

1. Product Description

StenSeal® PU 102 is a single-component, cold-applied, chemically curing, polyurethane-based, non-sag elastomeric joint sealant. It has high movement capability and is resistant to dynamic movement. It is resistant to short-term contact with organic and inorganic acids and alkalis, oils, fuels, and many chemicals.

It is completely resistant to ultraviolet radiation.

2. Uses

StenSeal® PU 102 is practical and easy to use. It can be used for all interior or exterior joints. Due to its high elasticity, it is recommended for use in places where connection and joint movements are high, and for joints constructed narrower than required.

It is used on floors subject to pedestrian and light vehicle traffic and wherever high elasticity is preferred over bearing strength. It can also be used for sealing joints used in floor coverings between marble tiling, wall tiles, floor tiles, joints between walls and joinery (door and window frames), pipe passages etc.

3. Joint Design

StenSeal® PU 102 is suitable for narrow joints because of its high elasticity. Joint width must not be less than four times the expected movement or 6 mm. Up to 20 mm width, sealant depth must be equal to 80% of the width.

For wider joints, sealant depth must be set to 16 mm. For adjusting depth, a backer rod must be used inside the joint.

4. Surface Preparation

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

StenSeal® PU 102 is affected by water before curing, like all other polyurethane-based materials. Therefore, the joints must be dry and the sealant must not contact water until chemical curing occurs.

5. Primer

StenSeal® PU 102 can be used in new concrete joints without primer. However, primer application helps minimize the negative effects of possible contamination, concrete moisture, and loose material in all cases. Therefore, **StenAst® S** is recommended for plastic, glass, and similar surfaces, and for all surfaces subject to continuous water contact.

6. Backer Material

A backer rod that preferably does not adhere to the sealant must be placed in the joint to achieve the sealant depth determined by the joint width. Closed-cell polyethylene foam rods (**StenBacker**) are suitable for this purpose. The diameter of the rod must be 10-25% larger than the joint width, and the rod must be placed tightly in the joint.

Rods must not be damaged during placement. In wide joints, semi-rigid materials, such as polystyrene foam, can be used instead of a backer rod. In such cases, a polyethylene tape must be placed over the backing material to prevent

Single-Component, Polyurethane Joint Sealant

Highlights

- Polyurethane-based, single-component
- Cold-applied, elastic
- Chemically cured
- Non-sagging, can be applied to vertical joints without problems
- Can be used indoors and outdoors
- Suitable for joints with high movement
- Ideal for narrow joints
- Resistant to dynamic movement
- Resistant to UV radiation
- Easy to use and practical



adhesion to the sealant.

7. Application

Ambient temperature during application should be between 5 °C and 35 °C. **StenSeal® PU 102** sausages should be cut from one end and loaded into a piston-type sealant gun. Cartridges can be applied directly.

Fit a nozzle narrow enough to enter the joint to the applicator. During application, advance the nozzle tip by sliding it over the backing material in the joint. This ensures that no gap remains beneath the sealant and that a sufficient amount of sealant is applied.

After application, the sealant surface must be smoothed with a spatula. Application can also be carried out directly with a spatula when necessary. It is recommended to tape both sides of the joint before application, especially where decorative appearance is important.

In this way, material that gets onto the area outside the joint during application is removed by pulling off the tape after application.

8. Application Tools

Use of professional-quality equipment is recommended.

9. Cleaning

Equipment and any other tools contaminated with sealant must be cleaned before the sealant cures. For that purpose, tools first wiped with a cloth or rag must be cleaned with **StenSolver PU** or aromatic solvents such as toluene and xylene.

10. Safety

Required safety measures must be observed during the application of the material and the applicators must use protective clothing, gloves and goggles. Applicators and supervisors must read the Material Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be handled in compliance with relevant regulations and laws.

11. Storage

Shelf life is 1 year without opening the package. Products must be stored at +5 °C to +35 °C in closed conditions protected from direct sunlight.

12. Disclaimer

This document is provided for general information and reflects **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information at any time without notice.

Stenkim® warrants that its products conform to the stated specifications on delivery. The buyer is responsible for determining the product's suitability for the intended application and for all conditions of transport, storage, handling, and use. **Stenkim®** accepts no liability for results obtained under conditions outside its control. **Stenkim®**'s liability under this warranty is limited to replacement of non-conforming product and excludes any consequential or indirect damages.



13. Technical Data

Property	Method	Result
Base Polymer		Single-Component Polyurethane
VOC		60 g/L
Density		1.2 ± 0.05 g/cm ³
Movement Class	In extension	25%
Movement Class	In contraction	25%
Elongation at Break	ASTM D 412 Die B	>400%
Hardness (Shore)	EN ISO 48-4	A30-40
Resilience	EN 14188-2	>95 %
Skin Formation Time @23 °C, 50% RH		4 hours
Rate of Cure @23 °C, 50% RH		1-2 mm / 24 hours
Color		Pearl White - RAL 1013 Cream - RAL 9001 Concrete Gray - RAL 7023 RAL 7004 – Signal Gray RAL 3020 – Traffic Red RAL 9005 – Jet Black
Shelf Life		1 year
Packaging		600 ml sausages

RAL codes are used for reference purpose only. **Stenkim®** reserves the right to make changes to the values in this table at any time.

