

## PRODUCT NAME

A/D FIREFILM® III

## PRODUCT DESCRIPTION

A/D FIREFILM III is a decorative, thin-film intumescent fire-resistive coating system for structural steel at interior locations in buildings. During a fire, it expands to form a meringue-like insulating ash that protects the steel from fire.

The topcoat component of the system provides a wide range of colors.

## FEATURES

- ULC, UL, ITS and FM Listed – Designs for many steel sizes and shapes for fire resistance ratings up to 3 hours.
- Decorative Finish – Gives a smooth to slight orange peel finish. Topcoats are available in a wide range of colors.
- Dust free surface.
- Durable finish – Provides a hard, impact and abrasion resistant surface.
- Thin-film coating – space saving smaller column footprints.
- Low VOC content.

## PRIMERS

Apply A/D FIREFILM III only to clean and primed steel surfaces. Use only compatible primers as approved by A/D. Refer to Approved Primers List. Follow primer manufacturer instructions.

## APPLICATION

A/D FIREFILM III is to be applied only by trained and authorized applicators. Refer to A/D FIREFILM III Application Guide for complete application instructions

## DRY FILM THICKNESS

Refer to the A/D FIREFILM III fire test design information to determine the minimum dry film thickness required for the size and shape of steel element to be protected and for the required fire resistance rating.

## LIMITATIONS

Not intended for exterior applications. Protect from freezing.

## Physical Characteristics

|                                       |   |
|---------------------------------------|---|
| Theoretical coverage                  | 484 m <sup>2</sup> per pail @ 1 mil (0.025 mm) DFT<br>5213 ft <sup>2</sup> per pail @ 1 mil DFT |
| Application rate, Max. recommended    | 1.14 mm (45 mil) wet film thickness (0.74 mm (30 mil) DFT) per coat                             |
| Density                               | 1.42 g/cc (11.9 lb/gal)   |
| Dry Weight                            | 1.87 kg/m <sup>2</sup> (0.38 lb/ft <sup>2</sup> ) at 1.1 mm (42 mil) dry                        |
| Durometer Hardness                    | Durometer D72   |
| pH                                    | 7.4   |
| Solids by Volume                      | 65 +/- 2 %  |
| Solids by Weight                      | 72%   |
| Thickness range, per fire tests       | 0.4 - 8.2 mm (16 - 324 mil) dry   |
| Surface Burning, CAN/ULC-S102         | Flame Spread: 0<br>Smoke Developed: 30 – 35<br>(Tested with and without A/D COLORCOAT)          |
| Impact Resistance, ASTM D2794         | 152 in-lbs @ 65 mil DFT   |
| VOC                                   | 20 g/L (0.17 lb/gal)  |
| Abrasion Resistance Index, ASTM D4060 | 103@1000 cycles @125 mil DFT<br>104@2000 cycles @125 mil DFT                                    |
| Adhesion/Cohesion ASTM D4541          | 862 kPa (18,000 psf) @ 65 mil DFT   |
| Compressive Strength, ASTM E761       | 5.2 MPa (109,008 psf) @ 10% deformation   |
| Packaging rate                        | 18.9L (5 gal) per pail  |

These are laboratory results and not intended for specification purposes.

## TOPCOATS

Topcoat is required for all installations.

For Interior General Purpose, use A/D COLORCOAT, silicone alkyd paint, applied to a minimum dry film thickness of 2 to 4 mils.

For Interior Conditioned Space Purpose, use A/D COLORCOAT, silicone alkyd paint or Carbocrylic 3350 or Sanitile 155 acrylic paint, applied to a minimum dry film thickness of 2 to 4 mils. For Carbocrylic 3350 and Sanitile 155, use spray application only.

**Caution:** Typical of alkyd coatings, yellowing of white and light colours of A/D COLORCOAT® may occur. Where colour retention is critical, contact your A/D representative for recommendations.

---

## APPROVALS

A/D FIREFILM III is listed and certified by ULC, UL, ITS and FM. The following fire test designs were published at the time of this writing:

### Fire Test Design Numbers

#### **Wide Flange Columns -**

ULC: Z608, Z610, Z612, Z617, Z626, Z627  
UL: X639, X641, X643, X645, X669, X670  
ITS: AD/CA 120-04, 180-01, 120-03  
FM: Column Protection Method 5, 6, 7

#### **HSS Columns –**

ULC: Z611, Z617, Z628, Z629, Z630  
UL: X642, X645, X671, X672, X673  
ITS: AD/CA 120-04, 90-02  
FM: Column Protection Method 5, 8, 9, 10

#### **Beams / Floors –**

ULC: F906, F910, F912  
UL: D941, D948  
ITS: AD/FCA 120-01  
FM: Beam Protection Method 31

Contact your A/D FIREFILM III representative for a current list of fire rated designs.

#### **City of New York**

MEA Number 108-94-S-4 (beams)  
MEA Number 242-92-S-7 (columns)

#### **City of Los Angeles**

Research Report Number 25440

## MAINTENANCE

No maintenance is required. If coating becomes damaged, rebuild required thickness by spray or brush. Refer to the A/D FIREFILM III Patch and Repair Guide. Small areas can be filled with trowel. A/D FIREFILM Putty is available for this purpose. When dry, smooth and finish with approved topcoat to match.

## PACKAGING, HANDLING AND STORAGE

|                     |   |
|---------------------|---|
| Shipping Weight     | 28 kg (62 lbs)  |
| Storage (General)   | Store in original unopened containers out of direct sunlight. |
| Storage Temperature | Protect from freezing.  |
| Shelf Life          | 6 months from date of manufacture*                            |

\*Shelf Life: when kept at recommended storage conditions and in original unopened containers.

---

## A/D FIRE PROTECTION SYSTEMS

**Head Office:** 420 Tapscott Rd., Scarborough, Ontario M1B 1Y4  
Tel: (800) 263-4087 or (416) 292-2361 Fax: (416) 298-5887

**www.adfire.com**

Regional Offices

Western Canada: Tel: (800) 263-4087 or (416) 292-2361, Fax: (416) 298-5887  
Capital Region, Quebec and Maritimes: Tel: (800) 914-6506 or (450) 661-0006, Fax: (450) 661-8776

**ISO9001**  
REGISTERED COMPANY