b>	: 28kg
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### Coverage at

<b>4 mm thick</b>	: 7m <sup>2</sup>
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### Proofex LM Mesh

<b>Width</b>	: 100mm
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<b>Length</b>	: 50m
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\* Denotes the trademark of Fosroc International Limited

† See separate data sheet



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