

1. Product Profile

StenCare® 3PU ASC is a specialized, 100% solids, three-component polyurethane-based elastomeric mortar. Specifically engineered for application at concrete-to-asphalt interfaces, this material effectively absorbs dynamic loads from heavy traffic to ensure long-lasting performance.

StenCare® 3PU ASC is available in 25 kg sets.

2. Uses

StenCare® 3PU ASC is utilized for creating expansion joint headers for various joint systems and for the rapid restoration of existing joint headers. It serves as an ideal filler material between differing substrates such as concrete-to-concrete, concrete-to-asphalt, and concrete-to-steel. Furthermore, it is highly suitable for localized asphalt repairs and securing drainage grates.

3. System Design

Comprehensive identification of current site conditions and application objectives is essential for effective system design. For optimal performance of **StenCare® 3PU ASC**, a minimum application thickness of 20 mm in a single layer is recommended. However, the thickness of a single layer must strictly not exceed 100 mm. Preliminary flow-control measures must be taken on surfaces where the slope exceeds 3%.

4. Application

4.1 Surface Preparation

Rigorous surface preparation is critical for success. Concrete surfaces must be entirely sound, clean, and dry; free from frost, curing compounds, waterproofing membranes, oil stains, loose debris, and dust. New concrete requires a minimum curing period of 14 days. Application on damp or wet concrete surfaces is strictly prohibited. For steel substrates, all oxidation must be removed to reach "white metal" (SP-10 level) via grinding to ensure surface roughness. Ambient temperature during application should be between 10°C and 32°C. Application must be avoided if the surface temperature is below 5°C.

Polyurethane Based Elastomeric Repair and Expansion Joint Mortar

Highlights

- Seamless waterproofing performance
- Dynamic traffic load absorption and uniform distribution
- Superior resistance to UV, ozone, de-icing chemicals and abrasives
- Rapid curing characteristics without the need for external heaters
- Advanced dissipation of heavy and repetitive impact loads to prevent structural damage
- No need for a primer

4.2 Mixing

StenCare® 3PU ASC is supplied as a ready-to-mix, three-component set. Mixing should be performed using a suitable mortar mixer and a heavy-duty machine. Component A is first added to Component B and mixed for at least 30 seconds until uniform. Subsequently, Component C (special aggregate)—formulated at a 1/5 ratio based on laboratory data—is added to the mixture. Mixing continues for an additional 1–2 minutes until a completely homogeneous structure is achieved. Special care must be taken to ensure no unmixed material remains at the bottom or sides of the container.

4.3 Placement

The mixture is poured onto the surface and quickly leveled using a steel trowel or appropriate spreading tools. Given the 20-minute pot life at 20°C, the material must be placed immediately after mixing. Application thickness must not exceed 100 mm per layer. The internal exothermic reaction of the material facilitates curing, eliminating the need for external heating devices.

5. Cleaning

Application devices can be cleaned by using **StenSolver EP** after application.

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 storage away from direct sunlight. Recommended storage temperature is 10 – 30°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

Properties	Results
Mixing Ratio (A+B/C)	1/5
Pot Life	20 Minutes
Density (g/cm ³)	2.2 g/cm ³
Adhesion to Concrete	>4 MPa (Concrete Failure)
Adhesion to Asphalt	Good
Compressive Strength	49 MPa
Hardness (A+B)	50 (Shore D)
Elongation at Break	150 %
Tensile Strength	7.30 MPa

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