

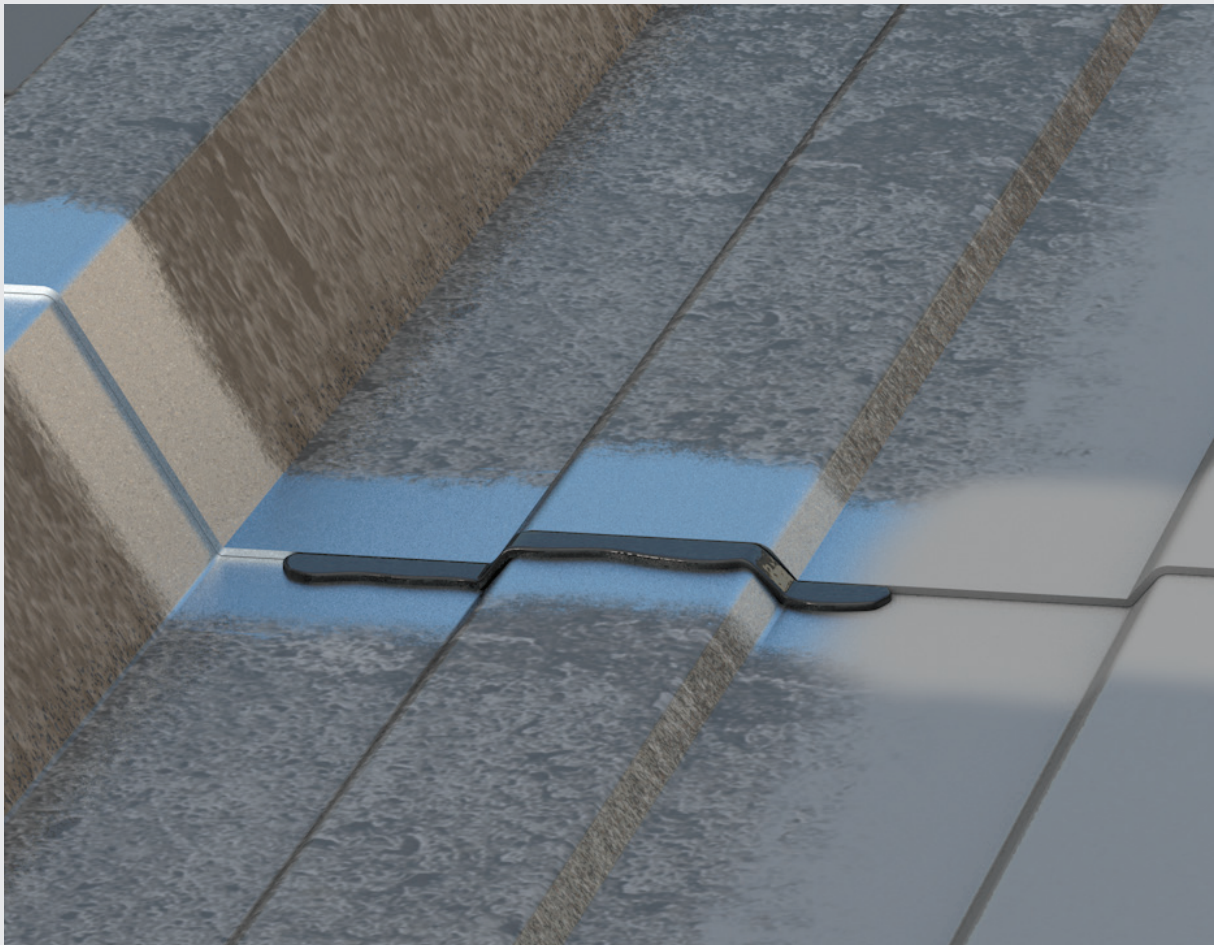
SIGNATURE^S

LIQUID WATERPROOFING

Product Data Sheet

PU JOINT SEALER

Single component, polyurethane-based low modulus joint sealant



DESCRIPTION

SIGNature PU Joint Sealer is an innovative, low modulus expansion joint sealant, formulated to contain both polyurethane (PU) and silylated-PU technology, and modified to provide enhanced thixotropic properties.

It cures by reaction with atmospheric humidity to create a joint sealant with a 50% movement accommodation factor. It provides excellent adhesion on substrates traditionally problematic for PU sealants, e.g. steel, fibre cement, concrete etc. Additionally, the sealant has been modified in order to have extrusion profile identical to hybrid PU or MS technology. The extrusion rate and tooling of the sealant remain the same throughout a very wide range of temperature and humidity conditions.

The sealant is easy to apply, even in very low temperatures, and has better storage stability than other PU sealants on the market.

TYPICAL APPLICATIONS

For sealing joints in:

- ⑤ In-situ concrete
- ⑤ Expansion concrete plates
- ⑤ Precast panels
- ⑤ Brick and blockwork
- ⑤ Water tanks
- ⑤ Metal frames
- ⑤ Aluminium windows and panels
- ⑤ Water tanks and swimming pools
- ⑤ Creating a 'cant strip' on internal corners prior to application of SIGNature PU Liquid Waterproofing products

LIMITATIONS OF USE

Not recommended for direct application to unsound substrates. If in doubt it is recommended that these areas are primed with SIGNature PU Primer.

FEATURES AND BENEFITS

- ⑤ Excellent adhesion to almost any surface
- ⑤ Excellent extrusion, tooling and storage stability in a wide range of climatic conditions
- ⑤ Excellent chemical resistance
- ⑤ Low modulus, joint movement accommodation 50%
- ⑤ Micro-organism and fungus resistant
- ⑤ Application in wet conditions possible
- ⑤ Excellent resistance to heat >60°C and will remain flexible down to -40°C

COVERAGE RATES

Linear metres per 600cc sausage

DEPTH (mm)	WIDTH (mm)				
	5mm	10mm	15mm	20mm	25mm
5mm	24	12			
10mm			4	3	2.4
15mm					1.6

PACKAGING AND SHELF LIFE

Supplied in 600cc foil cartridge sausages. Can be kept for a minimum of 12 months in the original packaging in dry conditions at temperatures between 5°C to 25°C.

APPLICATION PROCEDURE

Clean joint thoroughly and ensure that no oil, grease, silicone or wax contaminants are present. For most applications primer is not required unless onto a very porous or friable surface, if primer required use the relevant SIGnature PU Primer.

Bond area surfaces thoroughly to avoid the possibility of air bubbles being blown into the uncured product if the substrate temperature rises.

On applications where the depth of the expansion joint exceeds the width then it is necessary to use an open cell PU backing rod (of suitable size) to ensure a firm backing to the PU Joint Sealer against which it can be tooled off.

Slide the 600cc foil cartridge into the application gun, cut off the very end of the sealant packaging and fit the gun with the nozzle that has been cut to deliver the right bead size for the given application.

Extrude the PU Joint Sealer into the joint ensuring that no air is trapped in the joint. Wide joints may well require more than one pass of the application gun to ensure full contact of the Joint Sealer with the sides and bottom of the joint.

Tooling of the PU Joint Sealer is recommended immediately after application of the sealant to ensure that all air bubble are excluded and a smooth finish provided if other products are being applied over.

CLEANING

Clean tools first with paper towels and then using a suitable solvent. Rollers and paint brushes will not be re-useable. Dispose of these items responsibly.

PRECAUTIONS

Contains volatile, flammable solvents.

This product contains volatile, flammable solvents. Always apply in well-ventilated, non-smoking areas away from any source of ignition. In enclosed spaces always use ventilators and carbon active masks.

A Safety Data Sheet is available on request.

TECHNICAL SPECIFICATION

In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Specific weight	gr/cm ²	ASTM D1475 / DIN 5321 / ISO 2811, @ 20°C	1.2
Tack free time, @ 177°F (25°C) and 55% RH			3, 5-4, 5
Cure rate	Mm/day	-	3-4
Service temperature	°C	-	-40 to 80
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	±25
Modulus at 100% elongation	(N/mm ²)	ASTM D412 / EN - ISO - 527 - 3	0.2
Elongation	%	ASTM D412 / EN - ISO - 527 - 3	>900
QUV Accelerated Weathering Test (4hr UV, @ 60°C (UVB-Lamps) and 4hr COND @ 50°C)	-	ASTM G53	Passed (after 2000hr)
Thermal resistance 100 days, 80°C)	-	EOTA TR011	Passed
Toxicity	-	-	No restrictions after full cure
Resilience	%	DIN 52458	>80
Hydrolysis (8% KOH, 15 days @ 50°C)	-	-	No elastomeric property change
Hydrolysis (H ₂ O, 30 days-cycle 60°C to 100°C)	-	-	No elastomeric property change
HCl (PH=2, 10 days @RT)	-	-	No elastomeric property change
Adhesion to concrete	kg/cm ² (N/mm ²)	ASTM D4541	>20 (>2)



Mannheim House, Gelders Hall Road, Shepshed, Leicestershire LE12 9NH

Tel: 08445 766 760 Fax: 08445 766 761

Email: info@singleply.co.uk Web: www.singleply.co.uk