

1. Product Profile

StenCare® 2EP 311 is a heavy duty, solvent free epoxy based, thixotropic grade repair and coating material. It has high adhesion and abrasion resistance properties, and it is resistant to chemicals. It is resistant to weak organic and inorganic acids and alkalis, oils, fuels and antifreezes and many chemicals.

StenCare® 2EP 311 conforms to specification ASTM C881/C881 M Grade 3, Type I, IV, V, Class B and Class C.

StenCare® 2EP 311 is available in 10kg sets.

2. Uses

StenCare® 2EP 311 is used for repairing old concrete surfaces, broken slab and joint edges, for rigid anchorages and dowel bar fixing. It is used indoors and outdoors, in all kinds of repair where high elasticity is not required. It has excellent adhesion to concrete, metal and wooden surfaces, and provides a stable and durable repair.

3. Surface Preparation

The surfaces where **StenCare® 2EP 311** will be applied must be dry, free from contaminants such as oil, grease, sealant remains and loose particles. Metal surfaces must be cleaned by brush.

StenCare® 2EP 311 adheres excellent on many surfaces without primer; however, primer must be used at places in contact with water and in applications on glass, plastic or rubber.

4. Application

StenCare® 2EP 311 is a two-component material. Components A and B are packed as sets to be completely mixed. Entire component B is poured on component A and they are mixed manually or by means of a low-speed drill until a homogeneous mixture is obtained. For areas that require early trafficability or under cold ambient conditions StenQuick EP may be used to speed up curing. StenQuick EP should be added to component B or if container size does not permit, that, to the mixture of components B and A.

Prepared mixture must be used within the pot life and thickened materials must not be thinned and used. Applying the material with sufficient pressure and

Epoxy Based Thixotropic Repair and Coating Material

Highlights

- Epoxy-based
- Ideal for overhead, vertical and sloped repairs
- Heavy-duty
- Curing speed can be adjusted to weather and job site conditions
- High load bearing properties
- 100% compatible with concrete
- Resistant to chemicals
- Long-lasting

avoiding air entrapment will improve adhesion. In surface coating applications the product is applied by a roller. The coated area should be kept free from vehicle exhaust and flue gases for at least an hour.

For repairs and anchorage jobs with aggregates, the aggregates should be added to mixture of A and B components without delay, and all should be mixed for at least two more minutes. The moisture present on aggregate particles may lead to unexpected changes in curing time. Inadequately graded particles may lead to poor strength and application time problems. For these reasons, either three component **StenCare® 3EP** should be used instead of **StenCare® 2EP 311**, or adequately graded and dried **StenSilica** aggregates should be used.

For armature fixing and dowel bar installation, pot life must be observed closely. Special attention must be paid to ensure no voids are left under the material during dowel bar fixing. If complete set of **StenCare® 2EP 311** will not be used, contents of the container must be weighed and partitioned before mixing. Mix ratio by

weight must be maintained during this process, otherwise material properties are affected negatively.

5. Cleaning

Application devices can be cleaned by using **StenSolver CL** 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	Method	Results
Base Polymer		2 Component Epoxy
Solids Content %		100
Color		Gray
Density (A+B)		1.65 ± 0.05 g/cm ³
Durometer Hardness (Shore)	ASTM D 2240	D80±5
Consistency	ASTM C 881	2 mm
Bond Strength (2 days)	ASTM C 882	19 MPa
Bond Strength (14 days)	ASTM C 882	>25 MPa
Compressive Modulus	ASTM D 695	1800 Mpa
Elongation at Break	ASTM D 638	2.5%
Pot life @15°C	ASTM C 881	30 minutes
Pot life @23°C	ASTM C 881	15 minutes
Cure Time for Heavy Trafficability @20°C		8 hours
Cure Time for Chemical Resistance		12 hours

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