

1. Product Description

StenAst® 2EP MT is a two-component epoxy primer that can be diluted with water. It can be used on wet or moist concrete surfaces due to its water-based structure. With its moisture-tolerant structure and its breathable structure allowing water vapor transmission, it is a very good primer.

With its ability to penetrate the surface, it can be used as a surface protector and hardener. By penetrating deep into the concrete, it inhibits water diffusion into the top coating.

2. Uses

StenAst® 2EP MT is a two-component, water-based epoxy primer, prepared for top coats and surface materials such as StenCoat®, StenSeal®, StenSport®, StenCare® to be applied especially on concrete, steel, wood, epoxy and polyurethane surfaces. It is a waterproof primer that can be used on asphalt and concrete floors in indoor and outdoor areas. It enhances adhesion of polymer modified cement-based materials on old concrete applied for repair or coating purposes.

It is also used for filling capillary cracks on concrete surfaces and as a surface hardener and dust preventer for concrete coatings. It is preferred on rough, absorbent and cracked surfaces due to its high impregnation properties. It penetrates deep into the cracks and pores in these surfaces and makes the floor ready for top coating.

It is also used alone at places with shrinkage cracks to protect the concrete from freeze/thaw damage.

3. Surface Preparation

Surface must be free from loose materials, oil, grease, paint and the concrete must be dry. This is especially important if a polyurethane material will be applied to the primed surface. Humidity of the concrete pavement must be determined.

If the humidity is higher than 0.75 kg/24 hours/100 m² (ASTM F-1869/98) or relative humidity measured by hygrometer is higher than 75%, **StenAst® 2EP MT** must be applied in at least two coats. Surface moisture is not a problem where the product is used to ensure adhesion between old and new concrete. Surface contaminants must be removed by sandblasting or mechanical abrasion.

Contaminants that have penetrated into the concrete must be removed using cleaners capable of dissolving the contaminant, followed by detergent and water cleaning. In cases where there is suspicion that the contamination is not removed, it is recommended to conduct an adhesion test before coating.

4. Application

It is recommended to condition the materials at 20-30 °C for one day before application. During application, surface and air temperature must be at least 10 °C and the temperature must not drop below 10 °C for 24 hours following the application. Before starting the mixing process, a container large enough to easily mix all components with a mixer is prepared.

Two-Component, Water-Based, Moisture Tolerant Epoxy Primer and Surface Protector

Highlights

- Penetrates deep into concrete, prevents water diffusion
- Provides excellent adhesion for top coats
- Fills microcracks, forms waterproof layer
- Surface hardener, prevents dusting
- Can be diluted with water
- Can be applied with brush and roller
- Water-based, two-component epoxy



Component A of **StenAst® 2EP MT** is poured into this prepared container and mixed on its own for 2-3 minutes. Component B is poured into the vortex formed by the mixer and mixed for 2-3 minutes more at low speed. If required, 2.5-3 kg (approximately 20%) water is added to the mixture and mixed for at least 2 minutes at higher speed.

There must be no unmixed material left on the walls or at the bottom of the container. Manual mixing of the components is insufficient. Insufficient mixing may cause the material to cure partially or not at all.

Then the mixture is applied continuously by working it into the floor with a brush or roller. If necessary, while the primer is still wet, dry aggregate of medium or coarse size can be sprinkled on it to create a non-slip, granular coating. It can be used to repair wide cracks in the application area by mixing with a certain amount of quartz sand.

Approximately 200-300 µm is applied in each coat. Accordingly, the approximate consumption is 0.2-0.5 kg/m² per coat. **StenAst® 2EP MT** is applied by brush or roller in one or two coats depending on the texture of the surface on which it is applied.

The pot life of **StenAst® 2EP MT** and the required time before the next coat can be applied are as specified in the table. Here, the temperature of the coating where the application is carried out is important. It should be taken into account that the surface temperature may be higher than the ambient temperature in summer and lower in winter.

During application, the surface temperature must be above 10 °C. If the primer application will be carried out as two coats, the second coat must be applied before the first coat is fully cured, while it is still tacky. If the second coat is applied too late, intercoat adhesion may be adversely affected.

5. Cleaning

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

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

7. Storage

Storage temperature must be between 5 and 30 °C. Packages must not be exposed to direct sunlight. Under these conditions, the material will retain its properties in unopened containers for 12 months from the production date.

Protect the product from freezing. Frozen material cannot be reused.

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		Two-Component Water-based Epoxy
Solid Content	EN ISO 3251	80
Color		Transparent
Density	EN ISO 2811-2	1.05 ± 0.05 g/cm ³
Consumption (per coat)		200-400 g/m ²
Full Cure Time		5-7 days
Application Thickness		200-400 µm
Pot Life @23 °C		75 minutes
Time to open to traffic @23 °C		8-10 hours
Tack-free Time @23 °C		4-8 hours
Shelf Life		1 year
Packaging		15 kg sets

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

