

# FIRE BLOCKING 104

One-hour fire-resistant paint, for steel beam and column



This paint has obtained a domestic fire resistant construction certification (1 hour). It is an oil-based foaming fire-resistant paint for intermediate coating that is designed to protect steel structures from fire by demonstrating strong fire-resistant performance with a thin film. It is a highly functional paint that protects people and property by preventing a sudden collapse due to the decrease of strength of a steel structure in case of a fire as the film forms a thick heat insulation layer by rapid foam expansion once it is heated by flames and delays the transfer of heat.

Usage

One-hour fire-resistant paint for steel beam and column of buildings

## Specification

Paint type	Acrylic			
Drying time	Category	5°C	20°C	Remarks
	Set-to-touch	1 hour	30 minutes	* The actual drying time varies according to the conditions including film thickness, humidity and ventilation (Data are based on W.F.T 1mm)
	Dry-hard	24 hours	12 hours	
	Complete drying	more than 2 months	more than 1 month	
	Over-coat (Min.)	24 hours	12 hours	
Thinner	Thinner for fire-resistant paint		Dilution ratio ▷ Airless spray (in principle): less than 3% ▷ Brush, roller coating possible (depending on the site situation) ▷ Tip diameter : 0.025"~0.031" ▷ Injection pressure : 2,500 P.S.I or higher (176kg/cm <sup>2</sup> )	
Specific gravity	1.28±0.05			
Theoretical Coverage	(Beam)0.91 m <sup>2</sup> /ℓ/2times, (Column)0.98 m <sup>2</sup> /ℓ/2times			
Re-coating interval	20°C, sufficient ventilation for a minimum of 12 hours	Nonvolatile component	Approx. 68±2%	
Color	White	Thickness of dried film	(Beam) 700μm, (Column) 650μm	
Mixing ratio	One-component	Gloss	Matte	

## Product Properties (Physical Property Data)

Adhesion strength	More than the standard (ASTM D 4541)
Gas hazards	Acceptable (KS F 2271)

## How to Use

Surface treatment	<ol style="list-style-type: none"> <li>1. Completely remove mill scale, oil, moisture, sand, dust, and other foreign matter from the surface to be coated.</li> <li>2. Sufficiently dry the surface to be coated.</li> <li>3. If an old film exists on the surface to be coated, apply the undercoat recommended by this company after removing the portion with the poor film condition to the greatest extent possible.</li> </ol>
Coating Method	<p><b>1. Paint suitable for preceding coating</b></p> <p>① Architectural specification: KSM-6030 Class 1 (RED LEAD READY MIXED PAINT) * Note that wrinkles may occur while applying a fire-resistant paint according to the inside drying condition of the red lead ready mixed paint undercoating.</p> <p>② Heavy-duty specification: Epoxy paints such as DHDC-0690; Inorganic zinc paints such as DHDC-1800BG * Mist coating should be done with DHDC-5000HB, which is an epoxy intermediate coat, when DHDC-1800BG is used.</p> <p><b>2. Paint suitable for follow-up coating</b></p> <p>① Architectural specification: KSM 6020 class 1 (mixed) class 2 (Enamel) SUPER ENEMEL FAST DRYING, FIRE BLOCKING FAST DRYING TOP COAT</p> <p>② Heavy-duty specification: Urethane top coat, such as DHDC-2740BG</p> <p><b>3. Remarks</b></p> <p>① The fire-resistant paint is suitable for interior coating without constant exposure to water and dew condensation. However, when inevitably applying outdoors or areas continually exposed to water, consult the technical department of this company. For coating on general external exposure structures, urethane top coat is used for finishing after intermediate coating with DHDC-5000HB.</p> <p>② Please carry out follow-up coating after 3 days (summer) and 7 days (winter) after the intermediate coating is completed.</p>