

Case Study

PPG coatings protect sculpture in new St. Louis' garden



Coating Technology

Liquid coatings

PPG Products

PPG CORAFLO® ADS (Air Dry System) field-applied fluoropolymer

Segment

Coil and extrusion

Fabricator/Design Assist

TROCOFAB

Installation

TROCOFAB/Penn Services

Design/Engineering

Thornton Tomasetti/Larson Engineering

Architect

Lamar Johnson Collaborative

General Contractor

KAI

Construction Manager

Kozeny Wagner

Applicator

Blastco

Project overview

After the passing of renowned St. Louis photographer Katherine Ward Burg in 2013, her estate established an endowment to support the creation of a communal public green space in her honor. On April 23, 2023, the [Katherine Ward Burg Garden](#) officially opened with a community celebration.

The birth of a new garden

The project was spearheaded by [Great Rivers Greenway](#), a public agency that works to connect the St. Louis region with greenways.

The garden site chosen by the organization is adjacent to the Mississippi Greenway in downtown St. Louis that attracts visitors from nearby Gateway Arch National Park and historic Laclede's Landing. The vacant half-acre parcel was perfect to achieve the goals of the project while honoring its namesake.

"Katherine Ward Burg had a well-known love for the Mississippi River," says Lonny Boring, senior project

manager for Great Rivers Greenway. "It is a space where people can meet friends, enjoy a picnic, start an adventure, or just relax and enjoy up-close views of the mighty Mississippi River."

With the site location secured and goals for the space established, including the ability to withstand flooding, Great Rivers Greenway turned to the architectural firm of [Lamar Johnson Collaborative](#) to design the garden and its elements, including a piece of public art to anchor the space.

That team envisioned an arresting metal trellis sculpture that would not only add visual appeal but encourage visitors to interact with it by walking through it or enjoying one of the three pod swings that hang beneath.

For this piece, Lamar Johnson partnered with St. Louis-based [TROCOFAB](#), a design fabricator with experience creating large-scale metal sculptures, and Thornton Tomasetti/Larson Engineering.

Metal garden trellis

TROCOFAB had worked with Great Rivers Greenway on multiple projects over the years, so they were a natural fit for the job.

While the architects originally envisioned the trellis in stainless steel, TROCOFAB suggested using less costly, lighter aluminum to stay within budget.

Not only did the lighter-weight metal reduce material costs, but it would also make transporting the parts much easier since the trellis had to be fabricated at TROCOFAB, sent out to the applicator for paint and then transported to the site for installation.

From conception through installation, the metal structure required a collaborative effort between the architects, fabricators, engineers and general contractors.

TROCOFAB worked through several different structural engineering scenarios with Matt Kuba, vice president at Thornton Tomasetti, to develop



the preliminary design and determine the constructability, feasibility and pricing of the trellis that would eventually stand 20 feet high, span 60 feet in length and weigh roughly 15,000 pounds.

"Because of the size, we knew that the trellis needed to be created using a modular design so it could be built in sections," explained Chris McCrossan vice president of construction services for TROCOFAB. "The trellis is made of columns that are curved, nodes that adjoin the pipes and a series of straight sections. The cut list was over 700 pages."

Chris continued to explain that the entire sculpture had to be designed so that the sections could be broken down, coated and cured before being shipped to the site for installation "like a giant erector set."

Selecting the right coatings

Once the trellis design was finalized, the TROCOFAB team had to identify the best coatings to not only make the sculpture a beautiful work of public art but protected from the elements and use over a long period of time.

Chris reached out to Tim Crites, a local sales representative with PPG's

Architectural Coatings business, who then worked with Gary Edgar, architectural specifications manager for [PPG's Industrial Coatings](#) business.

"I've worked with Tim in the past and I knew we could work together to identify the right product for the job with the best warranty available," said Chris.

While Tim assisted with procuring the coating materials, Gary worked on the specifications and warranties. "This project is a perfect example of the One PPG approach that delivered outstanding results for a client," explained Gary.

Why PPG coatings?

TROCOFAB was quite familiar with PPG's coatings and had used them for years. Chris explained that with PPG's products, durability was never a concern.

At first, TROCOFAB considered [PPG DURANAR®](#) liquid coatings, PPG's premium PVDF formulation, but they also had a lot of experience with field touch-up work and were quite familiar with [PPG Corafion ADS](#) coatings.

For this specific project, Chris, Tim and Gary believed that *Corafion ADS* coating had the advantage in terms of

application ease and maintenance.

Working in tandem, Gary and Tim were able to offer an almost identical warranty to *Duranar* coatings that meet FGIA/AAMA 2605 performance specifications, using a four-step *Corafion ADS* coating system comprised of an epoxy primer, barrier coat, basecoat in silver mica and a clear topcoat.

The TROCOFAB team chose [Blastco](#) as the applicator since they were one of the few local companies that had paint booths and ovens large enough to accommodate the sections of the sculpture. The results were outstanding.

"We got the same color, gloss and durability that we would have gotten with the premium PVDF product, but with the ability to touch-up in the field as needed. In this case, *Corafion ADS* coating offered applications benefits and also met our production timeline," said Chris.

Garden elements

Today, the Katherine Ward Burg Garden sits perched along the banks of the Mississippi river, complete with sloping pathways to the water, a collection of native plants, a curved seating wall, and a dining terrace with sweeping panoramic river views. A striking two-story metal trellis sits at the heart of it, protected for decades to come by PPG's coating innovations.

To learn more about PPG *Corafion ADS* coatings and the entire range of PPG architectural coatings, visit ppgindustrialcoatings.com or call 1-800-258-6398.

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