



SERVICE WORKS
YOUR FULL SERVICE ROOFING CONTRACTOR

“UP ON TOP” NEWS

OCTOBER 2007

ROOF COATING - WHAT'S BEST?

Roof coatings are much like paint—the more polymer "solids" per gallon, the longer the coating's potential life. The more aluminum "metal" in asphalt-based aluminum roof coatings, the better the potential long-term performance. Likewise, the more acrylic polymer in a water-based roof coating, the better the potential long-term performance.

But the "best" roof coatings available will not live up to expectations if surfaces to which they are applied have not been evaluated for adhesion, and if surface preparation does not provide a suitable base for the coating. Solvent-based coatings are a little more forgiving of improperly prepared roof surfaces than are water-based coatings simply because the solvents provide a modicum of "self-priming" properties. Simply adding a "catalyst" (in two-component coatings) to the coating does not necessarily ensure better adhesion or weath-

ering performance.

The primary qualities necessary for an acceptable roof coating are:

- Low moisture absorption
- Good flow properties at all suitable application temperatures
- Quick skinning and short-cure properties
- Good weathering properties with minimal surface chalking
- Good adhesion properties to prepared surfaces

Low moisture absorption is one of the most important qualities for a coating. Moisture absorption from ponded water on roof surfaces causes adhesion to the substrate to break down and the coating to separate from the substrate surface. The lower the moisture-absorption properties of the coating, the longer it will remain bonded in areas of accumulated water. But even the best coatings are not going to perform for the expected time when subjected to severe, continuous ponded water or the effects of condensate discharge from roof-mounted heating, ventilating and air-conditioning units.

Properly preparing a substrate before applying any roof coating is critical to bonding of roof coatings. Surfaces contaminated with silicone (caulk, etc.) never will hold any coating until all silicone contaminants have been eliminated completely from the surface.

Pressure washing is the surface preparation method coating manufacturers generally recommend, however pres-

sure washing can irreparably damage some roof membranes if the high-pressure water is directed into laps or flaws in the roof membrane surface. In addition, high-pressure water can be forced through some types of laps in metal roof panels.

The most effective way to determine whether a coating effectively will bond to a surface is to perform peel tests in randomly selected roof areas.

To do so, prepare a sample area by applying an initial layer of the selected coating over the roof surface followed by embedding a strip of fabric with about 4 inches of tail exposed, followed by another application of roof coating. Allow the test area to cure for a minimum of three days under ambient conditions, and then pull the exposed tail of the fabric straight up.

If the coating effectively bonded to the surface, it will not peel away from the surface before the fabric breaks. If the coating peels cleanly from the surface under minimal load, try various surface preparation methods, primers or different coatings until coating adhesion is positive.

It should be obvious that quality and application properties of products held out to be suitable for coating roof surfaces may not be suitable for some applications. Simple and expedient evaluation of proposed roof coatings may save much consternation, money and grief for Owners. If there ever was any credence to the old adage "you get what you pay for", it is appropriate to roof coatings.

Service Works

5423 N. 59th Street
Tampa, FL 33610
Phone 813-626-7717
Fax 813-626-7248

3331 NW 55th Street
Ft. Lauderdale, FL 33309
Phone 954-777-0203
Fax 954-777-0283

www.serviceworksroofing.com