

StenSeal[®] PU-JFR/LV

1. Product Profile

StenSeal[®] PU-JFR/LV is a single component, cold applied, semi-selfleveling, polyurethane based joint sealant. **StenSeal[®] PU-JFR/LV**'s elastomeric structure, produced by **Stenkim[®]**'s polymer technology, is suitable for heavy traffic conditions with high abrasion resistance and adhesion strength, excellent chemical resistance. **StenSeal[®] PU-JFR/LV** is resistant to jet fuels, hydraulic fluids and oils and dynamic movements. It is resistant to UV radiation.

StenSeal[®] PU-JFR/LV is classified as TS5926 EN 14188-2 (Type D) and ASTM C 920 (Type S, Grade P, Class 25, Use T).

StenSeal[®] PU-JFR/LV is available in 14 kg packages or 600ml sausages.

2. Uses

StenSeal[®] PU-JFR/LV must be considered especially for horizontal or sloped (max 15%) joints. It can be used indoor and outdoor applications. It is suitable for joints at places such as airport, roads, bridges, refineries, chemical facilities where petroleum based fuels and oils, antifreezes or battery acid are present.

In joints with similar or different surfaces, it provides an effective adhesion on both surfaces. It is used at expansion and contraction joints subject to all types of traffic and sloped walls, ramps, canal, ditch etc.

3. Joint Design

Joint width must not be less than four times the expected movement or 6 mm. Up to 15 mm width, joint sealant depth must be equal to the width. Between 15 and 20 mm joint widths, sealant depth must be equal to 80% of the width. For wider joints, sealant depth must be set to 50% at most 30mm. For

**Jet Fuel Resistant,
Single Component,
Cold Applied,
Non Sag Type,
Polyurethane Joint
Sealant**

Highlights

StenSeal[®] PU-JFR/LV

- Polyurethane based, single component.
- Semi-selfleveling type.
- Low-modulus type and has high elasticity
- Ideal for horizontal and sloped joints.
- High abrasion resistance and adhesion.
- Resistant to dynamic movements.
- Resistant to jet fuels, oils, diluted acids and bases, various chemicals.
- Resistant to UV radiation
- Ready to use and easy to apply

adjusting depth backer material must be used inside the joint.

For localizing the cracks caused by contractions that may occur during and after curing at new concrete pavements, design and sealing of the contraction joints left before cure or saw cut after cure are also important. It is recommended that you refer to our technical document on joint design.

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4. Application

4.1. Surface Preparation

Joint surfaces must be clean and dry. Oil, grease, bitumen or sealant remains must be completely removed. Loose materials on the joint walls must be removed; broken joint walls must be repaired.

StenSeal® PU-JFR/LV is affected from water before curing like all other polyurethane materials. Therefore the joints must be dry and the sealant must not contact water until chemical curing occurs.

4.2. Primer

StenSeal® PU-JFR/LV can be used in concrete joints without primer. However, in any case primer application minimizes the negative effects of possible contamination, concrete moisture and loose materials. Therefore; **StenAst® S** is recommended for all kind of surfaces.

4.3. Backer Material

A rod which preferably does not adhere to the sealant must be placed in the joint in order to attain the sealant depth determined according to the joint width. Closed cell polyethylene foam rods are suitable for this purpose. Diameter of the rod must be 10 - 25% larger than the joint width; the rod must be placed tight in the joint. Rods must not be damaged during placement. In wide joints, semi-rigid materials like polystyrene foam can be used instead of rod. In such cases, it is helpful to place a polyethylene tape over backing material in order to prevent adhesion to the sealant.

4.4. Application

Material filled into a refillable type application apparatus with piston (sealant gun - applicator) or an appropriate 600ml sausage application gun and a nozzle with a diameter enabling it to enter into the joint must be fitted to the apparatus and while the sealant is applied this tip must be moved

forward by sliding over the backer rod in the joint. Thus it is ensured that no gap is left under the sealant and sufficient amount of sealant is used. After the application sealant surface can be finished by means of a spatula. Since the material that comes in contact with the air will harden, it is necessary to use the opened buckets as soon as possible and keep their mouths closed during the waiting period. Application can be carried out directly with a spatula.

It is recommended to tape both sides of the joint before starting application on joints especially where the decorative look is important. In this manner material smeared outside of the joint during the application is removed by pulling off the tape after the application.

4.5. Application Tools

Application gun or sausage gun and spatula. Professional quality tools must be used.

5. Cleaning

Application devices and other sealant smudged devices must be cleaned before the sealant cures. For that purpose, tools first wiped with cloth or oakum must be cleaned with **StenSolver CL** or aromatic solvents such as toluene and xylene.

6. Safety

Applicators and supervisors must read Material Safety Data Sheet (MSDS) carefully and observe the considerations written therein. Emptied packages must be handled in compliance with relevant regulations and laws.

7. Storage

The material must be kept in dry indoor storages. Recommended storage temperature is 10 - 25°C. Stored unopened in these conditions, the shelf life is 12 months.

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8. Maintenance

Damaged parts should be repaired. If required, please refer to our Technical Support service regarding this matter.

9. Company Liability

The information contained in this document is based on site experience of and laboratory tests done by **Stenkim®** and meant to give general information. It is the purchaser's

responsibility to ensure applicability of products to their use. All **Stenkim®** products are available in specified quality and conditions. The company accepts no liability whatsoever unless the transportation, storage, application conditions and customer use are overseen by **Stenkim®**.

Stenkim® reserves the right to update all information contained in this document without notice.

Technical Data

Property	Method	Result
Base Polymer		Single Component Polyurethane
Solids Content %		99
Color		Catalogue
Movement Capability	Expansion	25 %
Movement Capability	Contraction	25 %
Flow Resistance		15%
Tensile Elongation	TS 5926 EN 14188-2	850 %
Density(A+B)		1.52±0.05 g/cm ³
Durometer Hardness (Shore)	ASTM D 2240	A15±5
Elastic Recovery	TS 5926 EN 14188-2	>90%
Adhesion and Cohesion Properties	TS 5926 EN 14188-2	No damage
Hydrolysis Resistance	TS 5926 EN 14188-2	Passes
Tack free time @20° C	TS 5926 EN 14188-2	2 hours
Cure Time For Light Trafficability @20° C		3mm/day
RELATED STANDARDS: ASTM C-920, TS 5926 EN 14188-2, ISO 11600		

Stenkim® reserves the right to make changes in the values in this table at any time.