Application instructions Fire protection of steel constructions with fire protection paint "Polylack W"

1.0. The general safety instructions other than those of the specific hazards There is no addition to the general safety instructions for special requirements.

The stability of steel constructions decreases remarkably over temperatures of 550 °C, at constructions made of unprotected steel structures fire can lead to full or partial collapse of the structures, which endangers human health and material assets

You can protect the steel constructions for 30' with POLYLACK W, a heat-swelling, water based, indoor fire protection paint for indoor and outdoor.

1.0. Devices for application

The most effective application form on middle and big sized surfaces is using a low-pressure spraying device

Manual application: brush, roller

2.0. Materilas to use

Rust-eater liquid

Defatting liquids

Alkyd resin based, rustproof primer

Polylack W

Rapid Aqua

3.0. The technological process

3.1. Preparation of the surface

3.1.1. Remove the rust from the steel surface

The new constructions are fitted with anti-corrosion priming. Surface preparation in this case: removing dust, and fat leftovers.

Use rust-eater liquid to older constructions surfaces. In case of rust plates and or deep rust seizing, mechanical intervention: sand scattering.

3.1.2. Remove fat, oil leftovers and patches from the steel surface.

To this action wash the surface with regular fat remover liquid.

3.1.3. Removal of dust from the steel surface

Depending from the adhesion degree of the dust, you can choose from wiping, washing with detergent or the combination of both.

3.1.4. Finishing the preparation of steel construction surfaces

3.1.4.1. Coat the cleaned surface after total drying with a rust resistant paint, which contains Rapid cinkromát or any else alkyd resin containing primer (250 g/m 2 . Material requirement). Dry layer thickness: min 50 μ m.

3.2. Apllication modes of fire protection paints

3.2.1. With brush

The viscosity of POLYLACK W is significantly better higher than that of other paints, so more material can be applied in one layer. Keep the minimal drying

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Made by: Zsiga Gábor	Approved by: Zellei János	

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time, that is 2-3 hours at each layer on normal temperature. Average applicable material with brush per layer: app. $0.3~kg/m^2$; dry layer thickness: app 250 micron

The application is analogous with the normal painting procedure.

3.2.2. Application with roller

On steel constructions with larger surfaces is application of Polylack W with roller more effective than with brush. Although the use of a brush can not be avoided, as the first layer needs to be applied with it in any case for better adhesion. Use the brush to create adequate layer thickness on the edges.

3.2.3. Application with spraying

Considering the surface evenness, the economy of application and the reachable results is the spraying application the most efficient. You can either use this method on large, free surfaces, or on large, and medium sized steel constructions. Advised on surfaces where the surface wideness reaches 20 cm-s. Complete the spraying operation with Airless sprayer device; transmission: from 30:1 to 60:1. Air pressure operating the device: 6-8 bar. The spraying pressure of the paint is 280-320 bar. Applicable layer thickness and density with sprayer: 250-290 micron; 0,5-0,6 kg/m². Let the applied layer dry for 2-3 hours (at normal temperature and adequate airing) before you start spraying the next layer.

3.3. The layer thickness measures of the fire protection coating – according to the fire resistance requirements - are specified in the prevailing Licenses.

4.0. Controlling and examination tasks

Control steps for each working phase:

- 1. Surface preparation with primer
- -check the priming, document the type and laxer thickness of the applied primer
 - -check the cleanness of the surface

2. Fire protection paint

-dry layer thickness measurement

5.0. Equipments and appliances to use for the check

Wet measure pattern dry layer thickness meter Thermometer Dew point meter