

“Breakthrough Adhesion Technology” for Coating EPDM Roofing
William A. Kirn RRC

Project: North Garner Middle School Media Center, Garner NC

The 106 SQ mechanically fastened EPDM roof was beginning to show its age after years of heat, sunlight and rain. Rather than replace the roof, the facility manager at the school decided to restore the roof using acrylic coatings. roof is mechanically fastened with excellent drainage. Rooftop Systems Engineers of Raleigh NC was retained to write a maintenance specification. The project called for the use of National Coatings Corporation ARM Acrylic Roof Maintenance System using the AcryShield A502/A500 system. This coating system is unique in the roof coating industry as it is not only waterborne, but also does not require a corrosive primer that is normally used to achieve adequate adhesion to EPDM. The project called for reinforcing the seams and applying >24 mils of coating.

Mr. Bill Kirn, RRC, Technical Director and Key Accounts Manager of National Coatings Corporation conducted the final inspection. “It is noteworthy that the A502 primer had truly tenacious adhesion to the EPDM, and I had difficulty peeling a coating sample from the membrane to measure the dry film thickness, he said. “The primer uses truly “breakthrough technology” to achieve the adhesion necessary for long term durability and sustainability.”

An additional benefit of the white reflective coating is the increase in solar reflectance and corresponding reduction in heat gain and air conditioning energy costs. Typically a black EPDM roof has about 10% reflectance, while coating it increases the reflectance to 83%. Simply stated, the higher the solar reflectance, the cooler the roof, the cooler the interior and the less air conditioning that is required.

Baker Restoration, a division of Baker Roofing in Raleigh NC, was selected to install the National Coatings Corporation roof coating system. Jimmy Ramirez, Manager, Specialty Coatings, for Baker Roofing oversaw the project. He noted during the post installation warranty inspection that the National Coatings Corporation roof coatings sprayed very well and he was particularly impressed with the adhesion of the A502 primer. Normally Baker will check adhesion of the primer prior to application of the top coating. He checked the adhesion and found it to be excellent.

Bill Kirn had a few words for Baker Roofing, too. He said, “I have inspected acrylic coated roofs for over 25 years and was very impressed with the quality of the workmanship on this project. The Baker crew is to be complimented on an excellent installation.”



Overview of Completed Project



Details around parapets, crickets and drains