

## Contego Original Formula Reactive Fire Barrier Intumescent (RFB)



Approved  
No. CF 5303

**General Description:** Contego Original Formula RFB is a full-bodied water-based acrylic latex, single component coating designed to protect a wide range of building materials including structural steel, aluminum, dimensional lumber, manufactured wood products, trusses, drywall, spray polyurethane foam insulation, HDPE wall panels, concrete, plaster, solid core doors and more. The product may also be used for conduit, decking and cladding. This updated version of our original formula is an excellent product to use on spray polyurethane foam insulation, or for applications where you have to use a brush or roller to apply. Refer to our architectural specification for more details.

### Technical Data:

Color	White
Specific Gravity	1.32 +/- 0.06
pH Range	8.0 - 8.5
Weight/Gal	11.0 +/- 0.5 lbs (5.0 Kg)
Hazardous Ingredients	N/A
Volume Solids	58.0 +/- 2.0%
Weight Solids	60.0 +/- 2.0%
Viscosity	12,500 +/- 2,500 cPs
Flammability	Not Flammable
VOC. (less Water)	.01 gm/L (Nil)

\*Does not include weight of packaging.



**Application Conditions:** Contego RFB is designed to be applied by roller, brush or spray application. Contego RFB should not be applied when the relative humidity exceeds 80% or the surface to be coated is less than 50°F (10°C) or less than 15°F (9°C) above the current or forecasted dew point. The product is best applied when ambient temperatures are between 50°F (10°C) and 95°F (35°C). Once applied and cured, lower or higher temperatures can be tolerated. On structural steel and other metals such as aluminum, copper, brass, or composites, - a primer is always required. On combustible substrates such as dimensional lumber, manufactured wood (Oriented Strand Board, Particle Board, Plywood, etc.), Polyurethane foam, and drywall (GWB) a primer is not required but may be useful if:

**Dimensional Lumber** The wood is very old and/or dry and would likely absorb too much of the Contego RFB coating.

**Manufactured Wood** The substrate is very old and/or dry or if the resin content is unusually high.

**Polyurethane Foam** The foam is soy-based or made from other organics that emit a vegetable oil.

**Drywall (GWB)** The drywall has been previously painted with oil-based (alkyd) paint or if you're not sure.

Consult your Contego representative for specific information regarding the brand, and types of acceptable primers to be used under Contego RFB.

**Drying & Cure Times at Standard Ambient Temperature and Humidity:** As with any water-based acrylic latex coating, drying time is always a function of ambient temperature, ambient humidity and coating thickness. At 60°F (15°C) with a relative humidity of 70%, a 20 mil (500µ) wet film thickness coat should be dry to touch within 3 hours, completely dry in 6 hours and dried hard enough to handle in 8 hours. While our specifications call for a 72 hour cure time, the product is active as soon as it is hard dried.

**DO NOT** apply additional coats until you are sure the underlying coats are completely dry. Applying additional coats on top of product that still has moisture may cause the finish to crack and, if enough moisture is trapped under a surface film, blistering and delamination can occur. A top coat is recommended and permitted after the total amount of required thickness of Contego RFB has been applied and completely dried.

### Contego RFB Product Advantages:

- Exceptional protection from heat and fire.
- Smooth, thin, architectural grade finish.
- Top coat with a wide range of paints including alkyds, acrylics, water-based epoxy or polyurethane.
- Contego RFB commonly requires perhaps half the coating thickness and fewer coats to provide protection equal to or better than the competition. That means HUGE savings!
- Nontoxic, nondermatic and noncarcinogenic acrylic latex.
- Can be pre-applied to steel and other materials during fabrication and is easy to repair.
- Designed specifically for sprayer application. No special equipment is required.
- Any qualified contractor can apply it.
- Interior or exterior application (use an exterior grade top coat for exterior applications).
- Economically priced.
- Fast drying and fast curing times.
- Cleans up with soap and water.
- The longest shelf life in the industry. Does not need to be periodically reapplied.

Contego RFB is Truly  
Non-Toxic!





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**Required Coating Thickness:** Current recommendations are a maximum wet film thickness of 40 mils (1000 $\mu$ ), drying to 28 mils (710 $\mu$ ) - refer to the Contego Original Formula RFB Application Guide. **For structural steel applications**, refer to our Project Planner to determine required thickness for various substrates, densities and required ratings. Contact a qualified Contego representative with further questions.

### General Guidelines for Coating Thickness Requirements:

**Dimensional Lumber** - Up to 2 hours depending on the size of the wood and the thickness of Contego Original Formula RFB applied. (20 mils/500 $\mu$  dft). Based on our ASTM-E84/ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data

**Manufactured Wood** - Up to 2 hours depending on the size of the wood and the thickness of Contego Original Formula RFB applied. (20 mils/500 $\mu$  dft). Based on our ASTM-E84/ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data

**Polyurethane Foam** - Meets or exceeds the 15 minute thermal barrier requirements of IBC-2603 using UL-1715 (20 mils/500 $\mu$  dft). (Under EN-13823, Contego exceeded 25 minutes with no change after 6 minutes). Based on our ASTM-E84/UL-1715/CAN-ULC 9705/UBC 26.3/NFPA 286/ test data.

**Drywall (GWB)** - Contego Original Formula RFB adds 1 hour to any type of GWB. (15 mils/380 $\mu$  dft). Based on our ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data.

**Structural Steel** - Contego Original formula RFB provides up to 3 hours restrained protection depending on the W/D, Hp/A or A/P of the steel and the thickness of Contego Original Formula RFB applied. (8-200 mils/200-5000 $\mu$  dft) - refer to our steel calculator. Based on our ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data. UL XUV Design# D603, N644, Y637.

**Aluminum** Columns have been tested for 2 hours. Aviation grade .025 panels for an estimated 4+ hours. (20-50 mils/500-1270 $\mu$  dft). Based on our ASTM-E119/UL-263/CAN-ULC S101/UBC 7.1/NFPA 251/ANSI A2.19 test data.

### Precautions:

- Do not mix, thin or dilute the Contego Original Formula RFB product with water or other materials.
- Do not allow the product to freeze. If frozen, the texture will be obviously different. Discard it.
- Do not store at temperatures above 105°F (40°C) for extended periods of time.
- Do not expose the product to rain, snow, dew or extreme humidity until a top coat is applied.

**Warranty:** Contego Original Formula RFB products are warranted for ten years from date of application against material defects. Proof of purchase (store receipt and bar code from container) is required for warranty claims. Claims are limited to replacement of product only. The manufacturer accepts no responsibility for other losses or claims and the user waives such claims by breaking the seal on the container.

**Testing:** Contego Original Formula RFB products are tested to a variety of standards including UL, ULC, EN, BS, ASTM, NFPA, UBC, CEN, ISO, and others by the best independent fire testing laboratories available. Contego uses Underwriters Laboratories (UL), Exova/Warrington, Intertek, Western Fire Center, Southwest Research Institute (SwRI), Guardian Laboratories, SGS/US Testing, KTA-Tator, Materials Analytical Services, MAGI and more. All labs are certified, accredited and audited. Test results can be obtained by contacting our Distributor

ICC-ES Certification # 5078

2021, 2018, 2015 International Building Code (IBC, IRC, IFC)

2020 Florida Building Code (FBC, FRC)

2022 California Building Code (CBC, CRC, CFC)

2020 Los Angeles Building Code (LABC, LARC, LAFC)

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**A Contego Authorized Distributor**