

1. Product Profile

StenSeal® 2PU CRT 310 is a two-component cartridge system, cold applied, chemically curing, self-leveling type, polyurethane based, elastomeric joint sealant with high abrasion resistance and adhesion, suitable for heavy traffic conditions, resistant to dynamic movements. It is resistant to organic and inorganic acids and alkalis, oils, fuels and antifreezes and many chemicals. It is resistant to UV radiation.

StenSeal® 2PU CRT 310 is available in 380ml cartridges.

2. Uses

StenSeal® 2PU CRT 310 is produced to provide fast curing solution for horizontal joints.

It has a wide variety of use indoors and outdoors where both bearing strength and elasticity are required. It can also provide solutions to visual demands with various color choices. Some of the places where it is used are roads such as highways subject to all types of traffic, stadiums, industrial facility floors, depots, warehouses, dam platforms, harbor areas markets, stores, pedestrian fields, pavements; runways, park areas, terminals and ramps, cargo fields and similar indoor and outdoor areas.

It is also used for providing impermeability and adhesion at the sides and under the manhole and under the manhole covers on roads in the city. In brief, it is suitable for all kinds of indoor and outdoor horizontal joints and joints with slopes less than 2%.

3. Joint Design

Joint width must not be less than four times the expected movement or 8 mm. Up to 15 mm width, joint sealant depth must be equal to the width. Between 15 and 25mm joint widths, sealant depth must be equal to 80% of the width (min. 14mm). For wider joints, sealant depth must be set to 20mm. For adjusting depth backer material must be used inside the joint.

Polyurethane Based Cartridge Heavy Duty Joint Sealant

Highlights

- Polyurethane based, two component
- Very fast curing time
- Mixing tubes provides proper mixing
- Cold applied and self-levelling
- Suitable for both indoors and outdoors
- High adhesion
- Resistant to dynamic movements
- Resistant to various chemicals
- Resistant to UV radiation
- Catalog colors are available

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® 2PU CRT 310 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® 2PU CRT 310 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.

Joint Width - mm	8	10	12	14	16	18	20	24	28	32	36
Sealant Thickness - mm	8	10	12	14	14	14	16	19	20	20	20
Sealant Recess - mm	4	5	6	7	7	7	8	10	10	10	10
Backer Rod Diameter - mm	10	13	15	18	20	23	25	30	35	40	45
Minimum Backer Rod Depth -mm	12	15	18	21	21	22	24	29	30	30	30
Usage (meter / cartridge)	6	4	3	2	2	1	1	1	0.5	0.5	0.5

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

The two components are kept separate by means of a dual-cylinder foil pack attached to a manifold. The two components combine and react when dispensed through a static mixing nozzle attached to the manifold.

To apply the material, attach the mixing nozzle and squeeze cartridge allowing some material to discharge until unified mixture is extruding nozzle.

Pot life is important for the tip section where the components mix together. If the application is interrupted for any reason, that section must be cleaned immediately.

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.

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.

8. 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.

9. Technical Data

Property	Test Method	Result
Base Polymer		Two Component Polyurethane
Solids Content %		100
Color		Color Catalog
Movement Capability	Expansion	25 %
Movement Capability	Contraction	25 %
Elongation at Break	ASTM D 412 Die B	>400%
Density	TS 5926 EN 14188-2	1.50±0.05 g/cm ³
Durometer Hardness (Shore)	ASTM D 2240	A23±5
Pot life of the mixture @20°C		5 minutes
Tack free time @20°C	TS 5926 EN 14188-2	15 minutes
Cure Time for Light Trafficability @20°C		2 hours
Cure Time for Heavy Trafficability @20°C		12 hours
Cure Time for Chemical Resistance @20°C		4 days

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.