

JOINTSEAL 10

Single component polyurethane based low modulus joint sealant.

Description

FIX-R Classic JointSeal 10 is a novel low modulus expansion joint sealant, especially formulated to contain both PU and Silylated-PU technology, thus giving rise to a sealant which includes the best of both technologies. It has been modified in order to give enhanced thixotropic properties.

It cures by reaction with atmospheric humidity to produce a joint sealant with a 50% joint movement accommodation factor and excellent adhesion on substrates traditionally problematic for PU sealants, e.g. glass, aluminium, steel, polycarbonate, 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 the storage stability is unlike any polyurethane sealant in the market.

Applications

Sealing Joints in:

- In situ Concrete
- Expansion concrete plates
- Precast panels
- Brick and block work
- Water tanks
- Metal frames
- Aluminium windows and panels
- Water tanks and swimming pools
- Sealing between T&G joints in OSB3 T&G structural roof decks

Limitations

Not recommended for direct application to unsound substrates. Prime with Fix-R Classic Primer 10 if in doubt.

Features & Benefits

- Excellent adhesion to almost any surface
- Excellent extrusion, tooling and storage stability over a wide range of climatic conditions
- Excellent chemical resistance, suitable for sealing joints in swimming pools and chemically treated water
- Low modulus, joint movement accommodation 50%
- Microorganism and fungus resistant
- Application underwater immersion possible
- Excellent resistance to heat >60°C and will remain flexible down to -40°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 FIX-R Classic Primer 10.

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 polyurethane backing rod (of suitable size) to ensure a firm backing to the JointSeal 10 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 JointSeal 10 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 JointSeal 10 with the sides and bottom of the joint

Tooling of the JointSeal 10 is recommended immediately after application of the sealant to ensure that all air bubbles are excluded and a smooth finish provided if other products are being applied over.

Consumption

Linear meters per 600cc Sausage

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

Packaging and Shelf Life

- 600cc Sausage
- 12 months minimum in the original packaging
- Must be stored in a dry environment @ 5°C-25°C

Technical specification

In liquid form (before application):

Property	Units	Method	Specification
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C	1.2
Tack free time, @ 77°F (25°C) & 55% RH	hours	-	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) & 4hr COND @ 50°C)	-	ASTM G53	Passed (after 2000hr).
Thermal Resistance (100 days, 80°C)	-	EOT A 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 60-100°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)