

1. Product Description

StenCare® 2EP 310 is a heavy-duty, solvent-free, pourable epoxy repair and coating material. It has high adhesion and abrasion resistance, and is resistant to chemicals. It is resistant to weak acids and alkalis, oils, fuels, antifreeze and many other chemicals. **StenCare® 2EP 310** conforms to specification ASTM C 881 / C 881M Grade 2, Type I, IV and V, Class B and Class C.

2. Uses

StenCare® 2EP 310 is used for repairing old concrete surfaces, broken slab and joint edges, as an adhesion promoter between old concrete and fresh concrete, for rigid installation work and rebar doweling. It is used indoors and outdoors, in all kinds of repair where high elasticity is not required. It has good adhesion to concrete, metal, wood and similar surfaces, providing a permanent and sound repair.

3. Application

3.1. Surface Preparation

The surfaces where **StenCare® 2EP 310** will be applied must be dry, free from contaminants such as oil, grease and residues of previously applied sealant, and free of loose particles. Metal surfaces must be cleaned with a brush. **StenCare® 2EP 310** adheres well to many surfaces without primer; however, primer must be used in areas in contact with water and in applications on glass, plastic or rubber.

3.2. Application

StenCare® 2EP 310 is a two-component material. Components A and B are packaged in correctly proportioned sets. All of component B is added into the container of component A and they are mixed by hand or with a low-speed drill until a homogeneous mixture is obtained.

Mixed material must be used within the pot life, and thickened material must not be thinned and reused. Working the material into the surfaces and leaving no air voids beneath it will improve adhesion. In surface coating applications the material should be poured on the surface and spread with a notched trowel.

Once the material is spread, it must be left to self-level and cure without too much disturbance. The coated area must be protected from water, vehicle exhaust and flue gases for 1 hour. In adhesion promoter applications, fresh concrete should be placed before the material that has been thoroughly worked into the old concrete surface becomes tack-free.

If the material has cured to a tack-free state, another coat of the material can be applied without removing the previous coat. For repairs and anchoring work with aggregates, the aggregates must be added to mixture of A and B components without delay, and all must be mixed for at least two minutes, then application must be carried out. The moisture present on aggregate particles may lead to unexpected changes in curing time.

Inadequately graded particles may lead to poor load-bearing capacity and application difficulties. Therefore, in applications of this kind, correctly graded and dried **StenSilica** must be used, or three-component **StenCare® 3EP**

Self-Leveling Epoxy Repair and Coating Material

Highlights

- Epoxy-based
- Withstands harsh conditions
- Curing speed can be increased to suit weather and working conditions
- High load-bearing capacity
- 100% compatible with concrete
- Resistant to chemicals
- Long-lasting and easy to apply



must be preferred over **StenCare® 2EP 310**. In applications such as rebar doweling and fixture installation, take care to complete all operations within the pot life of the material.

During rebar doweling and anchoring work, ensure in particular that no voids are left under the material. If a complete set of **StenCare® 2EP 310** will not be used, the container contents must be weighed and divided before mixing. The mix ratio by weight must be maintained during this process; otherwise, the material properties are adversely affected.

3.3. Cleaning

Equipment used can be cleaned with **StenSolver EP** at the end of the job.

4. Safety

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. The application must be carried out by skilled workers under the supervision of experts and the applicators must use all personal protective equipment required for the worksite and the task such as goggles, mask and gloves.

5. Storage

It must be stored away from open flames and ignition sources. Materials must be stored at 5-30 °C in a temperature-controlled environment, protected from daylight and moisture. Under these conditions, the material will retain its properties in unopened packages until the expiration date.

Low temperatures may cause crystallization of the product; in this case, the product can be used after being warmed to +20 °C and homogenized. After prolonged storage, the product must be stirred thoroughly before use.

6. 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.



7. Technical Data

Property	Method	Result
Base Polymer		Epoxy
Solids Content (by weight)		100%
Color		Grey
Density		1.45 ± 0.05 g/cm ³
Hardness (Shore)	EN ISO 868	D75-85
Bond Strength (2 days)	ASTM C 882	19 MPa
Bond Strength (14 days)	ASTM C 882	>25 MPa
Tensile Strength	ASTM D 638	90 MPa
Compressive Modulus	ASTM D 695	1800 MPa
Elongation at Break	ASTM D 638	2.5%
Pot Life @15 °C	ASTM C 881	45 minutes
Pot Life @23 °C	ASTM C 881	30 minutes
Time to Open to Traffic @20 °C		8 hours
Cure Time for Chemical Resistance		24 hours
Shelf Life		1 year
Packaging		12.5 kg sets

Stenkim® reserves the right to make changes to the values in this table at any time. *CE: CE marked in accordance with EN 1504-3 (R1) (DoP STN-2EP310-0001).*

