The Alsa Corporation
The Razor's Edge of Product Surface Technology

Architectural Specification
for
ALSA PyroProof

A water-based, thin film, one-component latex fire barrier coating containing 56.2% solids, by weight, is designed to protect various substrates by developing a thick char barrier (intumescent layer) when exposed to high temperatures or flame.

PRODUCT CHARACTERISTICS:

The product is a white, flat-finish coating with a nominal viscosity of 125 KU and a pH of 8.0 – 8.5.

APPLICATION EQUIPMENT:

The product can be applied with an airless sprayer (recommended psi 1,200 – 2,400, tip size 25 – 50, positive displacement) or by roller, brush, or mitt.

Recommended thickness depends on the substrate and the level of protection needed. See test data for recommendations, or call the manufacturer for technical assistance.

GENERAL:

The product polymerizes to all tested substrates and accepts top coating with alkyd, acrylic, or latex paint without loss of fire protective qualities. The product meets the following requirements for:

Structural Steel and Aluminum @ various thicknesses (see individual test reports)

- ASTM-E119/UL-263 – 2-Hour rating on .250 plate steel.
- ASTM-E119/UL-263 – 1.5 Hour rating on W10x49 beams
- ASTM-E119/UL-263 – 1.5 Hour rating on HSS 06.00 x .250 columns
- DIN 4102 Part 8 – 1.5 hour rating on .250 plate steel.
- CTL Test for Thermal Protection of .125 Aluminum Sheeting
- Toxicity Data (Zero toxicity/No HAZMAT)

PROJECT CONDITIONS

A. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F (10 and 32 deg C).

B. Do not apply intumescent paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; if temperature is less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

INTERIOR INTUMESCENT FINISH COATS

1. Prime Coat: If used, Factory-formulated red oxide or similar applied at spreading rate recommended by manufacturer.

2. Intermediate Coat: Intumescent-type, fire-retardant paint applied at spreading rate of 10 – 20 mils wet using multiple coats to achieve a total dry film thickness of 75 MILS (DFT).

3. Finish Coat – For color or sheen applied according to manufacturer's recommendations.

EXAMINATION

C. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements and other conditions affecting performance of work.

1. Proceed with application only after unsatisfactory conditions have been corrected and surfaces to receive paint are thoroughly dry.
2. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

D. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total intumescent paint system for various substrates. On Architect's request, furnish information on characteristics of finish materials to ensure use of compatible primers.

PREPARATION

E. General: Remove hardware, hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.

F. Cleaning: Before applying coatings or other surface treatments, clean substrates of substances that could impair bond of intumescent paint systems.

1. Schedule cleaning and painting application so dust and other contaminants will not fall on wet, newly painted surfaces.

G. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.Coordinating shop-applied primers with finish coats is critical. See "Coordination of Work" Paragraph in "Examination" Article. If compatibility problems develop, it may be necessary to provide barrier coats over shop-applied primers or to remove primer and reprime substrate.

H. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.

1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
2. Stir material before application to produce a mixture of uniform density, and as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
3. Use only thinners recommended by manufacturer and only within recommended limits.

I. Tinting: Tint each undercoat a lighter shade to simplify identification of each coat when multiple coats of same material are applied. Tint undercoats to match color of finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

APPLICATION

J. General: Apply intumescent paints according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.

1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable paint film.
2. Provide finish coats that are compatible with primers used.

3. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
4. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces.

K. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

1. Film thickness required is the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
2. If undercoats, stains, or other conditions show through the final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
3. Allow enough time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where applying another coat of paint does not cause the undercoat to loose adhesion.

L. Application Procedures: Apply coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required. (See above).

M. Minimum Coating Thickness: Apply materials at not less than manufacturer's recommended spreading rate for surface to be coated. Provide total dry film thickness of entire system as recommended by manufacturer.

N. Prime Coat: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to substrates required to be painted that have not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas appears in the first coat.

O. Produce a smooth, even surface film **using multiple coats**. Provide a finish free of laps, runs, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.

P. Completed Work: Match approved samples for texture and coverage. Remove, refinish, or repaint work not complying with specified requirements.

CLEANING AND PROTECTION

Q. Cleanup: At the end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by proper methods. Be careful not to scratch or otherwise damage adjacent finished surfaces.

R. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting, remove temporary protective wrappings provided by others to protect their work.

1. After work of other trades is completed, touch up and restore damaged or defaced surfaces. Comply with PDCA P1.

Manufactured for ALSA Corporation, 2640 East 37th Street, Vernon, CA 90058 (USA).

Complete test results. MSDS, Application Data and other information is available on the World Wide Web at http://www.pyroproof.com