Coating Cure Time/Testing
Technical Bulletin

DESCRIPTION
As required by specification or procedurally part of coating application quality control, installed coating systems should be tested for adhesion and monolithic coverage. Raven coatings are typically tested for adhesion according to ASTM D4541 or 7234 using portable pull-off adhesion testers. Additionally, holidays should be tested for according to ASTM D-4787 and/or NACE RPO 188. Both types of testing require the coating film to cure to a certain degree prior to testing in order to obtain proper test data without compromising the coating beyond that required by the test method.

For holiday testing the coating should be allowed to cure to cure stage referenced to as “dry through”. This cure stage can be defined as having sufficient cure that when bearing down on the coating surface with the thumb and rotating ninety degrees, the coating does not distort or show signs of an impression. Since all Raven 400 Series coatings are 100% solids there is no concern of solvent entrapment or evaporation. At this stage the coating may be tested using high voltage test equipment and detected holidays repaired.

For adhesion testing it is recommended that the coating be allowed to cure for a minimum of 48 hours, at 70+ degrees F, prior to testing. This minimum cure time will allow the coating to reach sufficient physical strength so as not to affect the results of adhesion testing. Test dollies may be glued to the coating as soon as a “dry through” cure stage has been achieved. It is not recommended to place test dollies directly into the uncured coating as this may affect the alignment and adhesion of the dolly. Coatings which are subjected to less than 70 degree F temperatures will cure at a slower rate. Allow for additional cure time for such instances.

For more detailed information regarding test methods and equipment refer to Raven Technical Bulletins for Adhesion and Holiday testing as well as NACE, SSPC and ASTM publications.