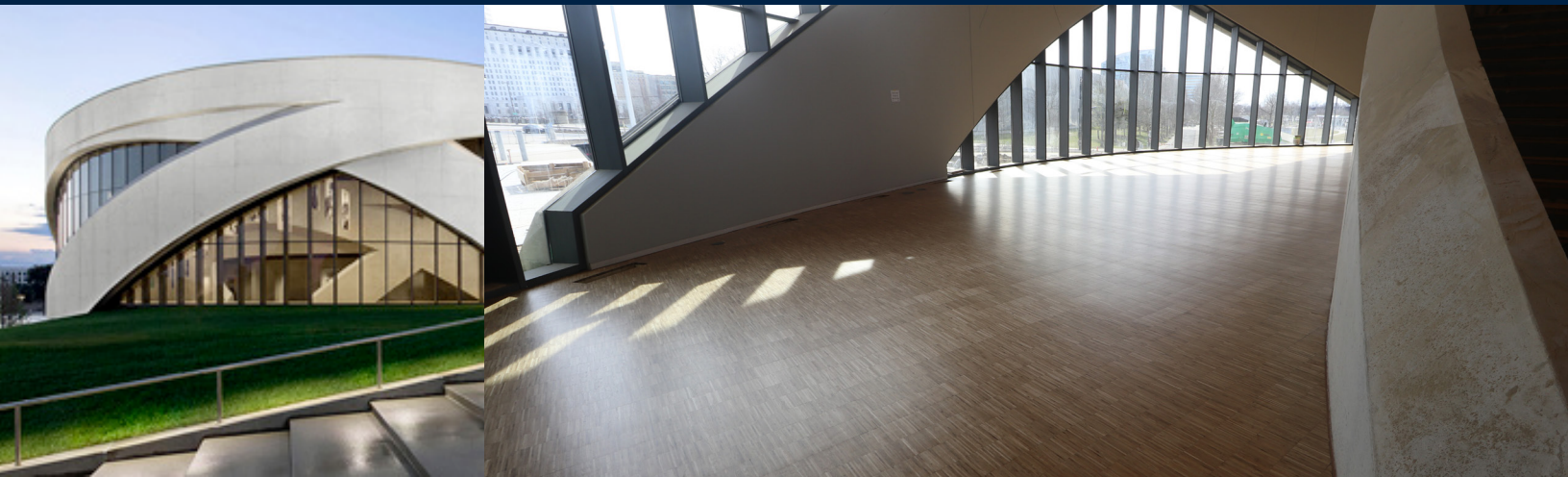




# Project Spotlight

## NATIONAL VETERANS MEMORIAL MUSEUM



PROJECT LOCATION:

**Columbus, Ohio**

INSTALLATION FIRM:

**The Final Floor**

*Sugar Grove, OH*

ADHESIVE:

**GreenForce™**

*Advanced Tri-Linking™  
Adhesive and Moisture  
Control Membrane*

### INSTALLER TESTIMONIAL

**Tony Stalford, Commercial Flooring Installation Specialist, The Final Floor**

*"The biggest issue, was when we wanted to begin installing the parquet flooring within the building, the concrete was very wet, yet the air was very dry. Greenforce™ was clearly the right choice."*

### CHALLENGE

- Install 26,000 square feet of wood parquet flooring over concrete
- Installation over concrete flooring with a high RH (relative humidity)
- Complex structural design
- Enormous amount of indoor foot traffic expected

### SOLUTION

- Bostik GreenForce™ for wood parquet flooring installation:
  - Warranty covers moisture on slab
  - Both a flooring adhesive and a moisture control membrane
  - Easy to spread and clean off of prefinished flooring

### RESULT

- Superior, long-term adhesive durability
- Time-consuming concrete moisture testing was not required
- Wood flooring adhesive that will perform for years in high traffic indoor application
- Bostik's BLOCKADE® antimicrobial protection

**For more information about GreenForce™ please visit:**

**[www.bostik.com/us/Bostik-products/greenforce-hardwood-flooring-adhesive](http://www.bostik.com/us/Bostik-products/greenforce-hardwood-flooring-adhesive)**

## **BOSTIK PROJECT SPOTLIGHT: NATIONAL VETERANS MEMORIAL MUSEUM**

# **MUSEUM ENLISTS BOSTIK'S GREENFORCE™**

## A high-performance wood flooring adhesive for long-term durability

*"Bostik is a valuable partner to our business. The firm's innovation and technology clearly make them leaders in the hardwood flooring industry. Bostik's core values align with our core values as we focus on the needs of our customers. We take pride in helping customers with products they need and support them with our expertise to help with their projects. As a distributor, it is invaluable to have partners such as Bostik, as this relationship allows our team to always be confident in knowing we do everything possible to help our customers be successful in their respective businesses."*

**Chris Hardsaw, Sales Manager, Lanham Hardwood Flooring**

The National Veterans Memorial Museum in Columbus, Ohio, was constructed to not only honor the contributions of our veterans, but also, to educate all visitors about the consummate value of their service. The NVMM is now able to share with all its guests, valuable information concerning the important role our servicemen and women have played throughout the history of the United States of America.

"The national designation lends validity to say, 'we are representative of those more-than-20 million veterans alive today, the 42 million veterans that have ever existed in our country, and we're trying to tell their story,'" stated Amy Taylor, one of the project's leaders. "And we're proud that it's here in Columbus."

Taylor is the COO of the Columbus Downtown Development Corporation, the group behind the museum. She says the project was really begun by the late John Glenn, veteran, astronaut and longtime Senator from Ohio.

### **Architecture as sculpture**

"The concrete and steel structure is literally a sculpture, as well as being the primary architecture of the facility," explained Nigel Carter, senior project manager at Turner Construction, the project's General Contractor. "Our structural blueprints include limited dimensional information due to the immense complexity of the structural design, which means we actually are building the entire building directly from the 3D model." He added that every piece of formwork, rebar, structural steel and curtain wall component is unique. "Each one is fabricated specifically for its singular location," he said.

The building's floor was also quite "unique." All in all, there were 26,000 square feet of wood parquet flooring installed on all three levels, including the stairs. According to Tony Stalford of The Final Floor, a commercial flooring installation specialist from Sugar Grove, Ohio, "This was a great project, but a challenging one."

"At first, we specified Bostik's Best™ to install the wood product. But when we checked out the exact RH (relative humidity) in the concrete flooring, it was just too high. So, we spoke with Chris Hardsaw of Lanham Hardwood Flooring, and Adam Abell of Bostik. Collectively, we decided it would be

best to use Bostik's GreenForce™ due to its warranty covering moisture on slab. Now this was not an inexpensive investment, as Greenforce™ gave us coverage of 20 square feet per gallon. But we knew that moving forward, the NVMM would have an enormous amount of indoor foot traffic. We wanted a wood flooring adhesive that would perform for years and years!"

### **Bostik's GreenForce™**

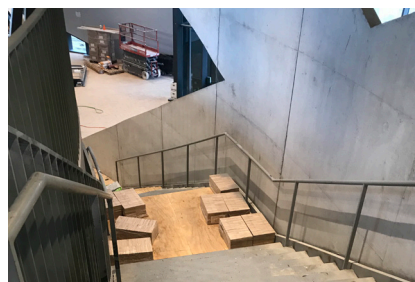
GreenForce™ is a high-performance hardwood flooring adhesive and moisture control membrane all-in-one. With Bostik's breakthrough AXIOS® Tri-Linking™ Polymer Technology, GreenForce™ maintains the superior long-term durability and moisture protection properties of other high-end urethane hardwood floor adhesives, but is easier to spread and clean off of prefinished flooring, even after full cure. "Basically," added Stalford, "GreenForce™ is both a flooring adhesive and a moisture control membrane."

Costly, time-consuming concrete moisture testing is not required when the slab is properly prepared, dry to the touch and fully cured. GreenForce™ has also been formulated with Bostik's BLOCKADE® antimicrobial protection, which inhibits the growth of bacteria, mold or mildew on the surface of the cured membrane.

### **Flooring installation**

The flooring installation project began in February of 2018, and was completed roughly four months later. "The biggest issue," added Stalford, "was that when we wanted to begin installing the parquet flooring within the building, the concrete was very wet, yet, the air was very dry. We could not even begin until we brought in humidification machines to add some moisture to the air. On top of that," continued Stalford, "there was not one straight wall anywhere to be found within the entire structure!"

This meant that many of the wood parquet pieces had to have very specialized curved cuts. Therefore, the intricate inlaid "picket fence" design within each individual piece, many times rose upwards, making the surface of the wood not entirely flat. What did we have to do to fix this? We spent hours and hours and HOURS, having to sand down wood pieces, which were not totally on the same plane."



Stalford went on to state that the stairs leading from one floor to the next all followed the contour of the building. “The stairs consisted of oak, matching the parquetry on the three levels. To add a bit of visual change, the nosing on each stair consisted of a darker walnut. We’re very pleased with the final outcome.”

### **Awe-inspiring design**

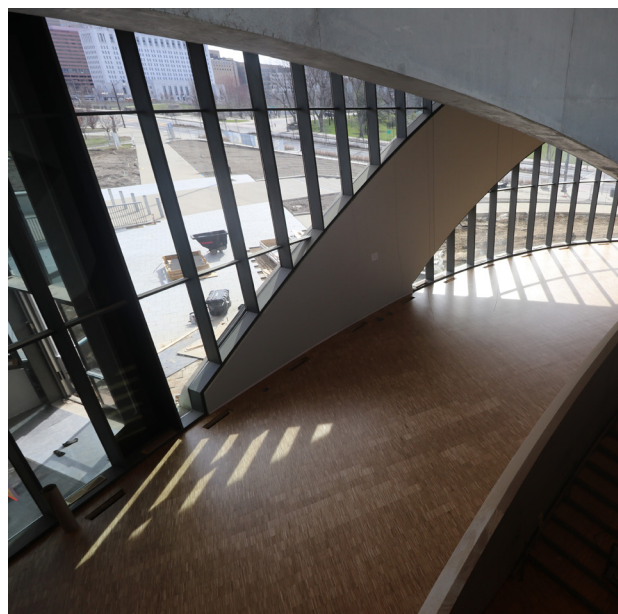
The awe-inspiring design of the NVMM by Allied Works Architecture was the result of a 2013 design competition that also included David Chipperfield and Diller Scofidio + Renfro. The “winning design theme” included a curved ramp that wraps around the edge of the building and up to a rooftop plaza. There are large concrete arches crisscrossing the museum’s exterior to add an even more unique exterior “look.”

“It was an honor to contribute to this all-American project,” declared Chris Hardsaw, sales manager of Lanham Hardwood Flooring. “And, we were pleased being able to provide Bostik’s outstanding high-performance adhesive for the 26,000 square feet of wood flooring.”

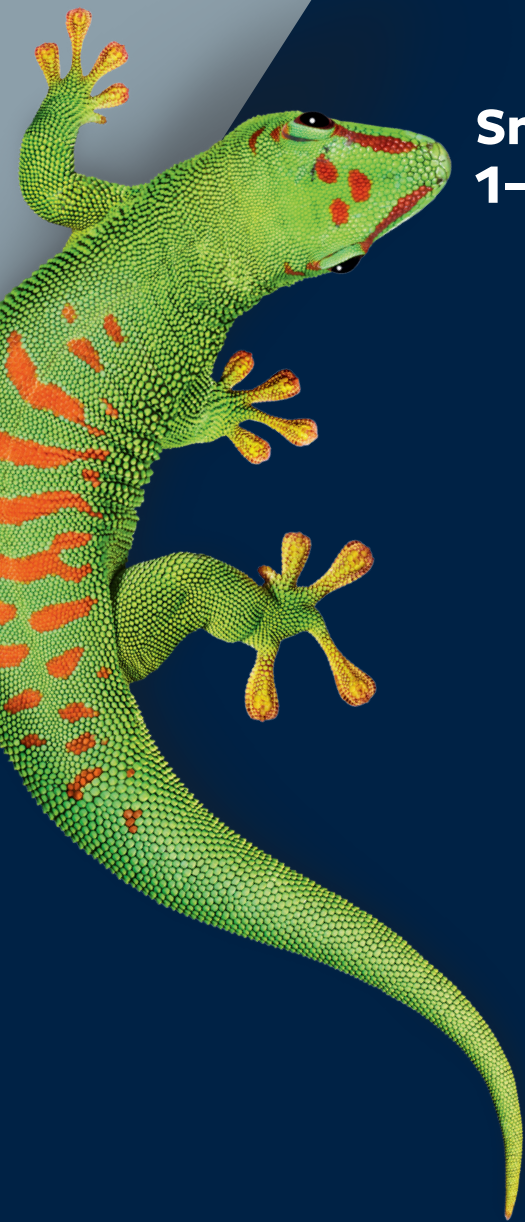
### **A valuable partner**

“Bostik is a valuable partner to our business. The firm’s innovation and technology, clearly, make them leaders in the hardwood flooring industry. Bostik’s core values align with our core values as we focus on the needs of our customers. We take pride in helping customers with products they need and support them with our expertise to help with their projects. As a distributor, it is invaluable to have partners such as Bostik, as this relationship allows our team to always be confident in knowing we do everything possible to help our customers be successful in their respective businesses.”

“The NVMM is a statement of our nation’s appreciation to those who have served. We never lost sight of that,” Hardsaw beamed. “And, we know that this particular flooring installation will last for a very long time, which makes us even prouder to be part of The National Veterans Memorial Museum construction project.”



**Quick Link:**  
[bostik.com/greenforce](http://bostik.com/greenforce)



**Smart help:**  
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