



International Fireproof Technology, Inc.

17528 Von Karman Ave. Irvine, CA 92614

Product Name:

DC 315 Fireproof Paint for Foam

Name of Company:

International Fireproof Technology, Inc.

Brand:

Paint to Protect™

Address:

17528 Von Karman Ave. Irvine, Ca. 92614

Phone:

949.975.8588

Chemtrec Emergency No:

800-424-9300

Web Site:

www.painttoprotect.com

Email:

ptp@painttoprotect.com

Characteristics

Finish:

Flat

Color:

Off-White, Special orders DC 315 is available in grey

V.O.C.:

(47 g/l)

Volume Solids:

67%

Drying Time:

@ 77°F & 50% RH to touch 1-2 hours to recoat 2 to 4 hours

Type of Cure:

Coalescence

Flash Point:

None

Reducer/Cleaner:

Water

Shelf Life:

2 years (unopened)

Packaging:

5 & 55 gallon containers

Shipping weight:

5 gallon pail - 58 lbs.

55 gallon drum - 640 lbs.

Application:

Brush, roller, conventional and airless spray



Surface Preparation:

All surfaces to be painted must be clean, cured, firm, dry and free of dust, dirt, oil, wax, grease, mildew, and efflorescence. The quality of any paint job is only as good as the surface preparation that precedes the paint application. Our coating has excellent bonding characteristics and will adhere to most sound, clean, foam surfaces. Make sure the surface of the foam is free of gouges, holes, exposed cells, and that the surface is stable and not crumbling or deteriorated. If any such defects are found, repair them prior to proceeding.

Mildew: should be removed by scrubbing with a 25% solution of household bleach water. Tri-sodium phosphate (TSP) or common laundry powder such as Tide may be added to solution to assist removal.

Efflorescence: is a white powdery alkaline crystal growth sometimes found on plaster or masonry walls. It is a condition caused by excessive moisture in the walls forcing alkaline salts to the surface of the wall. Efflorescence must be removed and neutralized with an acidic solution (white vinegar works well).

Caution: The presence of efflorescence indicates that a moisture problem has occurred behind the wall at some point in time. If the source of excessive moisture is not corrected, the efflorescence will return and push any coating, including ours, off the wall.

Temperature: **DC 315** is water based coating which will freeze and become unusable at temperatures below 32° F. PROTECT FROM FREEZING DURING SHIPMENT AND STORAGE. Do not store material at temperatures below 50° F. Do not apply **DC 315** when ambient air and substrate temperatures fall below 50° F. Store at 50° F to 80° F.

Important: Humidity 65% and higher must use fans to move air for curing. High humidity may require longer cure times.



Material Preparation:

DC315 Fireproof Paint must be thoroughly mixed before application. Failure to do so will seriously compromise our coating's ability to perform. We recommend mechanical stirring with a high speed drill and a paddle appropriate for the size container you are working from. Contents should be stirred from the bottom up, making sure to scrape the bottom and sides with a paint stick as you go. Contents should be stirred to a creamy consistency with no lumps. Thinning is usually not needed. If paint has been exposed to high heat, water may evaporate from the plastic 5 gallon container. If the paint level is below 3 inches from the top of the container, add enough water to bring the level back up to within 3 inches from the top in order to ensure proper consistency.

DC315 is a water based product and slight thinning will not hurt the product, however, thinning increases the likelihood of not applying the proper thickness of paint, thus diminishing our product's fire proofing ability. Ultimately, it is your responsibility to make sure that the proper thickness of material has been applied so our product can do its job. Except for tinting with universal paint tint, never mix our product with other materials.

Cold Storage: Before applying DC 315 in cold storage please review pre-application check list. It is important that all wall and ceiling surfaces must clean and dry. Application and curing temperatures must be above 50° F and rising. Curing time is 7-11 days high humidity may require longer cure time.

Please be aware that condensation will occur in cold storage rooms when the temperature is warmer outside and the door is left open. When this happens moisture will form on the wall and ceiling surfaces. This will affect proper adhesion and performance of DC 315 if substrate is not dried before applying. **DC 315 is not washable.**

Freezer: Before applying DC 315 in freezers please review pre-application check list. It is important that wall and ceiling surfaces be completely clean and dry. The temperature of substrate needs to be above 50° F degrees. Application and curing temperatures must be minimum 50° F and rising. Curing time takes 7-11 days. To reduce cure time too approximately 5 days add fans for air movement and heaters. DC 315 is a water-base product and if the coating is not completely cured it will freeze and affect proper adhesion. **DC 315 is not washable.**

Humidity: Humidity 65% and high must place fans to circulate air so moisture will not develop on walls and ceiling, if walls are not dry before applying DC 315, this will affect proper adhesion and performance. High humidity may require longer cure times.

Testing:

- UL 1715 - Thermal Barrier
- NFPA-286 - Contribution to Room Combustibility
- ASTM E 84
- CAL 1350
- NSF/ANS1 51 Incidental Food Contact, USDA approved for ceiling, **DC 315 is not washable.**



Application Equipment:

DC 315 can be applied by brush, roller or airless sprayer.

Brushing: Use top quality polyester/nylon blend brushes such as those supplied by Purdy, Wooster, or equivalent.

Rolling: 3/8" polyester blend nap roller covers generally work well when applying DC 315 by roller.

Spraying:

Airless Spray Minimum:

PSI:	3000 PSI or higher or equivalent
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip
Tip:	517 – 531
GPM:	.95

For Smaller Jobs Residential and Small Warehouses

IMPACT SERIES 740



Pump:	(Titan) 740 Impact or equivalent
PSI:	3300 / 227
GPM:	.80
Tip:	517 – 531 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip



Pump:	(Graco) Ultra Max II 795 Hi-Boy or equivalent
PSI:	3300 / 227
GPM:	.95
Tip:	517 – 531 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip



Pump:	(SprayTex) GPX 130 or equivalent
PSI:	3300 / 227
GPM:	1.30
Tip:	517 - 531 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip

For Best results: For all Jobs big or small



Pump: (Graco) Mark 4 or 5 or equivalent
PSI: 3300 / 227
GPM: 1.35
Tip: 517 - 533 or equivalent.
Filter: 30 mesh, removal of filter is recommend from gun and machine
Hose: 3/8" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip

For 55 gallon Drums



Pump: (Graco) GH 300 or equivalent
PSI: 3300/ 227
GPM: 3.0 / 11.4
Tip: 517 - 537 or equivalent.
Filter: 30 mesh, removal of filter is recommend from gun and machine
Hose: 3/8" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip



Pump: (Graco) GH 833 or equivalent
PSI: 4000/ 276
GPM: 3.0 / 11.4
Tip: 517 - 537 or equivalent.
Filter: 30 mesh, removal of filter is recommend from gun and machine
Hose: 3/8" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip

See test data for recommendations of mil thickness, or call the manufacturer for technical assistance.

Application Temperatures:

Temperature of substrate and application must be 50° F and rising. 68° to 90° F are recommended temperatures for applying. Do not apply if temperature will fall below 50° within two hours of application. It is the sole responsibility of the applicator to ensure that DC 315 has been applied in accordance with the application directions. Application should not proceed if surface or air temperatures exceed 90° F.

Workmanship:

General: Apply DC 315 fireproof paint according to manufacturer's written instructions. Use applicators and techniques best suited to the type of foam being applied. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable paint film. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces.

Coverage: Check Test report for square feet per gallon and mil thickness. Example at a rate of approximately 20 wet mils @ 80 square feet per gallon application. Dry film thickness (DFT) will be approximately 13 mils. The final (DFT) will vary and depends on the substrate of the specific assemblies.

Curing time: 7-11 Days



Cleanup:

- ✓ At the end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- ✓ 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.
- ✓ Provide "Wet Paint" signs to protect newly painted finishes.
- ✓ After completing painting, remove temporary protective wrappings provided by others to protect their work.

Health & Safety

- ✓ All work carried out under this specification shall be in tradesman-like manner, with due regard to prevention of contamination of the site and associated work.
- ✓ Appropriate steps are to be taken to protect the health and safety of any person who has reason to be on the site.
- ✓ Refer to the governing Health and Safety regulations and minimize the hazards on site by using the proper trade approved equipment and techniques. Ensure supply and appropriate use of protective clothing and equipment.
- ✓ **Lead:** Existing coatings may contain lead. Test surfaces accordingly. All necessary precautions must be taken with existing painted surfaces that contain lead.
- ✓ **Asbestos:** Contractors need to comply with local regulations and guidelines before commencing any work on surfaces and substrates that may contain asbestos.
- ✓ Avoid contact with skin and eyes and avoid breathing of vapors and spray mist. Wear eye protection, dust mask and protective clothing when using. Open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, seek fresh air immediately. Wash thoroughly after handling. Close container after each use.

FIRST AID

- ✓ If swallowed, drink large amounts of water and get medical attention immediately.
- ✓ In case of eye contact flush with plenty of water and consult a physician immediately.

Check List Before You Start

- ✓ **Temperature** Is temperature within limits (60° to 90° F)?
- ✓ **Humidity** Is the relative humidity less than 85%?
- ✓ **Consistency** Are the contents thoroughly mixed?
- ✓ **Surface** Are all substrates clean, dry and sound?
- ✓ **Measurement** Wet film gauge on site?
- ✓ **Safety** Are Health and Safety checks complete?
- ✓ **Need help** Call 949.975.8588
- ✓ Correct spray tips –525 thru 529
- ✓ Airless sprayer with minimum 1.25 GPM

- ✓ Electrical power and at minimum 12 gauge extension cord
- ✓ 30 mesh machine & gun (if applicable) filters
- ✓ Power drill & mixer of appropriate size
- ✓ Drop cloths or poly sheeting
- ✓ Disposable gloves, mask, protective eyewear
- ✓ Clean metal flashing or equivalent for spray (or clean metal flashing)
- ✓ Portable fans to speed drying
- ✓ Space heaters as required to create conditioned space ($\Rightarrow 68^{\circ}\text{f}$)
- ✓ Disposable paint brushes
- ✓ Work lights for tight areas
- ✓ Scaffolding (as required)
- ✓ Clean-up rags
- ✓ 2 five gallon pails for clean-up
- ✓ Dish detergent for clean-up 1-2 oz.

Measuring Wet Film Thickness



Figure 1

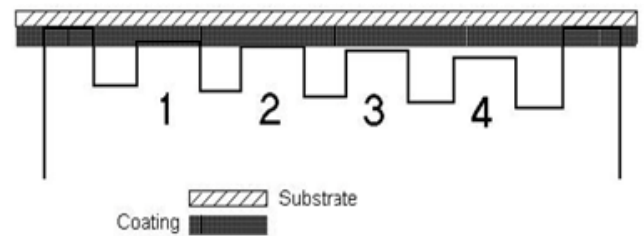


Figure 2

How do I use a wet film thickness (WFT) gauge?

A wet film thickness gauge is designed to give the spray operator immediate feedbacks as to the film build just sprayed. In most cases, measuring the dry film thickness (DFT) provides little information as it is usually measured a considerable amount of time after the actual spraying. Many things could have influenced the DFT: operator fatigue, ambient air temperature, coating temperature, etc.

There are several types of WFT gauges available. The most common being the notch gauge (see figure 1). Others types including the eccentric disk, the rolling notch gauge and the 6 sided gauges are available from specialty vendors.

There are several issues that must be addressed when using a WFT gauge.

- Technique
- Timing
- Reading with clear coats
- Creating surface defects

Technique

- When placing the gauge on a freshly painted part, the gauge must be placed 90 degrees to the part. The operator also needs to be aware of variation of the surface that may influence the reading. For example, if the surface is not perfectly flat, one direction may give a more accurate reading than another.
- To use the WFT gauge, place the gauge directly on the wet finished part (see figure 2) and as described above. The notches will indicate the measured film thickness. For example, if the 1 and 2 mil notches are wet and the 3 and 4 notches are dry, then the measured thickness is between 2 and 3 mils (.002 to .003 inches)

Reading with Clear Coats

- A clear coating on a WFT gauge would be very difficult to read. The most common method of reading clear coats is to use the gauge as a stamp on a piece of absorbent (non-gloss) paper. Many companies use the stamp method as a way of documenting the WFT.

Creating Surface Defects

- After using a WFT gauge to check the film thickness, the material may not flow to hide the area where the gauge was used. If this creates an undesirable defect, place a small sample of the material in line with the operators normal spray path. This sample should be sprayed along with the part. The sample then may be checked for WFT or DFT (after curing)

Wet Mil and Dry Mil:

During Application, the wet film thickness should be checked using a wet film thickness gauge. To use the gauge insert the teeth into the wet DC 315 wet base coat, the last tooth to be coated indicates the thickness achieved. This is very important so you can achieve the required dry film thickness (DFT) of the specific assembly. During the drying process, DC 315 will shrink due to evaporation.

Below Wet Mil Film (WFT) and a Dry Mil Film (DFT) Chart when using DC 315

Wet Mil Film Thickness (WFT) Build Chart

- ✓ 5 Gal @ 4 Mils covers 2000 square feet @ 400 square feet per gallon
- ✓ 5 Gal @ 18 Mils covers 450 square feet @ 90 square feet per gallon
- ✓ 5 Gal @ 20 Mils covers 400 square feet @ 80 square feet per gallon
- ✓ 5 Gal @ 22 Mils covers 365 square feet @ 73 square feet per gallon

Dry Mil Film Thickness (DFT) Build Chart

- ✓ 5 Gal @ 3 Mils covers 2000 square feet @ 400 square feet per gallon
- ✓ 5 Gal @ 12 Mils covers 450 square feet @ 90 square feet per gallon
- ✓ 5 Gal @ 13 Mils covers 400 square feet @ 80 square feet per gallon
- ✓ 5 Gal @ 15 Mils covers 365 square feet @ 73 square feet per gallon