

1. Product Description

StenCoat® 2PU TOP HC is an acrylic-polyurethane based, two-component, conductive topcoat paint. With its high conductivity, it has been developed specifically for explosive environments and for areas where electrostatically sensitive work is performed. **StenCoat® 2PU TOP HC** is resistant to chemicals, outdoor conditions and UV radiation; it retains its resistance and color. It protects the coated surface from water penetration and improves its resistance to oxidation and abrasion.

2. Uses

With its high conductivity, **StenCoat® 2PU TOP HC** has been developed specifically for areas sensitive to electrostatic discharge (ESD) and for explosive environments. It converts non-conductive floors into static-dissipative (ESD) 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 color-stable topcoat without impairing their antistatic behavior. 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. Grounding takes place through the underlying conductive floor coating and its copper grounding 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 impermeability and UV resistance for a long time. It covers the cracks, defects and joints of the floor, provides a smooth topcoat and prevents water penetration.

3. Application

3.1. 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 substrates must be fully cured before the application.

3.2. Application

Storing the materials at 20-30 °C for one day before application makes them easier to apply. 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 must not be carried out if there is a possibility of rain.

StenCoat® 2PU TOP HC is ready for application when components A and B are mixed. The components are packaged so that one container of each yields the correct mixing ratio. In cases where a complete package will not be used, the

Polyurethane-Based Heavy-Duty Conductive Floor Paint

Highlights

- Resistant to indoor and outdoor conditions
- High conductivity suits it to electrostatic-discharge (ESD)-sensitive areas and explosive environments
- Improves the grounding performance of conductive floor systems without impairing their antistatic behavior
- Converts non-conductive floors into ESD surfaces
- Provides a safe working environment by preventing static electricity accumulation
- Not adversely affected by vehicle traffic
- Protects the surface against water permeation
- Resistant to UV radiation and does not discolor
- Easy to apply
- Provides a long application window
- Fast cure after application
- Available in catalog colors



package must be weighed and proportioned; the mix ratio stated on the package must be observed. Component B is added to 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.

3.3. Cleaning

The equipment used can be cleaned with **StenSolver PU** at the end of the work.

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

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 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		Two-Component Acrylic-Polyurethane
Solids Content (by weight)		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	EN ISO 6272-1	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 Behavior	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 (PR-C) (DoP STN-PRC-2PUTOPHC-0001).*

