DURATEK INC.
PROTECTIVE COATING SYSTEMS

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PRODUCT INFORMATION

ROOF COATING SELECTION

DURATEK is frequently asked which coating is best for my roof? There are numerous roof coatings on the market, and not all roof coatings are created equal. In fact Manufacturers differentiate their products from their competitors through various methods which are quite often found on a Product Data Sheet. However the difference in testing methods, ambiguity in reported data and component properties make it difficult if not impossible to make an educated choice.

Selecting the best roof coating for your application requires an understanding of site specifics, such as the need or requirement for roof aesthetics, coating performance with respect to heat reflection, UV resistance, waterproofing. It is also critical to understand the condition of the roof substrate, slope and how much standing waters will be on the roof.

Ceramic Coatings

Even though a white roof (or light colored roof) will reflect more light, there are times when the building aesthetics will require a specific color. When darker colors are added to the coating, there will be additional heat gain, which is generally not desirable. To partially offset heat gain, a ceramic additive can be added to the coating to assist in reducing the heat gain. In fact, a ceramic additive added to a white acrylic roof coating can block as mush as 85% of the radiant heat.

Durability

Roof coating durability is defined as how well the coating resists UV or weathering. Roof coatings that are formulated to resist weathering in one area of the country may not work in another area. UV inhibitors are more critical in the latitudes closer to the equator. The ability of the materials such as the polymers to resist deterioration and pigments to be UV opaque are critical to protecting the roof substrate. Since solar reflectance and air conditioning energy savings are becoming more important in selecting white roof coatings, it is also important to consider dirt pick-up resistance.

Adhesion and Mechanical Properties

Coatings require adhesion to function properly and adhesion characteristics of any coating can differ between roof substrates. Wet adhesion verses dry adhesion is also of critical concern selecting a coating. Standing water on a roof may cause a coating to delaminate if it is not formulated properly. Mechanical properties such as elongation and tensile strength can be impacted by location as well (colder verses warmer climates). Coating formulations must resist cracking and therefore roofing substrate as well as climatic conditions should be considered.

DURATEK is experienced is selecting the correct coating for every type of roof. We have a detailed understanding of roof systems, and their substrates, quality and structural dynamics and can match the appropriate coatings to the your roof.