



Description

PyroPro® LST Fire Resistant Sealant is a water based, acrylic, ablative sealant used to reinstate the fire resistance of wall and floor constructions in linear gap seals and where apertures are penetrated by single or multiple services. PyroPro® LST is authorised for use on the London Underground network, and other underground/ tunnel networks.

Application / Use

- Authorized for use on the London Underground Network
- To reinstate fire resistance through Rigid Floors
- To reinstate fire resistance through rigid and flexible walls
- Linear Construction Joints
- Single Service penetrations
- Multi-Service penetrations
- Blank Openings

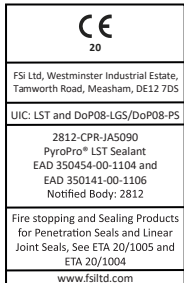
Packaging

- 310ml cartridge - 25 cartridges per box
- 900ml cartridge - 12 cartridges per box
- 400ml foils - 21 foil packs per box
- 600ml foils - 15 foil packs per box
- 5KG Pails
- 10KG Pails
- 20KG Pails

Product Details

Material	Water based acrylic sealant
Weight	~1.61g/cm ³
Finish /Colour	White, Grey, others available on request
Chemical properties/COSHH statement	See SDS latest version is available at www.fsilttd.com or available on request from technical@fsilttd.com
Size/dimensions (product & installation spacial requirement)	For penetrations seals, annular space and depth as per requirements of Approved FSi details. For linear joint seals see requirements of Approved FSi details
Shelf life	18 months if stored in accordance with storage conditions
Sag Flow	~0 mm (WI 018)
Skin Time	~40 minutes (23°C/50% r.h)
Determination of change in mass	12 - 15% (ISO 10563:2005)
Determination of change in volume	2 - 4% (ISO 10563:2005)
Shore A Hardness (28 Days)	66/31 (1 Second/5 Seconds) (BS ISO 7619-1:2010)
Chemical Resistance / Limitations	Not to be used where joints are to be constantly immersed in water. Do not use on substrates that are likely to release solvents, oils or plasticizers. Not resistant to water, strong acids, strong bases, oxidizing agents (i.e hydrogen peroxide), alcohols, hydrocarbon solvents

Product Certification / Approval



CE Mark

ETA-20/1004,
ETA-20/1005



ISO 9001

11378



Authorized for use on the
London Underground Network - Product ID 2199

Membership



Testing / Classification

Standard	Description	Result
BS EN 1366-3:2009	Fire resistance tests for service installations. Penetration seals	See APPROVED FSI DETAILS for fire resistance performance
BS EN 1366-4:2006	Fire resistance tests for service installations. Linear joint seals	See APPROVED FSI DETAILS for fire resistance performance
BS EN 1026:2000	Windows and doors. Air permeability. Test method	Tested at 600 Pa (contact technical@fsilttd.com for details)
BS 6853 D8.3:1999 A	Code of practice for fire precautions in the design and construction of passenger carrying trains: Annex D methods for measuring smoke density	o (max) value of 0.004
BS 6853: 1999 Annex B.1	Code of practice for fire precautions in the design and construction of passenger carrying trains: Annex B. Determination of weighted summation of toxic fume	R value of 0.19
BS EN ISO 4589-2: 1999	Determination of burning behaviour by oxygen index	Oxygen index of 27.9%
BS EN ISO 4589-3: 1996	Determination of Burning Behaviour By Oxygen Index Part 3 Appendix A– Temperature Test	Temperature index value of 166°C

Installation & Operation

FSi Ltd. recommend installation of FSi Ltd. products is carried out by 3rd party certified installers.

The substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust and loose particles. The product does not require a primer on most common surfaces, although adhesion tests are recommended prior to full scale application.

Adequate space and accessibility should be provided for applying and tooling the sealant. A suitable backing material to control the sealant depth may be required, please refer to APPROVED FSI DETAILS.

The joint depth should be such as to provide a minimum sealant depth required as per APPROVED FSI DETAILS.

The sealant should be gunned firmly into the joint ensuring that it is in full contact with the sides of the joint. Failure to carry this out may result in poor adhesion of the sealant and ultimate failure of the joint.

Tooling of the sealant may be necessary to achieve an acceptable appearance. This is accomplished by drawing a flat tool over the surface of the sealant to produce a smooth neat finish. Tooling also compresses the sealant into the joint enhancing the adhesion to the joint sides.

Clean all tools and application equipment with water immediately after use.

Competence records should be kept for all Individuals installing this product (s). Installations should be suitably recorded and logged.

Maintenance

Recorded inspection should be conducted in line with the maintenance and inspection schedule defined for the building/project.

These inspections should be completed and recorded by suitably competent individuals at intervals outlined in the operation and maintenance manual relevant to the building.

Ensure Safe Access and Egress when carrying out maintenance or inspection.

Where product (s) is damaged or tampered, new product should be installed in line with installation guidance.

Handling & Storage

For unopened material, store in a well-ventilated, dry, cool environment. Recommended temp ranges +5°C - +35°C. Protect against exposure to direct sunlight. Always ensure that safe manual handling procedures are followed at all times.

Disposal

Removal and disposal of cured product must be done in a way that limits, as much as possible, the formation of dust. Adequate PPE must be worn including suitable respiratory equipment in the case of insufficient ventilation.

European Waste Catalogue code: **08 04 10**

(Waste Sealant – **08 04 10** - waste adhesives and sealants other than those mentioned in 08 04 09) You must classify your own waste, the information given above is guidance only. Waste must be classified on a case-by-case basis.

The product is classified as non-hazardous, however, every care must be taken to avoid release to the environment. Take up liquid spill with absorbent material, dam if necessary to prevent access to water course. Material in paste form may be taken up by shovel.

Disposal of waste sealant must be done according to official regulations and in accordance with a licensed collector's sorting instructions.

The product cannot currently be recycled or incinerated for energy capture.

Warranty

FSi Ltd. products are manufactured to rigid standards of quality. Any product which has been applied in accordance with FSi Ltd.'s written instructions and in any application recommended by FSi Ltd., but which is proved to be defective in product quality, will be replaced free of charge. No liability can be accepted for the information provided in this document although it is published in good faith and believed to be correct at time of issue. Any drawings provided are for illustrative purposes only. FSi Ltd. reserves the right to alter product specifications without prior notice, in line with our Company policy of continuous development and improvement. Changes due to new findings are possible, errors and misprints are not excluded. No liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given. FSi Ltd. have no control over the methods of installation, competence of operatives or suitability of site conditions, no warranties, expressed or implied, are intended to be given as to the actual performance of the product/system mentioned within this document.

