

# DokaXpress

Magazine Vol. 25 Issue 1



Formwork & Scaffolding.  
We make it work.

# Table of contents

**03**

Editorial

**04 – 05**

News

**08 – 11**

Engineering Excellence  
at Doka USA

**12 – 13**

Perimeter Protection

**14 – 15**

A Core Commitment

**16 – 19**

A Tower of Texas-Size  
Proportions

**20 – 21**

A Cast-in-Place Collaboration

**22 – 23**

A Super(dek) Difference

**24 – 25**

Inside the Radioisotope Walls

**26 – 27**

A Summit Solution

**28 – 29**

Elevating Healthcare

**30 – 31**

(Un)conventional Expansion  
in Indiana

**32 – 35**

Formwork Finesse

**36 – 39**

A Shear Wall Showcase

**40 – 41**

Transforming Transit  
Connections

**42 – 43**

A Timeless Tower

**44 – 45**

Midtown Manhattan  
Update

**46**

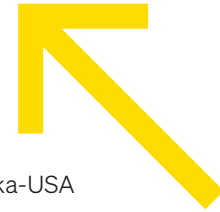
Project Spotlight:  
Doka Worldwide

**47**

DokaUnikit

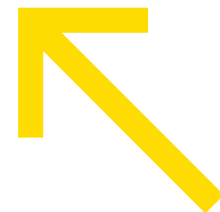
## Follow us on

**LinkedIn**



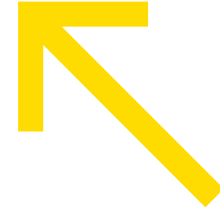
[/company/Doka-USA](#)

**Facebook**



[/DokaUSA](#)

**Instagram**



[/DokaUSA](#)



**AR Marker Symbol:** Download the app at [DokaAR.com](#), open the app on your smartphone or tablet device, scan the image with the AR Marker symbol to fully experience the latest developments of Doka USA!

**Imprint:** "DokaXpress" is a Doka publication.

**Edition:** Volume 25 Issue 1 | Publisher: Doka USA Ltd.

251 Monroe Ave Kenilworth, NJ | USA | T (201) 641-6500 | T (877) DOKA-USA | [usa@doka.com](mailto:usa@doka.com) | [www.doka.com](http://www.doka.com)

Some of the construction site photos show the assembly status of the formwork and Scaffolding and are therefore not always complete in terms of safety.



## Welcome to the first edition of DokaXpress in 2025

As we turn the page to a new year, it's remarkable to reflect on the progress our industry has made and the opportunities that lie ahead.

Following three interest rate cuts in 2024, we're seeing renewed momentum in project starts across key sectors. According to a recent report from Deloitte, more positive economic conditions in the U.S. will likely lead to increased construction demand across several segments. Overall, forecasts indicate that non-residential construction will grow in 2025. While optimism is on the rise, we will continue to closely monitor the market's development moving into the new year.

As we welcome industry investment, we also understand that even modest growth can present challenges for the concrete industry, especially as it relates to ongoing constraints in the labor market. We continue to see growing



adoption of advanced construction methods to address labor shortages and improve operational efficiency. Doka aims to be at the forefront with time-saving services like pre-assembly, digital solutions like our award-winning Doka Xact Load and Pressure Sensors, and efficiency-oriented systems like Super Climber, the next generation in self-climbing formwork, and SuperCurve, which enables quicker assembly and cycling on curved or circular walls. These examples represent just a few of the products and services Doka has developed to increase productivity in the concrete industry.

Sustainability also remains an industry-wide focal point, as the private sector prioritizes resilient infrastructure and green building initiatives. At Doka, we recently announced our global commitment to the Science Based Targets initiative (SBTi). You can read more about Doka's "Net Zero 2040" sustainability strategy on page 4.

As we step into 2025, our commitment to collaboration and innovation has never been stronger. This issue showcases inspiring projects and the achievements of builders who are leveraging Doka's solutions to redefine the boundaries of possibility. We are immensely grateful for the trust and partnership of our clients and look forward to another year of making it work, together.

**Michael Kennedy**  
CEO, Doka USA

# News

## Doka becomes first formwork and scaffolding company to commit to Science Based Targets Initiative



The construction industry faces increasing pressure to adopt more sustainable practices. The sector is responsible for approximately 37% of global greenhouse gas emissions, making it a key player in the fight against climate change. Doka views this challenge not only as an environmental responsibility but as a catalyst for building more resilient and sustainable business models that can drive long-term success in the evolving global construction market.

### **On the way to net zero**

Doka recently announced a commitment to the Science Based Targets initiative (SBTi) as part of our comprehensive "Net Zero 2040" sustainability strategy, setting ambitious goals for reducing our carbon footprint. The company is committed to reducing Scope 1, 2, and 3 emissions in line with the SBTi absolute reduction methodology.

### **A longstanding commitment to sustainable progress**

Doka's leadership in sustainability goes far beyond our current commitment to the SBTi. Doka has already implemented significant measures to reduce emissions, such as increasing the use of renewable energy across our global operations.

Doka's rental model also contributes significantly to the circular economy, which, alongside decarbonization, is another key pillar of the company's sustainability strategy. By refurbishing formwork after every use, Doka ensures that material and resource consumption is minimized, keeping products in circulation for extended periods. The company is also exploring the use of recycled, low-carbon materials in formwork systems, further reducing the environmental impact of construction projects.

Building on these efforts, Doka has pioneered the calculation of the Product Carbon Footprint (PCF) for our portfolio of over 7,000 products. The company has been instrumental in initiating and co-developing the first industry-wide criteria for calculating the PCF of formwork and scaffolding, supporting evidence-based purchasing decisions. These efforts benefit both the climate and Doka's customers worldwide.

# Partnering with Habitat for Humanity to Support Neighbors in Need

Doka USA recently partnered with Habitat for Humanity to support the organization’s vital work of constructing safe, affordable housing for families in need of a hand up. For the second consecutive year, this impactful collaboration was made possible through the generous support of the Umdasch Group Foundation, which enabled a sponsorship that went beyond financial contributions to include hands-on volunteerism.

This year, Doka team members volunteered at 13 Habitat build sites nationwide, spanning from coast to coast. Employees rolled up their sleeves to frame homes, paint walls, install insulation, and stock Habitat’s ReStore to provide stability and opportunity for families in their local communities.

”**Working with Habitat for Humanity is an incredibly meaningful experience. Our teams have embraced this partnership with Habitat, and I’m extremely proud of their participation and commitment,**” said Michael Kennedy, CEO of Doka USA. **“They are ‘making it work’ for these families who can now become Habitat homeowners.”**

With more than 170 volunteers, Doka team members answered the call by stepping away from their daily responsibilities to give back at Habitat build sites, and the feedback from participants was resoundingly positive.

”**Reflecting on the experience, Sam Saeed, Area Manager for the Southeastern U.S., said, “Participating with my team to create meaningful change is deeply fulfilling. Our collective efforts not only reinforce our connections but also allow us to contribute to a greater cause.”**



Another highlight of the 2024 partnership was Doka’s participation in the Jimmy and Rosalynn Carter Work Project, Habitat for Humanity’s flagship initiative that brings together volunteers from around the world to build an entire neighborhood. This year’s Carter Work Project jumpstarted an environmentally responsible redevelopment of the 112-acre former Hillcrest Golf Course in St. Paul, Minnesota.

Following an expanded commitment from the Umdasch Group Foundation, the Doka team had the opportunity to welcome their colleagues from AT-PAC to the Carter Work Project in St. Paul.

”**“The Carter Work Project exemplifies the shared spirit of giving back and uniting for a greater cause,”** said Michael. **“Partnering not just with Habitat but also with our colleagues at AT-PAC made this year’s effort even more special.”**



WE  
IT

# MAKE - WORK.



**Visit us at upcoming tradeshow  
and see for yourself how we make it  
work – every day, on every project.**



**bauma in Munich, Germany**  
**April 7-13, 2025**  
Booth FN.420-FN.423



**Conexpo-CON/AGG in Las Vegas, NV**  
**March 3-7, 2026**  
The Largest Construction Show  
in North America!

Formwork & Scaffolding.  
**We make it work.**

# Engineering Excellence at Doka USA

Leading Innovation, Support, and Success in Concrete Construction

At Doka, we pride ourselves on our exceptional engineering competence and our unwavering commitment to supporting our customers in any concrete construction engineering project, regardless of its size or complexity.





With engineering offices strategically located in 10 locations across the country, we are well-positioned to provide comprehensive support and services. Our team includes 10 licensed professional engineers who offer Professional Engineering supervision and sealing services across 49 states, ensuring that our projects meet the highest standards of safety and quality.

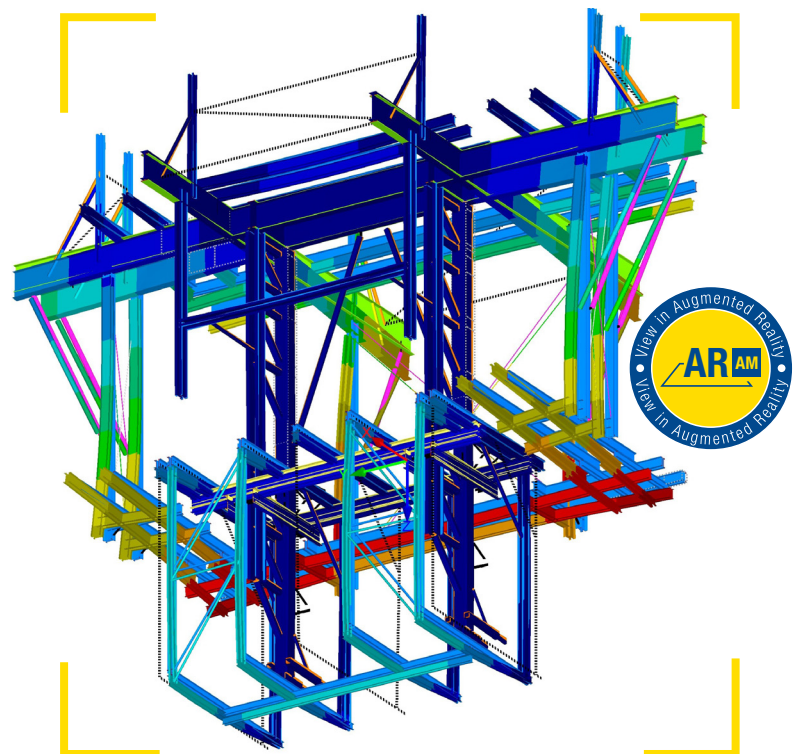
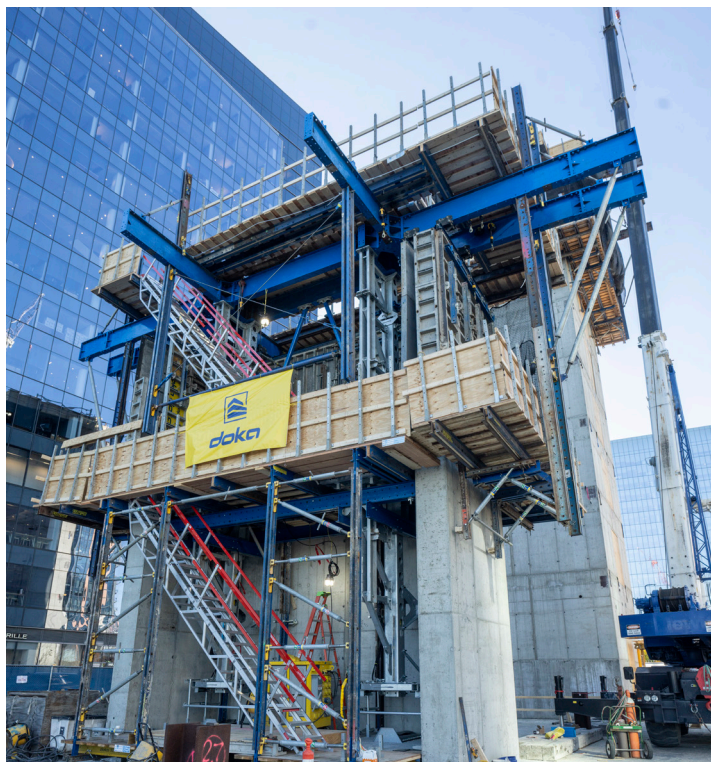


**”The Doka USA BIM team, established in 2018, began with just one member and has since grown to a dedicated team of four. This team provides essential support for BIM projects across the country, helping local branches incorporate BIM principles into their daily workflows. They offer training and guidance in using Revit and Tekla Structures, promoting these tools not only for BIM-specific projects but also as resources for everyday tasks. To further support BIM implementation, Revit and Tekla Key-Users have been appointed in each branch to manage local projects and provide guidance to new users, which allows the BIM team to focus on software development and optimization. Through these efforts, the BIM team promotes a strong culture of digital literacy and efficiency in concrete construction throughout Doka USA.”**



**Juan Aguilar**  
BIM Manager, Doka USA

Doka's engineering team harnesses the power of BIM in streamlining complex designs and enhancing collaboration .



Continue on the next page →



Our dedicated Structural Engineering department is equipped to provide detailed calculations and submittal packages, guaranteeing safe and efficient engineering designs. Additionally, our team of engineers and formwork designers based at our headquarters in Austria collaborates closely with our USA engineering team. They bring the latest innovations in engineering digitization and product development, ensuring that we stay at the forefront of industry advancements.

We also invest heavily in the continuous development of our engineering talent. Our dedicated engineering academy trains new engineers and designers, while our ongoing training programs, led by experienced trainers, ensure that our existing engineers remain at the cutting edge of their field. This commitment to education extends to customer training and product training for non-engineering departments, fostering a culture of knowledge and excellence throughout our organization.

**“In the summer of 2011, Doka USA proudly introduced the formation of the KAM team a small, elite group of engineers and sales professionals who redefined the art of selling formwork. Tasked with securing large-scale projects and supporting key accounts, this dynamic team seamlessly combined engineering expertise, sales acumen, and project management excellence to meet every need of our customers.**

**Over the past 14 years, this team has evolved into a cornerstone of Doka USA's success. Now known as the LSP team, their engineering prowess serves as the backbone of the group, delivering innovative formwork solutions to meet the demands of an ever-changing and increasingly complex construction industry.**

**The LSP team continues to push boundaries, driving excellence and ensuring that Doka USA remains a trusted partner in building the future.”**



**Chris Lewis**  
LSP Engineering Director, Doka USA



**“The National Support Team at DOKA USA, consists of a dedicated group of engineers committed to execution of special or large-scale construction projects across the country, in support of the branches. Our expertise spans high-rise buildings, complex infrastructure, and other demanding construction challenges. Our team’s primary focus is to provide tailored, effective solutions that meet project requirements while maximizing efficiency and safety.**

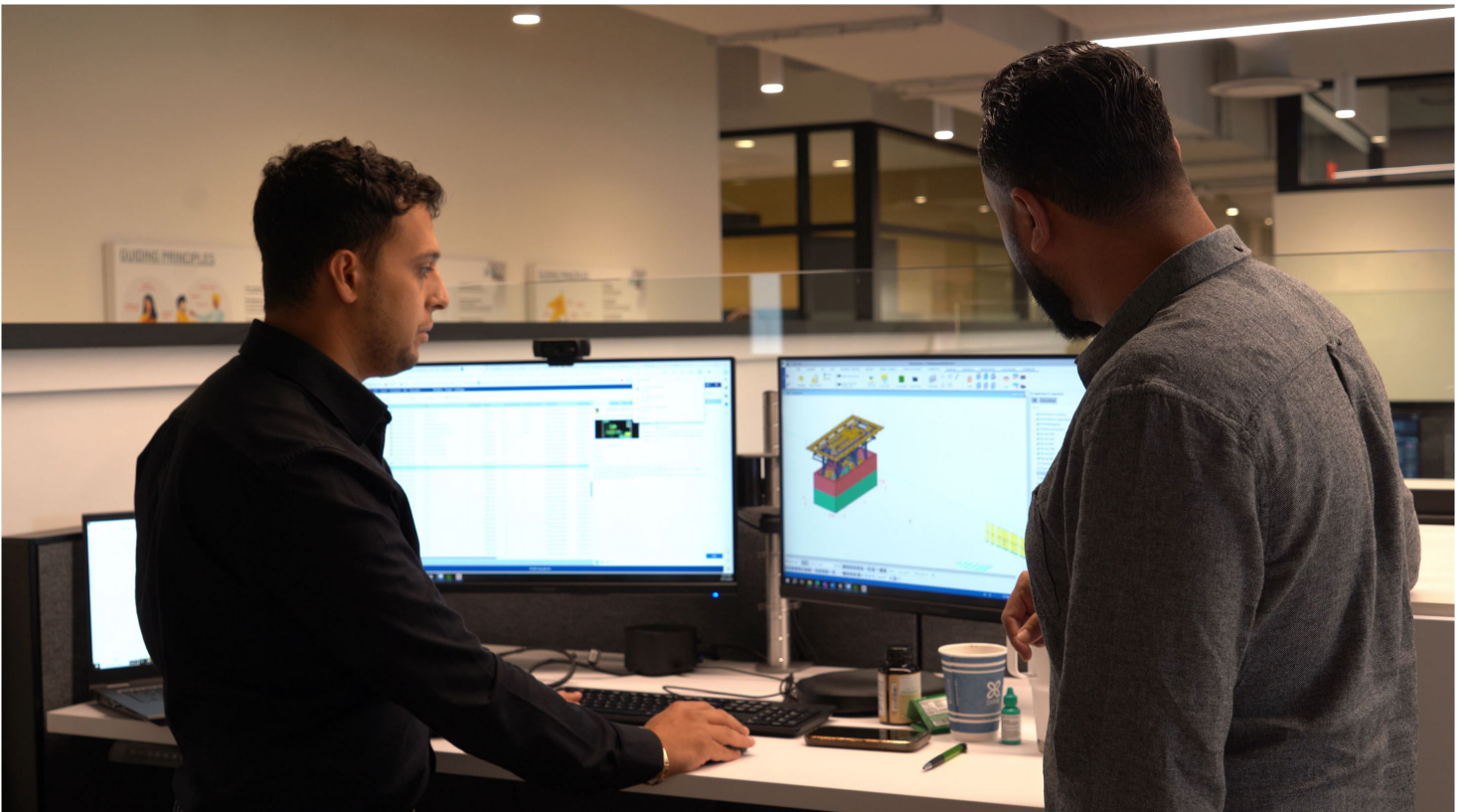
**With a customer-first approach, we aim for excellence in every project phase, from design through implementation, ensuring that our clients receive the highest level of support and satisfaction. Our goal is to not only meet but exceed customer expectations, positioning DOKA USA as a trusted partner in innovative engineering and construction support.”**

**David Wassef**  
National Support Engineering  
Manager, Doka USA



Our BIM team plays a crucial role in supporting and training engineers nationwide, enhancing our ability to deliver precise and efficient project outcomes. For large-scale projects, our specialized engineering team works closely with project account managers to create tailored concepts and proposals that meet our customers' unique needs. Furthermore, our global support teams are always ready to assist during periods of rapid growth, helping us keep pace with the increasing demand for our engineering services.

Our comprehensive engineering capabilities, combined with our commitment to innovation and continuous improvement, make us the ideal partner for any concrete construction engineering project. We are ready to support our customers with unparalleled expertise and dedication, ensuring successful project outcomes.



# Perimeter Protection

The distinctive 26-story Houston Methodist Hospital Centennial Tower medical center project is redefining perimeter protection in Houston, Texas for both the contractor and Doka.

Houston Methodist Hospital broke ground on the \$1.4 billion Centennial Tower project, located in the Texas Medical Center of Houston, in 2022 to replace the organization's older main building. The new 26-story structure will encompass over 1.3 million square feet and support nearly 400 patient beds, a new emergency department, nine operating rooms, enhanced imaging services and a 14<sup>th</sup> floor rooftop garden. Levels 9 to 21 of the Centennial Tower will connect to the nearby Walter Tower via a series of vertically stacked connector bridges. The project is on track for completion in 2027. It is one of the largest protection screen projects Doka has ever undertaken and its first protection screen project in Houston.

## Challenge

The scope and scale of the Centennial Tower project in Houston presented unique challenges that required careful planning and engineering from the Doka team when planning protection screens. Further, each floor would be constructed of post-tensioned concrete, which would limit the workspace available for crews and require a number of step outs for extra workspace with protection screens on each floor. Ensuring the availability of sufficient materials and delivering a comprehensive safety system as the tower rose was paramount to the success of this ambitious project.



## The Facts.

**Project Name:** Centennial Tower

**Location:** 6541 Bertner Ave., Houston, Texas

**Owner:** Houston Methodist Hospital

**General Contractor:** Vaughn Construction

**Concrete Contractor:** Keystone Structural Concrete

**Architect:** Page

**Structural Engineer:** Walter P. Moore

**Type of structure:** Hospital

**Stories:** 26 above grade

**Sq. Ft.:** 1,330,000

**Cycle time:** ~2-3 weeks/floor

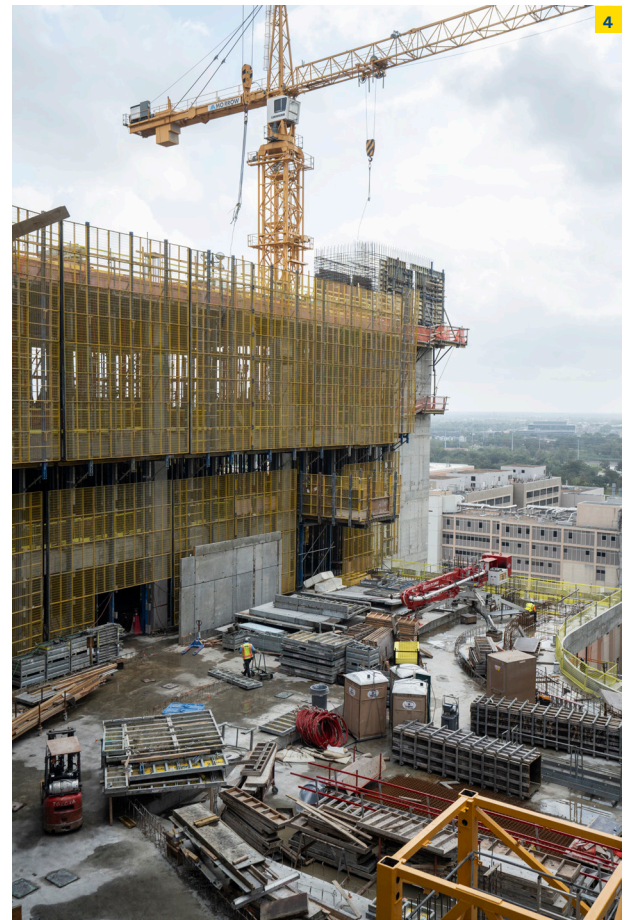
**Construction time:** Framework completed by mid-2025; overall project completion 2027

**Products used:** Core: Framax, MF240, Shaft platform;  
Facade: Xclimb 60

## Solution

Doka's expertise in navigating complex job site requirements and its longstanding partnership with the concrete contractor, Keystone Structural Concrete was instrumental in providing the best possible protection screen solution for the project team. Doka designed and specified a complete protection screen solution built around the Xclimb 60 guided climbing system along the MF240 climbing formwork.

The standalone screens were tightly integrated with MF240 formwork which helped to seamlessly incorporate the screens into the overall building structure. As the framework nears completion, the DOKA team is already preparing for the next phase, with plans to install additional screens to cover the entire 26-story structure as it rises.



**1 Curved Conditions:** The Centennial Tower's overall scale, unique curvilinear shape and post-tension slab construction techniques required a flexible perimeter protection solution.

**2 Towering Techniques:** An expansive view of the hospital tower construction captures the sheer scope and scale of the structure.

**3 Safe Spaces:** The protected step-outs provide a safe space for access of concrete edge forms.

**4 Seamless Solution:** A view from the backside of the tower shows the comprehensive screen installation that spans the entirety of the building's frame as well as the MF240 core walls in the background.

# A Core Commitment

A collaborative approach, technical expertise, and on-time delivery are helping bring University Health's newest hospital to completion in Selma, Texas.

When it opens in 2027, the University Health Retama Hospital in Selma, Texas, will be a modern five-story structure with services that include a 24/7 emergency department, a labor and delivery unit, NICU, inpatient units, operating rooms, radiology and lab services. The approximately 480,000-sq.-ft. structure will accommodate about 160 beds.

## Challenge

To meet growing healthcare needs in the region, University Health stipulated an accelerated schedule for the construction of the hospital. For the concrete contractor, Keystone Concrete Placement, that meant labor and materials, including formwork needed to be delivered faster than originally planned.

For instance, to keep this project on track, the contractor needed four of the five core formwork solutions to be available at the same time.

## Solution

Keystone Concrete worked closely with Doka to meet this challenging logistical undertaking. For the cores, the team selected Framax Xlife steel-framed formwork. The formwork was further customized to support the integration of 3-4-ft long, embedded steel weld plates in the wall corners of the cores.

Doka has provided 7,320 sq. ft. of formwork thus far on this project.

## The Facts

**Project Name:** University Health Retama Hospital

**Location:** Selma, Texas

**Developer:** University Health

**General Contractor:** Layton Construction

**Concrete Contractor:** Keystone Concrete Placement

**Architect:** ESa (associate architect for design) and Marmon Mok (architect-of-record)

**Type of structure:** Hospital

**Height:** 107-ft. – 1-in.

**Stories:** 5

**Sq. Ft.:** 480,000

**Construction time:** Q4 2024 for cores

**Products used:** Core: Framax, MF240; Other: At-Pac stair towers





2

**1 Custom Plates:** The formwork accommodated large, rectangular steel weld plates that were embedded at the corners of the core, shown in dark grey.

**2 Access with Ease:** Doka also supplied At-Pac stair towers to provide safe access to the cores up for all six stories.



3

**3 Coordinating Cores:** The combination of Framax Xlife crane-assisted formwork and MF240 climbing formwork are helping the contractor construct all five hospital cores with speed, efficiency and safety.



**Platform with Purpose:** A stationary loading platform helps the construction crew manage materials as needed on each floor. Once materials are placed on the platform, a crane picks them up, and then the loading platform advances to the next floor.

## A Tower of Texas-Size Proportions

A rapid protection screen installation and a one-of-a-kind mid-tower table lifting system are highlight of the Waterline Tower construction, reinforcing the safe, timely construction of what will become the tallest building in Texas.

Called one of the most ambitious mixed-used projects in Texas history, the Waterline Tower mixed use high rise is anticipated to be the tallest tower in the state. With a planned height of 1,022 feet, will ultimately rise 74-stories. Beyond luxury apartments and a hotel, the Waterline Tower will also feature amenities such as rooftop pools, fitness centers and pedestrian bridges connecting to the Waterloo Greenway. It's a construction effort that has required considerable creativity to maintain schedule and safety. The tower is on track for completion in 2026.

### **Challenge**

The Waterline Tower construction presented several significant challenges for the general contractor, DPR. The primary concern was the need to build and install protection screens around the perimeter of the structure in a short window of time and with limited space in the lay-down yard.

Another key concern was the changing slab thickness throughout the tower structure at each level. As well, the contractor determined they would need a table lifting system to be installed halfway up the under-construction structure, where the tower structure steps in a few feet, to support material movement from level to level.





## The Facts

**Project Name:** Waterline Tower

**Location:** 98 Red River Street, Austin, Texas

**Developers:** Lincoln Property Company, Kairoi Residential

**General Contractor:** DPR

**Architect:** Kohn Pedersen Fox Associates (KPF)

**Type of structure:** Mixed-se high rise

**Height:** 1022-ft

**Stories:** 74

**Square feet:** 1,500,000

**Cycle time:** One week

**Construction time:** June 2022-Q4 2026

**Products used:** Xclimb 60, Doka Table Lifting System TLS, Stair Tower

**Stairs and Lifts:** Doka installed a stair tower (left) and its Table Lifting System TLS (right) on the structure at floor 44.

## Solution

After extensive planning and coordination, the Doka team engineered a solution that included the including the Xclimb 60 protection screen for full perimeter protection, the Doka Table Lifting System TLS and a Stair Tower. The Xclimb 60 included an integrated loading platform to re-position tools and materials.

Once engineered and pre-assembled as much as possible, all systems were loaded on 37 trucks.

At the site, two crews working 10 hour days with two Doka site services representatives, installed the 20,500 ft<sup>2</sup>. screens in just 4.5 days – one of the fastest screen installations for a project of this scope and scale that Doka had ever completed.

In addition, Doka engineers also custom designed floor supports to accommodate the changing slab thicknesses at each level.

Another unique aspect of the project was the installation of the Table Lifting System TLS. Ordinarily, these systems are installed at grade. In this case, the contractor needed it installed at level 44 – another installation first for the Doka team.

Continue on the next page →





**2 High Security:** Doka protection screens are an essential part of safety on the Waterline Tower project.

**3 Field Support:** Doka team members review the operation and safety measures on the hydraulic Table Lifting System TLS.

**4 Secure Lift:** Crew member installing the hydraulic lift that will advance the protection screens to the next level.

# A Cast-in-Place Collaboration

Strategically planned, designed and executed formwork solution is helping accelerate the safe completion of North Lamar North Loop mixed use development in Austin.

The North Lamar North Loop is a 6-story mixed-use development located in North Central Austin, Texas. It will include 227 residential units, street-level retail, below-grade parking and a rooftop pool. It is strategically located a short and equal distance from downtown and Austin's Northwest Technology Corridor. The cast-in-place structure includes a 120,000 sq. ft. of subterranean parking.



The SuperDek slab formwork system, which includes joists, drop heads, stringers and props, is ideal for helping BCS Concrete meet the developer's demanding schedule.

## Challenge

A fast-paced schedule, custom shoring and complex structural elements are just a few of the known challenges associated with the North Lamar North Loop structure. The shear walls and the project's complex structural elements, including a courtyard and ramp design that would require high shoring, added complexity to the project construction for the concrete contractor, BCS Concrete.



The Frami Xlife complete formwork system is ideal for shear walls. It's quick to assemble with few connections and ties, and also incorporates light clamps.



The SuperDek's drop head design provides superior stability while facilitating faster cycling times while the large grid capabilities reduce shoring and reshoring tasks.

## Solution

BCS Concrete worked closely with Doka to develop a carefully orchestrated plan for the design, engineering and timely delivery of necessary materials. For the shear walls, the lightning fast Frami Xlife formwork system was an ideal solution. The system is quick to assemble, with fewer connections and ties than other similar systems, and highly adaptable.

For the shoring, BCS Concrete looked to Doka's simple handset drop head slab SuperDek formwork system. In total, this project has already required approximately 60,000 sq. ft. of SuperDek material. Working closely with BCS Concrete, Doka has successfully delivered the all materials as needed. At last check, the North Lamar North Loop project was ahead of schedule.

## The Facts

**Project Name:** North Lamar North Loop

**Location:** 5210 North Lamar Boulevard

**Developer:** Madrone Ventures LLC

**General Contractor:** White Construction Company

**Concrete Contractor:** BCS Concrete

**Architect:** Nelsen Partners

**Type of structure:** Mixed use complex

**Stories:** 6

**Sq. Ft.:** 250,000

**Cycle time:** 3 weeks

**Construction time:** Q2 2024 - Q2 2026

**Products used:** Shear Walls: Frami Xlife;  
Other: SuperDek

# A Super(dek) Difference

Faced with a large project footprint and a tight schedule, the contractor for a multi-story senior living facility relies on robust and adaptable shoring solutions to ensure timely concrete pours.

The Wisteria at Warner Center is a phased 486-unit senior living project in Woodland Hills, California. It is part of the only Type A Life Plan Retirement Community in Los Angeles County. The initial phase of the Retirement Community includes a new on-grade, six-story Type IA building with four stories of residential over a two-level parking garage as well one level of in-line hotel units below the parking garage, residential amenity spaces, sales offices, marketing and employee facilities, and in-line tenant improvement spaces.

## Challenge

Given the large footprint of the project and the tight schedule, the concrete contractor, Largo Concrete needed to be able to pour various floors of the structure at the same time, an effort that would require timely delivery of all shoring, reshoring and related solutions.



## Solution

Working closely with Largo Concrete, Doka put together a team that included project management, engineering, operations and field services to develop and deliver the optimal formwork for the project. The effort included weekly customer meetings, daily internal meetings, and adding additional engineering resources (four within California's local team, and one in Seattle) to facilitate the right solutions in the right quantities with on-time deliveries.

For the shoring and reshoring, the plan called for a combination of SuperDek for shoring as well as Eurex, Super prop, and 10k for reshoring. The advantage of the Doka shoring system is that SuperDek offers speed, safety, and simplicity. The SuperDek drop head feature lets the concrete crews remove joists and stringers earlier for faster cycling times.

SuperDek was utilized as the majority of shoring for this project with 10k shoring towers used in high-bay

## The Facts.

**Project Name:** Wisteria at Warner Center

**Location:** 5850 Canoga Ave Suite 110, Woodland Hills, California

**Developer:** Spieker Senior Development Partners

**General Contractor:** W.E. O'Neil

**Concrete Contractor:** Largo Concrete, Inc.

**Architect:** KTG Y

**Type of structure:** Retirement Community

**Height:** 65-ft.

**Stories:** 6

**Cycle time:** ~3 days

**Construction time:** May 2024 - Q1 2025

**Products used:** Reshoring: Eurex, Super prop, 10k; Shoring: SuperDek, 10k; Other: Shear Wall: Top 50



“The LCI (Largo Concrete Inc) Wisteria team was particularly satisfied with Doka’s customer service and willingness to be as involved in the project as possible. The Doka team working with us at Wisteria was always available and eager to help us work through any issues that might have arisen, which has helped us greatly in our effort to deliver a top-of-the-line product.”

Customer’s Statement



**1 Load Bearing Towers:** The flexible and strong Doka 10k leg shoring towers helped shoring and reshoring activities across the six story structure. In total, Doka provided 84,000 sq. ft of 10k shoring tower system for this project.

**2 Time Crunch:** The concrete contractor needed to be able to work on multiple levels at any given time to facilitate the tight schedule.

**3 Formed to Fit:** The large-area Top 50 formwork system was engineered and largely pre-assembled to form-facing and tie-hole pattern requirements to meet the project-specific needs.

**4 Structural Support:** The floor prop Eurex top with built-in impact protectors, along with Super props, were used extensively throughout the project to support reshoring across large areas.

**5 Shored Up:** The simple handset drop head formwork proved ideal for the Wisteria project, for both speed and flexibility. In total, Doka provided 322,000 sq. ft. of SuperDek shoring.



# Inside the Radioisotope Walls

The construction of a high-tech production facility to support radioisotope production took on some extraordinary dimensions and formwork challenges in Salt Lake City.

The construction of a radioisotope production facility in Salt Lake City, Utah, took on mega proportions for both the contractor and Doka as the formwork provider. When complete, this 170,000-sq.-ft. production facility will create and supply rare isotopes to the healthcare and pharmaceutical industry to support patient care and enable the next generation of radiotherapeutics.



## Challenge

Every aspect of the Nusano production facility has required custom engineering to support therapeutic radiopharmaceutical development. Essentially, the contractor Layton Construction must build a super structure building within a building. For instance, the design calls for the entire concrete foundation, a structure rises 9-ft., to be formed without ties. The switch walls, which are 27-ft. high with thicknesses that vary between 24-40-in., requires a special concrete mix. The target bays, also 27-ft. high, have special rebar requirements and tie clearances to reduce radiation scaping. Finally, the roof slab ranges from 40-80 in. thicknesses. The challenge was to construct the towers in situ within the mega structure, ensuring they could reach 27 ft. in height while accommodating the various angles of the walls.

## Solution

Meticulous planning, including consideration of transportation times and the flexibility for re-scheduling, were essential to the delivery of formwork to meet the concrete pours schedules and keep this project on track.

The structure's mat foundations are formed with Frami Xlife formwork. These were placed in multiple lifts to mitigate the exothermic reactions of the materials and optimize the logistics for concrete truck scheduling.

For the switch walls, Framax Xlife panels with plywood lining are used to achieve a Class A finish and enhance the structural integrity of the structure. Of note, 90% of the panels and associated materials were recycled, contributing to sustainable construction practices.

Initially, Layton planned to pour the target bays separately. However, after further evaluation, it was decided to construct all units in a single pour, significantly increasing the quantity of special-sized Framax panels. As well, the steel components in the walls had to be positioned 10 inches away from the concrete surface. Doka engineers designed custom She-bolts (reusable form ties) to ensure proper material clearance. Forming the many angled interior walls was done with the use of custom fillers and batter plate washers. Doka's phenolic plywood was employed to cover the entire panels, thereby providing a superior finish.

The roof posed significant challenges given the thickness that ranged from 40-60 inches. The team opted to deploy the Staxo 100 high capacity shoring system in conjunction





**1 Switch Walls:** Framax Xlife panels with plywood lining for the 27-ft. tall switch walls helped the contractor deliver a Class A finish and enhance the structural integrity of the structure.

**2 Pits and Panels:** Universal panels with custom-engineered ties were deployed in the pit areas, providing structural bracing back to a bespoke shoring platform.

**3 No Ties, No Problem:** The 9-ft. tall concrete mat foundation was formed without ties.

**4 Target Bay Techniques:** The target bay panel formwork is lined with phenolic plywood to provide additional strength to the walls and minimize heat on the panels. Doka's phenolic plywood was employed to cover the entire panels, thereby providing a superior finish.

**5 Shoring Setup:** Staxo 100 high capacity shoring system is essential to constructing the roof.

### The Facts

**Project Name:** Biotechnology Research Building

**Location:** Salt Lake City, Utah

**Developer:** Nusano

**General Contractor:** Layton Construction

**Concrete Contractor:** Layton Construction

**Type of structure:** Concrete super structure

**Height:** 40-ft.

**Stories:** 1

**Construction time:** June 2024 - Spring 2025

### Products used:

Mega Foundations: Frami Xlife;  
Super Structure: Framax Xlife,  
Dokaply Phenolic Film Faced  
Plywood; Shoring: Staxo 100

**"We trusted Jonathan for his engineering, know-how and service. His yard team and operations were ready to go the extra mile to make sure we got all the materials we needed. They kept in constant touch with the engineering team to answer any questions we had."**

**Layton Construction**  
Customer

# A Summit Solution

Three multistory, high-end luxury ski lodges in Park City, Utah have begun to take shape with help from flexible, fast drop head formwork, specially designed core pours and concrete pressure sensors to ensure efficient pouring even in varying weather conditions.



**Built for Speed:** JRock crews are currently using about 30,000-sq. ft. of SuperDek shoring to support construction of the three buildings at the Sommet Blanc site.

## The Facts

**Project Name:** Sommet Blanc

**Location:** 9300 Marsac Ave, Park City, Utah

**Developer:** Aspen Group

**General Contractor:** Ikon Construction

**Concrete Contractor:** JRock Construction

**Architect:** Olson Kundig

**Type of structure:** Private ski lodge

**Height:** 80-ft.-100-ft.

**Stories:** 9-10

**Cycle time:** 2-3 weeks/deck

**Construction time:** 2024-2026

**Products used:** Core: MF240, Top 50;  
Shoring: SuperDek; Other: Dokaply 2-side  
HDO/HDO Grey plywood, DokaXact Load  
and Pressure sensors

The Sommet Blanc development includes three slope-side lodges located at the Empire Pass at Deer Valley Resort in Park City, Utah. The lodges will be 9-10 stories and, according to the owner, Aspen Group, will comprise a total of 50 luxury residences and penthouses when complete in 2026. For the concrete contractor, JRock Construction, it's a build that is complicated by the site location and fast-track construction timeline.

## Challenge

The Sommet Blanc development is difficult to access as it's located at the top of Empire Pass and adjacent to other buildings including Empire Lodge and Montage Deer Valley. JRock knew that staying on schedule while working through daily adjustments to site access would require considerable flexibility when it came to formwork and concrete pours. As well, once the shoring is complete and construction of the concrete cores begins, the contractor knew it would need a custom insulation and anchor support plan.

## Solution

JRock Construction looked to the Doka team for help engineering a formwork plan to support efficient shoring and quality core pours, even under highly variable weather conditions, and ever changing access points.

A combination of SuperDek, MF240 and Top 50 formwork systems along with Dokaply 2-side HDO/HDO Grey plywood and the DokaXact Load and Pressure sensors proved an ideal combination.

The SuperDek drop head slab formwork system is used for the shoring on the three structures. This formwork system's fast setting and stripping times are helping the contractor meet the tight schedule with safety and efficiency. In addition, Dokaply HDO hardwood panels are used to sheet the SuperDek decking system.

MF240 and Top 50 formwork systems will be used on the exposed concrete cores, which will begin in 2025. The entire pour sequence has been developed through close coordination with the contractor, rebar supplier and Doka. For the cores, the contractor will need to pour twice at each level. First, they will pour a 16-in. thick structural wall, then place 1.5-in. of insulation followed by the pour of a 6-in. thick architectural exposed wall outside the original structural pour. The pour sequence also incorporates a custom anchor detail, and will use DokaXact pressure sensors to monitor this challenging pour.



**1 A Sheet Shield:** Dokaply HDO hardwood panels sheet the SuperDek decking system and help shape the concrete. In this case, the panels can be reused multiple times.

**2 Tight Conditions:** One of the biggest challenges to the construction of the Sommét Blanc development is accessibility given its location at the top of Empire Pass with narrow roadways and existing structures. In this case, one building under construction blocks access to another.

**3 Cantilevered Connections:** The SuperDek shoring, positioned outside the perimeter walls, supports the deck above that is cantilevered out about 5-6 ft.

**“I’ve used all the systems, the SuperDek is good, really good. It’s very easy to learn, it’s fast, and I really like how the cantilevered edges are set up. Something else that has been helpful is the wheels on the baskets; seems simple but it makes a pretty big impact.”**

**JRock Construction**  
Customer



# Elevating Healthcare

A new downtown Indianapolis hospital, one of the largest of its kind in North America, relies on a range of flexible and customized formwork solutions to rise to new heights.

The Indiana University Hospital in Indianapolis, Indiana is one of the largest hospitals under construction in North America, with a footprint that measures about two city blocks. The design calls for three bed towers, each 16 stories, and will support 864 inpatient rooms, 50 operating rooms and 110 care spaces in the emergency department. It's a 2,650,000 sq. ft. concrete and steel structure with features that include wood-clad entry canopy soffits, bridges to nearby buildings including the Indiana University School of Medicine.

## Challenge

Speed, capacity and accessibility are all challenges for the contractor, F.A. Wilhelm Construction during the construction of this hospital. Given the scope and scale of the new hospital footprint, the contractor would need a formwork partner that could meet the tight schedules and timelines with proven formwork solutions, even as the nearby convention center rework is ongoing at the same time.

## The Facts

**Project Name:** Indiana University Hospital

**Location:** 1701 N Senate Ave, Indianapolis, Indiana

**Developers:** CURIS Design, HOK, Wilhelm/Gilbane

**Construction Manager:** F.A. Wilhelm Construction / Gilbane Building Company

**Concrete Contractor:** F.A. Wilhelm Construction

**Architect:** CURIS Design

**Type of structure:** High rise

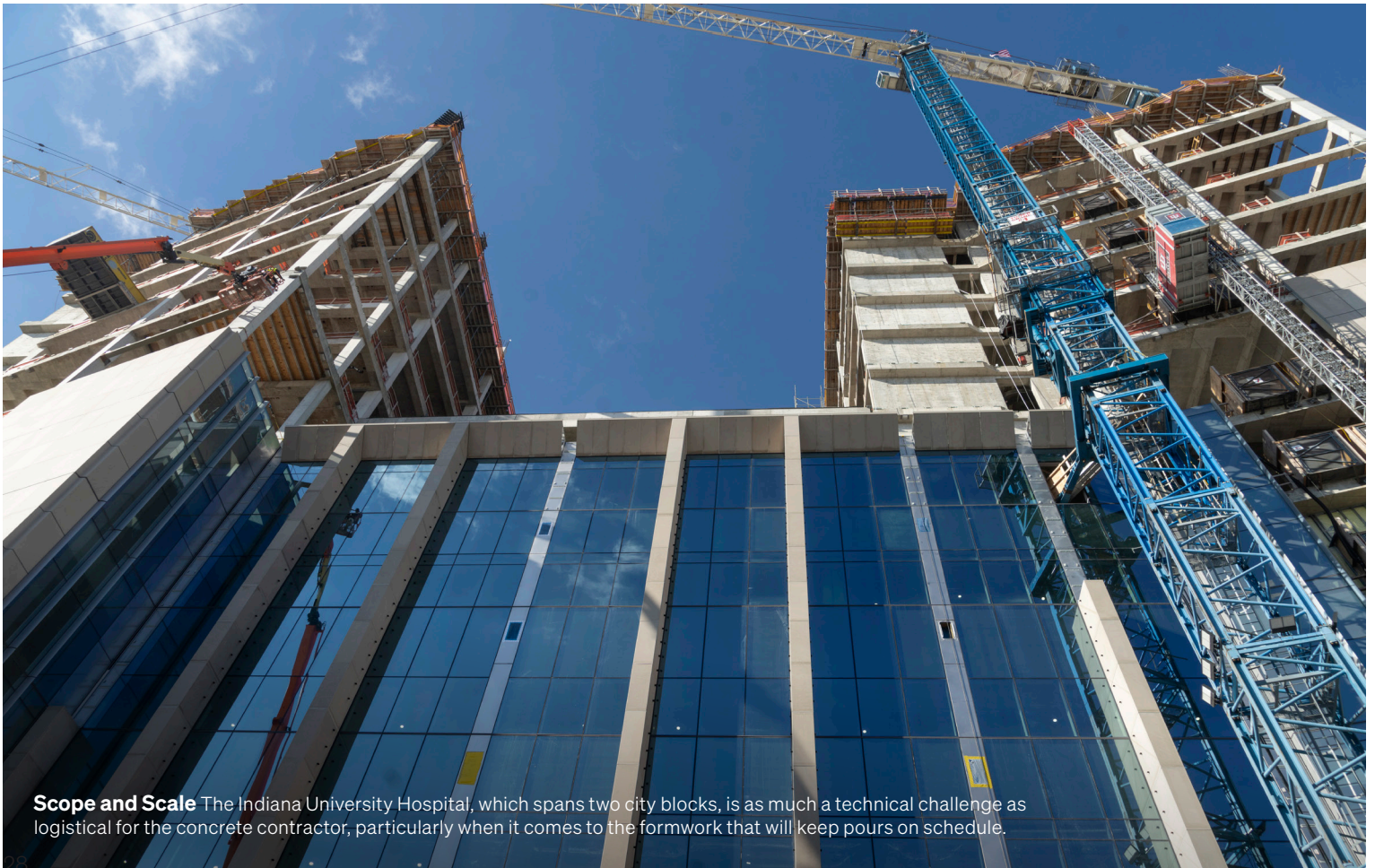
**Height:** 350-ft. (each tower)

**Stories:** 16

**Sq. Ft.:** 2,650,000

**Construction time:** Jan. 2021 to Q4 2027

**Products used:** Core: Top 50, Super Climber SCP;  
Facade: Top 50, Frami, Framax;  
Other: Framax (tall columns), MF240



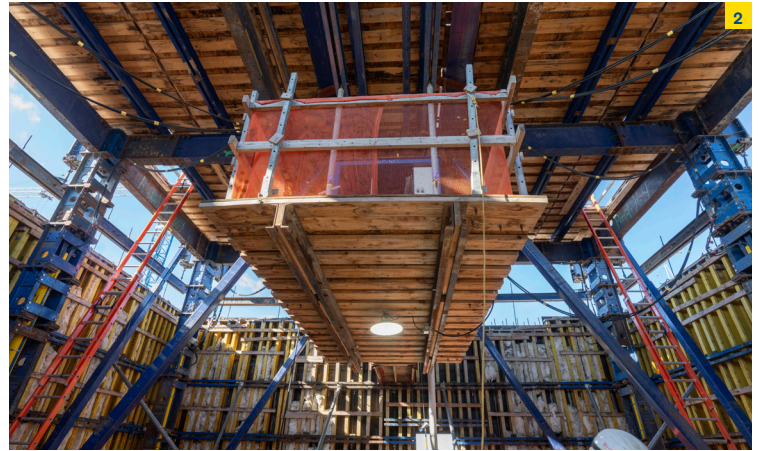
**Scope and Scale** The Indiana University Hospital, which spans two city blocks, is as much a technical challenge as logistical for the concrete contractor, particularly when it comes to the formwork that will keep pours on schedule.

**1 Formwork Flexibility:** The combination of formwork such as Super Climber SCP and Top 50 are used and re-used inside the cores and throughout the hospital construction for greater efficiency and productivity.

**2 Hydraulic Advantage:** A custom hydraulic unit setup allowed the contractor to pour the lobby slabs through the core, for increased efficiency and speed.

**3 Columns in Context:** Framax Xlife steel-framed formwork, ideal for large areas, is used to construct the tall columns, each of which rise to around 40-ft. in height.

**4 Perimeter Access:** The Doka MF240 perimeter platform system has been customized to meet the unique requirements of the towers, for safe work environments as the tower rises to its full 16 stories.



## Solution

To support this massive construction project, Doka engineers put together a complete core, façade and column formwork solution along with other formwork scopes as needed.

The plan called for Super Climber SCP and Top50, both automated climbing systems, to facilitate more streamlined core wall and deck pours. As well, Framax was selected to form the tall columns and walls (up to 40-ft. in height) and MF 240 perimeter platforms and safety working platforms are helping drive productivity, safety

and quality.

One of the unique aspects of the Indiana University Health project is a custom hydraulic unit setup that was developed by the Doka project manager for this job. This lift solution allows the contractor to pour the lobby slabs through the core of the building, providing an efficient solution for this aspect of the construction.

# (Un)conventional Expansion in Indiana

In the shadow of Lucas Oil Stadium, home to the NFL Indianapolis Colts, the Indiana Convention Center is undergoing a significant expansion that includes the construction of a massive ballroom and a 38-story hotel all of which requires extensive and adaptable formwork solutions.

The Indiana Convention Center Hotel Ballroom expansion project, located on the former Pan Am Plaza in downtown Indianapolis, includes the construction of additional convention space with a 50,000 sq. ft. ballroom (the largest in the state) and other event space as well as a 38-story, 800-room Signia Hotel by Hilton, which will be owned by the city. The hotel will be connected by a skybridge to the Indiana Convention Center.

F.A. Wilhelm Construction is responsible for the structural concrete work for both the Signa Hotel and the new ballroom area, a scope of work that requires approximately 75,000 cu. yds. of concrete and equal or greater quantities of formwork.

## Challenge

The scale and complexity of the project were the biggest challenges on this project. To complete the concrete pours in a timely fashion, crews would require multiple formwork systems to complete cores, walls and the facade. Coordinating the installation and integration of these varying formwork solutions across a large project site, with similar formwork demands ongoing at the nearby Indiana University Hospital, would require considerable collaboration and teamwork.



## The Facts

**Project Name:** Indiana Convention Center Hotel Ballroom

**Location:** 101 W. Georgia Street Indianapolis, Indiana

**Developer:** AECOM Hunt

**General Contractor:** F.A. Wilhelm Construction

**Concrete Contractor:** F.A. Wilhelm Construction

**Architect:** Ratio Architects

**Type of structure:** High rise

**Height:** 301-ft.

**Stories:** 38

**Sq. Ft.:** 1,200,000

**Construction time:** Early 2024 - Fall 2026

**Products used:** Core: Top 50, Super Climber SCP;  
Facade: Top 50, Frami, Framax; Other: Top 50 (walls)

## Solution

Working closely with Doka's engineers and field teams, the F.A. Wilhelm Construction team developed a complete formwork solution to support the multi-year effort. Specifically, the Super Climber SCP and Top 50 automated climbing systems were selected to climb the core system eliminating the need for a crane, thereby improving productivity and safety across the jobsite. With this system, cores with forming heights of up to 20 ft. can be poured with the slabs or climbed ahead of slab pours.

Framax is used for tall columns and walls on the project while MF240 is used for perimeter platforms and safety working platforms. The highly adaptable Top 50 and Framax Xlife steel-framed formwork are ideal for large areas and require fewer ties, assuring the architectural aesthetics are maintained.



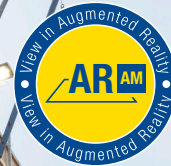
**1 Expanding Opportunities:** The Convention Center expansion will add a 50,000 sq. ft. ballroom along with a 38-story hotel.

**2 Core Focused:** The new hotel cores get a lift with Super Climber SCP and Top 50 formwork.

**3 Hanging Out:** Within the core, a look at the underside of the Super Climber SCP system with a hanging tower.

**4 Single-Stroke Lift:** The Super Climber SCP system is raised at the push of a button with a single-stroke cylinder.

# Formwork Finesse



The construction of a complex, high-profile JW Marriott hotel along the Detroit waterfront opened the door for creative and customized formwork solutions.

## The Facts

**Project Name:** JW Marriott Detroit Water Square

**Location:** 600 Civic Center Drive, Detroit, Michigan

**Developer:** Atwater & Second Associates, an affiliate of Sterling Group

**General Contractor:** Colasanti Construction Services, Inc.

**Concrete Contractor:** Colasanti Construction Services, Inc. – Concrete Division

**Architect:** Neumann/Smith Architecture

**Type of structure:** Hotel

**Height:** 281-ft.

**Stories:** 25

**Sq. Ft.:** 500,000

**Cycle time:** 4 days

**Construction time:** 24 months

**Products used:** Core: Super Climber SCP, Xclimb 60, Top 50, MF240; Columns: Frami; Framax; Shoring: Staxo, SuperDek; Other: Staxo Stair Towers (egress)

**Boom Support:** Doka's project and engineering teams, in collaboration with Colasanti's engineering team, designed a custom beam assembly to support the concrete placing boom that sits on top of the Super Climber.



The new JW Marriott Detroit Water Square is a 25-story, 600-room hotel located on the former site of the Joe Louis Arena in downtown Detroit. Positioned adjacent to the Residences at Water Square, the hotel will connect to the Huntington Place Convention Center via a skybridge, and will feature 50,000 sq. ft. of meeting spaces, restaurants, and other venues. Construction of the hotel began in 2024 and is expected to be complete by 2027.

### Challenge

Given the scope and scale of this project, along with an aggressive schedule, the biggest challenge for the concrete contractor has been the scheduling of concrete pours alongside delivering the large quantity of formwork solutions needed.

Colasanti Construction Services needed a comprehensive formwork solution that would aid construction of the hotel cores and columns including a substantial amount of shoring to support thick slabs and high floor heights. It's a two-year construction job that necessitates a formwork partner that could adapt on the fly to the changing needs of the jobsite.

### Solution

Colasanti looked to Doka for its extensive line of formwork solutions but also for its problem solving expertise. A range of solutions were selected for the project ranging from self-climbing core solutions to wall forming systems and a very large quantity of load bearing towers.

For instance, the overall footprint of the first level of the building initially created concerns about cycle times. Doka's highly flexible Staxo 100 load bearing towers proved an ideal solution. To further strengthen the use of the towers, Doka developed C8-channel assemblies to splice the towers together creating essentially very large, very stable tables. Doka also designed a custom Double-Fork C-Caddy at Colasanti's request to provide a unique solution for stripping out Staxo towers to cycle up the tower.

The Staxo 100 were also used to create five stair towers used for egress at each floor. These systems were pre-assembled off-site and flown directly in-place at delivery. The Staxo screw jacks provide for the fluctuation needed for any small height changes in certain areas, and minor variations floor-to-floor. As well, a safety ladder and OSHA approved tie-off points were built in to the frames for added benefit and increases efficiency of the laborers.

The Frami Xlife tie-less formwork helped quickly set and strip columns as they are poured.

For the cores, the team is relying on a combination of Super Climber SCP self-climbing platforms along with Top 50 and MF240 systems. Doka's project and engineering teams, in collaboration with Colasanti's engineering team, designed a custom beam assembly to support the concrete placing boom that sits on top of the Super



Continue on the next page →

**Table Strength:** Custom engineered C-8 assemblies allowed the contractor to adapt the Staxo 100 shoring system to specific site constraints and challenges.



1

**1 At the Core:** The hotel stair and elevator cores are formed with Super Climber SCP and Xclimb 60 formwork systems.

**2 Staxo Versatility:** Slip resistant towers are used across the site for shoring and stair towers

**“The Super Climber system was a game-changer for our main elevator core, allowing us to stay ahead of schedule and utilize a placing boom for large deck placements. Doka makes it work by providing a collaborative team effort to address problems on the job site and throughout the course of the project.”**



**Tiffany Polley**  
Concrete Project Manager at Colasanti Specialty Services



Scan QR-Code to watch the full testimonial



2



**3 Column Connections:** Frami and Framax Xlife were used to construct concrete universal columns.

**4 Customized Self Climb:** The custom Super Climber SCP assembly included modifications for door openings as well as the concrete placing boom.



# A Shear Wall Showcase

As the Fan Pier Parcel H Condominium climbs to the planned 17-story height, it's the custom shear wall super climber that captures the attention of many. The formwork solution hangs entirely from one wall, entirely locked to the structure, a solution that not only meets the fast cycle time requirements of the contractors, but sets a new standard of safety for similar wall climbing systems.

## The Facts

**Project Name:** Fan Pier Parcel H Condominium

**Location:** 1 Harbor Shore Drive, Boston, Massachusetts

**Developer:** The Fallon Company

**General Contractor:** Turner Construction Company

**Concrete Contractor:** G&C Concrete, Inc.

**Architect:** CBT Architects

**Type of structure:** Condominium

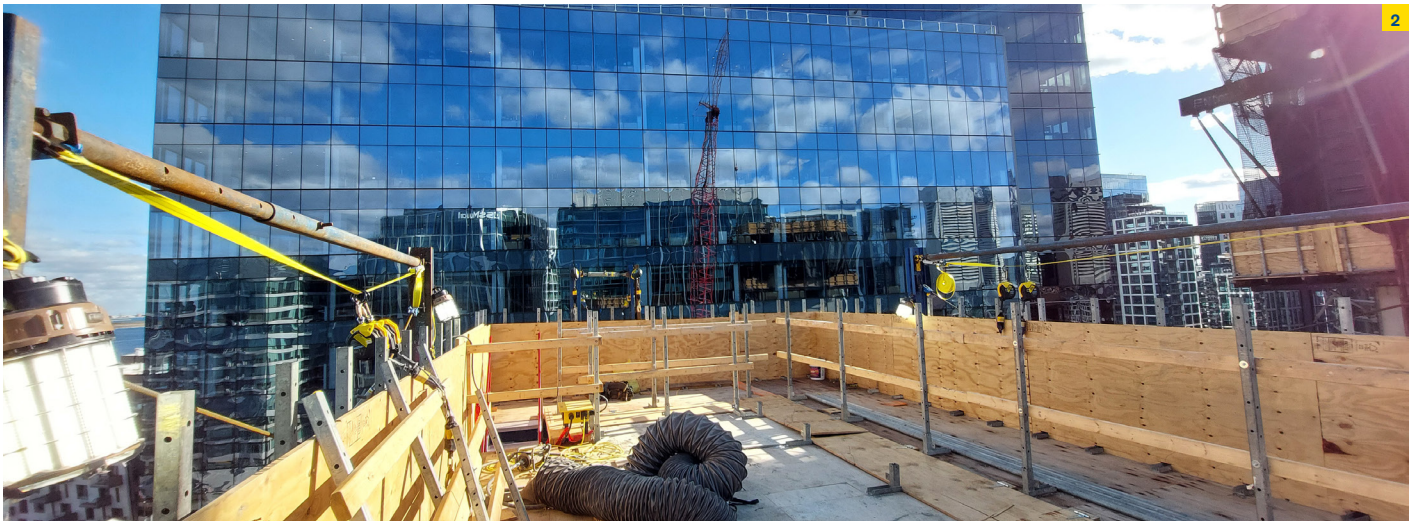
**Height:** 217'-0"

**Stories:** 17

**Cycle time:** 2 days

**Products used:** Core: Framax, Super Climber SCP





While its seemingly ordinary name suggests otherwise, the Fan Pier Parcel H Condominium project is in fact, anything but. As the latest project the Fan Pier Planned Development Area, the 17-story Parcel H residential high-rise will include 122 luxury residential units as well as civic/cultural space and a restaurant overlooking the Boston Harbor. But for those constructing this structure, it's the means and methods that are setting a new standard for safer, more efficient core construction.

- 1 Flexible forming solution:** Cores with forming heights of up to 20 feet can be poured with the slabs or climbed ahead of slab pours.
- 2 Crane Independent:** All formwork, working platforms and concrete placing boom for an entire level can be raised completely independent of the crane.
- 3 Fast forming:** When used in combination with the Doka stripping corner, no breaking or re-connecting gangs are required on the inside core wall formwork. Stripping space required from poured wall can be as little as 1 in. and still climb smoothly.
- 4 Efficient assembly/cycling:** A single stroke cylinder raises all interior and exterior core formwork, all working level platforms and placing boom at the push of a button.

Continue on the next page →

## Challenge

Beyond the familiar challenges associated with constructing a high-rise building, Parcel H set the bar on safety standards. The general contractor, Turner Construction, mandated the use of more advanced super climber formwork solutions to construct the cores to avoid weather-related safety concerns during construction. It's a challenge that created an opportunity for the contractor and their formwork partner to demonstrate innovative solutions.



## Solution

Working closely with G&C Concrete, Doka adapted its Super Climber SCP solution to support single-face operation, with a permanent (therefore safer) locking mechanism and wider walkways. The unit hangs from one wall with four bolts that fit in your hand, where more conventional climbers hang from two different walls with four brackets. As well, the face is permanently locked to the structure and incorporates wide walkways, therefore its safer in any environmental condition.

The modular formwork and climbing system, which includes Framax, allows for maximum preassembly to reduce on site labor cost and increase efficiencies. As well, the anchor requirements are comparably reduced saving labor and material costs. The modular standard components of the system minimize time and labor for initial setup. Designed with all standard Doka parts and can be used in conjunction with all other Doka climbing systems.

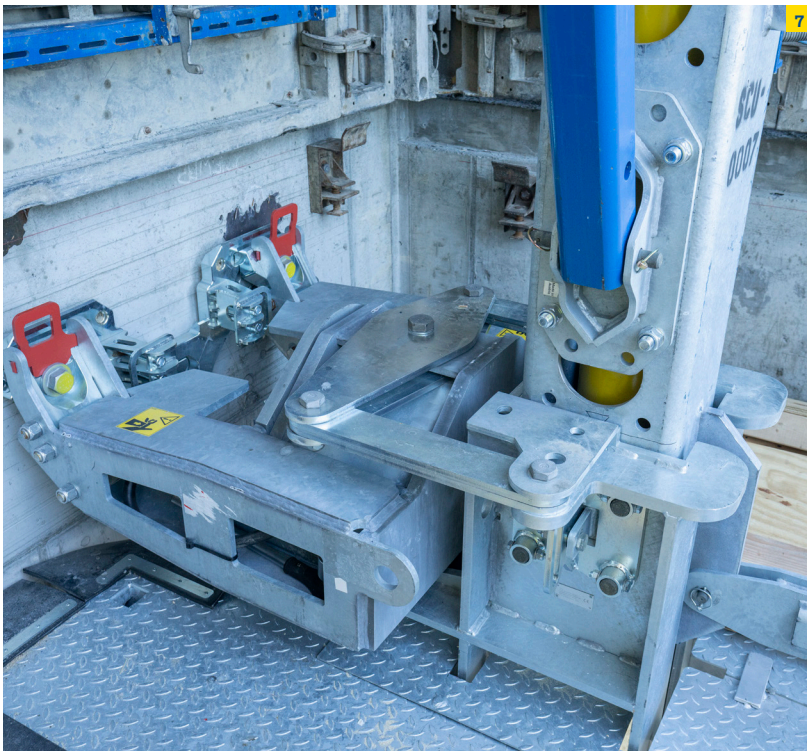
**“When I'm thinking about Doka, I'm thinking big, fast and efficient. With their systems, we can pour a floor a day, jump it and pour it again the next day. I don't know what's faster than that; Doka makes it work.”**



**Jacob Holt**  
Carpenter Foreman, G&C Concrete



Scan QR-Code  
to watch the full  
testimonial



**5 Space to Move:** Walkways on the modified shear wall Super Climber system are 6 ft. versus more conventional 4-ft.

**6 Capacity to Move:** High load capacity of gantry platform provides a large site storage area for material storage on top of core.

**7 Assured Alignment:** The self-guiding, self-leveling hydraulic cylinders ensure the core remains plumb. Up to 10 climbing brackets can be lifted at one time together from one hydraulic pump.



# Transforming Transit Connections

On a capacity and access improvement project at John F. Kennedy International Airport in New York City, a contractor and formwork specialists are doing their part to ensure two essential bridges are built with speed and quality, while pressure sensors monitor real-time conditions, enabling faster pour rates.



**Challenge**

Building in the high traffic area of JFK International Airport requires considerable planning and flexibility, particularly when it comes to constructing two large bridges. One bridge spans approximately 510-linear-ft. across three pier caps with the longest span approximately 150-ft. along with two abutments. The second bridge is approximately 622 linear ft. and spans four pier caps with the longest span approximately 297-ft. with two abutments.

The Van Wyck Expressway (VWE) is a crucial transportation artery, providing seamless access to and from John F. Kennedy (JFK) International Airport. As part of the ambitious Van Wyck Expressway Capacity and Access Improvements project, Tully Construction is undertaking the monumental task of building two new bridges to enhance capacity on the VWE between the Kew Gardens Interchange and JFK Airport, significantly improving vehicular access to the airport.

The pier caps are significant in scope and scale. As an example, one pier cap is supported by two columns which are 20-24-ft. high and 9-ft. wide x 6-ft. deep, with an allowed pour pressure of 1,650-lbs-per-sq.ft. In terms of formwork, the contractor needed a comprehensive solution that would facilitate the fastest, safest and easiest pour cycles for all bridge elements.



## The Facts

**Project Name:** Van Wyck Expressway Capacity and Access Improvements Project to JFK Airport

**Location:** Queens, New York

**Developer:** Port Authority of New York and New Jersey

**General Contractor:**

Tully Construction

**Concrete Contractor:** Tully Construction

**Type of structure:** Bridge

**Height:** Varied

**Products used:** Abutments/Pier Formwork: Frami Xlife, Framax Xlife; Pier Cap: Girder; Access: Folding Platform K; Other: Doka Xact Pressure Sensors

## Solution

To support the effort, Doka provided tailored formwork solutions, ensuring efficiency and seamless execution. Three distinct formwork systems were utilized—Frami (medium-duty), Framax (heavy-duty), and Girder (self-spanning)—each offering the contractor the necessary flexibility to address the unique site conditions and project timelines.

Frami was perfect for areas requiring handset formwork, easily adapting to changing geometries during phased construction. Framax, on the other hand, delivered high-capacity formwork for large placements, eliminating the need for bolts and heavy machinery, thus boosting overall productivity. The Doka Girder system facilitated clear spans over existing roadways and enabled reuse across multiple caps, optimizing labor costs through repeat applications.

Additionally, the Folding Platform K provided an effective solution, arriving fully assembled with handrails, which significantly reduced on-site labor for installation and dismantling. To top it off, Doka's Xact pressure sensors were deployed to monitor real-time pour pressure.



**“Doka makes it work by giving us everything that we need when we need it. The blueprints are very easy to understand, and honestly, it’s like building Lego blocks. I enjoy what I do, and I just want to give a big shoutout to Doka for making things possible to build this great New York City that we have.”**

**Joshua Lopez**  
Carpenter, Tully Construction



Scan QR-Code to watch the full testimonial



3

**1 Meeting Allowable Limits:** For the bridge abutments, the combination of Frami Xlife and Framax Xlife wall form systems provided the optimal solution to meet the high pour pressures.

**2 A Cap of Efficiency:** The Girder form system is ideal for bridge pier caps, with large tie spacing, modular sections and a high pressure rating up to 1,500-lbs-per-sq.ft.

**3 Emphasizing Access:** The two new bridges will greatly improve access from the Van Wyck Expressway to and from JFK airport.

# A Timeless Tower

With its stacked, jagged architectural appeal, the new office building for an international manufacturer in Midtown New York City will include almost 200,000 sq. ft. of office and retail space while also representing the highest level of environmental friendliness.

The new architectural masterpiece under construction in Midtown Manhattan will be an eye-catching, 28-story structure with staggered setbacks and zigzagged glazed windows. The reinforced concrete tower includes a three-story enclosed glass atrium along with outdoor terraces and balconies at each of the setbacks.

According to the architect, the tower is designed in accordance with LEED Platinum with the goal of being the most environmentally sustainable new-build tower in New York. The project is on track for completion in December 2025.

## Challenge

The 28-story high rise has a number of demanding architectural and structural requirements. The tower includes four core cells with floor heights that rise from 14-ft. to 17-ft.. Further, there are exposed perimeter and interior beams with portions of exposed slab. The exposed interior core walls require large tie spacing with 14,000 PSI concrete. As well, the cycle time required multiple levels of formwork to be ready to deliver and modified multiple times to meet the demanding construction schedule.

From an aesthetic standpoint, the structure also has a large area of exposed technically complex architectural walls. Finally, all climbing systems, wall/beam formwork, shoring, preassembly, custom designs as well as engineering needed to be expedited by one vendor.



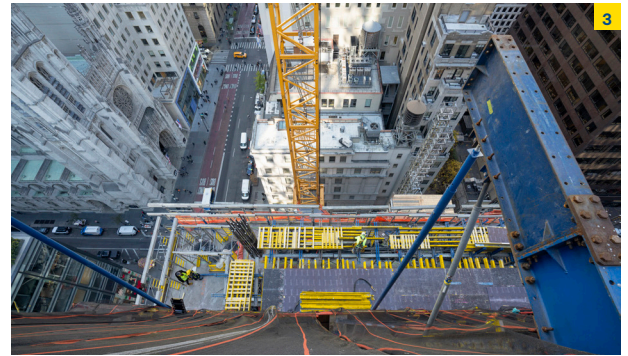
## Solution

To meet both structural and architectural specifications, both ECD NY, the foundation concrete contractor, and New Leaf Development LLC, the super structure contractor, worked closely with Doka to engineer a comprehensive formwork solution during the bidding stage. That effort included extensive preassembly plans to improve efficiency and a modular solution to accommodate the footprint and geometry that changed on almost every floor. As well, the team constructed two full scale mockups.

Weekly meetings were held with the customer was held for approximately 12 months prior to construction start to review the solution-oriented concepts for the challenging architectural finish with respect to the schedule, site logistics and system implementation.

Ultimately, a combination of Super Climber SCP, Architectural Top 50 and custom steel plates were combined to support the core construction with Staxo, SuperFlex (customized DokaFlex floor-slab formwork) and Top 50 the primary formwork for shoring.

The team opted for DoKarts, a single-person horizontal repositioning system, for safer and faster movement of architectural Top50 beam sides and soffits – a non-standard way of cycling material in New York City. Typically, the beam sides and soffits are rebuilt on every floor. With DoKarts, the contractor, New Leaf Development minimized the need to rework formwork from floor-to-floor.



**1 Facilitating Fast Cores:** Super Climber SCP was used extensively to construct the four cores of the high rise tower.

**2 Optimal Finish:** Developed to accommodate the most demand architectural requirements, the Architectural Top 50 wall formwork with adaptable element size-grid and tie-hole patterns ensures premium finishes.

**3 Midtown Masterpiece:** A comprehensive suite of formwork are used to construct the 28-story tower.

**4 Efficient Pours:** The contractor is using Top 50 formwork on the beam sides and soffits to facilitate streamlined pours and to achieve optimal surface finish per architectural specifications.

### The Facts

**Project Name:** 5<sup>th</sup> Ave and 53<sup>rd</sup>

**Location:** 5<sup>th</sup> Avenue and 53<sup>rd</sup> Street, New York City

**General Contractor:** Pavarini McGovern

**Concrete Contractor:** ECD NY (Foundation); New Leaf Development LLC (Super Structure)

**Architect:** David Chipperfield Architects with Adamson Associates

**Type of structure:** High rise

**Height:** 469-ft.

**Stories:** 28

**Sq. Ft.:** 199,000

**Cycle time:** 4-day

**Products used:** Core: Super Climber SCP, Architectural Top 50, Custom Steel Plates; Shoring: Staxo, SuperFlex, Top 50, DoKart; Other: Staxo (stair towers)



**Miguel Lee,**  
Project Manager,  
New Leaf Development

**“Doka makes it work with our formwork by providing a Super Climber in combination with Top 50 for architectural walls and beams, as well as Superflex for slab formwork. Their engineering and services have been excellent.”**



Scan QR-Code  
to watch the full  
testimonial

# Midtown Manhattan Update

Construction continues on the 989 6<sup>th</sup> Avenue skyscraper in the shadow of the Empire State Building. The glass-clad cylindrical tower presents a unique set of challenges for the contractor. To keep to a tight pour schedule demands exceptional adaptability in the formwork system.



The construction of the 989 6<sup>th</sup> Avenue skyscraper located at 100 West 37<sup>th</sup> Street in Midtown, Manhattan continues. At last report, the concrete and formwork were largely focused on foundation walls, inner columns and perimeter walls. This fast-track project has progressed significantly since that last update, with level 20 of the total 72 floors poured in December. The skyscraper is still on track for completion in 2026.

## The Facts

**Project Name:** 989 6<sup>th</sup> Avenue

**Location:** 989 6<sup>th</sup> Avenue, Manhattan, New York

**General Contractor:** Precise Construction Contracting, Inc

**Concrete Contractor:** Precise Construction Contracting, Inc

**Architect:** C3D Architecture, PLLC

**Type of structure:** High rise

**Height:** 789-ft.

**Stories:** 72

**Sq. Ft.:** ~4,200 per floor

**Cycle time:** 3 days per floor

**Construction time:** early 2024-mid-2025

**Products used:** Core: Frami, X-Climb 60; Exterior Shear Walls: Frami, X-Climb 60; Protection Screen: Xbright

## Challenge

The challenge of constructing a skyscraper with a small building footprint amidst other tall buildings and limited street access for material deliveries continue. For instance, there is only 9-in. of clearance between the adjacent building, leaving little room for double-sided wall construction. The greatest challenge though continues to be maintaining a client-required aggressive construction schedule that requires 3-day cycle times for concrete.

## Solution

Critical to the project success thus far has been easy-to-use, lightweight and adaptable formwork solution developed by Doka engineers and field teams to support core and exterior shear wall construction.

The formwork solutions currently in place include Frami with Xclimb 60 platforms for the single-sided pours (no crane required) and the Frami S blind-side wall form system for the exterior shear walls. In January 2025, Precise Construction will add the Xclimb 60 platforms to the exterior shear walls with the Doka Xbright protection screen system.

**1 Curved and Creative:** Lightweight adaptable Frami formwork is ideal for supporting the construction of the architecturally unique cylindrical residential and retail tower with its curved geometry.

**2 A 9-In. Gap:** The Frami S Blind-Side wall form system has been ideal for pouring shear walls with limited space, in some cases, just 9-in. from the nearby building.

**3 Tower Techniques:** The adaptability of the Frami formwork with Xclimb 60 platforms is helping crews adapt to changing geometry and 11-ft. high pours.

**4 High Performance:** The modular design of Frami Xlife formwork with few ties and connections makes panel adjustments fast and easy.

**5 Down the Core:** Looking down the finished elevator core as the Xclimb 60 platform rises.



**“We’re using Doka solutions. It’s been very helpful on this project—from the blind side wall formwork to the climbers and elevator shafts. It’s been very efficient, very great for me as a problem solver. I’m happy with the product—it’s as good as it gets!”**



**Sean Carroll,**  
Project Superintendent,  
Precise Construction



Scan QR-Code  
to watch the full  
testimonial

# Global Project Highlights

**1 Baltic's largest passenger center**  
Riga Central Railway Station, Latvia

**2 Redevelopment of 150m high-rise tower**  
Post Rotterdam, Netherlands

**3 Canada's tallest office complex**  
CIBC Square, Toronto

**4 World's second tallest building**  
Burj Azizi, U.A.E.



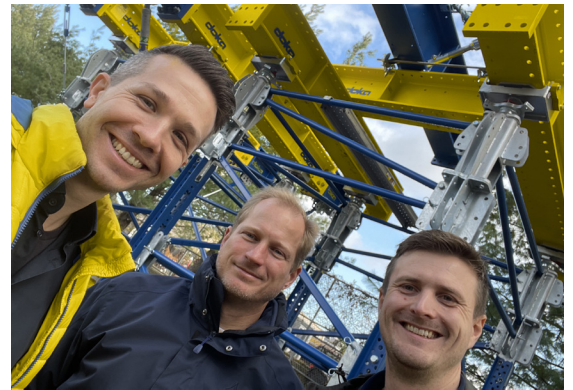
# Teamwork, Training, and Innovation in Action!

At Doka USA Headquarters in Kenilworth, NJ, we recently hosted an inspiring UniKit Go-to-Market (G2M) Workshop! Over three engaging days, team members from across the U.S. and our global headquarters in Austria came together to collaborate, learn, and prepare for the launch of the revolutionary Doka UniKit system in the U.S. market.

The UniKit is more than just a system – it's a modular solution for heavy-load applications in infrastructure and building construction. Featuring game-changing innovations the system is designed to save labor hours and drive efficiency. With its plug & play design, UniKit empowers teams to achieve faster assembly, seamless integration, and unparalleled adaptability for projects ranging from bridges and tunnels to high-rise buildings.

This workshop focused on:

- **Sales Training:** Equipping our teams to understand client challenges and showcase the value UniKit brings to every project.
- **Engineering Training:** Exploring system design, load management, and seamless assembly processes for optimal implementation.
- **Collaborative Exchange:** Strategizing innovative ways to support customer success and maximize project efficiency as we introduce this cutting-edge solution.



We're proud of the passion, expertise, and teamwork demonstrated throughout this event. Together, we're building the foundation for the future of construction innovation – where efficiency meets profitability.



# Doka UniKit

Your solution for infrastructure  
projects – Plug and Play



/DokaUSA



/Doka\_USA



/company/Doka-USA



/Doka\_USA



/DokaUSA

Scan for more  
[www.dokausa.com](http://www.dokausa.com)



**USA Headquarters | Doka USA Ltd.** | 251 Monroe Ave. | Kenilworth, NJ 07033 | T (201) 641-6500 | T (877) DOKA-USA | F (201) 641-6254 | [usa@doka.com](mailto:usa@doka.com)  
**New York | Doka USA, Ltd.** | 251 Monroe Ave. | Kenilworth, NJ 07033 | T (201) 641-6500 | **Baltimore | Doka USA, Ltd.** | 3665 Benson Ave. | Baltimore, MD 21227 | T (410) 368-8390  
**Atlanta | Doka USA, Ltd.** | 105A Boulderbrook Circle | Lawrenceville, GA 30045 | T (888) 618-4700 | **Nashville | Doka USA Ltd.** | 704 Briskin Lane | Lebanon, TN 37087 | T (470) 347-7583  
**Miami | Doka USA, Ltd.** | 1001 NW 12<sup>th</sup> Terrace | Pompano Beach, FL 33069 | T (954) 247-2220 | **Orlando | Doka USA, Ltd.** | 2300 Dairy Rd. | Auburndale, FL 33823 | T (815) 521-3700  
**Chicago | Doka USA, Ltd.** | 22901 West Winchester Dr. | Channahon, IL 60410 | T (815) 521-3700 | **Houston | Doka USA, Ltd.** | 11002 Mahaffey Road | Tomball, TX 77375 | T (281) 516-2211  
**Dallas | Doka USA, Ltd.** | 10011 W. University Drive | McKinney, TX 75071 | T (469) 489-0176 | **Denver | Doka USA, Ltd.** | 8780 E. 93<sup>rd</sup> Place | Commerce City, CO 80640 | T (303) 791-1388  
**Salt Lake City | Doka USA Ltd.** | 595 S. 600 East | Lehi, UT 84043 | T (801) 701-7864 | **Los Angeles | Doka USA, Ltd.** | 25525 Redlands Blvd, Loma Linda, CA 92504 | T (951) 509-0023  
**Seattle | Doka USA, Ltd.** | 1217 140<sup>th</sup> Ave Ct E Sumner, WA 98390 | T (425) 368-0866