

Benjamin Banneker Academic High School

Washington D.C.

Building a Net Zero Energy School With Elemax™ 2600 AWB Coating

Benjamin Banneker Academic High School, in Washington DC, was given the go ahead for a \$152M expansion project that encompassed demolition and transformation of the existing site to a modernized, larger facility that could accommodate an additional 300 students.

A key focus of this construction project was sustainability, with ambitious goals to be Net Zero Energy ready; at a minimum, the school needed to achieve LEED BD+C Schools Gold Certification for efficiency. Architects Perkins Eastman DC and MCN Build alongside contractors Forsythe Inc., were tasked with delivering on these objectives.

Adding Elemax to the Specification

To help reach the required standards, the original building plans called for a complex design that included spray foam on the Rockwall of the building's exterior, and an additional thermal barrier coating in order to meet fire safety standards. The plans also specified an acrylic AWB coating.

When Bob Hudson, Vice President of Operations at Forsyth Inc, the contractor for the project, the supplier of sealants for the project, saw the plans, he believed there was an easier, more cost-effective way – using Elemax 100% silicone air and water-resistant barrier.

He suggested moving the spray foam to the interior and swapping the acrylic AWB for Elemax 2600 coating. In addition to enabling greater energy performance of the building, these changes would also eliminate the need for the thermal barrier coating, thus the opportunity for reducing costs, complexity, and shortening the timetable for the project. The new specification was accepted, and the project broke ground in early Fall 2019.



Efficient Application and Overcoming Project Disruption

This was a large-scale, challenging project that included the application of Elemax 2600 AWB coating to 80,000 sq ft of surface! Unfortunately, due to its proximity, spray application simply wasn't an option, so it needed to be applied with rollers instead. Thankfully, Elemax 2600 AWB coating is primerless, and can be applied in a single coat.

Work began in the spring, but soon, the Coronavirus crisis caused significant and immediate disruption. With the surfaces only partially coated, work was paused for several months. With an acrylic AWB coating, this delay would have likely posed a significant problem, as the product typically needs to be applied to surfaces within a strict time period, or otherwise require recoating.

Delivering LEED Certification

The design changes proved to be a success, and, with help from Elemax 2600 AWB coating, the build is on track to achieve its sustainability goals, including both LEED BD+C Schools Gold certification and Net Zero energy use.

Despite the disruption caused by the pandemic, the school is set to be completed in 2021 - and scheduled to open in time for the new school year in September.

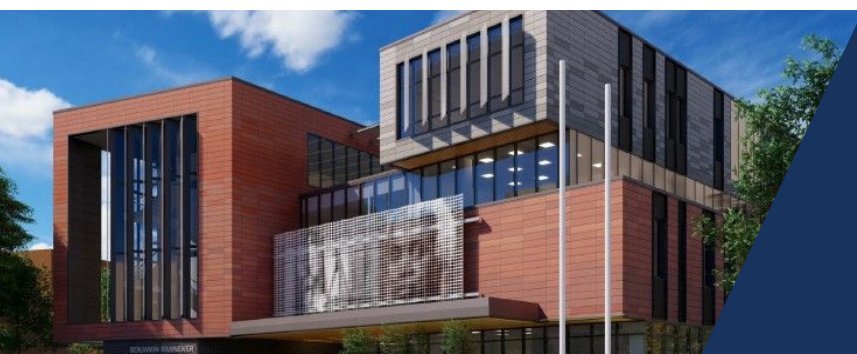


Seamless Protection with Elemax Air and Water Barrier Coatings

Protect your building against wet weather, air intrusions, damaging UV and extreme temperatures, with Elemax Air and Water-Resistive Barrier Coatings.

By preventing the seepage of unwanted water and the growth of mold and mildew, a single coat of Elemax AWB coating can help improve air quality, stabilize temperature control, and reduce energy consumption by up to 35%. UV-resistant upon cure, Elemax AWB coating maintains elasticity even after years of exposure to the elements.

NOTE: Performance results are those of reported accounts, and are not to be relied upon as typical or expected under any other circumstances. Performance results will vary depending upon a number of factors. Prospective customers should rely solely upon their own evaluative techniques to determine what results are attainable and optimal to their specific needs. Further note that MPM is not endorsed by or affiliated with the owner(s) of Benjamin Banneker High School.



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