

Pre-applied waterproofing membrane which mechanically bonds to poured concrete, 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
- Methane, radon and CO₂ protection as defined in BRE Report 212
- 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 seldge 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

Membrane properties	Test method	Typical value
Peel adhesion to concrete:		
	BS4254 mod*	74N per 50mm
Shear strength of joints:		
	MOAT 27:5.2.2	
Seldge:		377N
Proofex Engage Detail Strip:		
		506N
Puncture resistance:	ASTM E154	600N
Methane permeability:	BS903 Pt A30: 1996	1.33E-17m ² /sec/Pa
CO₂ permeability:	Rilem Report 12	<5.12E-13m ² /sec/Pa

*Concrete cast against grid and cured for 7 days. Peel adhesion tested at 50mm/minute at 20°C.

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 75mm along the adhesive seldge. The overlaps should be firmly rolled to ensure complete adhesion between layers.

If cold or damp conditions prevail the seldge 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 conditions.

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

Removal of formwork

Where the membrane has been applied to removable shuttering it is recommended that a minimum concrete compressive strength of 10N/mm² is reached before the formwork is stripped.

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

Thickness:	4 to 5mm (0.8mm excluding grid section)
Roll width:	1.27m
Roll length:	30m
Edge laps:	75mm
End lengths:	Butt jointed
Roll weight:	58kg

Proofex Engage Detail Strip

Thickness:	1.5mm
Roll width:	240mm
Roll length:	10m
Roll weight:	4kg
Pack weight:	8kg

Proofex LM

Average thickness:	3.3mm
Pack size:	28kg
Coverage at 4 mm thick:	7m ²

Proofex LM Mesh

Thickness:	1mm
Width:	508mm
Length:	15m

Storage

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

Important note

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