

VX Savior Waterborne is a fire protection coating for structural steel sections / steel structures

ADVANTAGES

- Water-based, intumescent coating system
- Free from halogens, APEO, borates, plasticizers and silicones
- Approved according to BS 476, Certifire No. CF 5344
- Fire resistance rates from R15 up to R180 for open and hollow profiles
- Environmentally friendly
- Non-VOC, free from halogens, APEO, borates and plasticizers
- Classified according to UL 263
- Fire resistance rates up to 5.5 hours
- Environmental Product Declaration, UL: 4787852008.101.1
- Environmental Product Declaration, IBU: EPD-RHG-20160139-IAA1-EN

APPROVAL

- Approved according to BS 476
- Certifire Certificate No. CF 5344
- Approved according to UL 263/Design Nos D987, N638, Y627, Y628
- UL online Certification Directory, File: CDWZ.R27201
- EPD, UL Number: 4787852008.101.1
- EPD, IBU Number: EPD-RHG-20160139-IAA1-EN

APPLICATION AREA

- For indoor use only
- Structural steel profiles as columns /beams /girders /I- /H-sections
- R15–R180 open steel profiles
- R15–R180 hollow sections
- Up to R180 usable without top coat in dry indoor conditions¹⁾ according to BS 476
- Coated steel components shall not be receive coverings or miscellaneous jackets which prevent the intumescent fire protection coating from foaming/expanding! Only those components may be connected force-fit, which comply with the same fire resistance rate.
- Designed for indoor use and semi-exposed conditions
- Suitable for shop application and temporary exterior weathering/ storage
- Approved for exterior use with top coat acc. to UL 263
- Structural steel/ steel profiles as columns /I- /H-sections
- Up to 5.5 hours on open steel profiles and 3.5 hours on hollow sections
- Approved with a two component epoxy primer, solvent-based alkyd primer, water-based acrylic primer and a two component polyurethane primer. In case of epoxy zinc rich primer or other primer chemistry, please contact our service team for technical support
- Indoor use without top coat, approved for Interior General Purpose and Interior Conditioned Space according to UL 263
- Top coatings for finish and aesthetic purposes available

Disclaimer. The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials substrates and actual size conditions are such that no warranty in respect of merchantability of or fitness for particular purpose, nor any liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and all risks and liability in connection therewith. The information contained in the brochure may change at any time without notice.



INSTRUCTION FOR APPLICATION

- The coating system consist of primer HENSOGRUND* & HENSOGRUND 2K EP*, fire protection coating VX Savior Waterborne and top coat HENSOTOP*
- The coating system should only be applied by trained staff!
- System should be preferably applied and dried at a temperature above +10°C and at a relative humidity below 80%
- Surface temperature should be at least +5°C above dew point, during application see Corrosion Protection Standard EN ISO 12944-7
- In line with good painting practice, application should not take place in conditions which are deteriorating, e.g. where the temperature is falling or where there is a risk of condensation forming on the steel
- Steel surface should not be warmer than +35°C/95°F during application and drying time
- The ambient conditions during application must be documented in a report according to EN ISO 12944-7 and -8 for warranty reasons.

SURFACE PREPARATION

Bare Profiles

- Sandblasting Sa 2.5 according to EN ISO 12944-4, then application of primer HENSOGRUND AQ*, HENSOGRUND 1966E* or HENSOGRUND 2K EP* also recommended for cast steel
- Manual cleaning possible, PSt 2 according to EN ISO 12944-4, after manual cleaning application of HENSOGRUND 1K AK*
- Application of HENSOGRUND 2K EP* (solvent based 2-pack epoxy primer):
- Conditions for application: relative humidity <80%, temperature +10°C/50°F
- Surface temperature must be at least + 5°C/41°F above dew point
- Surfaces must be free from oil, dust, grease and moisture
- Surface preparation should be carried out according to good painting practises – DIN EN ISO 12944-4
- Application by brush, roller or airless spraying
- Tip size: airless: 0.019”–0.023”
- Mixing ratio: 8 weight units base HENSOGRUND 2K EP*:
- 1 weight unit hardener HENSOGRUND 2K EP*
- Density of the mixture: 1.51g/ml = 12.6lb/gal
- Pot life 6 hours (+20°C/68°F)
- Base and hardener should be mixed thoroughly with an electrical stirrer
- Coverage rate: 140–195g/m² = 3.5–5 mils wet = 2–3 mils dry
- Thinner: HENSOTHERM® V22* Thinner, max. 5%
- Cleaning of equipment by e.g. HENSOTHERM® V22*

Drying Times

Drying time depends on temperature and relative humidity. At a temperature of approx. +20°C/68°F and a relative humidity of approx. 65% drying times are as follows:

- Dust-dry after approx. 60 minutes
- Ready for overcoating after approx. 24 hours

Notice: The coverage rates does not consider the correction factor for rough surfaces according to ISO 19840.

Primed Profiles

- VX Savior Waterborne is designed to be applied over suitable prepared and primed substrate
- The compatibility between VX Savior Waterborne and unknown already applied primers need to be checked; any damage (corrosion, impact e.g.) must be repaired carefully with the particular type of primer used or other compatible primers
- VX Savior Waterborne is designed to be applied over suitable prepared and primed substrate
- The compatibility between VX Savior Waterborne and unknown already applied primers need to be checked; any damage (corrosion, impact e.g.) must be repaired carefully with HENSOGRUND 2K EP* or other compatible two component epoxy primers. Please contact our service team for technical support.

Before the application of VX Savior Waterborne already primed surfaces must be checked for damages and dry film thickness if they have been exposed to the weather for longer. If necessary, repair work is needed! For further information see Technical Data Sheets for HENSOGRUND primers.

Galvanized Profiles

- Surface has to be cleaned to remove contamination and to ensure adhesion, then priming with HENSOGRUND AQ* or HENSOGRUND 2K*
- Galvanized components must be tempered (heated) before coating with HENSOGRUND 2K (Blistering!)
- Surface has to be cleaned to remove contamination and to ensure adhesion
- Efficient washing with solvents and cleaning by high pressure are recommended according to the degree of pollution. Alternatively, a mechanical pre-treatment (preferred method: sweeping) of the galvanized steel surface is also possible.
- Application of HENSOGRUND 2K* (solvent-based)
- Coverage rate min. 150g/m², wet 4 mils, dry 2 mils
- Next application after 24 hours (+20°C/68°F and 65% relative humidity)

SHOP APPLICATION

The temperature of the steel surface and the ambient temperature has to be between min. +10°C and max. +35°C. For further questions, please contact our technical support team.



APPLICATION

Properties

- Colour: white with a flat matt finish
- Density: 1.35kg/l \pm 0.05 = 11.3lb/gal \pm 0.5
- Solids by Weight: 70 \pm 2%
- Hardness: \geq 90 shore A (7 days @ DFT = 1mm/40 mils)
- pH: 7.5–8.5

Conditions for Application

- Relative humidity < 80%, temperature +10°C/50°F
- Surface temperature must be at least +5°C/41°F above dew point

Airless Spraying

- A material temperature of about + 20 °C is recommended for achieving an optimal spraying behaviour and result
- If needed thinning with max. 3 % water
- Recommended operation pressure 200 – 250 bar
- Nozzle size 0.017"– 0.025"; flow rate > 4 l/min
- All filters should be removed
- Recommended coverage rate for the 1st layer on a primed surface 500 g/m² (approx. 250 μ m dry film thickness)
- Each further layer can be applied with up to 1,000 g/m² (approx. 500 μ m dry film thickness)
- Typical coverage rate of VX Savior Waterborne applied in one layer depends on the type of steel profile and the position within construction
- Coverage**: 1mm DFT = 1,429mm WFT = 1,929kg/m², 28mils DFT = 40mils WFT = 1,141ft²/gal @ 1mil DFT
- Recommended spray coverage is 2.5mm WFT/100mils performing under 2 coat application. 1 coat of approx. 1.25mmWFT /50mils instantly sprayed another 1.25mmWFT/50mils on top
- Particular attention should be paid to the internal and external angles of flanges and webs where excessive build-up of paint can occur and air flow may be restricted
- Occasionally cracking may occur on edges of flanges and external or internal angles of structural steel, depending on geometry, over-application and ambient conditions. This does not detrimentally affect the fire performance properties of the product.
- After reaching fingernail hardness each further layer can be applied of 1–1.25mm/40–50mils wet film thickness
- To ensure the correct thickness is being applied, frequent measurements should be taken using a wet film thickness gauge
- Typical coverage rate of VX Savior Waterborne applied in one layer depends on the type of steel profile and the position within construction

Brushing and Rolling

- Rolling by lambskin or foam roller, brushing with long-bristled Chinex-bristle



STORAGE and TRANSPORT

- Storage and Transport free from frost!
Preferably at a minimum of +5°C to a maximum of +30°C
- Shelf life of unopened pails: 12 months
- Opened pails must be sealed carefully after use!

PACKAGING

25 kg plastic pails, other sizes on request

PRECAUTIONS

Use VX Savior Waterborne in accordance with all applicable local and national regulations.

Giscode: M-DF01

ENVIRONMENT, HEALTH AND SAFETY

As regulations are often revised please request for the actual Material Safety Data Sheet before using the product.