



# DC315 Intumescent Coating

## Description

DC315 is a single component, water based intumescent coating tested to meet Building Code requirements for the fire protection of Spray Polyurethane Foam (SPF). Tested and evaluated in the USA by UL and ICC-ES, and in Canada by ULC and CCMC.

DC315 is fully AC456 Compliant and satisfies the International Building Code (IBC), International Residential Code (IRC), National Building Code of Canada (NBCC) and many other National and International building codes.

DC315 offers more tested systems to meet interior thermal and ignition barrier requirements AND DC315 has been tested as a component of exterior wall systems in accordance with the NFPA 285 meeting IBC Section 2603.5 AND DC315 has been tested to provide up to a 1 hr. fire resistance rating.

**The Choice is clear, DC315 is the most tested and approved fire protective coating for SPF insulation on the market today!**



## DC315 Tested Solutions for Spray Polyurethane Foam

- Certified full scale alternative Thermal and Ignition Barrier tests over SPF
- Code Compliance Evaluated by [ICC-ESR 3702](#) for the **USA market**
- Code Compliance Evaluated by [CCMC #14036-R](#) and [ULC ER39793](#) for the **Canadian market**
- NFPA 285 Tested and Listed by UL [File R40016](#) as a component of exterior wall systems with various architectural claddings
- [ICC-ESL 1577](#) and [ICC-ESR 3702](#) Listed for up to 60 minutes in accordance with ULC S-101 and ASTM E119
- DC315 manufacturing facilities are [3rd party Listed](#) and Inspected
- Tested useful life, fire performance not compromised after 50 years.
- Topcoat for color, weather and moisture protection, tested full scale via NFPA 286
- [ANSI 51](#) testing for incidental food contact
- Passed [CA-1350](#) - qualifies DC315 as a low-emitting material for [LEEDS](#) and Green Building standards
- Passed strict EPA – [VOC](#) and AQMD air emission requirements
- No formaldehyde, RoHS
- Meets Life Safety Code NFPA 101

## Specifications:

<b>Finish:</b>	Flat
<b>Color:</b>	Ice Gray, White and Charcoal Black
<b>V.O.C.:</b>	10.3 g/l TVOC 18.6 g/l VOC Less Water
<b>Volume Solids:</b>	67%
<b>Drying Time:</b>	To Touch: 1-2 hours recoat: 4 to 8 hours
<b>Type of Cure:</b>	Coalescence
<b>Flash Point:</b>	None
<b>Reducer/Cleaner:</b>	Water
<b>Shelf Life:</b>	18-24 months (unopened)
<b>Packaging:</b>	5- & 55-gallon containers
<b>Shipping weight:</b>	5-gallon pail - 58 lbs. 55-gallon drum - 640 lbs.
<b>Application:</b>	Brush, roller, airless spray
<b>Application Rate:</b>	Max 24 mils WFT per coat
<b>QAI Listed:</b>	File B1117



**International Building Code Fire Performance Requirements for SPF:** The International Building Code (IBC) Section 2603.4 mandates that SPF be separated from the interior of the building by a ½" gypsum board on an **NFPA 275** tested covering, unless specifically tested in accordance with Section **2603.9**. DC315 passed certified **NFPA 286** testing over all major brands and types of open and closed cell spray applied polyurethane foams. This finished assembly testing complies with the requirements of IBC Section 2603.9 and Section 803.1 and allows the coated assembly to be left exposed without covering in the prescribed gypsum board or NFPA 275 thermal barrier.

**Alternative Ignition Barrier Assemblies:** DC315 meets the requirements for ignition barrier protection in unoccupied spaces as per **AC 377, Appendix X**.

**Exterior Wall Systems:** DC315 has been tested as a component of exterior wall systems in accordance with the NFPA 285 and meets 2015 IBC Section 2603.5 with various architectural cladding options.

**National Building Code of Canada:** DC315 prevents flashover for 10 minutes for Combustible Construction or 20 minutes for Non-Combustible construction when tested to the CAN/ULC S-145 Standard. This testing has been shown to exceed the protection of CAN/ULC S-124 tested materials and meets the Intent of NBC Section 3.1.5.12 for the protection of foamed plastics.

**60- Minute Fire Resistance Rating for Steel Buildings-** DC315 has been tested in accordance with CAN/UCL S-101 and ASTM E119 and has met the conditions of acceptance for exterior walls in steel building applications

**European Union:** DC315 has been tested over both medium density and low-density spray polyurethane foam and provides an EN13501- 1 Fire Classification of B-S2-D0.

**Australia and New Zealand:** DC315 has been tested to the AUS ISO- 9705 standard over spray polyurethane foam and meets Group 2 Classification. ISO5660 (part 1 and 2) tests confirm Group number classification as 1 which allows for the addition of the thermal barrier coating to upgrade the fire rating of the underlying spray foam.

**END USE APPLICATIONS:** DC315 is designed as an interior Fire Protective Coating used to protect spray foam insulation from the interior conditioned space of a building. DC315 can also be used in many different applications such as cold storage, parking garages and agricultural buildings by following a few additional steps to address these types of environments. When installing DC315 in unconditioned spaces the coating and the SPF are exposed to variations in environment that needs to be accounted for by the installer/end user, when designing the full system. Care needs to be taken to ensure that the correct products are specified based on the expected service or environmental conditions. Topcoats are not required to meet the certified fire testing however should be considered for use where/when conditions warrant. Suitability for a particular end use condition shall be determined by code and inspection authorities, architects, specifiers, contractors, installers or any end user of DC315. **This guide does not purport to address all unconditioned or conditioned environmental concerns if any, associated with a specific project.**

## Testing

### USA

- **ASTM E84** - Flame Spread 0 Smoke 10
- **NFPA 286** - Complies with IBC/IRC
- **ASTM E2768** - 30-minute Ignition Resistant Material
- **NFPA 285** - Exterior Wall System with various claddings
- **ASTM E119** 60-minute fire resistance rating

### Canada

- **CAN/ULC S102** - FSR 0 SDC 25
- **CAN/ULC S 101** – up to 1 hr assembly rating
- **CAN/ULC 9705** - 10- and 20-minute testing
- **CAN/ULC S-145** – 20 Minute Rating

### European Union

- **BS 476 Part 6 & 7**
- **BS EN ISO 11925-2**
- **EN 13823**
- **EN 13501** Classification B-S2-d0

### Australia/New Zealand

- **AUS ISO 9705**
- **AS/NZS 1530.3**
- **AS 5637.1** Group Classification 2, NZBC Group 2-S
- **ISO 5660** Parts 1 and 2

### Physical Properties Testing

- **ASTM D522** Flexibility, Mandrel Bend
- **ASTM D4541** Adhesion pull off strength
- **ASTM D4585** Moisture resistance for 100 hours
- **ASTM D4587 / ASTM G154** Accelerated Weather QUV 1000 hours
- **ASTM D3359** Tape Adhesion
- **ASTM D2486** Scrub Resistance
- **ASTM E661** Durability, Impact, Concentrated load

