Reference Guide for DC 360

DC 360 Fire Protection for Eaves, Wood, Gypsum (Drywall), and OSB



International Fireproof Technology, Inc.

17528 Von Karman Ave., Irvine, CA 92614

Phone: 949.975.8588 **Fax:** 949.724.8898

Email: ptp@painttoprotect.com
Website: www.painttoprotect.com



DC 360 For Use on Eaves, Wood, Gypsum (DryWall), and OSB

Approvals:

Wild Land Urban Interface: Tested with a Top Coat for use on Eaves

Farmers Insurance: Approved

UL Listed: Life Safety Code 101

UL 723: Class A (0 Flame/ 10 Smoke) **ASTM E119:** One Hour on Plywood Assembly

ASTM E119: Non-Rated Gypsum Assembly to One Hour Rating

ASTM E84: Equivalent to use in place of Fire Retardant Treated Wood (FRTW)

DC 360 Passed the Wild Land Urban Interface for Eaves



- ✓ Water Base
- √ 267 sq. ft. per Gallon as Class A
- ✓ 115 sq. ft. per gallon for 30 minute
- ✓ Non-Toxic
- √ Hypoallergenic
- ✓ Non-Carcinogenic
- ✓ Passed Strict EPA V.O.C. and AQMD
- ✓ Spray, Roll, or Brush
- ✓ Warnock Hersey Listed
- ✓ Compatible with any paintable surface

Do a couple of minutes really make that much of a difference? YES!

A typical house fire doubles in size every 30 seconds. Using these figures a small trash can fire will grow over 1000 sq. ft. in 5 minutes. Needless to say, time is of the essence!!!

	IME	0:00	0:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00
SIZE 1 2 4 8 16 32 64 128 256 512						-				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-

Smoke is the leading cause of death in fires. Adults and children can die in less than 60 seconds from the amount of smoke created from a typical fire. DC 360 is proven to reduce fire spread, and **dramatically reduce smoke up to 80%**, allowing you extra precious time to escape.

DC 360 Characteristics:

Finish: Flat

Packaging: 5 Gallon Pails
Colors: Off White
V.O.C.: 56 g/l

Uses:

- ✓ Elementary, Intermediate, High School, and Colleges
- ✓ Nursing Homes, Hospitals, and Child Care Centers
- ✓ Penal Institutions
- ✓ Apartments and Hotels
- ✓ Factories, Warehouses, and Utilities
- ✓ Businesses, Retail Stores, and Restaurants
- Railroad and Other Transportation Companies
- Military Installations and Other Government Facilities

Quick Reference Application Guide

Download Full Application Guide at: www.painttoprotect.com

Spraying DC 360 for Maximum Yield: If this is the first time using DC 360 we suggest testing a pre-measured area to get a feel for spraying and yield. If the job requires 16 wet mils or 100 sq. ft. per gallon, than a 5 gallon pail would cover 500 sq. ft. Measure out one or two 500 sq. ft. sections using pieces of tape, thumbtacks, or canned spray paint. Use just enough to outline the area you intend to apply DC 360. We suggest spraying inside the outlined area and taking wet film thickness measurements, with a wet film gauge across the area, to get a feel for maximum yield.

WET Film Thickness	Sq. Ft. Per One Gallon	Sq. Ft. Per Five Gallon
6 WFT	267 Sq. Ft. Per One Gallon	1335 Sq. Ft. Per Five Gallon
14 WFT	115 Sq. Ft. Per One Gallon	575 Sq. Ft. Per Five Gallon
40 WFT	40 Sq. Ft. Per One Gallon	200 Sq. Ft. Per Five Gallon

<u>Temperature:</u> <u>PROTECT FROM FREEZING DURING SHIPMENT AND STORAGE</u>. DC 360 is water based coating which will freeze and become unusable at temperatures below 32° F. <u>Do Not</u> store material at temperatures below 50° F. <u>Do Not Apply</u> DC 360 when ambient air and substrate temperatures fall below 50° F. Store DC 360 at 50° F to 80° F at all times.

Humidity: Humidity at 65% or higher requires fans to circulate the air for proper curing. High humidity may require a longer curing time. Relative humidity is harder to measure than temperature, but it plays an equally important role in how well DC 360 cures. Ideal conditions are 50-65% relative humidity. Curing times are significantly affected when humidity levels exceed 70%. Low relative humidity can also be a problem, because DC 360 may dry too quickly and lead to blistering on the surface. This is less common in cooler temperatures. Blistering happens more often when there is too much wind, which can dry DC 360 too quickly, causing dust deposits and other particles to settle on the surface. For additional information on applying DC 360 in high or low humidity contact IFTI at 949.975.8588 or email us at ptp@painttoprotect.com.

<u>Ventilation</u>: Please see humidity and temperature guidelines above. We recommend running fans to circulate the air during all applications especially in high or low humidity. In most cases free air movement across the surface will suffice. It is important that the fans do not blow directly onto the DC 360 coated surfaces before or after application, this may cause the paint to dry too fast resulting in cracking or delamination. Fans should be used to move air in and out of the work space.

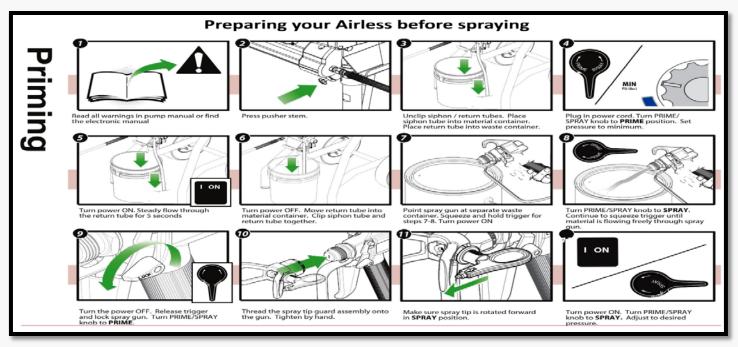
<u>Freezing:</u> It's also important that air temperatures do not drop below freezing conditions in the work space the first night after DC 360 coating has been applied. Curing paint can still contain moisture that will crystallize in sub-freezing temperatures instead of evaporating out into the atmosphere as it is designed to do. If temperatures do drop, you won't see a problem until the following spring. Moisture will remain hidden in some surfaces over the winter and then migrate into the paint under a warm spring sun, which may form blisters or delamination.

<u>Surface Preparation</u>: All surfaces to be coated must be clean, cured, firm, dry and free of dust, dirt, oil, wax, grease, mildew, and efflorescence. The quality of any application is only as good as the surface preparation that precedes the application. Our coating has excellent bonding characteristics and will adhere to most sound, clean, surfaces. Verify that the surface is free of gouges, holes. Also verify the surface is stable, and not deteriorated. If any such defects are found make sure to repair them prior to proceeding.

Material Preparation: DC 360 must be thoroughly mixed before application. Failure to do so will seriously compromise the coating's ability to perform. It is recommended to perform 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. Continue mixing for 4-5 minutes per 5 gallon pail. Thinning is usually not needed. If DC 360 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.

<u>Application Equipment:</u> DC 360 is best applied with an airless sprayer to achieve a more consistent mil thickness. In challenging areas where an airless sprayer is not practical, DC 360 can be applied by brush or roller (See the following recommended sprayer).

- **Brush**: Use top quality polyester/nylon blend brushes, such as those supplied by Purdy, Wooster, or equivalent
- Roller: Use a 3/8" polyester blend nap roller, which will generally work well when applying DC 360



IMPORTANT: PRIMING YOUR AIRLESS HOSE LINE WITH WATER PRIOR TO USING DC 360 WILL GREATLY ASSIST IN APPLICATION AND YIELD (SEE INSTRUCTIONS ABOVE).

<u>DC 333 VISCOSITY:</u> DC 360 is a variable viscosity coating. When you open DC 360 the unmixed viscosity will be approximately 30,000 – 35,000 CPS. After mixing for five minutes the viscosity will drop 15,000 CPS to approximately 20,000 CPS. If viscosity is still too high you can add 8 ounce of water per 5 gallon pail and mix to reduce the viscosity by 4000 – 5000 CPS.

COVERAGE: DC 360 MUST BE THOROUGHLY MIXED FOR 5 MINUTES PRIOR TO APPLICATION WITH A MECHANICAL MIXER

Check appropriate test report or ESR for required wet film thickness (WFT) and gallon per square coverage. For example, if the wet film thickness (WFT) required is 14 mils, the coverage will be 115 sq. ft. per gallon.



Measuring Wet Film Thickness (WFT)

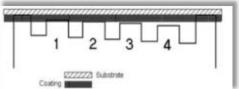


Figure 1 Figure 2

How do I use a wet film thickness gauge: A WFT gauge is designed to give the spray applicator immediate mil measurement of the film build just sprayed. There are several types of WFT gauges available. The most common is the notch gauge (see figure 1). Other types of gauges available from specialty vendors include the eccentric disk, rolling notch, and the 6 sided.

Technique

• When placing the gauge on a freshly painted area, the gauge must be placed at a 90 degree angle to the substrate and pressed firmly to ensure correct depth. The applicator also needs to be aware of variations in 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 the other. International Fireproof Technology, Inc. (IFTI) suggests placing metal plates throughout the surface, or at least one per 100 sq. ft. These plates are available at most hardware

stores. IFTI recommends writing the job date and applicator name on the back of each plate. Measuring WFT on the front side of the plate will give the most accurate reading. Collect these plates and keep them on file at the job site. They are a great tool to present your code official or Fire Marshal.



To use the WFT gauge, place the gauge directly on the wet finished
part as described above (see figure 2). The notches will indicate the measured film thickness. For example, if
the 18 mil notch is wet and the 20 notch is dry, then the wet measured thickness is 18 mils.



Curing: Fans should be used to circulate air for the first 24 hours of curing. Do not blow air directly on coating.

Airless Sprayer: IFTI Recommends Titans Airless Sprayers

For Residential and Warehouse usage:

Smaller Jobs less than 7,500 Square Feet:



Pump: Titan 640 Impact or equivalent

PSI: 3300 GPM: 0.70 Tip: 515 – 527

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

Priming your airless: Prior to using DC 333 prime the sprayer by filling the hose with water

Larger Jobs 7,500 Square Feet and Up:



Pump: Titan 840 Impact or (Graco) Ultra Max II 795 Hi-Boy or equivalent

PSI: 3300 GPM: 1.00 Tip: 515 - 532

Filter: 30 mesh, removal of filter from gun and machine

Hose: 3/8" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip

Priming your airless: Prior to using DC 333 prime the sprayer by filling the hose with water



Pump: Titan 1140 Impact or equivalent or (Graco) Mark 4 or 5 or equivalent

PSI: 3300 GPM: 1.2 Tip: 515 - 534

Filter: 30 mesh, removal of filter from gun and machine

Hose: 3/8" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip

Priming your airless: Prior to using DC 333 prime the sprayer by filling the hose with water

For 5 Gallon Pails and 55 Gallon Drums:



Pump: Titan PowrTwin 12000 PLUS or (Graco) GH 300 or equivalent

PSI: 3300 GPM: 3.15 Tip: 517 – 558

Filter: 30 mesh, removal of filter from gun and machine

Hose: 3/8" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip



Pump: Titan M 4000 or (Graco) GH 833 or equivalent

PSI: 4000/276 GPM: 3.3 Tip: 517 - 560

Filter: 30 mesh, removal of filter from gun and machine

Hose: 3/8" diameter airless spray line for the first 50' from pump and 1/4" x 6' whip