Application of DC315 in unconditioned space and limited exterior applications

DC315 is designed as an interior Alternative Thermal Barrier Coating used to protect spray foam insulation from the interior conditioned space 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. For example, when applying DC315 in areas such as parking garages the coating is being applied on the cold side of the SPF. Temperature and humidity changes will lead to dimensional changes of the underlying SPF which can affect the adhesion of the coating. Essentially the foam expands and contracts slightly as the temperature and humidity change. This is normal of the SPF and is not a cause for concern however must be taken into account by the applicator. Following are some examples of applications and an outline of steps that should be followed.

Prior to installing DC315 in ANY unconditioned space it is imperative that installers contact IFTI to discuss the application.

Parking Garages- Due to the ever-changing environment in parking garages it is imperative applicators contact IFTI to discuss the application. At a minimum it is required that a primer be applied to the SPF surface prior to installing the DC315. Primers, such as DTM bonding Primer from Sherwin Williams, have been tested for conditions such freeze thaw cycling and minor humidity changes, very common conditions in these types of spaces. Apply 4 mils WFT of the primer and allow to cure for a minimum of 1 hour prior to applying the DC315 to the tested thickness. In some cases where there is a higher risk of constant moisture or high humidity leading to condensation it may be required to apply a topcoat.
Freezer and Refrigerated Storage
Swimming Pools and High Humidity Applications - During normal operation these applications are usually at a consistent temperature. However, there is some potential for condensation and seasonal - maintenance shut down may create very high condensation. The application of a topcoat will protect the DC315 from condensation. There are many topcoat options you can use so we recommend discussing the specifics with the topcoat manufacturer to ensure it will meet the needs of the intended end use such as food grade or washability.

Continuous Insulation/Exterior Air Barrier Projects (Installed Under Cladding) DC315 has been evaluated for use over SPF insulation applied on the exterior side of a wall assembly where it will be covered by a cladding material. This evaluation includes fire testing, weathering and durability to ensure the long-term protection of this system. Use in these applications require that a protective topcoat is applied over the DC315. Sher-Cryl High Performance Acrylic from Sherwin Williams, or similar products have been tested and protect DC315 in these applications. Apply DC315 to the tested thickness for the SPF system being installed, allow to dry for 12 hours before applying the topcoat.

*Topcoats have been investigated as to not reduce the fire resistance rating of the DC315 intumescent coating. Topcoat manufacturers, Authorities Having Jurisdiction, Architects, Engineers or Specifiers should be consulted as to the requirements covering the installation and use, such as suitability for the environment, of any topcoat listed.

DC315 has been used successfully in hundreds of applications such as cold storage buildings, swimming pools and exterior parking garage ceilings. As with any installation it is imperative that installers CONTACT IFTI and are familiar with all installation guidelines for the product they are installing. IFTI publishes a Master Specification which governs the installation of DC315 and spells out the necessary steps and products that must be used in these types of projects. In addition, we have application and ventilation guides as well as job work records all designed to ensure the successful installation of our products.

DC315 “The Proof is in the Testing”
ALL installation documents are available on our website or contact us at www.painttoprotect.com or Call us at 949-975-8588.

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