For Best Yield

Prior to Applying DC 315 to Insure Proper Adhesion: Prior to applying DC 315 over SPF you must inspect the foam surface carefully to make sure it is free of any dust, oil, moisture or other impediments. Adhesion of a coating to SPF requires the foam surface to have a slight profile or texture similar to an orange peel (view below). Smooth or glossy foam surfaces should be flash coated with a light 3-4mil WFT of DC 315, a water based primer, or the DC 315P primer prior to coating with DC 315. We also recommend flash coating around pipes, AC ducts or water pipes. Allow a minimum of 20 minutes for curing before applying DC 315. Flash coating is defined as a quick burst of primer or DC315 via your airless over the area needing treatment. (2-4 Mils WFT)



Orange Peel Surface Texture Description: The surface shows a fine texture and is compared to the exterior skin of an orange. This surface is considered acceptable for receiving a protective coating.



Smooth Surface Texture Description: The surface shows spray undulation and is ideal for receiving a protective coating.

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Spraying DC 315 for Maximum Yield: If this is the first time using DC 315 we suggest testing a pre-measured area to get a feel for spraying and yield. Example, if the job requires 20 wet mils or 80 sq. ft. per gallon, then a 5 gallon pail would cover 400 sq. ft. Measure out one or two 400 sq. ft. sections using pieces of tape, thumbtacks, or canned spray paint. Use just enough to outline the area you intend to apply DC 315. 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
4 WFT	400 Sq. Ft. Per One Gallon	2000 Sq. Ft. Per Five Gallon
18 WFT	89 Sq. Ft. Per One Gallon	445 Sq. Ft. Per Five Gallon
20 WFT	80 Sq. Ft. Per One Gallon	400 Sq. Ft. Per Five Gallon
21 WFT	76 Sq. Ft. Per One Gallon	380 Sq. Ft. Per Five Gallon
22 WFT	73 Sq. Ft. Per One Gallon	365 Sq. Ft. Per Five Gallon

Overlapping Technique: The overlapping technique ensures that an even amount of coating was sprayed onto the surface. The spray gun should be aimed so that the tip points at the edge of the previous stroke, therefore overlapping each stroke by 50%. To maximize efficiency when spraying on broad and open surfaces (e.g. ceilings and bare walls); the outside edges of walls should be sprayed first. The middle can then be sprayed quickly requiring less precise strokes. Given the contour of SPF we suggest spraying side to side followed by an up and down stroke.



Coarse Orange Peel Surface Texture

Description: The surface shows a texture where nodules

and valleys are approximately the same size and shape.

because of the roundness of the nodules and valleys.

This surface is acceptable for receiving a protective coating

Wait 12-24 hours to let foam off gas and cure before applying DC 315:

Temperature: PROTECT FROM FREEZING DURING SHIPMENT AND STORAGE. DC 315 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 315 when ambient air and substrate temperatures fall below 50° F. Store DC 315 at 50° F to 80° F at all times. Do not store on concrete floors during winter months.

Humidity: Ventilation or air exchange is critical in unvented areas, areas with limited air movement or if Humidity is 65% or higher, requires fans must be used to circulate air, maintaining at least 0.3 Air Changes per Hour in application area for 24 – 48 hours following application. Relative humidity is harder to measure than temperature, but it plays an equally important role in how well DC 315 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 315 may dry too quickly and lead to blistering on the surface. This is less common in cooler temperatures. For additional information on applying DC 315 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. If the relative humidity is greater than 65% at the end of spraying and cross ventilation is not drastically reducing it, then a mechanical industrial

dehumidifier is required. Air flows must be across the area DC 315 was applied, not directly on it. If the relative humidity in the application area is over 65%, fans must be used to circulate air, maintaining at least 0.3 Air Changes per Hour in application area for 24 – 48 hours following application. Use a "exhaust" blower at the opposite end of the enclosed space and run a hose to the exterior of the building for removing stale air, ensure large volume air output to maintain a negative pressure compared to the surrounding area. Use a "supply" blower at the end of the enclosed space and a hose from the non-occupied exterior. IFTI recommends a ideal temperature range of 62°F to 90°F and a relative humidity no greater than 65%.For more information on ventilation click here to download our complete guide or contact IFTI at 949.975.8588 or email <u>PTP@painttoprotect.com</u> <u>download ventilation guide here</u>.

Freezing: It's also important that air temperatures do not drop below 50° F conditions in the work space for the first 24-72 hours after DC 315 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 or as temperatures rise. Moisture will remain hidden in the coating over the winter and then migrate to the surface under a warm spring sun, which may form blisters or delamination.

Surface Preparation: 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, foam surfaces. Verify that the surface of the foam is free of gouges, holes, and exposed cells. Also verify the surface is stable, and not crumbling or deteriorated. If any such defects are found make sure to repair them prior to proceeding.

Material Preparation: DC 315 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 315 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 315 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 315 can be applied by brush or roller (See pg. 4 for a list of recommended sprayers).

DC 315 Viscosity: DC 315 is a 9,000-10,000 viscosity coating. When you open a container of DC 315 it may appear thick, before it is mixed, but once remixed for 5 minutes it will return to 9000-10,000 viscosity.

Coverage: DC 315 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 18 mils, the coverage will be 89 sq. ft. per gallon.

Measuring Wet Film Thickness (WFT)





Figure 1

Figure 2

<u>How to use a wet film thickness gauge</u>: A WFT gauge is designed to give the spray applicator immediate mil measurement of the film build just been 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 of the foam, 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.

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