

# Crossing DC

Washington, DC

**Studio 431 Elements:**

Custom Roof Planters

**Design Partners:**

James Corner Field Operations

**Team Members:**

Clark Construction Group, LLC & Tishman Speyer

**Awards:**

2021 Washington Building Congress Craftmanship Awards:  
Ornamental Metal Award Winner

**Crossing DC is the latest vision of mixed-use luxury living to come to the Capitol’s sought-after Navy Yard neighborhood. The fourteen-story, 850,000-square-foot building inverts the familiar central courtyard layout, effectively turning the block inside-out. Four smaller perimeter courtyards “cut” into the face of each street wall, giving each apartment visual access to the streetscape and creating smaller, more intimate neighborhoods within the building’s large footprint.**

**The Vision**

James Corner Field Operations (JCFO), the renowned landscape architecture firm behind NYC’s High Line and many other preeminent landscape projects, was responsible for designing Crossing DC’s 30,000+ square feet of exterior amenity space spread across the four courtyards and statement rooftop.

Creating a unique rooftop experience was central to JCFO’s plan to help Crossing DC stand apart among the neighborhood’s other amenity-rich residential buildings.

“We’re in a bit of an ‘amenities arms race’ these days,” describes Todd Lewis, RLA, Associate at JCFO. “It began with a gym, then maybe a pool. Now it’s dog washing stations, meditation rooms and saunas. This building has no less than six podcast studios! It’s like a resort and then some.”

To create a rooftop experience that stood up to the building’s unique offerings, Lewis and JCFO focused on bringing diverse use and dynamic topography to the space. “The design process centered around breaking away from the familiar mono-tiered or terrace approach to rooftop design to really make this a stand-out space,” describes Lewis.

**Challenges**

A few challenges complicated the approach to the rooftop’s design, the first being DC’s height limitation. Unable to change the height of the rooftop decking itself, JCFO creatively opted instead to use and manipulate planter walls to build interesting topography on the roof.

The second challenge came as a result of Crossing DC’s hallmark angular and asymmetric “plus sign” footprint. “This building is a different shape than a lot of its competitors. From the decking design to the layout of the wood, nothing is orthogonal, nothing is like your classic two-foot-squared roof module,” says Lewis. “We



had to take the geometry of the building, express that up to the roof and create a compelling outdoor space that doesn't look like it was assembled from a catalogue."

### Finding Solutions with Studio 431

To help overcome these challenges with creative, design-forward thinking, JCFO tapped Landscape Forms' Studio 431 team to engineer and manufacture the large-scale planters that would define space and topography on the rooftop.

"When we were looking for a partner in this project, first and foremost was the question, 'Does the fabricator have the ability to do it?' And when I say ability, I'm not only thinking about the technical skills needed, but also the physical space and craftspeople needed to complete such a large and complex fabrication job on time. Studio 431 checked both these boxes and more," says Lewis.

With the building still under construction, Studio 431 generated 3D models based on Crossing DC's structural drawings to begin working out how the extensive network of planters would define space and bring intrigue and elevation change to the rooftop. "When we began with Studio 431, we had design intent and had just modeled up the walls based on a few known elevational changes. It was very early on in the process," says Lewis.

**"Studio 431 was able to figure out in detail the precise widths, slab folds, seaming and points of connection need to make everything essentially drop into place."**

**– Todd Lewis, RLA, Associate at JCFO**



In all, Studio 431 engineered and manufactured a mighty 604 weldments that make up a planter wall exceeding 3,451 feet in length. Providing the needed topography on the rooftop, the planter walls range from flush with the decking to standing 36 inches tall. The tight seams and consistency of the finish, a textured nutmeg powdercoat that Studio 431 developed, gives the planters a contiguous and monolithic, yet organic look, which Lewis describes as "the feel of COR-TEN without the worry of rusting." Highlighted by the warm, wide-slab Ipe decking, the planters' geometric forms and precise edges reflect Crossing DC's angular architecture. Inside the planters, a variety of regional native plants surrounded by Virginia Jet Mist crushed granite aggregate bring greenery and texture to the space.

"When someone says 'metal planter,' you think of something small and off-the-shelf that you can move around. I actually think calling these installations planters is selling them short—they're more like sculptural metal retaining walls," describes Lewis.

The planters' sheer scale is matched by the level of detail and intricacy in engineering and manufacturing needed to make Crossing DC's rooftop both aesthetically and functionally versatile. Around the pool and cabana areas, outdoor grilling areas, intimate lounge spaces and wide-open fitness spaces,



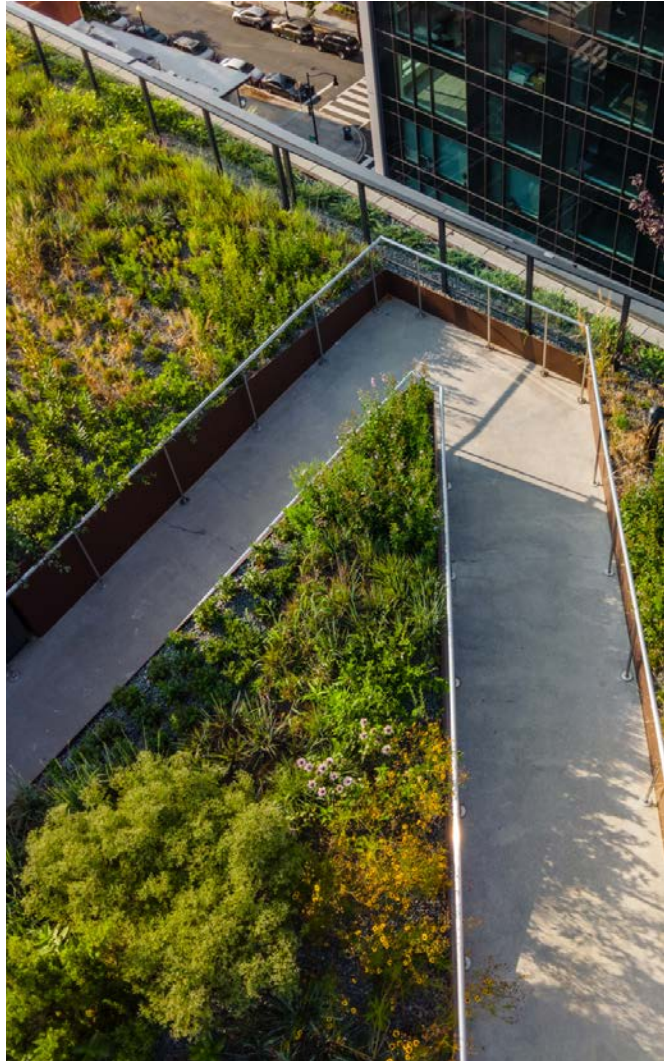
the planter walls define different “rooms,” enabling flexible outdoor living for groups and individuals in a modern ambiance.

“There’s three or four hundred different planter types because not many of the pieces are repetitive. Even despite some design changes throughout the project, each panel arrived completely done, ready to be bolted into the one next to it.”

**“Just seeing the top of the planters align perfectly straight—that’s not because of great installation, it’s due to having a great product to install. That, to me, is the greatest thing about working with Studio 431. The interaction and level of communication was fantastic.”**

“Communication like that’s not as common now as it was thirty years ago when I started in this business. It was really nice to see the attention to detail, the forethought of anticipating potential issues and offering solutions in real time to keep the process moving as quickly as it could,” continues Lewis. “Overall, the fact that they were able to deliver in the field something that captured our initial concept with all of the complexity below surface was remarkable. Landscape Forms and Studio 431 really came through on this.”

**“Truthfully, leveraging the services that Studio 431 provides beyond fabrication—project management, estimation and engineering from conception to installation—is the only way that this project could have been successful.”**



“If we had worked with an independent fabricator, then an independent powdercoater, it wouldn’t have been possible to get this project done within the timeframe we needed to,” says Lewis. “Having a point of contact who’s pulling everything together, an impartial party who bridges the client, the owner, the designer and the contractor to keep things moving and on track simply makes all the difference in the world.”