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A 'cool' roof and more

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There are those who believe that all black or dark colored surfaces, such as asphalt pavements and exposed black roofing materials, are contributors to a "Heat Island Effect." In addition, much of the heat generated by absorbing the sun's ultraviolet radiation is also transferred to the building interior.

In cooler climates this is not a major problem. But in warm temperature areas this increases the demand for power, as the air-conditioning systems labor to maintain a comfortable working climate.

Studies conducted around the world have long ago established the benefits of a reflective roof coating for a "cool" roof system. The results are well documented that reflective coatings produce energy savings, a more comfortable work environment and, more importantly, a sustainable roofing solution that can prolong the life of a roofing system with proper maintenance and periodic re-coating-thus eliminating the necessity for expensive roof tear-off and replacement--and adding to already overtaxed waste disposal sites.

Much of what you've read about white reflective roof coatings is true. Liquid-applied white roof coatings will, to varying degrees, reflect the sun's ultraviolet radiation away from a roof's surface. Some roofing products are more effective than others, some hold up better over time and some have modern additives that may, or may not, give the product in question near mythical qualities.

It is virtually impossible to simply look into a pail of roof coating and predict whether one product is going to perform better than another. For this reason, specific guidelines have been established for testing and approval of liquid applied acrylic roof coatings that provide a yardstick by which all products can be measured. Coatings products that meet specific standards will display that information on the product label. Look for those markings when evaluating a product to meet a specific need.

Some of these markings indicate whether the coating meets specific standards or has the approval of certifying testing organizations. Among the important standards is American Society for Testing and Materials (ASTM) D6083. This document includes a comprehensive set of criteria, which, if met, should provide the user with an excellent performing product.

Creating a waterproof barrier to the atmospheric elements is the primary

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objective of any roof system. A high quality roof coating will assist in this process by providing resistance to ultraviolet radiation and the effects of heavy or light rainfalls and the standing and melting of snow on roof surfaces.

The ability of these coatings to stand up to the elements depends largely on the application of the properly balanced ratio of acrylic solids to fillers in the coating, the thickness at time of application and, of course, use of the proper roof preparation and workmanship techniques.

Workmanship is a key variable that has a significant effect on the success of the roof coating project. If pipes, soffits, drains and other roof details are not properly reinforced with fabric or high-strength, mastic grade material prior to the final application of the coating, there is a risk of premature failure at these critical detail areas.

A major benefit of these coatings is their ability to sustain or extend the life of the existing roof substrate, while providing a seamless roof surface that requires no fasteners, adhesives or heat welding. Environmentally friendly and applicator safe to use, the coating, applied at the proper thickness to a sound roof surface, may virtually eliminate the need to replace existing roof material. The benefits of acrylic roof coatings produce cost savings for roof maintenance and energy expenditures and results in significant environmental benefits as well.

For additional information, contact RCMA at: 202-207-0919; or visit: http://www.roofcoatings.org/.

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