



Formwork & Scaffolding.
We make it work.

Table of contents

03

Editorial

04 – 05

News

06 – 07

Did you know this about Doka USA?

08 – 09

A Culvert of Concrete and Steel

10 – 11

An Emerging Beacon of Opportunity

12 – 13

A High Rise of Opportunity

18 – 19

Reaching New Heights in Brooklyn

20 – 21

A View of Things to Come

22 – 23

Raise and Roll in Colorado

24 – 25

A Pavilion of Parabolic Possibilities

26 – 28

Doka USA Preassembly Capabilities: Precision and Efficiency in Action

30 – 31

The Building Blocks of a Lock

32 – 33

Midtown Mixed-Use Cycles Up

34 – 35

A High Rise by the Bay

36 – 37

Doka Enables Safe Demolition of Vanderbilt’s Oxford House

38 – 39

A Core Connection



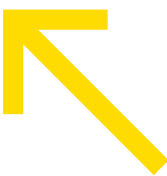
AR Marker Symbol: Download the app at DokaAR.com, open the app on your smartphone or tablet device, scan the image with the AR Marker symbol to fully experience the latest developments of Doka USA!

Imprint: "DokaXpress" is a Doka publication.
Edition: Volumen 24 Issue 2 | Publisher: Doka USA Ltd.
251 Monroe Ave Kenilworth, NJ | USA | T (201) 641-6500 | T (877) DOKA-USA | usa@doka.com | 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.

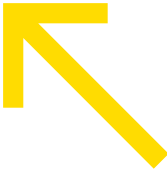
Follow us on



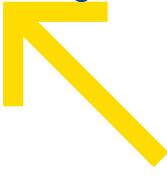
LinkedIn



Facebook



Instagram



Dear readers,

Welcome to the second edition of Doka Xpress in 2024! It's hard to believe we are already in the back half of the year, and yet there are already so many developments to share. This issue is packed with the latest developments in formwork and scaffolding, from exciting news at Doka to current project highlights from across the country.

First, a quick look at the industry view:

- Despite persistently high interest rates and some delays in project starts, the overall demand for high-quality forming, shoring, and scaffolding continues. We expect a ramp up in project starts as we enter the last trimester of 2024.



- To help mitigate the risks associated with the ongoing labor shortage, forward-thinking contractors are embracing technology and innovative construction methods to improve efficiency.
- Governments and investors are increasingly focusing on reducing carbon footprints. The market is indicating a strong consideration towards the long-term sustainability of projects.

Now, a look at what's happening at Doka:

- In February, we announced the acquisition of Malaysia-based MFE, the market leader for monolithic aluminum formwork. By integrating MFE's unique expertise and complimentary product portfolio into Doka's ecosystem, we have expanded our offering and our global market reach. Together, we're poised to deliver comprehensive solutions that empower construction professionals around the world to build faster, smarter, and safer.
- We have also continued to make strategic investments in properties, facilities, and inventory to better serve our customers across the United States. In February, we opened a new Doka branch in Dallas to better serve the rapidly growing North Texas market. In July, we opened our newest branch in Salt Lake City which further bolsters our coverage in the West. And by the end of the year, we will have relocated and expanded our Far West branch, which serves California and surrounding areas. By investing in growth markets like these, we continue to strengthen our local service offering and increase our ability to deliver custom and regionally specific solutions.

As we navigate the road ahead, Doka remains dedicated to moving our customers' businesses forward and exceeding expectations at every turn. We hope you enjoy the project highlights we have collected here, and we send our deep appreciation to the developers and contractors featured in these pages for their trust and partnership.

Together, we make it work!

Michael Kennedy
CEO, Doka USA

Making the Invisible Visible: Introducing DokaXact Load and Pressure Sensors

Doka has been at the forefront of developing digital innovations to enhance efficiency and safety on construction sites for years. The latest breakthroughs from Doka, DokaXact Load and Pressure sensors, promise precise real-time monitoring throughout the concrete curing process.

Advancing Concrete Pouring with Real-Time Data

The speed at which concrete can be poured is influenced by a number external factors such as weather conditions and the concrete mix. DokaXact Load and Pressure sensors provide real-time data to ensure concrete is poured at the optimal speed, balancing productivity, safety, and quality. These jobsite-tough sensors are waterproof and dustproof, and they connect seamlessly to users' smartphones via Bluetooth.

Simple Installation, Advanced Monitoring

DokaXact Load Sensor: Easily attaches to the tie rod, requiring minimal installation effort. The formwork load data is visualized in real time on the user-friendly DokaXact app.

DokaXact Pressure Sensor: Mounts directly onto the plywood to monitor fresh concrete pressure, allowing precise control of the curing process and preventing exceedance of limit values.

Both sensors feed data into the DokaXact web portal, which offers detailed information and comprehensive documentation.

Versatile Applications Across Construction Projects

DokaXact sensors are compatible with a wide range of concrete construction projects, including residential, non-residential, infrastructure, and energy projects. They are particularly beneficial for projects with critical anchor loads or high single-sided walls or columns, where accurate data is essential for optimizing forming and shoring.

For more information, visit www.doka.com/dokaxact



The DokaXact sensor in operation. © Doka 1
The DokaXact Pressure sensor transmits live data for monitoring fresh concrete pressure. © Doka 2



In February, Doka announced the acquisition of Malaysia-based MFE Formwork Technology, a market leader in monolithic aluminum formwork.

This exciting step marks a significant milestone in Doka's strategic growth plan that also strengthens its position in the Pacific region - an important growth market alongside North America. For the formwork industry, this integration means more innovative solutions from a single source.

Using monolithic formwork allows elements such as slabs and walls to be formed in a single pour, resulting in

a seamless, jointless structure. This technique is particularly suited to projects with less complex and repetitive geometric requirements.

With more than 2,200 team members, MFE Formwork Technology has established itself as a reliable partner for efficient construction projects and sets standards in the construction industry. With this acquisition, MFE gains access to Doka's extensive global sales network which is active in over 60 countries with more than 180 locations.

Doka plays a lead role in developing product carbon footprint standards in the formwork and scaffolding industry

A product carbon footprint (PCF) measures the total greenhouse gas emissions generated by a product across all relevant material lifecycle phases. It is an important tool for assessing the overall climate impact of a product and identifying levers to reduce emissions in the value chain.

In 2024, an association of manufacturers, suppliers, and users of formwork and scaffolding systems – which included representation from Doka – was established with the aim of developing a standard for the transparent quantification of product carbon footprints for the formwork and scaffolding sector. The group's newly published agreement on minimum standards is the result of intensive collaboration and cooperation. With this important step, Doka and its market partners are not only setting a new standard in the industry but are also helping establish transparency on greenhouse gas emissions as a standard in the value chain.

agreement between leading manufacturers brings us a big step closer to being able to better compare product carbon footprints and create a level playing field within the formwork and scaffolding industry."

For more than two years, Doka has been providing customers with transparent data on the greenhouse gas emissions of its products.

"When it comes to sustainability, facts count, not gut feelings," emphasizes Weber. She adds that transparency into the carbon impact of products is also an important pillar of Doka's own sustainability strategy. "We are consistently pursuing our goal of net-zero emissions by 2040, and in the long term we are striving for ever lower-emission product strategies. Product carbon footprint data is already an integral part of the innovation process at Doka."



"We are delighted to have been able to contribute our many years of experience and our calculation methodology to the working group," says Julia Weber, Head of Sustainability at Doka. "This industry-wide

Did you know this about Doka USA?

Photo: DOKA USA HQ, Kenilworth, NJ



Doka USA HQ

Doka USA's new headquarters and New York branch office in Kenilworth, NJ features a state-of-the-art facility designed to enhance operational efficiency and innovation in formwork solutions. The modern, sustainable building reflects Doka's commitment to growth and cutting-edge technology in the construction industry.



13 Locations

Doka USA has 13 well-equipped sales and logistics locations across the US. We are ready to provide formwork solutions, including engineering services, field service, preassembly, and more.



650+ Team Members

Our team of over 650 Account Managers, Engineers, Field Service, Preassembly, Operations, and Support staff is ready to assist you across the USA.
#WeMakItWork



The symbol in our new logo represents the entire life cycle established around a building. And it stands for the Spaces that we create for our customers, partners and employees want to develop.



Our products are available to you 24/7 in our Doka online shop



Scan the QR code to visit the store



We are expanding

"We continue to invest in new locations to provide you with faster response times and greater accessibility to our innovative solutions."

Michael Kennedy, CEO | Doka USA



Scan the QR code to watch video



Brand Values

Our brand values "partnership, passion and high performance" are in each of our solutions and in noticeable in our actions.

A Culvert of Concrete and Steel

A large diversion channel in a Colorado Springs neighborhood requires creative formwork solutions to support high pressure pours at height and a tight construction timeline.

The Briargate Parkway Crossing is a culvert project designed to divert excess rain and floodwaters away from homes. Located in a new housing development in Colorado Springs, Colorado, the culvert measures 31-ft.-2¼-in. at its highest point and extends a maximum 90-ft. along the longest wing wall. The structure will require 12,000 sq. ft. of concrete.

Challenge

The biggest challenge in constructing the diversion channel was to form the domed concrete around the already placed steel culvert, while also pouring at full height, which creates high pressure loads. Further, the customer sought to reduce labor time and improve the efficiency of formwork erection. Given the height, the dome would necessarily require high pouring windows. Further, the wall thicknesses, most at 2-ft.-6-in.

thick, and a number of angles made the use of ties very difficult. In addition, the wingwalls needed to be hand set and stripped quickly in order to rotate gangs to other placements.

The customer expected it would take 3-4 weeks to assemble the formwork, which would place the project behind schedule from the start.

Solution

Doka selected an engineered forming solution using a combination of Large-area formwork Top 50 and Staxo to accommodate the high pressure loads with the flexibility to create a large radius curve around the steel culvert.

With just two weeks to assemble the units, Doka called in support from California and Texas. The Top 50 units had very

The Facts:

Project: Parkway Crossing

Location: Briargate Parkway, Black Forest, Colorado Springs, Colorado

General Contractor: Rusin Concrete Construction

Concrete Contractor: Rusin Concrete Construction

Architect: Kiowa Engineering Corporation

Developer: GC – Classic Homes

Type of structure: Steel culvert

Height: 31-ft.-2 ¼-in. tall (highest point)

Length: 90-ft. (longest wing wall)

Sq. Ft: 12,000-sq.-ft.

Products used: Wingwalls: Frami; Shoring: Staxo 100; Other: Custom Pre-Assembled Top 50



critical angles and wailer placements that made assembly difficult. As well, in some areas, the crew was unable to get ties through all the rebar and some areas of the metal structure were blocked out. In this case, the team used ties that were welded or hooked into internal rebars for support.

Pour windows were incorporated into the forms so that the concrete would not have to drop 30-ft at the start of pour. As the pour reached the window at 15 feet, the window was closed with plywood and the pour then continued.

When complete, crews will have used about 12,000 sq. ft. of formwork on this project. ■



From the Top of the Drain

The Top 50 and Staxo formwork solutions helped crews reach the culvert's highest point at 31-ft.-2¼-in.

Wing Walls

Frami forms were used on the wing walls that needed to be handset and stripped quickly to rotate gangs to other placements.

Pre-Assembled Speed

The use of pre-assembled forms allowed the client to reduce labor requirements and erect forms quickly.

Mountain West First

The Briargate Parkway Crossing is one of the first applications of the pre-assembled Large-area formwork Top 50 solution in the Mountain West Region.



An Emerging Beacon of Opportunity

Speed, flexibility and strength underscore the formwork solution that is helping construct the newest skyscraper in Omaha, Nebraska.



1 Hydraulic Boost

On the west cell of the tower, the weight of the -1 platform was too heavy for the retraction process. Doka used some chain falls connected to the underside of the 0 level platform to take some of the weight off the -1 platform and provide a smoother retraction operation.

2 Timber Flexibility

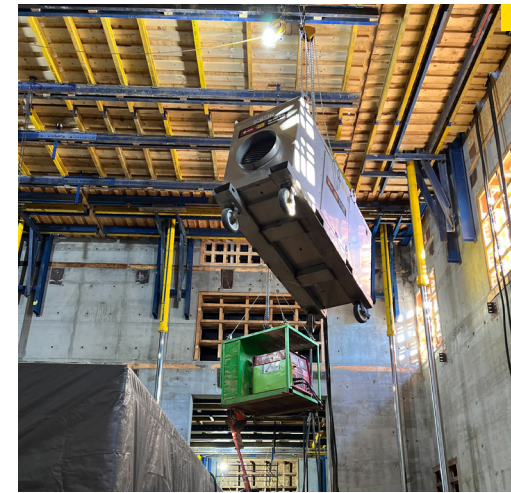
Given the high number of block outs needed on this project the Large-area Top 50 Timber Beam System plywood-faced formwork solution (versus a steel-faced solution) has proven an optimal solution for the façade for flexibility and efficiency.

3 Tower Gap

Doka engineered an extra 15-ft. of Staxo stair tower to help the contractor solve a gap between the trailing core decks to the -1 platform. An alternative solution would have been a considerably more expensive solution.

4 Ease of Use

The Large-area formwork Top 50 Timber Beam System and the Super Climber SCP solutions combined to maximize the girder layout, thereby keeping the overall system light and easy to operate throughout construction.



Mutual of Omaha's new Headquarters, referred to as Project Beacon, will be the tallest building in downtown Omaha at 677 ft. It will feature 44 floors and approximately 800,000 sq. ft. of office, meeting, collaboration and amenity space—purpose-built for the hybrid workforce. The modern glass high-rise tower is on track to open in 2026.

Challenge

The core size of the tower is 90-ft. by 60-ft. The tower required a number of block outs to accommodate doors, windows, plumbing, electrical conduits, or structural fixtures.

The formwork solution also needed to be relatively light in weight and adjustable.

Solution

Working closely with JE Dunn, Doka developed a highly flexible solution for both the core and façade.

Framax was selected for the first foundation for speed and functionality as well as to support the future install of the Self Climbing System (SCP). The solution maximizes the cylinder and girder layout to keep the system as light as possible and still functional and easy for the customer to operate. A single-stroke cylinder raises all interior and exterior core formwork, all working level platforms and the market's largest concrete placing boom at the push of a button. After the third training lift with Doka onsite Field Service team, JE Dunn was able to operate the system on their own without help from Doka.



Doka was also able to help JE Dunn figure out the best height of the first lift on the core walls for the smoothest and fastest transition from foundation pours to core pours. JE Dunn is running on average a 10-day lift cycle, due to all the door block outs and penetrations, which require considerable prep time. ■

The Facts:

Project: Project Beacon/Mutual of Omaha Tower

Location: Omaha, Nebraska

General Contractor: JE Dunn Construction - Omaha

Concrete Contractor: JE Dunn Self-Perform

Architect: Pickard Chilton Architects Inc.

Developer: Lanoha Real Estate Company

Type of structure: High rise

Height: 677-ft.

Stories: 44 stories

Sq. Ft: 800,000 sq. ft. tower.

Cycle time: 12-day lift cycle

Products used: **Core:** Super Climber SCP; **Facade:** Large-area formwork Top 50 Timber Beam System; **Foundation:** Framax



“Doka on-site field techs were a huge benefit to us. In one case, they were able to re-engineer stair scaffolding to give us an extra 15-ft of access.”

Carter Anderson,
Project Manager | JE Dunn Construction



Scan QR-Code to watch the full testimonial

A High Rise of Opportunity

A tight worksite located in busy downtown Miami with limited access created new opportunities for the contractor to deploy the super climbing system for the first time.

Located in the heart of downtown Miami, the 501 First Residences is a residential high rise under construction by developers Aria Development Group and AQARAT. The 441,000 sq. ft tower will include 448 fully furnished residences. Concrete and formwork were finished in 2024 with Doka formwork used in creative ways to overcome site and schedule challenges.

Challenges

The tight property lines around the high-rise severely limited space for lay down areas on the property. The structure is narrow but very tall at 430-ft. It's also located on one of the busiest roads in downtown Miami, creating logistical challenges for material deliveries including

concrete. JGR crews faced strict maintenance of traffic (MOT) restrictions. Permitting delays put the project behind schedule.

Solution

To accommodate the tight property lines and limited lay down areas, JGR opted to use the Super Climber SCP, a first for the contractor. For the core and facade, the team relied on Framax steel-framed formwork with the Super Climber SCP with 10k and truss tables. The self-climbing formwork eliminated the need to bring the main core and column formwork down from the tower. By taking formwork removal off the critical path schedule, crews were able pour decks every Tuesday and Friday and get back on track . ■

The Facts:

Project: 501 First Residences

Location: Miami, Florida

General Contractor: Beauchamp Construction

Concrete Contractor: JGR Construction

Architect: Revuelta Architecture International

Developer: Aria Development Group and AQARAT

Type of structure: Residential Tower

Height: 430-ft. tall

Stories: 42

Sq. Ft: 13,000 sq ft per level.

Products used: **Core:** Framax, Super Climber SCP; **Facade:** Staxo, Framax, Super Climber SCP; **Reshoring:** Doka Eurex Props; **Shoring:** 10k, Truss



Narrow Site with Height 1

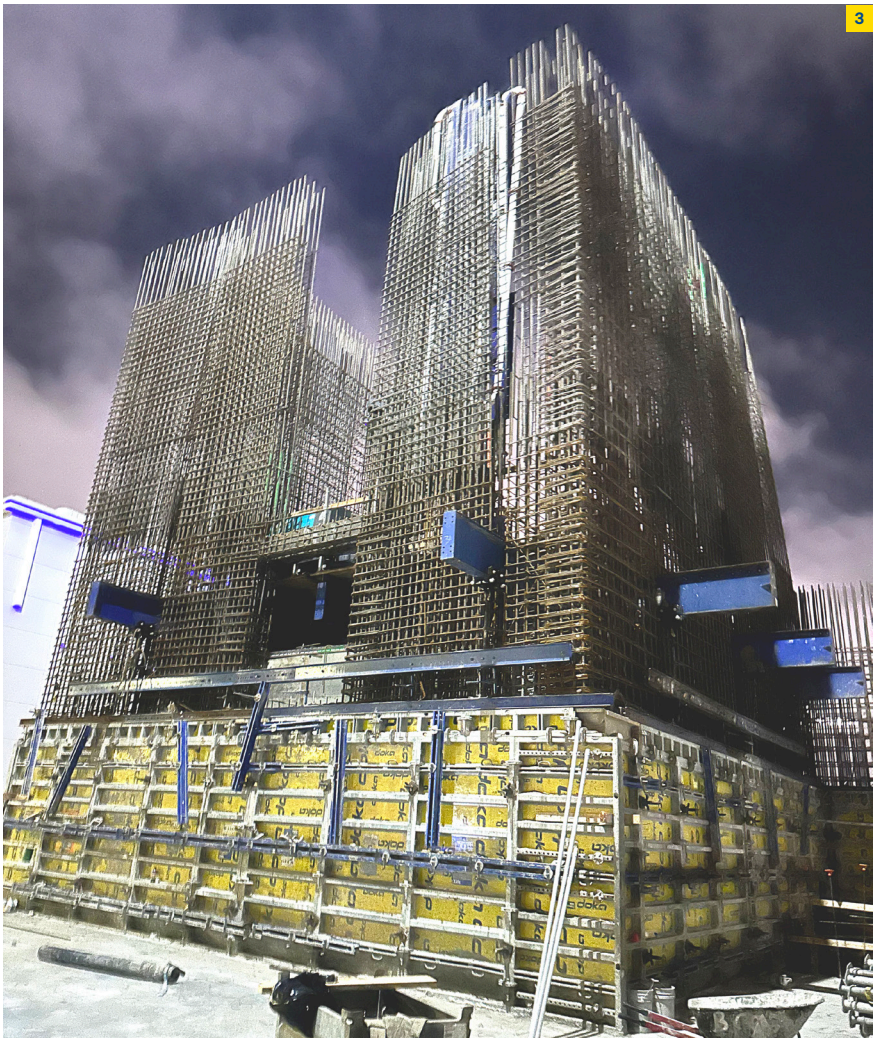
The Doka compact truss design with minimal loose framing allowed the customer to fly all trusses to the north of the building, away from existing buildings, open streets and the nearby metro line.

Pour with Purpose 2

The speed of the Super Climber SCP allowed for a more aggressive pour schedule, which helped JGR get this project back on track despite early permit delays.

Efficient Operations 3

JGR crews place the Super Climber SCP and trusses in preparation for a pour.





4

Project supplied 100% by Doka 4

The finished product is truly impressive.

Teamwork 5

JGR crews place the Super Climber SCP and trusses in preparation for a pour.

Scope and Scale 6

The Super Climber SCP formwork measured with interior dimensions of 36'-8" x 37'-10" and varying exterior going up the structure.

Resource Ready 7

The custom truck passage formed with Doka load bearing Staxo towers gantry beams facilitated easier, safer movement of trucks around the site during concrete pours. The Doka team worked closely with JGR to ensure smooth, timely deliveries.



5



6



7



Superdek

**Pouring
Concrete
Slabs?**

We got *deck*
your ~~back~~.



Truss Table



Dokadek



Superflex Garage Beam System



/DokaUSA



/Doka_USA



/company/DokaUSA



/DokaUSA



/Doka_USA

Doka USA Ltd. | T 877 365 2872 | usa@doka.com | www.doka.com

Formwork & Scaffolding.
We make it work.

Pouring Concrete Slabs?

We got your back.

Selecting the right system for your project

If your job has ...



Tall floors

Super Prop & Gates

Staxo 100

10k shoring



Heavy loads & thick slabs

Super Prop & Gates

Staxo 100

10k shoring



Handset requirements

Dokaflex

SuperDek

Dokadek 30

Super Prop & Gates



Large forming area

DokaTruss

Dokamatic tables

Superflex Garage Beam System



Changing geometry

Dokaflex

SuperDek



Strip formwork faster!

Concremote uses sensors to measure the temperature and calculates compressive strength of the concrete structure. Think construction processes forward and boost your productivity.



Handset

Designed for strength, versatility, and ease of use to optimize slab formwork operations, enhancing safety and productivity on site.



Dokaflex
Flexible slab formwork system for any layout or concrete finish

SuperDek

Fast, safe and simple handset drop head slab system.



Super Prop & Gates

Exceptional versatility and efficiency



Tables

Designed to streamline the construction of large slab areas with speed and precision.



Dokamatic table
The unbeatably fast tableform that adapts perfectly to any slab

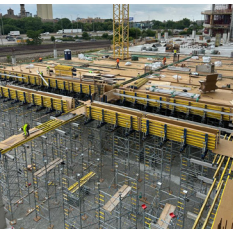
DokaTruss table

An improved Table system solution for high speed construction



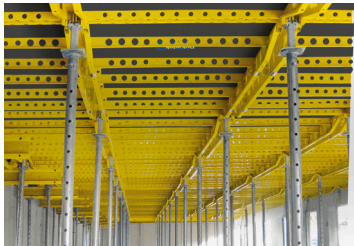
Superflex Garage Beam System

The flexible shoring solution designed for garage beam applications



Panelized

The versatile system for creating smooth, precise surfaces and complex shapes in concrete construction.



Dokadek 30
The beamless handset system for speed on site

Shoring

Shoring solutions designed to offer unparalleled strength and reliability.

10k shoring

The proven load-bearing tower made of steel



Load-bearing Staxo

The high-capacity, fast shoring system

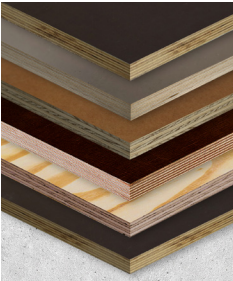


Choosing the right plywood

	Phenolic / Phenolic eco	MDO	HDO	Birch
Applications	Most common panel for loose shoring. ECO utilized on podium slabs, around columns, slab edges.	Medium reuse requirements where a matte finish is desired.	Architectural finish requirements, preassembled tables/trusses.	High reuse applications such as core climbers and preassembled tables/trusses.
Finish	Smooth/Glossy. Will have rippling/tiger striping	Matte	Smooth/Glossy finish with little to no woodgrain transfer.	Smooth and glossy finish. Will have rippling and tiger striping.
Reuses (horizontal loose shoring)	ECO 2-4, Phenolic 6-8+	6-8+	10-15+	15+
Safety/considerations	Recommend a water based release agent. Oil based will result in a very slick surface. Non absorptive overlay reduces quantity of release agent needed. Pencil marks are not as clear compared to marking an MDO.	The MDO overlay is better suited on sloped applications where the smoother phenolic may be problematic.	Recommend a water based release agent. Oil based will result in a very slick surface. Non absorptive overlay reduces quantity of release agent needed. Pencil marks are not as clear compared to marking an MDO.	Recommend a water based release agent. Oil based will result in a very slick surface. Non absorptive overlay reduces quantity of release agent needed. Pencil marks are not as clear compared to marking an MDO.
Benefits	Provides a similar reuse to MDO with a reduced cost. Utilized with HDO or birch where panels need to be cut, it provides a lower cost solution with a matching finish.	Hardwood face provides a very smooth MDO finish with above average reuse.	Glossy finish with no rippling. Applications for higher than MDO reuse needs.	Extremely long lifespan both in reuses and while exposed to the elements. Very Smooth finish.
Why from Doka?	Highest quality phenolic available in the market. Stocked in our yards it can be delivered with the shoring.	Our MDO overlay has some of the highest resin content available. Stocked in our yards it can be delivered with the shoring.	Assembled projects remove the need to purchase full units. Stocked in our yards it can be delivered with the shoring.	Assembled projects remove the need to purchase full units. Stocked in our yards it can be delivered with the shoring. Our international relationships ensure a steady supply.
Overall costs	5/10	6/10	7/10	8/10 (lowest cost per reuse)

DokaPly Formwork Sheets

DokaPly formwork sheets can be used along with all of our formwork systems.



Reaching New Heights in Brooklyn

Specialized forming and shoring system supports tower construction in close confines

Situated on Willoughby Street between Jay and Lawrence in Downtown Brooklyn, New York, 55 Willoughby is a 44-story residential tower. This luxury mixed-use project, anticipated to be complete in late 2025, will comprise a mix of nearly 300 residences and about 3,000 sq. ft. of ground floor retail space.

Challenge

Early on, location and logistics proved to be the biggest challenge in this tower construction. The new building sits adjacent to two other structures. Up to the 6th floor on the east and the 4th floor on the west side, there is approximately 10-in. of clearance. The limited space left no room for a tower crane to support work at the upper stories.

As well, the structure includes a 49-ft.-1.5-in. (long) x 18-ft.-3-in. (projection) cantilevered section on level 14 that extends over one of the adjacent

buildings, which requires specialized formwork.

Solution

Working closely with the contractor, Doka designed a complete formwork system to facilitate efficient construction in the constrained environment, providing additional assistance to gain permits through the New York City Department of Buildings.

The shoring solution included Dokadek 30 and the Staxo suspended stair tower version, which permits safe access to automatic climbing formwork (from floor to core) and, for reshoring, the Eurex 30 and Super Props. The exterior formwork combined Xclimb 60 hydraulic climbing formwork, ideal for high-rise construction, and the Stair Tower 250.

For the interior, the team selected Doka's Xclimb 60 formwork system. Beyond

The Facts:

Project: 55 Willoughby St.

Location: Brooklyn, New York

General Contractor: Noble

Concrete Contractor: Moore Group

Architect: Colberg Architecture

Design Engineer: DeSimone Consulting Engineers

Type of structure: Residential tower

Height: 3468-ft, 4-in. (roof)

Stories: 43 (main roof)

Sq. Ft: 6000 sq. ft.

Cycle time: 3-4 day

Construction time: 4 months

Products used: **Reshoring:** Eurex 30 and Super Props; **Shoring:** Dokadek 30, Staxo; **Exterior:** Xclimb 60, Stair Tower 250; **Interior:** Xclimb 60, Mini crane climbing system; **Other:** 2-ft. x 8-ft. Frami S Panel Blind Tie System



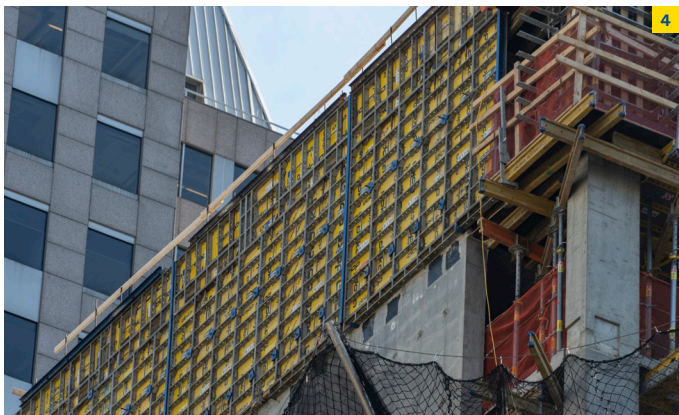
its self-climbing capabilities, this solution is designed to lift mini cranes from floor to floor—a feature that will be of great benefit once the construction exceeds the possible reach (about level 17) of the mobile crane positioned on the street. This solution eliminated the need for openings in the slab commonly associated with mini cranes and the need for an additional hoisting system.

For the cantilever, Doka worked closely with the contractor to develop a suspended formwork solution that projects 22-ft. from the edge of the building below. The custom solution is designed to be dismantled from the top for a more safe operation. ■

1 Doka supplied the custom 2-ft x 8-ft. Frami S panel that ties to a 9-ft. outside form, allowing up to 10-ft. of formwork to be set up and poured (wall + slab) with only two ties

2 Suspended gantry beams were used to support the cantilever, increasing concrete quantity and helping maintain weight restrictions. The cantilever's utilization of segmented elements ensures easy removal.

3 In order to eliminate the need for Stayform, Doka supplied a new standard blind tie system, which includes components to allow the exterior Frami panels to be jumped from floor to floor as gangs within the lifting capacity of the crane and maintain an overall formwork depth of less than 5-in. This allows the use of standard Frami panels as a blind side system.



“Our biggest challenge was the 22 feet cantilever beam in a tight space for that Doka provided blind side system that we can work with mini cranes. We want to thank Doka for supporting us with this big challenge”

Jose Alvarez, General Foreman | Moore Group



Scan QR-Code to watch the full testimonial

A View of Things to Come

The Casamar oceanfront development in Pompano Beach takes shape with pre-assembled and easy to handle formwork.

The 21 story Casamar is an ocean front condominium tower in Pompano Beach being developed by the Related group. It overlooks both the Atlantic Ocean and the Intracoastal Waterway. Doka is providing a complete turnkey formwork, shoring, reshoring and plywood package to Coast to Coast Forms. Doka's ability to provide a complete package of material as well as technical expertise and a "Let's make it Work " attitude was central in the project's success and in meeting the project timeline.

Challenge

The biggest challenge on this project is the tight lot lines with no room for laydown. For Coast to Coast Forms, there was also the real possibility of design changes in the field that would require formwork adjustments. Along with a wide choice of formwork solutions, field services and the use of plywood was important to the concrete contractor.

Solution

Doka's highly experienced sales and engineering specialists and field service technicians worked closely with Coast to Coast to develop a detailed preconstruction plan and design that provided the necessary scope and scale of formwork solutions. The lightweight, easy to handle Frami Xlife formwork systems were combined with 10k, Eurex 30 Props and truss tables for shoring and reshoring at the site. Further, Doka and Coast to Coast put together an optimized delivery schedule that assured timely delivery of the formwork solutions as needed. The use of Doka Truss Tables as low as level 3 allowed for tremendous efficiency on site. These tables reduced crane picks and coupled with DOKA's robust and competitively priced plywood allowed the Coast to Coast Forms team to meet a challenging schedule. ■



On-Time Delivery 1

By partially pre-assembling Frami Xlife formwork, Coast to Coast was able to move material directly from the delivery trucks into position for use, cutting down on the need for laydown space.

Curved Concerns 2

The distinctive curves of the Casamar tower design were easily formed flexible formwork.

Handling High Loads 3

On each floor, the durable and strong Eurex 30 Props are purpose-built to handle high loads.



The Facts:

- Project:** Casamar
- Location:** Pompano Beach, Florida
- General Contractor:** Coastal Construction
- Concrete Contractor:** Coast to Coast Forms
- Architect:** Rockwell Group & Arquitectonica
- Developer:** Lanoha Real Estate Company
- Type of structure:** Residential High Rise
- Height:** 220 ft.
- Stories:** 21 stories
- Products used:** **Core:** Frami Xlife; **Reshoring:** Eurex 30 Props; **Shoring:** Truss Tables and 10k; **Columns:** Frami universal panels



"Our biggest constraint was on-time delivery to support our construction progress on a very tight site. Doka solved that problem for us, also providing supervision and pre-assembly."

Gabriel Maldonado, Project Manager | Coast to Coast Forms



Scan QR-Code to watch to watch the full testimonial

Raise and Roll in Colorado

Adjustable steel-faced formwork supports RCC dam expansion

As part of a long-term water supply plan, Denver Water is raising the Golden, Colorado-based Gross Reservoir from 340-ft. to 471-ft. The multi-year Gross Reservoir Expansion Project is the largest dam raise in the U.S. and the largest roller compacted concrete (RCC) dam raise worldwide, according to the agency. The rise will almost triple the capacity of the reservoir, from approximately 42,000 acre ft. to 119,000 acre ft. The dam raising project also includes 118 concrete steps that rise from the bottom of the existing dam to the new dam crest. About 725,000 cu. yds. of RCC and over 90,000 cu. yds. of conventional concrete will be placed in total. That placement will occur around the clock during the spring, summer and fall work seasons beginning in May 2024. The dam rise project is scheduled to be completed in 2027.

Challenge

In the past, Denver Water has identified critical issues related to RCC concrete formwork in the way of efficiency and aesthetics.

Specifically, the agency wanted a tie form system that aligns with the dam face for aesthetics and to better support the wall forms from the pressure of freshly placed concrete. From a pour complexity standpoint, the dam face steps back with each lift and gets wider as work progresses. Denver Water also wanted a formwork solution that was quick and efficient to move, but with minimal ties for greater flexibility. Finally, to maintain the proposed pour schedule, the formwork supplier needed local service and supplies.

Solution

Doka was flexible and creative in providing solutions that meet the needs of this type of formwork. Working closely with Denver Water, Doka's Infrastructure Group designed a formwork system that incorporates horizontal adjustment to maintain horizontal tie spacing up the dam face. The solution combines both custom and standard girder forms to create a highly adjustable steel-faced formwork that offers



significant flexibility (easy to adjust and move), thereby keeping the pour process moving 24 hours a day, 7 days a week. The formwork solutions includes Xclimb 60 for the training wall girder formwork, Framax S Xlife panels on the lower training walls and WS10 Top 50 formwork beams on the trailing platforms. Formwork is assembled in a way that allows three lifts of 4-ft. before they are lifted for the next three lifts. On average, forms will be moved every three days. Down the road, Doka will install DokaXact Load and Pressure sensors for real-time concrete monitoring. ■



The Facts:

Project: Gross Reservoir Expansion

Location: Golden, Colorado

Owner: Denver Water

General Contractor: Kiewit Infrastructure and Barnard Construction

Construction Manager: Black & Veatch

Type of structure: Dam

Height: Increase height of dam by 131-ft.

Sq. Ft.: 725,000 cubic yards

Products used: **RCC Steps:** Doka custom steel girder design; **Training Wall Girder Formwork:** Xclimb 60; **Lower Training Walls:** Framax S Xlife panels; **Trailing Platforms:** WS10 Top 50 formwork beams; **Other:** DokaXact Load and Pressure sensors

1 The uncommon, aligned ties up the face of the dam provide a clean, aesthetic to the dam face to meet the high standards of Denver Water.

2 The new dam steps are formed using Doka's custom girder system. As the steps are formed, rollers compact the concrete.

3 Doka was the only formwork supplier that had a local yard to service and supply the needs. At the yard, a purpose-built platform is used to attach to the custom girders, providing a safe space to attach ties to the girders as these systems get higher off the ground.



A Pavilion of Parabolic Possibilities

From its curved walls to the varying arch radii, the new park pavilion in Battery Park City, New York, is an attention-grabbing piece of architecture and a unique opportunity to demonstrate the formwork flexibility.



A Seamless Solution
Doka designed, preassembled, and delivered parabolic architectural formwork gangs that extended up to 28-ft. high.



“We rely heavily on Doka to design and pre-assemble all of the formwork as well as helping to precisely locate the systems at the site. I don’t think anyone else could do the job that Doka is doing here.”

Brian Duffy, Superintendent | Darcon Construction Corp.

As part of the Lower Manhattan Coastal Resiliency (LMCR) Master Plan, the South Battery Park City Resiliency Project will provide a reliable coastal flood risk control system during storm events. One component of this project is the reconstruction of the Robert F. Wagner Jr. Park, which includes the rebuilding of the Wagner Pavilion. The new pavilion is a unique two-story, concrete superstructure that incorporates three full arches, multiple staircases and various other intricate elements including a dome.

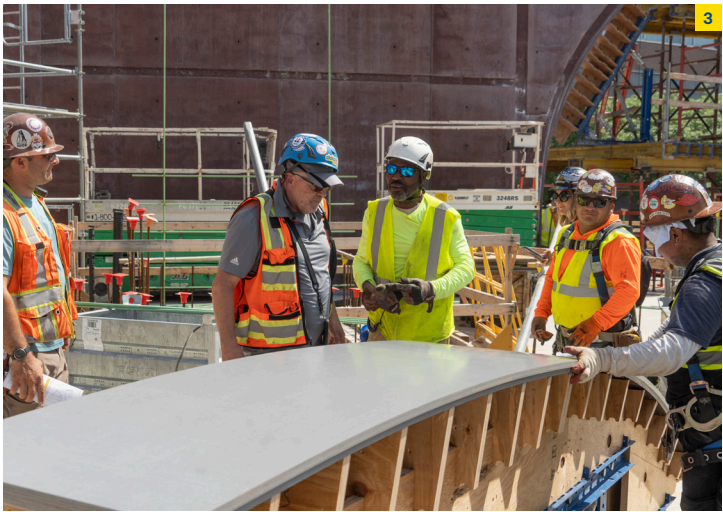
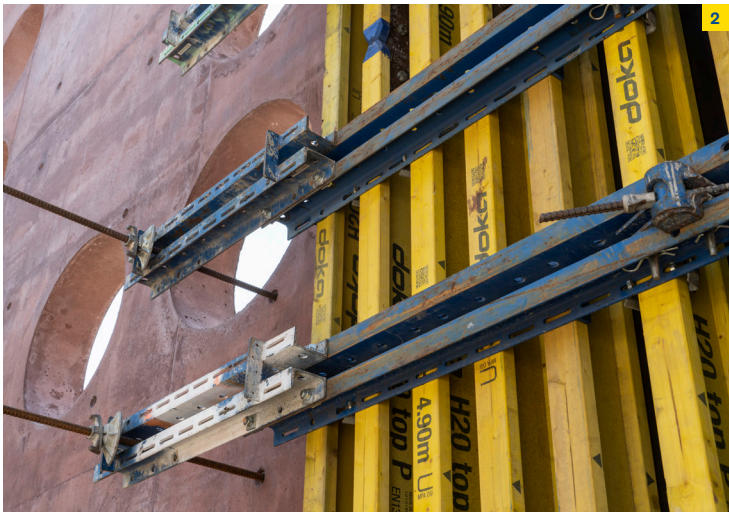
Challenge
The 19,204-sq.-ft., 28-ft. high Wagner Pavilion is an architecturally complex design that requires meticulous engineering and craftsmanship to construct. The biggest challenge is the unusual geometry which, in many cases, has no continuous radius. Therefore, the plywood formwork face sheet needs to be bent in two directions as well as back cut or kerf bending (cutting grooves in wood formwork) to achieve the required tight radius.

Solution
The Darcon Construction Corp. team and Doka engineering and field teams worked closely to ensure every element of the Wagner Pavilion’s formwork and concrete pouring was performed with precision.

The team used the simple Doka Superdek drop head slab formwork on the first floor and Frami specialized framing for the foundation walls. Critical to the success of the project is an advanced CNC machine that shapes the sustainable plywood timbers and plywood gussets with no visible fasteners. ■



Scan here to watch the full testimonial



The Facts:
Project: Wagner Park Pavilion
Location: Battery Park City, New York
General Contractor: EW Howell Construction Group
Concrete Contractor: Darcon Construction Corp.
Architect: Thomas Phifer and Partners
Developer: Battery Park City Authority
Type of structure: Park pavilion
Height: 28 ft.
Stories: 2
Sq. Ft.: 19,204
Products used: **Core:** Frami Xlife, Large Area formwork Top 50; **Façade:** Large Area formwork Top 50; **Reshoring:** Eurex props, 10k, Super Props; **Shoring:** SuperDek, 10k

Geometric Complexity 1
The modular Large Area formwork Top 50 facilitated the construction of unique design elements, such as exposed archways and complex wall configurations, pour of high quality exposed concrete within the complex radial geometry.

All Shapes and Sizes 2
The Large Area formwork Top 50 system, which includes the H20 formwork beams, steel walings and freely selectable form-facing options proved ideal for meeting widely varying geometric design.

Specialized Framing 3
Critical to the success of the project is an advanced CNC machine that shapes the sustainable plywood timbers and plywood gussets with no visible fasteners. The plywood formwork necessarily had to bend in two directions.

Doka USA Preassembly Capabilities: Precision and Efficiency in Action

At Doka USA, our preassembly capabilities are designed to streamline construction processes and enhance efficiency. By leveraging our extensive expertise and advanced technologies, we provide formwork solutions that deliver optimal results, as exemplified by our work on the Wagner Pavilion project in Battery Park City, NY.

Streamlined Formwork Solutions

Doka's preassembly service combines our high-quality formwork systems with custom-made units to create tailor-fit solutions for complex projects. This approach ensures that formwork is perfectly, exactly or precisely aligned with project specifications, reducing on-site assembly time and improving overall efficiency.

Success in Action

The Wagner Pavilion project highlights the transformative impact of Doka's preassembly services. By delivering custom preassembled formwork units and integrating advanced solutions, we supported the successful execution of this architecturally complex pavilion, demonstrating the tangible benefits of our approach. This project involved constructing a

unique two-story pavilion with intricate geometric features, including curved walls and arches. To meet these complex design requirements, Doka provided preassembled formwork gangs tailored to the project's specific needs.

Partner with Doka USA

Doka USA's preassembly capabilities offer a competitive edge for formwork construction, ensuring efficiency, precision, and cost-effectiveness. For projects requiring custom solutions and optimal performance, our preassembly service is the key to achieving exceptional results. Partner with Doka USA to experience the difference our comprehensive services can make. From initial planning to project completion, we're here to support you every step of the way.



Scan QR-Code to watch Doka Custom Preassembly Service Wagner Pavilion

"Our CNC wood cutting machine in the preassembly warehouse delivers exact cuts of complex designs with speed and accuracy, streamlining production and ensuring top-quality formwork components." Dumar Posada - Lead operator takes a break to show us the current item.



After the frame is constructed, walers are installed, shaping timbers are positioned, and the underlayment plywood is in place. The final step involves installing the face sheet using a back-screwing technique through the underlayment to ensure that no fasteners are visible on the face. Don Mettler is carefully installing the back screws.

Advantages of Doka Preassembly

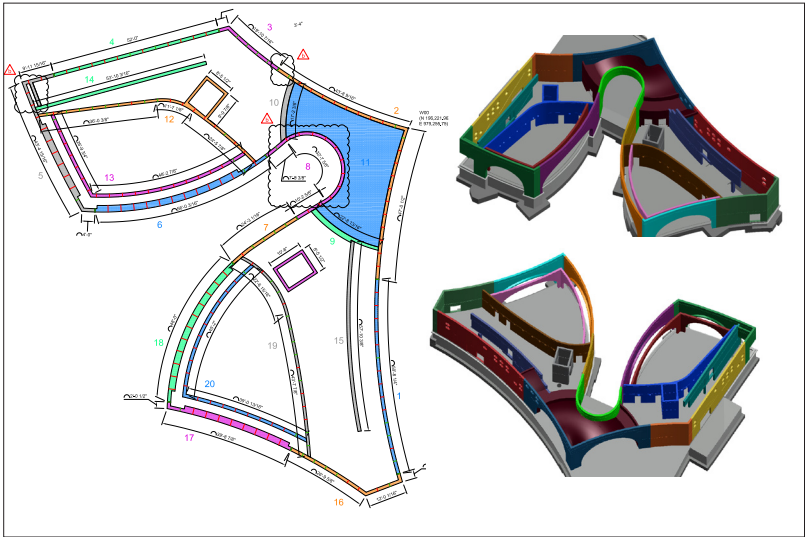
Time and Cost Savings:

Efficient Assembly: Our preassembled formwork units reduced assembly time on-site, easing the construction schedule and minimizing the demand on manpower resources.

Cost Efficiency: Shortened rental periods and reduced crane capacity translated into significant cost savings. Less material was stockpiled on-site, reducing clutter and associated costs.



Preassembly Supervisor Marvin Zarate and Branch Manager John DiMicco discussing the accelerated production to meet the project schedule.



Doka's inhouse engineering team created a BIM Revit 3D model of the complex structure to support the design and on-site construction team. This advanced technology also supported the design and preassembly of each individual formwork element to significantly minimize conflict in the field and increase overall on-site production.

Precision and Quality:

Perfect Fit: The Wagner Pavilion required precise formwork to accommodate its non-standard curves and archways. Doka's preassembly service ensured that the formwork fit perfectly, facilitating a smooth installation process and high-quality concrete pours.

Advanced Technology: Utilizing CNC-machined plywood for formwork, we achieved the tight radii and complex shapes required by the pavilion's design, all while avoiding visible fasteners.

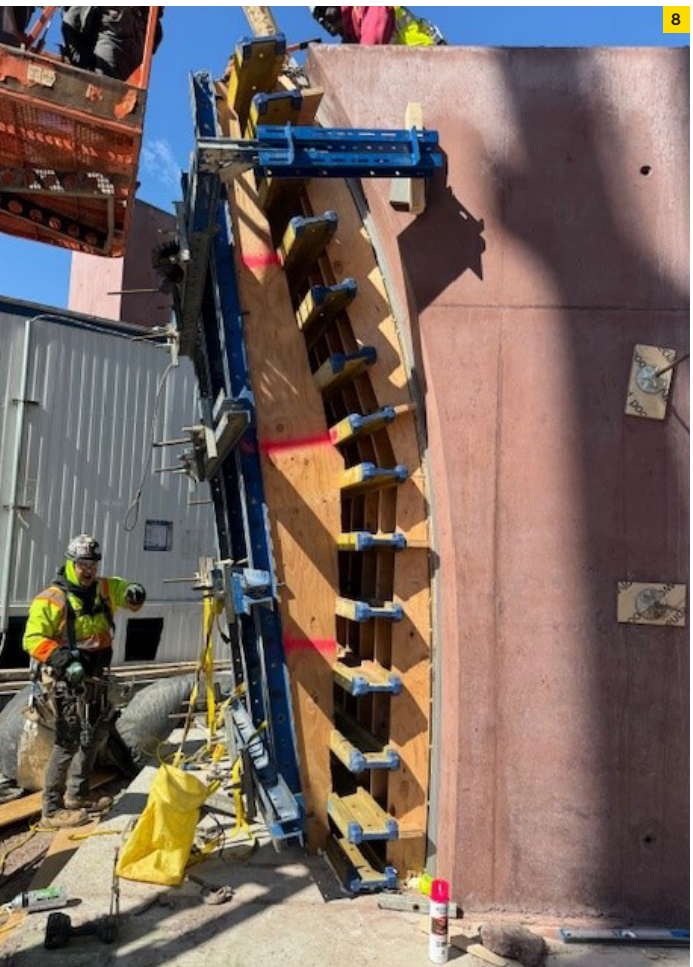
Accelerated Project Progress

Streamlined Construction: The preassembled units sped up the construction process, enabling the project to advance more quickly and efficiently. ■

- 1 Our team of skilled carpenters creating a complex box out on one of the pour 14 gangs.
- 2 Jose Rodriguez, preassembly Carpenter foreman and Kyle Essig Account Manager after QC inspection.
- 3 Each of the pre-assembled gangs is labeled, measured, and undergoes a quality check before being loaded onto the truck and shipped to the site.
- 4 Checked, packed, and prepared for delivery.
- 5 Preassembled architectural formwork gangs delivered directly to the jobsite and installed in-place.



- 6 Doka's preassembled Top 50 braced, tied, surveyed and ready for concrete.
- 7 Doka's preassembly service ensured that the formwork fit perfectly, facilitating a smooth installation process and high-quality concrete pours.
- 8 The Wagner Pavilion required precise formwork to accommodate its non-standard curves and archways.



The Building Blocks of a Lock

As construction crews build the monolith sections that form the new Kentucky Lock project, specialized formwork solutions streamline the complex workflows.

The Kentucky Lock, located near Gilbertsville, Kentucky, is the lower gateway to more than 700 miles of navigable waters in the Tennessee River Basin. The locks work to move commercial, military and recreational boats between the higher-elevated Kentucky Lake and the Tennessee River. To improve navigation on the Tennessee River, the U.S. Army Corps of Engineers (USACE) is constructing a new 1,200-ft. x 110-ft. lock in this area that will be twice the size of the existing lock. The lock is anticipated to be operational by 2029.

Challenge
Thalle Construction Company is tasked with developing all onsite infrastructure to support the new lock construction project including an onsite concrete plant capable of producing the 375,000 cu. yds. of concrete required for the structure, thousands of feet of conveyors to transport the concrete from the plant to point of placement, formwork and steel fabrication shops, laydown yards and aggregate stockpile structures. Key in the project is the construction of 52 monolith sections which span over 100 vertical feet from the foundation to the top out.

A job of this scope requires considerable amount of formwork, particularly when it comes to construction the varying monolith configurations that form the walls of the lock. When the project was first initiated, USACE and Thalle needed formwork materials on site within a short time frame, with first equipment deliveries to begin within a month of engineering design.

Solution
Doka engineering and operations team worked closely with Thalle and USACE to acquire and deliver the necessary formwork solutions to site soon after the contract award. In total, approximately 350,000 lbs of D22 and Top 50 equipment was shipped in the first four months of the project (June – September 2023).

The flexible D22 climbing system allowed for a quick transition from single sided to elevated



Site Specific Adaptation
Doka developed a custom D22 bracket that had an adjustable leg to accommodate different rock elevations.

platforms while the Top 50 helped form the wall system with Dokaflex for shoring. The first three lifts were completed with the D22 starter block and then crews transitioned to the D22 platforms with roll backs. In addition, Framax with stripping corners was used on the tight small ladder access areas within the monolith structure, allowing for easy removal of the boxouts. ■



The Facts:
Project: Kentucky Lock Addition Downstream Lock Monoliths
Location: Grand Rivers, Kentucky
General Contractor: Thalle Construction Company - A Tully Group Company
Architect: US Army Corps of Engineers, Nashville, Tennessee
Developer: TVA Fossil and Hydro Engineering
Type of structure: Lock and Dam
Height: 100 ft.
Sq. Ft.: 375,000 cu. yds
Products used: **Wall System:** Top 50; **Shoring:** Dokaflex; **Climbing System:** D22; **Other:** Framax with stripping corners

Reduced Reuse 1
The Top 50 formwork beams minimized the number of custom panels and had a higher reuse rate.

Pre-Assembly Edge 2
A nearby laydown yard is used to pre-assemble the Large-area formwork Top 50 systems.

Safe Access 3
The sturdy dam formwork, including safety platforms and the preassembled gallery formwork, formed a complex network of control walkways inside the dam.

Midtown Mixed-Use Cycles Up

A tight schedule, limited access and close proximity to other structures are just a few of the challenges to constructing a glass-clad cylindrical tower in Midtown Manhattan and ideal conditions to demonstrate formwork adaptability.

The slender mixed-use skyscraper is located at 100 West 37th Street located at the intersection of Sixth Avenue and West 37th Street in the Garment District of Midtown, Manhattan. When complete, it will include 300 condominium units as well as 86,817 sq. ft. of commercial space.

Designed by C3D Architecture and developed by Sioni Group under the 989 Sixth Realty LLC, the structure features a conjoined glass-clad cylindrical tower with a wraparound landscaped terrace at the top. The skyscraper is on track for completion in 2026.

Challenge

Located in Midtown, Manhattan, the building footprint is small with other buildings located on two sides and limited street access for deliveries or to unload material. Those two buildings have less than 12-inches of clearance. Also, there is no room for a permanent crane and only small mobile cranes are available to lift material, including formwork, into place. Finally, the contractor was given a demanding construction schedule to complete the concrete work on the tower with a cycle time of three days per floor.

Solution

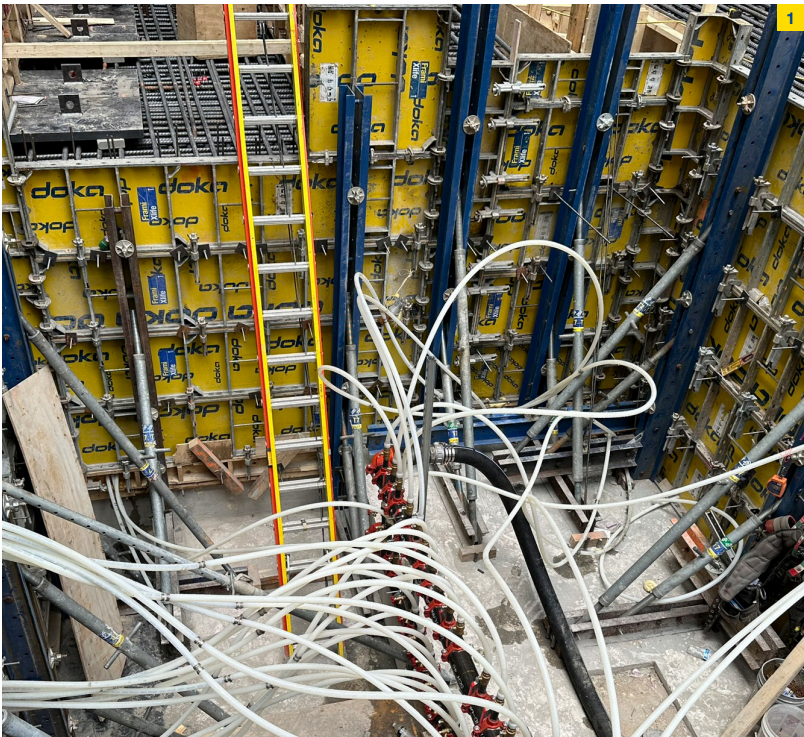
From the inner substructure to the columns and perimeter walls, Precise Construction Contracting looked to Doka to resolve some unique challenges.

For single-sided pours, Doka designed a lightweight Frami handset system with A-frame brackets that didn't require a crane for setup. A blind-side Frami formwork system was used for pouring exterior shear-walls to accommodate the tight clearance between adjacent buildings. For the foundation walls, Precise broke pours into four segments, with the largest pour at over 1,050 cu. yds. ■

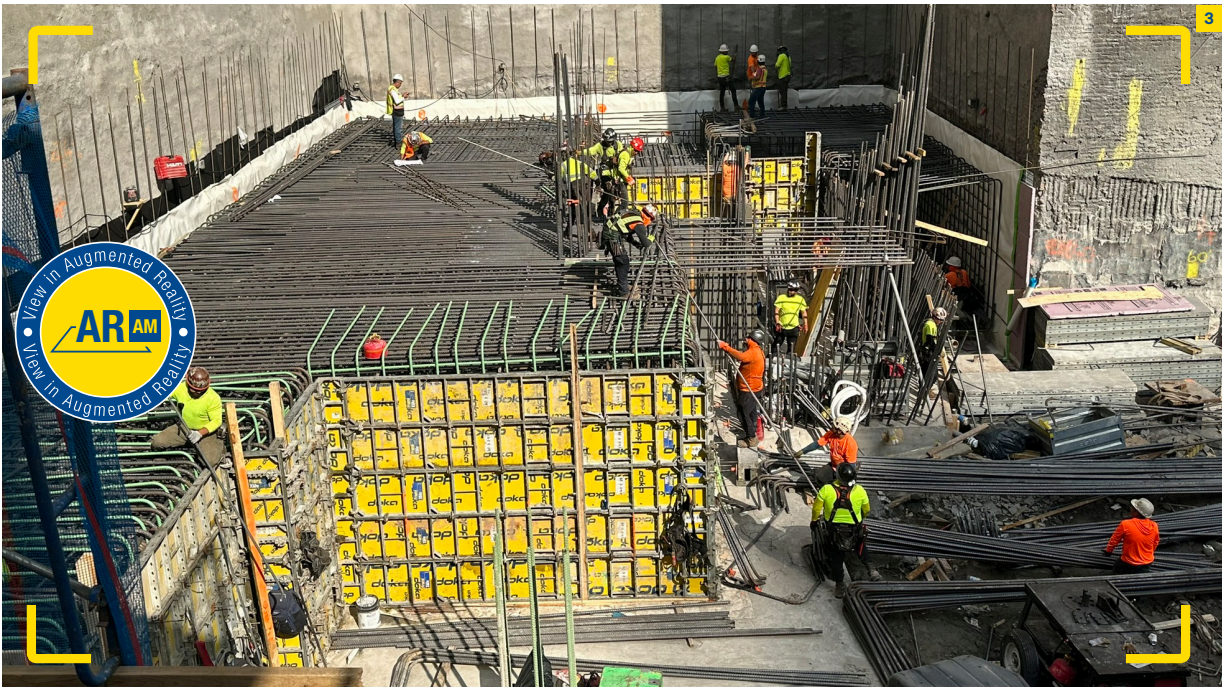


Cut Conditions
Frami was the perfect system to adapt to cut-up geometry of the interior foundation walls.

- The Facts:**
Project: 989 6th Avenue
Location: Manhattan, New York
General Contractor: Omni Build
Concrete Contractor: Precise Construction Contracting, Inc
Architect: C3D Architecture, PLLC
Developer: Sioni Group under the 989 Sixth Realty LLC
Type of structure: High rise
Height: 789 ft.
Stories: 72 stories (including mechanical)
Sq. Ft.: 4,200 per floor
Cycle time: 3 days per floor
Construction time: Early 2024-mid-2025
Products used: **Core:** Frami, Xclimb 60; **Exterior Shear Walls:** Frami, Xclimb 60; Protection Screen; **Reshoring:** Eurex Props; **Other:** Loading Platforms



- Concrete cooling system** 1
The mass concrete required a special cooling system to avoid concrete overheating during curing.
- Single-Sided Support** 2
Doka Frami forms and single-sided brackets were utilized to cast 11-ft high pours.
- Easy Field Assembly** 3
Frami was an ideal system for the jobsite due to lightweight, easy assembly and adaptability to building geometry.





1



2

The Facts:

Project: Soleste on the Bay
Location: North Miami Beach, Florida
General Contractor: Estate Companies
Concrete Contractor: Florida Concrete Structures
Architect: Formgroup
Developer: Estate Companies
Type of structure: Multi-family mixed use apartment
Height: 297 ft.
Stories: 29
Sq. Ft.: 700,000
Construction time: Early 2024-mid-2025
Products used: **Reshoring:** Doka Eurex Props;
Shoring: 10K, Truss Tables; **Facade:** MF240, Frami
Core: Frami

On the Fly Adjustments 1

Flying truss tables was one challenge early on. Initially, the construction crew planned to close a lane and fly the trusses, but the city denied the request for a lane closure. The east and west were limited by other structures, so plans were adapted to fly the tables from the south.



“It’s been a blessing to have Doka on site, to engineer the proper table layout so that we can have an efficient project and make schedule. Anytime we have an issue or we need to find a solution, John Skora is available to help us out.”

Jeremiah Jimenez
 Project Engineer | Florida Concrete Structures and the Estate Companies



Scan here to watch the full testimonial

Shored Up 2 Doka 10k and Truss Tables provided much of the shoring for the tower construction.

Vertical Stability 3 Frami Xlife walls and columns provide the core formwork for verticals.

A High Rise by the Bay

A new mixed-use high-rise residential tower challenges formwork engineers and field crews to work around limited space, restricted access areas and onsite redesigns.

Located near Maule Lake and Dumfoundling Bay, Soleste on the Bay is a 29-story multi-family mixed-use apartment under construction in North Miami Beach. Estate Companies, acting as both developer and general contractor, is building the 363-unit luxury complex.

Challenge

The location of the Soleste on the Bay high-rise is tight with restricted space for materials and a number of restricted areas of access. As both developer and contractor for this project, Estate Companies needed support from its formwork supplier to adapt

to the redesigns that were necessitated by the city during the permitting process.

Solution

With a focus on engineering, customer service and product availability, Estate Companies selected Doka to support its formwork requirements. Critical to the selection was the ability to provide quantity and quality solutions for this large scale project. Multiple on site, on-the-spot meetings between Doka Sales, Engineering, and Estate Companies were essential to keep this project moving forward. ■



3



Doka Enables Safe Demolition of Vanderbilt's Oxford House

Innovative use of protection screens keeps debris contained amidst tight construction zone

While protection screens might not be the first thing that comes to mind for a demolition job, one contractor has found them to be the ideal solution for the removal of a multi-story office building in Nashville, Tennessee.

On the compact Vanderbilt University Medical Center (VUMC) campus, Spirtas Worldwide, a demolition company based in St Louis, Missouri, was challenged to demolish the Oxford House, a 12-story administrative office building. All demolition materials had to be safely contained and removed without impact to the nearby active work zones or the adjacent hospital.

Challenge

The Oxford House is on 21st Avenue between the Central Garage parking structure and the Vanderbilt Medical Center, with the VUMC link tower building behind. The demolition is part of VUMC's expansion of the Vanderbilt University Hospital, which includes the ongoing construction of a 470,000-square-foot

tower and connected parking structure. In some parts of the Oxford House demolition, crews on nearby projects were only inches away.

To further complicate the effort, the Oxford House structure was built in the 1960s using a jack-slab or lift slab technique. In this method, each floor is cast on top of a previous slab and then raised by hydraulic jacks into position. Unfortunately, the steel reinforcements within the Oxford House slabs have deteriorated over time, a weakness that could potentially cause a slab to fail during demolition, causing a pancake effect.

In addition, there is limited space on the site to set up equipment and stage protective screening materials. The screens would necessarily need to be delivered (largely at night), installed, and removed in stages as demolition progressed from floor-to-floor, from top to bottom, which would require considerable coordination with multiple contractors.



- 1 One hundred feet tall Protection Screens were used to demolish the building safely.
- 2 Screens were delivered pre-assembled to the site and lifted in 40-foot-long segments onto the building.

A tight timeline added another layer of complexity. All protection screens had to be designed and approved by the engineer-of-record and the first screens installed within two months.

Solution:

Doka developed a protection screen solution that can essentially climb down—not up, like the more familiar use of screens when building a high rise. One of the key challenges with designing the protection systems was that the screens needed to be 100-feet tall but could only be delivered and lifted to the roof of the building in 40-foot-long segments that could be lifted by the onsite crane.

The Facts:
Project: Oxford House
Location: Nashville, Tennessee
General Contractor: Spirtas Worldwide
Type of structure: Office Building
Stories: 12
Sq. Ft.: 470,000
Products used: Protection Screen



“This demolition job does not provide any room for error. We have hospital pedestrian and vehicle traffic incredibly close and at times under the building we are demolishing. Controlling material during the demolition process is essential as it is imperative to keep not only our workers safe but also the public in a highly sensitive environment. The protection screens from Doka have done exactly what we intended throughout the demolition sequence” stated Chris Hancock, Project Manager, Spirtas Worldwide.

As a demolition contractor, Spirtas had little experience working with, formwork, or protection screens, thus training was essential. Doka experts facilitated hands-on training with the demolition crew. During the first screen installation, Doka field supervisor Doug Robinson guided the crew through the step-by-step installation. After the crew got the process down, he would check in every few days as additional layers were installed to ensure the proper procedures were being followed. This training approach helped improve efficiency as the crew became more familiar with the process. ■



A Core Connection

Constructing three cores ahead of the decks opened up new opportunities for one concrete contractor to deploy self-climbing formwork and a suspended trolley system.

The final design calls for a 31-story tower that will incorporate an 18,000-sq.-ft. North Market expansion, 174 residential units, 65,000 sq. ft. of office space, a 162-room hotel and a 350-space parking garage, as well as additional bar, restaurant, and retail space.

Challenge
Lithko Construction was tasked with building the cores of this 31-story tower, while another contractor worked

on the horizontal shoring. In order to avoid coordination issues, Lithko was tasked with constructing the three cores using self-climbing formwork ahead of the slab work. As well, the three cores—two that would be service elevators and one spare core—were relatively small compared to more conventional four- or six-bank elevators, which limited the space available for the formwork and for crew access.



Solution
Working with Lithko, Doka designed a custom engineered single stroke Super Climber self-climbing solution combined with Large-area formwork Top 50.

To provide access to and from the cores during construction, Doka also installed a suspended trolley system with Staxo stairs to be erected underneath the climbing cores as they progressed upwards. This solution lifts and raises each section of steel stairs and beams allowing the project team to access the cores more easily as construction progressed. ■

- The Facts:**
- Project:** The Merchant Building - North Market Tower
 - Location:** Columbus, Ohio
 - General Contractor:** Lithko Construction
 - Architect:** NBBJ
 - Developers:** Rockbridge and Edwards
 - Type of structure:** Retail, office, hotel, residential
 - Height:** 356 ft.
 - Stories:** 31 stories
 - Sq. Ft.:** 7,000 per floor
 - Cycle time:** 3 days per floor
 - Construction time:** 2 years
 - Products used:** **Core:** Super Climber, Top 50; **Other:** Staxo



1 One of the biggest challenges on the project was limited space for formwork and crew access. The Staxo stairs helped improve access.

2 Doka's versatile Top 50 formwork used in combination with the Super Climber self climbing equipment offer a fast and safe solution to achieve the project goals.

