Application of DC315 in unconditioned space and 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 food storage 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.

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 garages it is imperative 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, condensation and moisture resistance, 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.
Freezer and Refrigerated Storage-
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. A primer must be applied to handle these variations. The further application of a topcoat will protect the DC315 from condensation. While there are many top coats you can use we recommend top coats, such as Sherwin Williams water based pre-catalyzed epoxy. Not only do they offer protection from condensation, they can provide a washable surface that is suitable for use in food storage facilities.

Food Storage, Swimming Pools and High Humidity Applications-
Projects that are exposed to ongoing high humidity conditions require the use of a primer and topcoat. Topcoats protect the DC315 from condensation as well as provide a barrier for vapor to transfer through the coating. DC315 is designed to be permeable to allow for proper curing of the underlying SPF. This allows DC315 to be used in all applications including those that do not require a vapor barrier. High humidity and moisture can affect the long-term adhesion. Apply the primer then DC315. Allow the DC315 to cure for a minimum of 12 hours before applying the top coat.

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 is NOT covered by at least 1” masonry. 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. A-100 Acrylic Exterior paint 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.

DC315 has been used successfully in hundreds of applications such as food 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.

ALL installation documents are available on our website or contact us at www.painttoprotect.com or Call us at 949-975-8588. rev: 1-10-18