



Fontefire ST 60

DESCRIPTION

A water-borne one-component intumescent coating. When subjected to heat it expands and forms an insulating layer of foam.

PRODUCT FEATURES AND RECOMMENDED USES

- Provides efficient fire protection for constructional steelwork, up to class R90 in the fire resistance classification
- Certified for 'H' or 'I' shaped beam and column sections, and rectangular/circular hollow sections
- The CE-marked Fontefire ST 60 is compatible with a wide range of primers and topcoats. The product is tested and approved in accordance with ETA
- Used as a fire retardant paint on internal conditions Z2 for steel structures
- Recommended to be applied on-site during dry conditions. Components painted in workshops must be topcoated before taken outdoors

TECHNICAL DATA

Volume solids 72±2%

Weight solids 74±2%

Specific gravity 1.4 kg / l

Recommended film thicknesses and theoretical coverage

Examples of recommended film thicknesses		Amount	Theoretical coverage	
wet mm	dry mm	g/m ²	l/m ²	m ² /l
0.28	0.2	389	0.28	3.6
0.38	0.25	486	0.35	2.9
0.47	0.3	583	0.42	2.4
0.49	0.35	681	0.49	2.1
0.56	0.4	778	0.56	1.8
0.63	0.45	875	0.63	1.6
0.69	0.5	972	0.69	1.4
1.4	1.0	1944	1.39	0.7
1.8	1.3	2528	1.81	0.6

Maximum wet film thickness is 1.2 mm in a single spray coat.

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated.

Drying time

DFT 500µm	+20°C, RH 50%
Recoatible, after	By itself 4–6 h
Recoatible, after	With topcoat 16 h

Drying and recoating times are related to the film thickness, temperature, the relative humidity of the air and ventilation.

Gloss Matt.

Color shades White

Fontefire ST 60

APPLICATION INSTRUCTIONS

Surface preparation	Primed surfaces: Oil, grease, salt and dirt are removed from the surface by appropriate means. Repair any damage to the primer coat. Note the overcoating time of primer. (ISO 12944-4) Note: An approved intumescent coating system always requires a primer coat.
Recommended primers	Fontecryl AP (40µm), Fontecoat EP 50 (60µm), Temacoat GPL-S Primer (60 µm), Temaprime EUR (40 µm), Temacoat Primer (60 µm).
Recommended topcoats	Nova 20, Temalac FD 50 (about 50–60 µm), Fontecryl SC 50, Temadur 50.
Application conditions	All surfaces must be clean, dry and free from contamination. The temperature of the ambient air, surface and paint should not fall below +15°C during application and drying. Relative humidity of the air should not exceed 80% during application and drying. The surface temperature of the steel should remain at least 3°C above the dew point. Good ventilation and sufficient air movement is required in confined areas during application and drying.
Application	<p>Application by brush, roller or airless spray. Mix the paint thoroughly before use. Recommended dry film thickness is approximately 500 µm/layer. Diameter of the paint hoses should be at least 10mm, the length should not exceed 60m. Nozzle tip size 0.019"–0.025", turnable nozzle is recommended. Nozzle shall be chosen according to the efficiency and output of the equipment. Nozzle pressure 175–210 kg/cm². Spray angle shall be chosen according to the shape of the object.</p> <p>Application with roller and brush is typically 416 µm WFT (300 µm DFT).</p> <p>When using Temadur 50 as a topcoat: thin the paint max 10% with Thinner 1048. First apply a thin misty coat to seal the porous surface of the intumescent. Then once the surface is touch dry, after 10–15 minutes dependant on ambient conditions, apply a further coat of WFT 150–175µm.</p>
Control of film thickness	Before overcoating should the dry film thickness of the coating be controlled with a reliable test method in accordance with ISO 19840 and a record should be drawn.
Packing and touch-up of damages	Components painted in work shop should be covered with a plastic film during transport and storage and packed in order to avoid impresses. During winter season components should be dried 48 hours in room temperature before taken outdoors. Damages shall be repaired immediately in the same way as originally.
Thinners	Water
Cleaning of equipment	Water.
Storage	6 months in dry and cool conditions.
VOC	The Volatile Organic Compounds amount to 17 g/litre of paint.
HEALTH AND SAFETY	<p>Containers are provided with safety labels, which should be observed. Further information about hazardous influences and protection are detailed in individual health and safety data sheets.</p> <p>A health and safety data sheet is available on request from Tikkurila Oyj.</p> <p>For industrial and professional use only.</p>



Fontefire ST 60

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.

The product is intended for professional use only and shall only be used by professionals who have sufficient knowledge and expertise on the proper use of the product. The information above is advisory only. To the extent permitted by applicable law, we shall not approve of any liability for the conditions under which the product is being used or for the use or application of the product.

In case you intend to use the product for any other purpose than that recommended in this document without first getting our written confirmation on the suitability for the intended use, such use takes place at your own risk.

Fontefire ST 60

EN
13381-8:2013



Tikkurila Oyj, Kuninkaalantie 1, FI-01300 Vantaa
15
1121-CPR-GA5023
TIK-066-5001

EN 13381-8:2013
ETA 15-0442
ETAG 18, Parts 1 and 2

Reactive coating for the fire protection of structural steel members to obtain load-bearing capacity up to R60 for 'H' or 'I' shaped beam and column sections and up to R90 for circular and rectangular/square hollow columns for design temperatures in the range 350°C to 750°C.

Essential Characteristic	Performance
Safety in Case of Fire	
Reaction to fire	Class B-s2, d0 (without topcoat) Class D-s2, d0 (with topcoat)
Resistance to fire	Resistance to fire performance & field of application in accordance with EN13051-2 See ETA 15/0442 clause 3.2 - Annex A
Hygiene, Health and Environment	
Dangerous Substances	Does not contain dangerous substances See ETA 15/0442 Clause 3.3
Energy, Economy and Heat Retention	
Service & Durability	Compatible with generic primer types: 1 pack solvent based alkyd 1 pack water based acrylic 2 pack solvent based epoxy 2 pack water based epoxy Internal Conditions Z2 (with or without topcoat) Compatible with a range of topcoats. See ETA 15/0442 clause 3.4
Other	Not applicable/No performance determined