

1. Product Description

StenSeal® PU 102 is a single-component, cold-applied, chemically curing, polyurethane-based, non-sagging elastomeric joint sealant. It has high movement accommodation 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 especially recommended where connection and joint movements are large, and for joints made narrower than they should be.

It is used on floors subject to pedestrian and light vehicle traffic and wherever high elasticity is preferred over load-bearing capacity. It can also be used to fill and seal the joints of floor finishes such as marble, porcelain tile and ceramic tile. It also provides sealing at joinery-to-wall junctions, pipe penetrations and similar details.

3. Joint Design

Its flexibility makes **StenSeal® PU 102** suitable for narrow joints. Joint width must not be less than four times the expected movement or 6 mm. In joints narrower than 20 mm, the sealant depth must be equal to 80% of the joint width.

For wider joints, sealant depth must be set to 16 mm. To adjust the depth, backing material must be used inside the joint.

4. Application

4.1. Surface Preparation

Joint surfaces must be clean and dry. Oil, grease, bitumen, and old joint materials must be completely removed. Loose material on the joint edges must be removed; broken joint edges 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.

4.2. 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 glass and similar surfaces, and for all surfaces subject to continuous water contact.

4.3. 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 backer rod must be 10-25% larger than the joint width, and the rod must be placed tightly in the joint.

Single-Component, Polyurethane Joint Sealant

Highlights

- Cold-applied, elastic
- Cures chemically
- Non-sag; applies cleanly to vertical joints
- 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



Care must be taken not to damage the backer rods 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 the sealant from adhering to it.

4.4. Application

Ambient temperature during application must be between 5 °C and 35 °C. **StenSeal® PU 102** tubes must be cut from one end and loaded into a piston-type sealant gun. Fit the applicator with a nozzle narrow enough to enter the joint.

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.

4.5. Application Tools

Use of professional-quality equipment is recommended.

4.6. Cleaning

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

5. Safety

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

6. Storage

Shelf life is 1 year in unopened packaging. Products must be stored at +5 °C to +35 °C in enclosed storage protected from direct sunlight.

7. Disclaimer

This document is provided for general information and is based on **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information without prior 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 purpose and for all conditions of transport, storage, application, 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.



8. Technical Data

Property	Method	Result
Base Polymer		Single-Component Polyurethane
Volatile Organic Compound (VOC)		60 g/l
Density		1.2 ± 0.05 g/cm ³
Movement Class	In extension	25%
Movement Class	In compression	25%
Elongation at Break	ASTM D 412 Die B	>400%
Hardness (Shore)	EN ISO 868	A30-40
Elastic Recovery	EN 14188-2	>95 %
Skin Formation Time @23 °C, 50% RH		4 hours
Cure Rate @23 °C, 50% RH		1-2 mm / 24 hours
Color		Oyster White - RAL 1013 Cream - RAL 9001 Concrete Grey - RAL 7023 RAL 7004 – Signal Grey RAL 3020 – Traffic Red RAL 9005 – Jet Black
Shelf Life		1 year
Packaging		600 ml tubes

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

