

1. Product Description

StenCoat® 2PU TOP HC is an acrylic-polyurethane based, two-component, conductive top coat. Thanks to its high conductivity, it has been specially developed for explosive environments and for areas where work sensitive to electrostatic charges is carried out. **StenCoat® 2PU TOP HC** is resistant to chemicals, outside conditions and UV radiation; it does not lose its resistance or its color.

It prevents water penetration into the applied surface and increases its resistance to oxidation and abrasion.

2. Uses

Thanks to its high conductivity, **StenCoat® 2PU TOP HC** has been specially developed for areas sensitive to electrostatic discharge (ESD) and for explosive environments. It converts non-conductive floors into electrostatic-discharge (ESD) dissipative surfaces. It improves the grounding and surface-conductivity profile of existing conductive or ESD floors.

On conductive coatings it forms a UV-resistant, scratch-resistant and colour-stable topcoat without impairing their antistatic behaviour. By spreading the conductive cross-section across the entire floor area, it markedly lowers the surface's resistance to ground, so that even weakly conductive floors can be effectively grounded. Conduction to earth takes place through the underlying conductive floor coating and its copper earthing network; over a non-conductive floor it dissipates the static charge but does not, on its own, provide grounding.

It can be used as a protective layer in all kinds of floor systems.

Surfaces coated with **StenCoat® 2PU TOP HC** are easy to clean, dry quickly, and do not generate dust. The coating retains its color, abrasion resistance, water resistance and UV resistance for a long time.

It covers the cracks, defects and joints of the floor and provides a smooth top coat and stops permeation of water.

3. Surface Preparation

Application surfaces must be clean and dry. Application must not be carried out if the surface temperature is below 5 °C or above 40 °C. Epoxy and polyurethane surfaces must be fully cured before the application.

4. Application

It is recommended to store 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. Application should not be carried out if there is a possibility of rain.

StenCoat® 2PU TOP HC is prepared for the application by mixing two components. The components are packaged so that one container of each yields the correct mixing ratio. In cases where one complete package cannot be used, the package must be weighed and proportioned; the mix ratio stated on the package must be observed.

Polyurethane-Based Heavy-Duty Conductive Floor Paint

Highlights

- Resistant to indoor and outdoor conditions
- Suitable for areas sensitive to electrostatic discharge (ESD) and for explosive environments thanks to its high conductivity
- Improves the grounding performance of conductive floor systems without impairing their antistatic behaviour
- Converts non-conductive floors into ESD surfaces
- Provides a safe working environment by preventing static electricity accumulation
- Not affected by vehicle traffic
- Protects the surface against water permeation
- Resistant to UV radiation, does not discolor
- Easy to apply
- Provides a long application window
- Fast cure after application
- Catalog colors are available



Component B is added into the container of component A and they are mixed for 2-3 minutes at 300-500 rpm. Mixed material must be used within the pot life, and thickened material must not be thinned and reused. **StenCoat® 2PU TOP HC** is applied with a roller.

The application is carried out in one or two coats, with 80 g per m² per coat.

5. Cleaning

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

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.

Low temperatures may cause crystallization of the product; in this case, the product can be used after heating and homogenizing at +20 °C. The product must be stirred thoroughly before use after prolonged storage.

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 Acrylic - Polyurethane
Solid Content		67
Color		Catalog
Density		1.28 ± 0.05 g/cm ³
Density (Dry Film)		1.51 ± 0.05 g/cm ³
Application Thickness (per coat, dry film)		80-160 µm
Abrasion Resistance	ASTM D 4060 CS10/100 rev/1 kg	1 mg
Impact Resistance	ASTM D 2794, 2 kg, 100 cm	No Damage
Radiation Resistance	200 hours, Xenon Arc	No Damage
Pot Life @20 °C		30 minutes
Tack-free Time (100 µm) @20 °C		20 minutes
Full Cure Time @20 °C		2 days
Antistatic Behaviour	EN 1081	Class I (10 ⁴ -10 ⁶ Ω)
Electrical Resistance (between electrodes, 90 cm)	IEC 61340-4-1	< 1 × 10 ⁶ Ω
Consumption (per coat)		80 g/m ²
Shelf Life		1 year
Packaging		15 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 1504-2 (DoP STN-PRC-2PUTOPHC-0001).*

