

1. Product Description

StenSeal® ATR is an asphalt-polymer-based, hot-applied, elastomeric joint and crack sealant. It has high adhesion to concrete and asphalt surfaces and is resistant to traffic loads and weather conditions.

2. Uses

StenSeal® ATR is used for sealing joints and cracks in concrete and asphalt pavements. It is suitable for dynamic cracks, static asphalt joints, and minor repairs. In pressurized and underwater applications, the material must be supported from below to carry the load.

3. Joint Design

In the filling of immobile joints, minor repairs and cracks in asphalt fields, necessary precautions should be taken to ensure that the application depth is not less than the width of the crack and not less than 4 mm; if necessary, the correct application depth should be provided by cutting and widening.

4. Application

4.1. 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.

Not used on dirty, oily and wet surfaces. Cleaning such joints before application is important for ensuring good adhesion. Especially in cold weather, it is recommended to heat the surfaces with an LPG burner or an electric blower and to apply **StenSeal® ATR** in the hot joint or crack for better adhesion.

4.2. Heating

StenSeal® ATR box is opened and placed in a container full of hot water and heated. Indirect heating is required to avoid overheating zones, the container should not come into direct contact with the flame. The mixture is heated to 60-80 °C and these temperatures are maintained during application.

If heating is made with oil instead of water, care should be taken not to overheat, the temperature of the material should never exceed 140 °C.

4.3. Backer Material

To achieve the sealant depth determined by the joint width, a heat-resistant material that preferably does not adhere to the sealant must be placed in the joint. Flax or PP rope is suitable for this purpose. Diameter of the rope must be 5-10% larger than the joint width; the rope must be pressed tight into the joint.

Dried sand can be used in areas with no risk of freezing and low joint movement. In such cases, it is helpful to place a paper tape over the backer material to prevent adhesion to the sealant.

Hot-Applied Elastomeric Joint and Crack Sealant

Highlights

- Asphalt-polymer-based
- Hot applied
- For sealing expansion joints and cracks
- Highly adhesive to concrete and asphalt
- Resistant to weather conditions
- Resistant to traffic loads



4.4. Application

The heated and softened material is applied to the joint or crack with a hot trowel. For dynamic cracks, routing a groove at least 10 mm deep and 10 mm wide is recommended. These kinds of cracks should be filled like joints.

Repair by routing alone is sufficient at places where the cracks are infrequent. In areas with severe cracking, coating is recommended for narrow cracks and combined sealing for wide cracks. The width of the static joints and cracks in asphalt is not so important.

As long as the application depth is at least the crack width, these cracks can be repaired without widening and without opening a groove. However, to ensure the exact depth and surface cleanliness, opening a groove is beneficial.

4.5. Restrictions

Not recommended for joints narrower than 10 mm. Application must not be carried out at temperatures below 10 °C and in extremely windy or rainy weather. During application, ambient temperature should not be below 10 °C or the dew point.

Despite its high load-bearing resistance, studded tires, ice chains, and spiked heels may cause damage. If application under conditions outside this range is necessary, contact **Stenkim®**.

4.6. Application Tools

Use of professional-quality equipment is recommended.

5. 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 CL** or aliphatic solvents such as white spirit, kerosene and diesel fuel. These solvents are flammable, so they should not be used with hot equipment or near open flames.

Equipment cleaning with solvents should be done after the equipment has completely cooled down.

6. Safety

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. Required safety precautions must be taken during application of the material; application must be carried out by authorized applicators under expert supervision, and the applicators must use protective equipment such as goggles, mask and gloves.

7. Storage

The material must be kept in dry indoor storage. Recommended storage temperature is 10-25 °C. Under these conditions, the material will retain its properties in unopened containers for 12 months from the production date.

8. 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.

9. Technical Data

Property	Method	Result
Base Polymer		Styrene Butadiene Block Copolymer
Color		Black
Density		1.4 ± 0.05 g/cm ³
Movement Class		15%
Maximum Heating Temperature		140 °C
Penetration	ASTM D 5329	6 ± 2 mm
Flow	ASTM D 5329	2 ± 0.5 mm
Rebound	ASTM D 5329	> 25%
Asphalt Compatibility	ASTM D 5329	Pass
Shelf Life		1 year
Packaging		Boxes
Related Standards		ASTM D 6690 Type II, ASTM D 3405, EN 14188-1

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

