

Thioflex One

constructive solutions

One part polysulphide sealant

Uses

Thioflex One is ideal for sealing joints in window and door frame surrounds and as a capping for beaded glazing systems. It can also be used for sealing joints in external walls and cladding.

Advantages

Thioflex One is a one part polysulphide joint sealant which, on exposure to atmospheric moisture, cures to form a flexible rubber seal.

- One part gun application
- Cures to a tough, flexible rubbery seal
- Available in a range of colours
- Bonds to most building construction materials

Description

Thioflex One is a one part, gun applied, moisture activated, polysulphide sealant. After application a skin forms rapidly leaving the body of the sealant to cure more gradually, the rate being dependent upon temperature, humidity and dimensions of seal.

During the curing period, one part polysulphide sealants will accept limited movement normally associated with the applications described. For joints where significant early cyclic movements can be anticipated, Nitoseal MS100 or Nitoseal MS50 should be used.

Design criteria

Thioflex One may be applied in joints ranging from 5 to 25 mm wide. The minimum depth should be 5 mm (10 mm on porous surfaces) and the maximum depth should not exceed 15 mm. The joint should also include a suitable back-up strip.

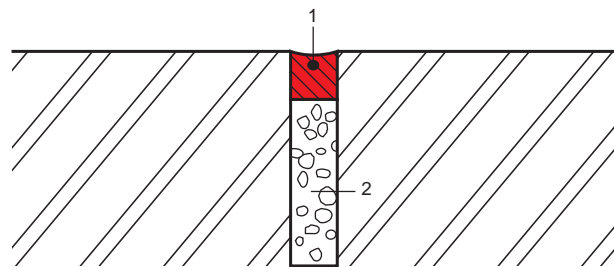
To ensure that the sealant remains within its stated movement capacity, the width of the designed sealing slot should be in accordance with the recommendations of BS 6093.

All surfaces require the use of a primer. Primer 4 for non-porous surfaces and Primer 7 for porous surfaces.

Standards compliance

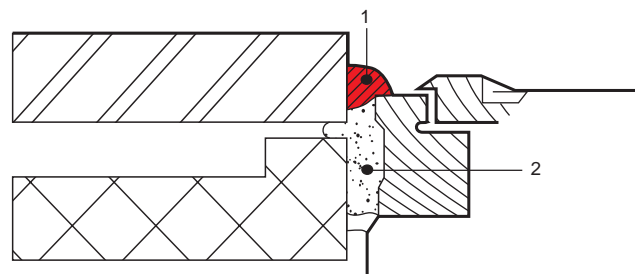
British Standard BS 5215: 1986.

Example of an external wall joint



- 1 Thioflex One
- 2 *Expandaf foam/Hydrocell

Example of a sealed window frame



- 1 Thioflex One
- 2 *Secofoam

*also available from Fosroc

Specification clauses

Joints shall be sealed using Fosroc Thioflex One; BS 5215: 1983 one part polysulphide sealant, manufactured by Fosroc. Joints shall be prepared and the sealant applied in accordance with the manufacturer's current data sheet.

Properties

Form:	Paste
Colours:	Black, buff, mahogany, grey, stone, cement white, white, brick red
Movement accommodation factor (MAF):	Total joint movement for cured sealants: 20% for butt joints
Physical or chemical change:	Chemical cure
Cure rate:	Thioflex One forms a surface skin within 24 hours. Though cure gradually proceeds over a period of weeks depending upon temperature, humidity, substrates and sealant depth

Thioflex One

Application temperature:	5 to 50°C	
Hardness shore 'A' 25°C:	25 to 30	
Water immersion:	Not suitable for use in submerged joints	
Chemical resistance to occasional spillage:	Dilute acid	resistant
	Dilute alkali	resistant
	Lubricating oil	resistant
	Petrol	resistant
UV resistance:	Good	
Solids content:	95%	
Flash point:	Over 65°C	
Flammability:	Burns but does not readily support combustion	

Application instructions

Preparation

Joint surfaces must be clean, dry and free from frost. Remove all dirt, laitance, loose material and foreign matter. Remove all rust, scale and protective lacquers from metal surfaces. Non-porous surfaces should be degreased using joint cleaner.

In movement joints Thioflex One must always be supported by a foam back-up strip such as Expandaflex or Hydrocell XL which will allow free movement. If insufficient depth is available use an adhesive polyethylene bond breaking tape. A bond breaker is not required when applied over Expandaflex or Hydrocell.

Where a particularly neat finish is required, cover face edges of the joint with masking tape and remove immediately after application and tooling of the Thioflex One.

Priming

It is important to prime in order to enhance the adhesive properties of Thioflex One.

Porous surfaces: Use Primer 7 on concrete, brickwork, stone, timber and unglazed edges of ceramic tiles. Apply by brush. Allow primer to be touch dry (20 to 60 minutes) before applying Thioflex One. Any joint not sealed within 3 hours must be reprimed. Any joint not sealed within 24 hours, the primer film must be mechanically removed before repriming.

Non-porous surfaces: Use Primer 4 on ferrous metals, stainless steel, ceramics and glass. Apply by brush. Allow primer to be touch dry (5 minutes approximately) before applying Thioflex One. Any joint not sealed within 24 hours must be reprimed.

Ferrous metals should be treated with an anti-corrosion primer.

Gun loading

Cut conical tip off cartridge end thread, screw on nozzle, cut at 45°C to required size and fit into sealant gun.

Application

Extrude the sealant firmly into joint to ensure complete contact with joint faces. Tool off as required with a spatula wetted with dilute detergent solution.

Cleaning

Clean tools immediately after use with Fosroc Equipment Cleaner.

Estimating

Packaging

Plastic cartridges with separate screw-on nozzles, packed in cartons of 20. Total contents approximately 7.6 litres.

Guide to Thioflex One quantities

Joint size in mm	Litre per metre run	Metre run per 0.38 litre cartridge
5 x 5	0.025	15.2
10 x 10	0.100	3.8
15 x 10	0.150	2.5
15 x 15	0.230	1.6
20 x 15	0.300	1.2
25 x 15	0.380	1.0

These are theoretical yields. No allowance has been made for variation in joint dimensions or wastage.

Guide to primer quantities

1 litre Primer 4 to 200 litres of Thioflex One.

1 litre Primer 7 to 30 litres of Thioflex One.

Actual usage depends upon joint dimensions and other factors.

Limitations

Not recommended for permanent water immersion.

Not suitable for trafficked joints.

Thioflex One should not be used in direct contact with materials containing pitch or bitumen.

Storage

Storage life of 12 months in original containers when kept in dry conditions between 5 and 27°C.



Thioflex One

Precautions

Health and safety

For further information refer to appropriate Product Safety Data Sheet.

Thioflex is a trade mark of Fosroc International Limited



Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it.

Fosroc Limited

Drayton Manor Business Park
Coleshill Road, Tamworth,
Staffordshire B78 3TL. UK

www.fosroc.com

telephone:
+44 (0) 1827 262222

fax:
+44 (0) 1827 262444

email:
uk@fosroc.com



Certificate number FM 610