

constructive solutions

Torch applied waterproofing membranes

Uses

Waterproofing and damp-proof membranes for:

- Concrete roof and floor slabs
- Basement tanks
- Car park deck slabs
- Concrete retaining structures
- Tunnels and subways

Advantages

High strength reinforcement gives excellent resistance to puncture and stress. Proofex Torchseal 3P and 4P is easily torch applied and bonds well to the substrate. It is readily formed to contours, and is dimensionally stable.

Description

Proofex Torchseal 3P and 4P are quality applied membranes manufactured from premium grade heavily modified bitumen, reinforced with a core of non-woven polyester fabric. The core has a weight of 180 gms/m², it does not rot, and is malleable.

The core gives the membrane its excellent mechanical properties, allows for good elongation, and affords high resistance to piercing.

Proofex Torchseal 3P and 4P membranes are ideal for use in a wide range of waterproofing applications such as foundations, basements, tunnels, roofs, car park decks and other civil works. The chemical resistance of Proofex Torchseal 3P and 4P makes it particularly suitable for tanking applications in areas where aggressive ground water conditions prevail.

Technical support

Fosroc offers comprehensive technical support, including help at the design stage, application advice and on site problem solving. Specifiers and contractors are encouraged to contact our trained staff for answers to their questions.

For further information please contact us at your nearest Fosroc office.

Specification clauses

All areas so designated shall be protected with a high performance torch applied 3 mm / 4 mm thick membrane, manufactured from high quality polymer - modified bituminous compounds and reinforced with non-woven polyester fabric such as Fosroc Proofex Torchseal.

Application method

The application of Proofex Torchseal 3P and 4P waterproofing membrane is easy and quick. The surface of the area to be waterproofed should be free of dust, dirt and protruding nibs.

Porous substrate should be coated with Proofex Torchseal primer at an application rate of 5-6m² per litre or according to the porosity of the surface. The Proofex Primer should be allowed to dry until it is tack free prior to application of the membrane. All surfaces must be re-primed if left for more than 24 hours prior to application of Proofex Torchseal membranes.

The membrane is then unrolled and placed in the correct position where it is to be torched on later. During each stage, each roll must overlap the next layer at least 10 cm. The membrane is then rerolled again without changing the given orientation, then it is slowly unrolled again, and its surface lightly heated, transversally, by means of propane gas torch, thus causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

Application tools and equipment

The tools and equipment required to apply Proofex Torchseal 3P and 4P membrane include a propane gas torch with related gas cylinder, a knife for cutting the membrane to size, and a trowel with a rounded tip. Protective gloves and goggles are necessary when using the gas torch.

Typical Properties

Membrane thickness ± 5% (ASTM D 751)	:	Proofex 3P Proofex 4P	3mm 4mm	
Reinforcement base	:	180 gms / m ² polyester mat		
Softening point (R+B) of coating mixture (ASTM D 36)	:	150°C		
Penetrating (DOW) of coating mixture (ASTM D 5)	:	20-30 dmm		
Flexibility at low temperature (UEAtc)	:	-5°C		
Tensile strength				
Longitudinal (UEAtc)	:	820N/5 cm		
Transversal (ASTM D 146)	:	600N/5 cm		
Elongation				
Longitudinal (UEAtc)	:	50%		
Transversal (ASTM D 146)	:	60%		
Load strain				
Longitudinal (CGSB37-GP56M)	:	41,000		
Transversal	:	36,000		
Tear resistance				
Longitudinal (UEAtc)	:	180N		
Transversal	:	180N		
Lap joint strength				
Longitudinal (UEAtc)	:	750N/5 cm		
Transversal (CGSB37-GP56M)	:	550N/5 cm		
Puncture resistance				
Static (UEAtc)	:	L 4		
Dynamic	:	I 4		
Creeping of the membrane	-	No creeping		
applied on 60°C sloped surface at a test (UNI 8202)	•	. to oroopg		
Temperature of 100°C during 120 hours				
Water absorption	:	Less than 0.	15%	
(ASTM D 1228)				
Impermeability of the membrane	:	Absolutely impermeable)	

Resistance to thermal ageing (UNI 8202)	:	No sign of deterioration after the test	
Resistance to ageing due to UV-radiation (ASTM G53)	:	No sign of deterioration after the test	
Resistance to thermal hydro shock (ASTM G53)	:	No sign of deterioration after the test	
Chemical resistance (ASTM D 543-87)	:	Chloride, sulphate and nitrate	

Estimating

Supply

Proofex Torchseal 3P and 4P membranes are supplied in rolls 1 x 10 metres.

Slated surface (3 mm / 4 mm), Aluminium faced range (3 mm/ 4 mm) and double reinforced torch membrane are available on request.

Storage Proofex Torchseal 3P and 4P should be stored under dry conditions and away from heat sources.

Note: In accordance with Commercial or Health & Safety requirements packaging detail may alter. Please contact your local Fosroc office for detail.

Precautions

Health and safety

Protective gloves and goggles are necessary when using the gas torch to apply Proofex Torchseal membrane.

Fire

Proofex Torchseal 3P and 4P are flammable. Care should be taken not to ignite Proofex Torchseal during application by gas torch.

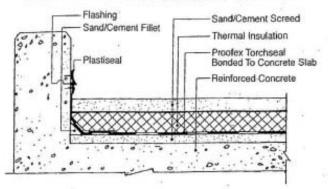
Additional Information

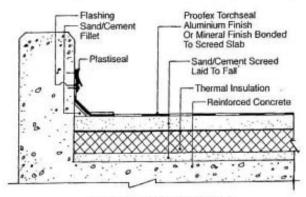
Fosroc provides a wide range of waterproofing products, including membranes, waterstops, sealants and other ancillary products. For further information about products or training, contact your local Fosroc office.



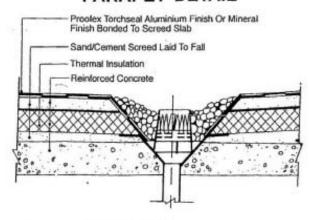
to water (UNI 8202)

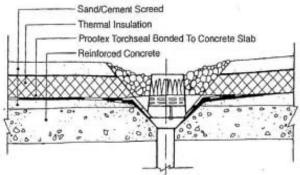
CONVENTIONAL ROOFING SYSTEM EXPOSED MEMBRANE BONDED TO SAND/CEMENT SCREED





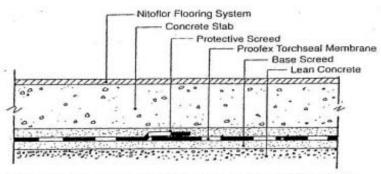
PARAPET DETAIL



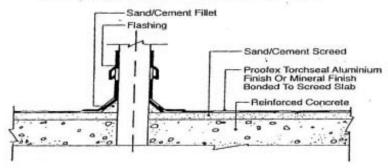


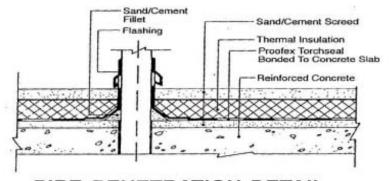
WATER DRAIN DETAIL





TO GROUND FLOOR SLAB





PIPE PENETRATION DETAIL

Proofex is the trademark of Fosroc International Limited



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