TRU-LIFT®

SELF-CLIMBING CORE FORMWORK SYSTEM

At Work For You™

Construction of SalesForce Tower (Tallest Skyscraper in San Fransisco)

BY BRAND SAFWAY

Aluma SYSTEMS

BY BRAND SAFWAY

TRU-LIFT®

SELF-CLIMBING CORE FORMWORK SYSTEM

The Sky's the limit with one of the industries top lifting formwork system and its team of pioneers and experts.

Introduction

Tru-lift is the new *Self-Climbing Core Formwork System* developed by Forming Concepts, a BrandSafway Company. Designed to minimize construction cycle times and maximize safety, Tru-lift's fully boarded top platform is designed to carry the concrete boom and any additional materials required, ensuring everything is on hand as it is needed - important when forming at higher floors.

At Forming Concepts, we work with our customers to ensure we minimize cycle times, and as such can provide the option of pre-assembled panels upon delivery to site to minimize on site set up times. The service we provide is the result of over 60 years experience, so when you deal with Forming Concepts, you talk to people who understand the working environment, technical difficulties and challenges you face.

Our Story

In 2005 Aluma Systems became a subsidiary of Brand Energy & Infrastructure Services and in 2017 BEIS combined with Safway to establish the largest global provider of specialized services for the global energy, industrial and infrastructure markets.

Aluma Systems services the concrete construction industry in North and South America with the addition of two other globally renowned market leaders: SGB and Hünnebeck. This Forming & Shoring coalition benefits our customers from a closely knit network comprising over 300 branches in 32 countries. Together, BrandSafway has more than 36,000 employees and generates annual revenue in excess of US $5.1 billion

BRAND SAFWAY™

Aluma Systems | SGB | HÜNNEBECK | FC | BY BRAND SAFWAY

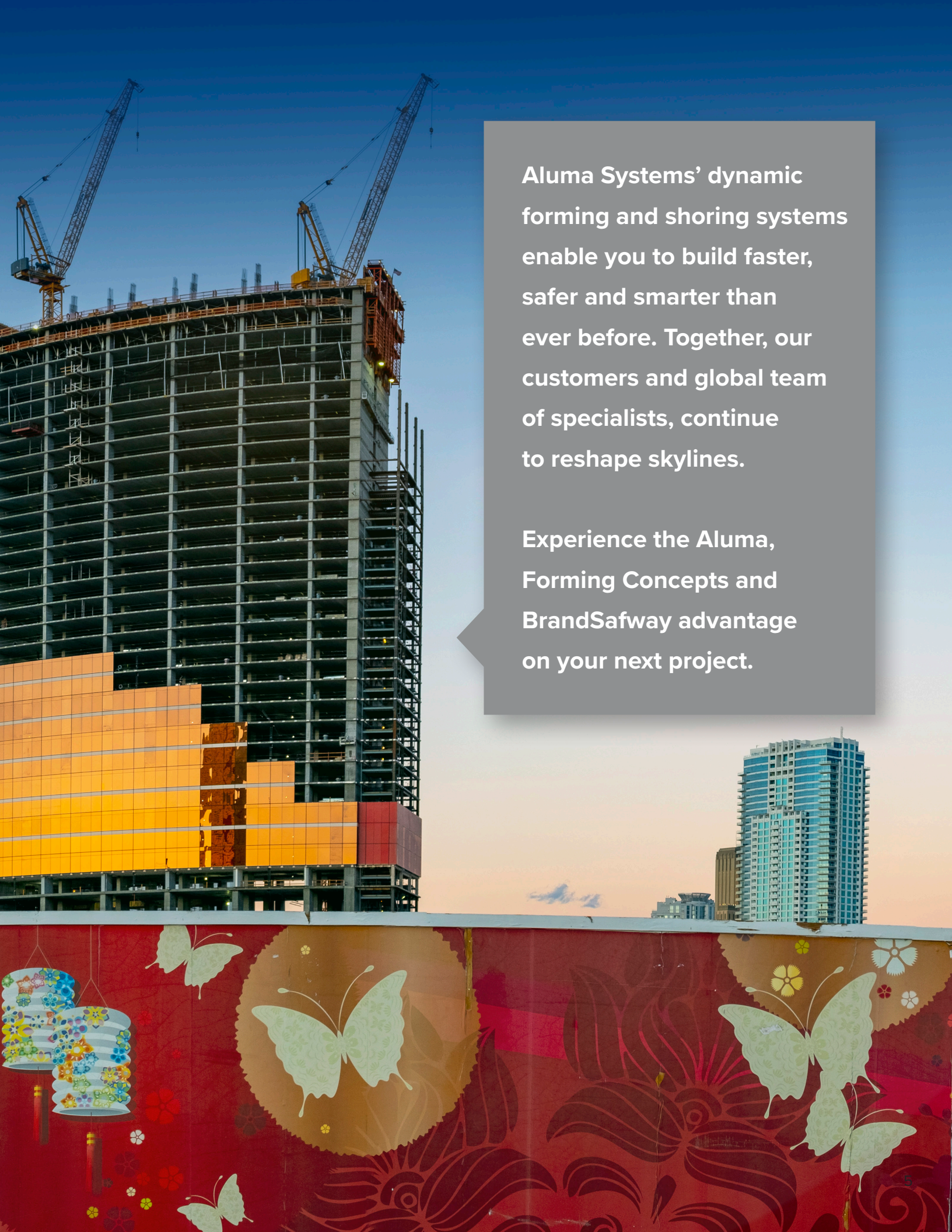
Safety First

"Aluma Systems with Forming Concepts has an uncompromising determination to provide the highest standards of safety leadership. We comply with international codes of practice and frequently win awards for safety excellence from our customer base."

From Left to Right: Erielle, Designer | Tamer, Speciality Projects, Engineer | Robbie, Site & Yard Coordinator | Jammie, Skilled Labor

Solutions+

Forming & Shoring Equipment to Construct
Multi-level Residential & Commercial



Aluma Systems' dynamic forming and shoring systems enable you to build faster, safer and smarter than ever before. Together, our customers and global team of specialists, continue to reshape skylines.

Experience the Aluma, Forming Concepts and BrandSafway advantage on your next project.

Features & Benefits

TRU-LIFT® | SELF-CLIMBING CORE FORMWORK SYSTEM

Safe

Ability to have fully boarded working platforms create a safe working area. Concrete placement from top working platform via hatches in the upper deck, maximize safe working practices. External panels supported off overhead steel beams, easily retracts, providing safe access for panel cleaning & rebar placement.

Easy

Hydraulic stripping corners allow the quick and easy stripping and re-setting of interior wall formwork.

Versatile

All sizes of core walls can be accommodated, maximizing the versatility of the system.

Effective

Complete system raised during the lifting cycle, maximizing system effectiveness. Up to 50 T hydraulic cylinder, climb system with a simple push of a button in as little as 20 min

Reuseable

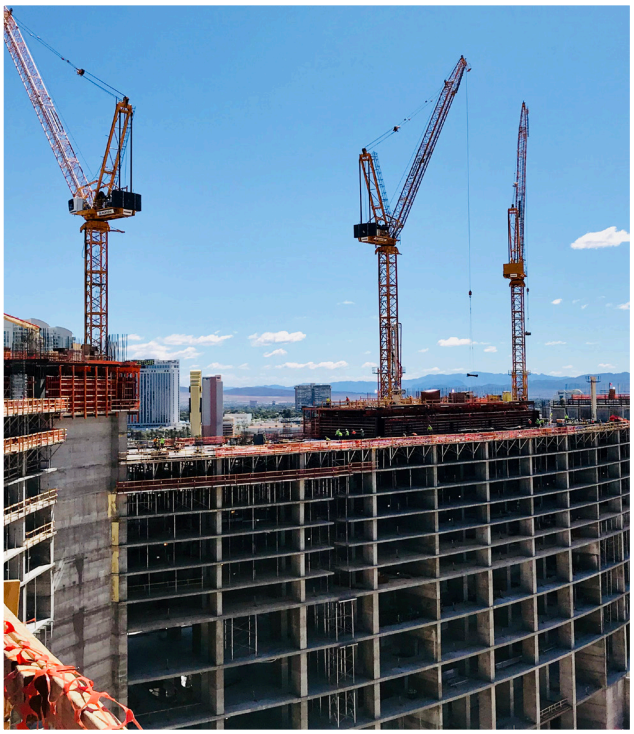
Reusable tapered tie system eliminating the use of sacrificial hardware, minimizing hardware costs.

Efficient

Minimal number of components ensures quick & easy erection, maximizing construction cycle times. Trailing platforms allow remedial work to previous pours, maximizing efficiency. Controlled lifting of equipment through use of hydraulics, eliminating crane time and maximizing safety.

Wolf Point | Chicago | USA

Tacoma Convention Centre | Washington | USA



Resorts World | Las Vegas | USA

400 Broadway | Los Angeles | USA

Concrete Delivery, Elevator Core | Washington | USA

Safety Features

TRU-LIFT® | SELF-CLIMBING CORE FORMWORK SYSTEM

Tru-lift has a range of both inbuild and additional optional safety add-on features to ensure the highest levels of safety are maintained at all times

Options:

1 Handrails

Full perimeter handrails to upper and lower platforms as well as internal hanging platforms for areas not fully covered

2 Perimeter Screen

Optional use of reinforced PVC sheeting

3 Enclosed Ladders

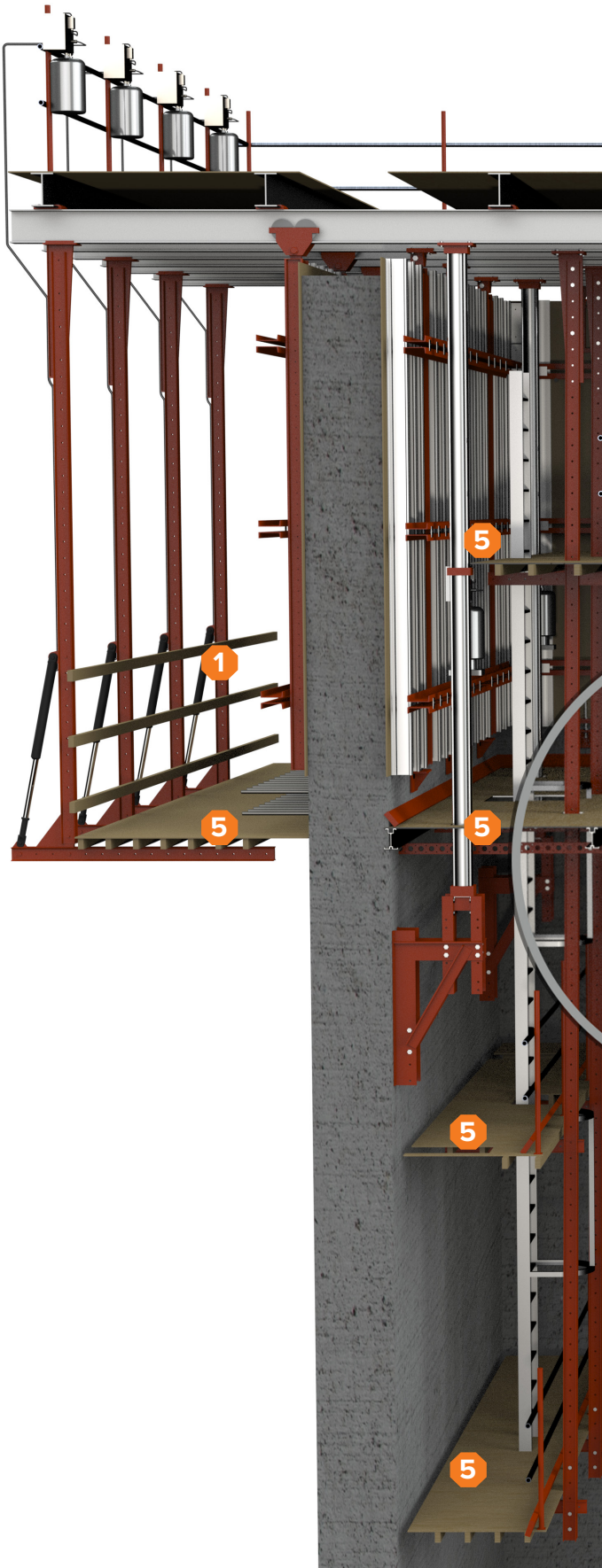
Full ladder access between platforms ensuring accessibility at all times during the various cycles

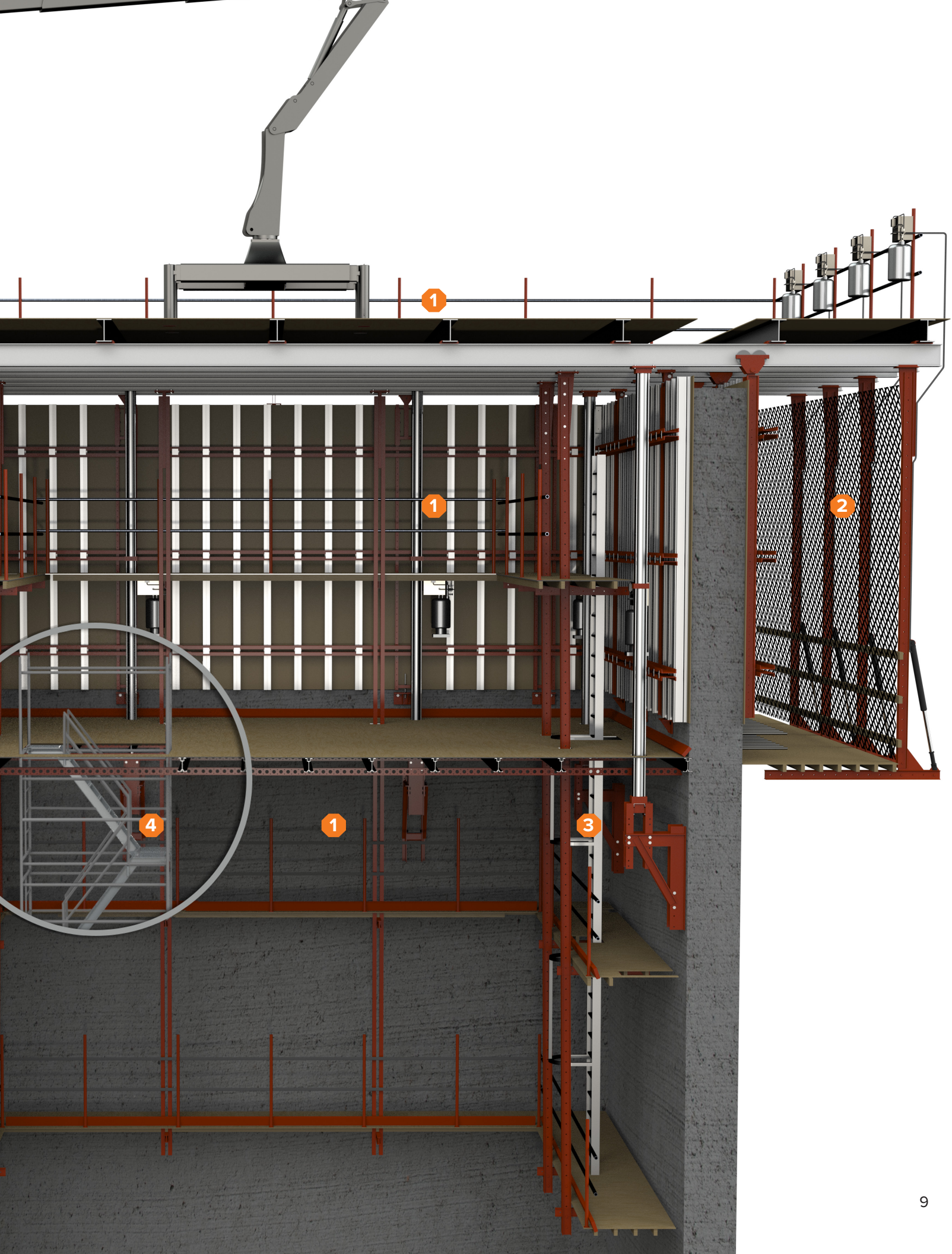
4 Inbuilt Stair Access Option

Optional using a modular stair access tower system supported off the internal platform allowing accessible egress/ingress from desired floor level below the self climbing system

5 Working Platforms

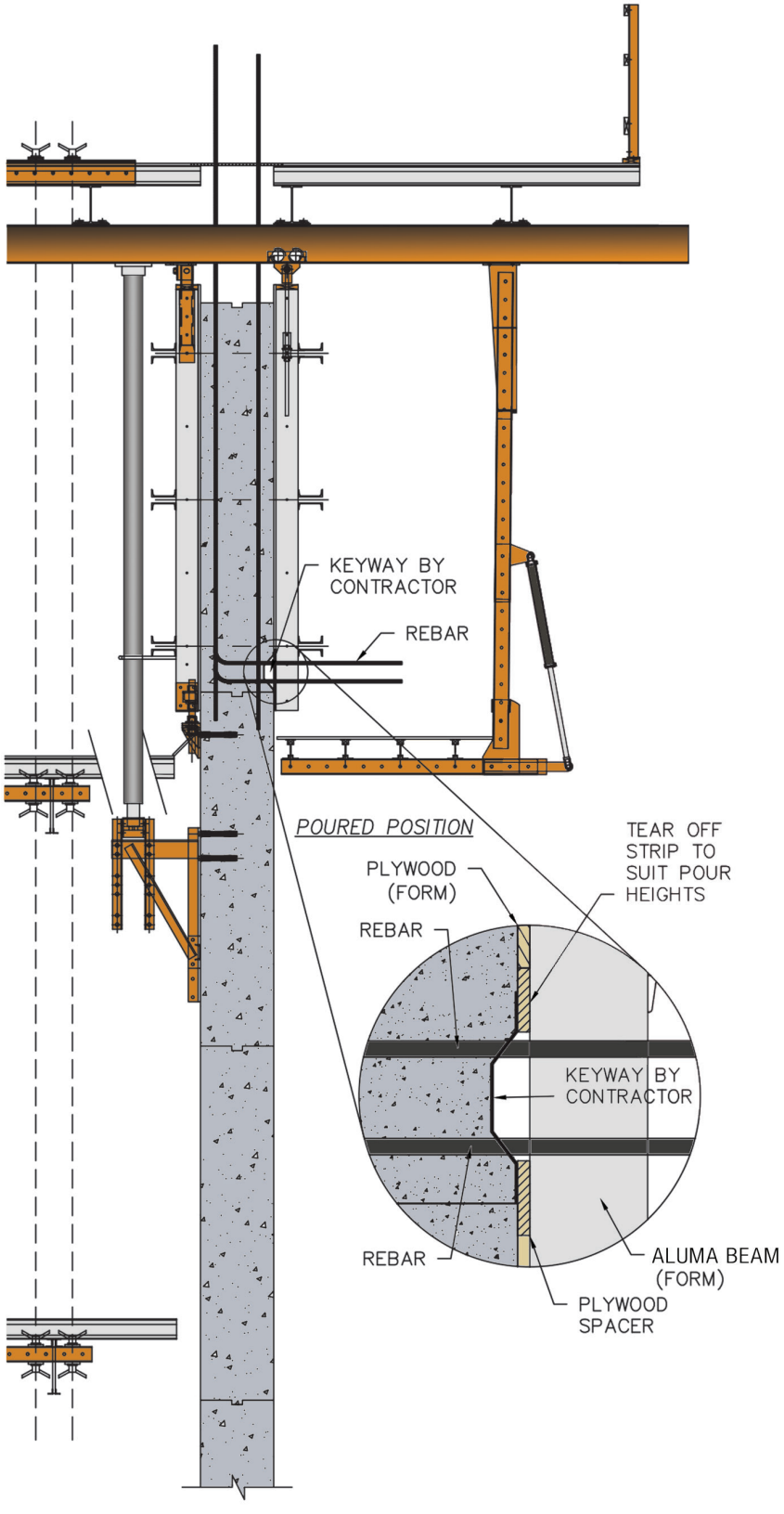
Aluma Beams using Plywood as decking

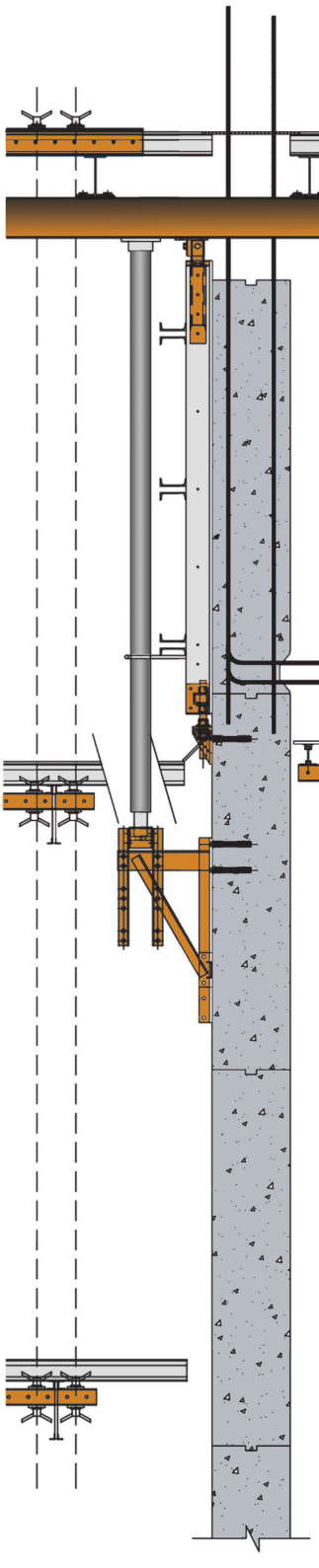



1
1
2
4
1
3

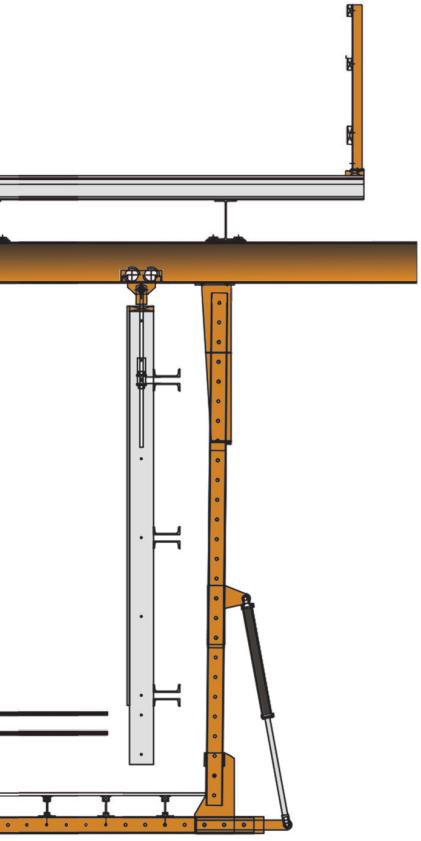
New Features

TRU-LIFT® | Dowel Bar Splicers Elimination Systems (Patent #9,611,663)

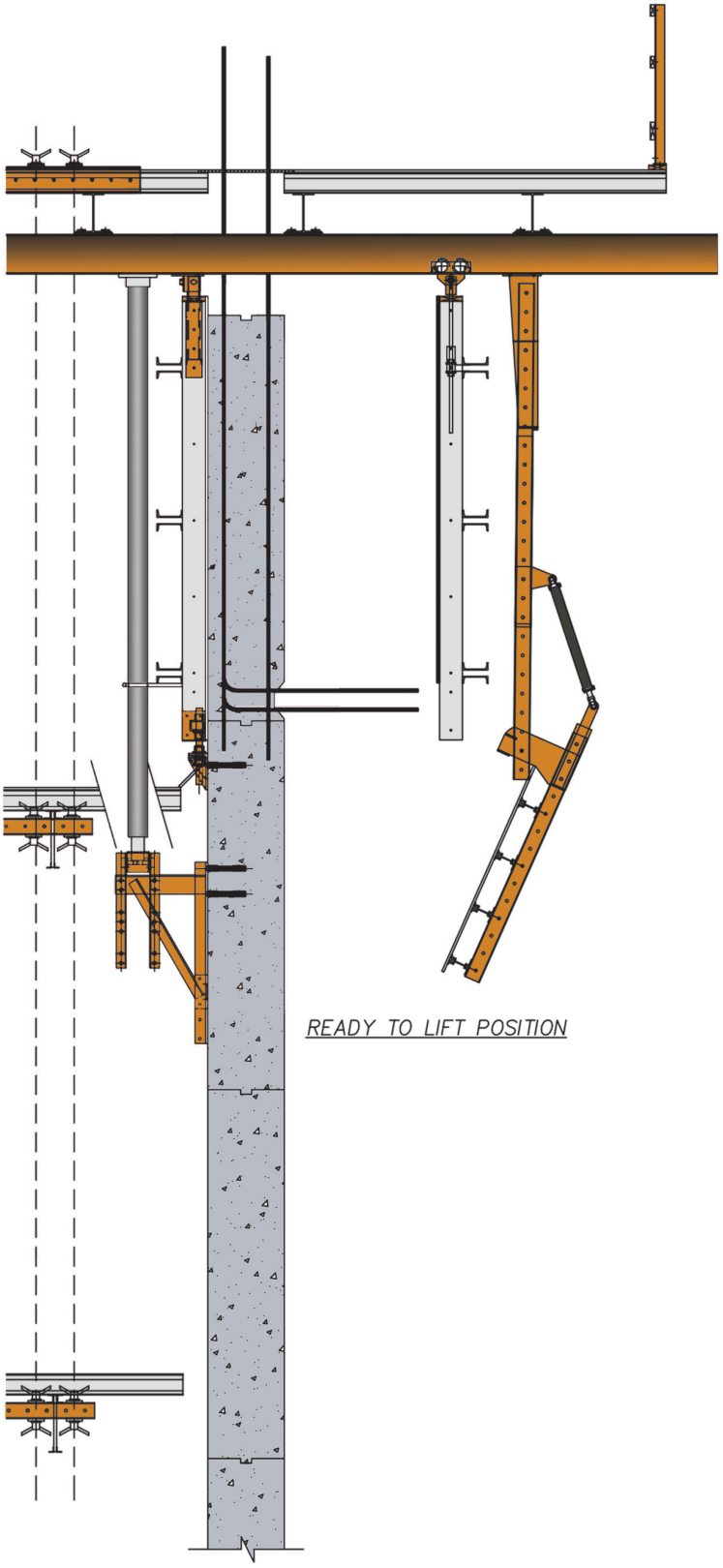




Forming Concepts' New Generation *Dowel Bar Splicer Elimination System* allows the contractor to utilize the *Tru-Lift Self-Climbing Core Formwork System* while pouring the elevator core walls ahead of the slabs. This system eliminates expensive dowel bar splicers that are normally required when utilizing this construction method. The dowel bars are allowed to protrude through the outside forms. Once the forms are rolled back off the rebar, the outside scaffolding is retracted clear of the rebar and the system lifted. This method speeds core construction without any delays waiting for the decks to keep up.



ROLLED BACK POSITION

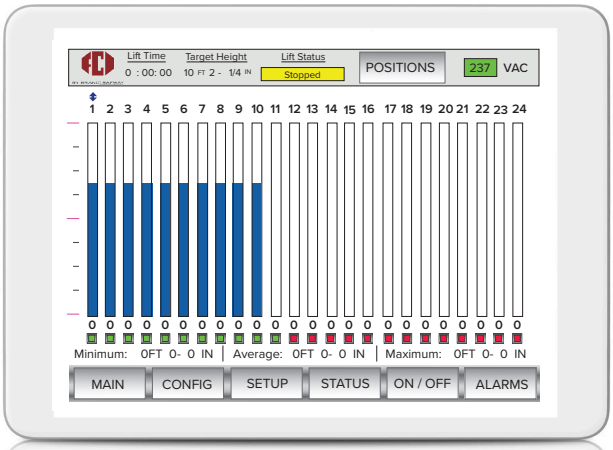


READY TO LIFT POSITION

New Features

TRU-LIFT® | Tru-Tech™ Patent #8,020,271

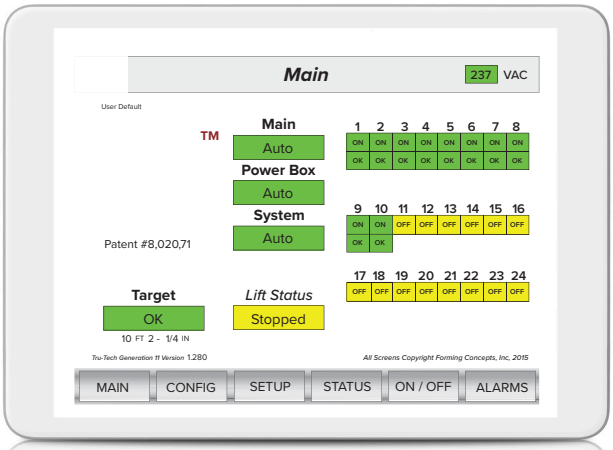
The Tru-Tech™ system is accessible at any time through the internet by our support staff in the main office. Any questions or modifications to the controls can be done remotely by our experts.



Up to 24 cylinders climbing capabilities synchronized & level

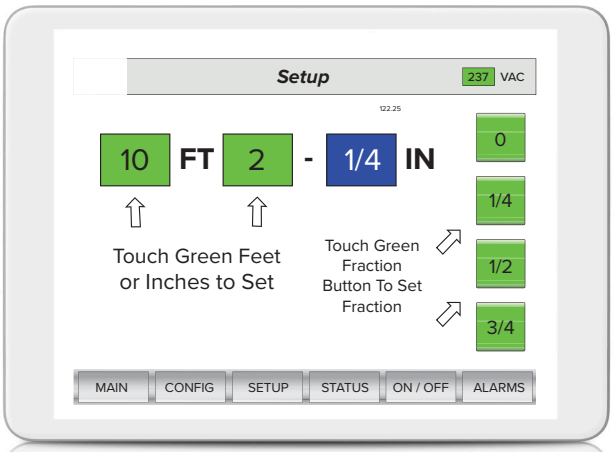
Where it works

Tru-Tech™ is utilized on jobs with 9 to 24 hydraulic cylinders. The desired lift height is entered into the system and the start button pushed, the computer takes over and controls the lift within preset tolerances. Upon reaching the desired lift height the system automatically shuts down.



Core raised within 20min with simple push of a button on site or remotely

Tru-Level™ utilized on jobs with eight or less hydraulic cylinders. The lift height is entered into the system and the start button pushed. The computer monitors the progress of each cylinder and prompts the operator to turn on or shut down individual cylinders as required to keep within the preset tolerances. Upon reaching the desired lift height the system prompts the operator to shut the system down.



Complete core climbed level to within 1/4”


Recycle Bin
E: [Local Disk]
Main
237 VAC
User Default
TM
Patent #8,020,71
Main
Auto
Power Box
Auto
System
Auto
Target
OK
10 FT 2 - 1/4 IN
Lift Status
Stopped
1 2 3 4 5 6 7 8
ON ON ON ON ON ON ON ON
OK OK OK OK OK OK OK OK
9 10 11 12 13 14 15 16
ON ON OFF OFF OFF OFF OFF OFF
OK OK
17 18 19 20 21 22 23 24
OFF OFF OFF OFF OFF OFF OFF OFF
Tru-Tech Generation 11 Version 1.280
All Screens Copyright Forming Concepts, Inc, 2015
MAIN
CONFIG
SETUP
STATUS
ON / OFF
ALARMS
E: 7.35GB free, 43.9GB total
Total 1 file(s) (0 bytes)
Calculator
Voice Recorder
OneNote
Ask me anything
2:52 PM
12/2/2016

*Patent Pending

New Features

TRU-LIFT® | Hydraulic Stripping Corners* & Hydraulic Cylinders

Forming Concepts' New Generation hydraulic stripping corner* is the quickest cleanest way to strip all 4 inside corners of a core form at once.

Advantages

Assisted by hydraulic cylinders in each corner, all four corners can be stripped or reset in 10 seconds. The design of the corner is sealed so there's no chance of grout leakage from even self-consolidating concrete that would fowl up the corner operation or detract from the appearance of the finished concrete. The advantage of the hydraulic stripping corner* is that it eliminates the cost of labor climbing the forms to manually release or set the corners.

High Capacity Hydraulic Cylinders

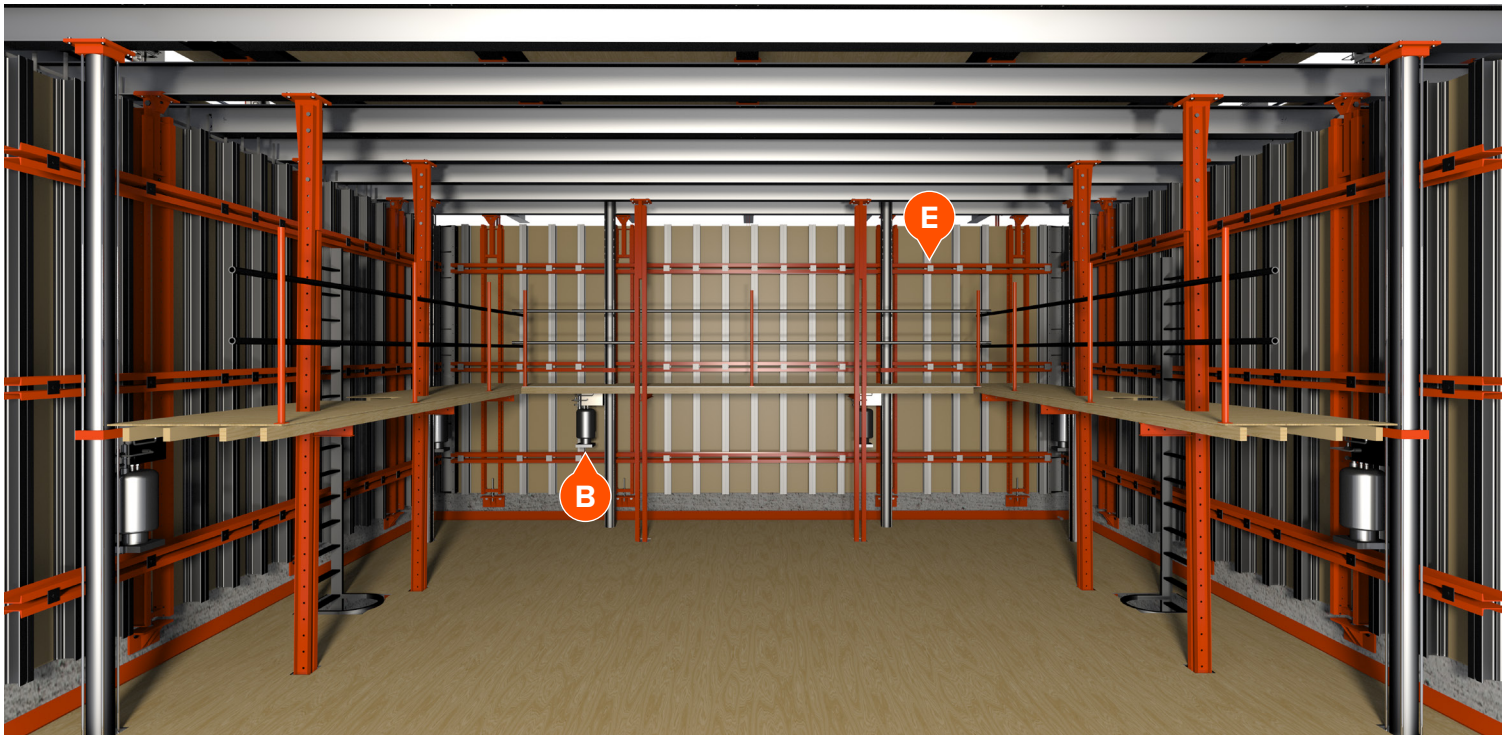
Forming Concepts' New Generation High capacity 50 T hydraulic cylinders allow fewer hydraulic cylinders to be used. The larger capacity cylinders allow for greater grid beam spacing resulting in fewer grid beams crossing the walls. Therefore rebar can be caged and assembled in larger units speeding the cycle time. The lower cylinder attachment is adjustable and allows for greater flexibility of insert placement.

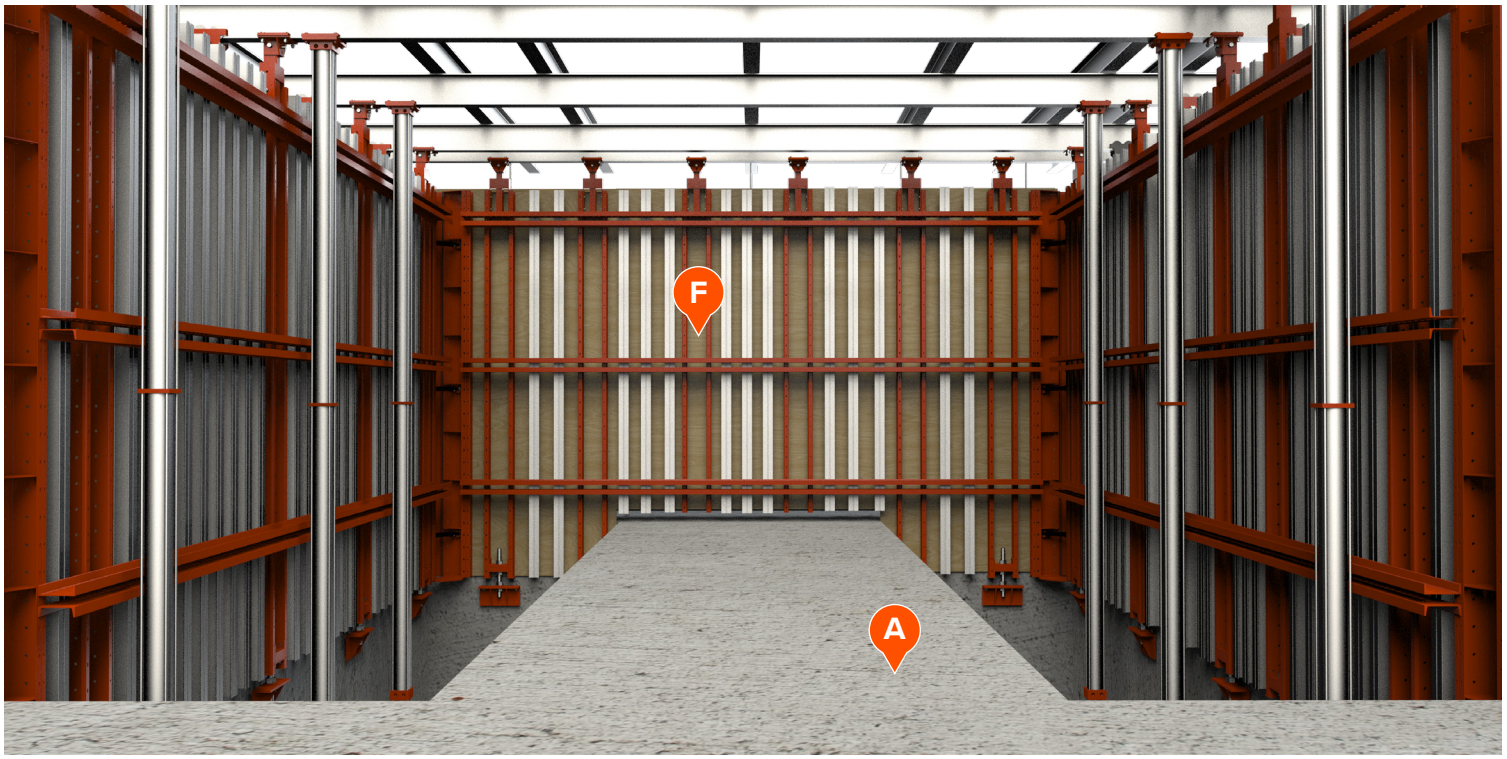
Latest Design Hydraulic Pumps
Forming Concepts' New Generation hydraulic pumps are separate from the hydraulic reservoirs. This feature makes changing of pumps easier should the need arise. No oil has to be transferred, only the pump and motor.

Each hydraulic cylinder is energized by its own pump & reservoir, built into the forms.

Feature Chart

TRU-LIFT® | SELF-CLIMBING CORE FORMWORK SYSTEM





A Wide Open working space inside core
- Greater safety & productivity
- Allows for easy casting of lobby slab and landing

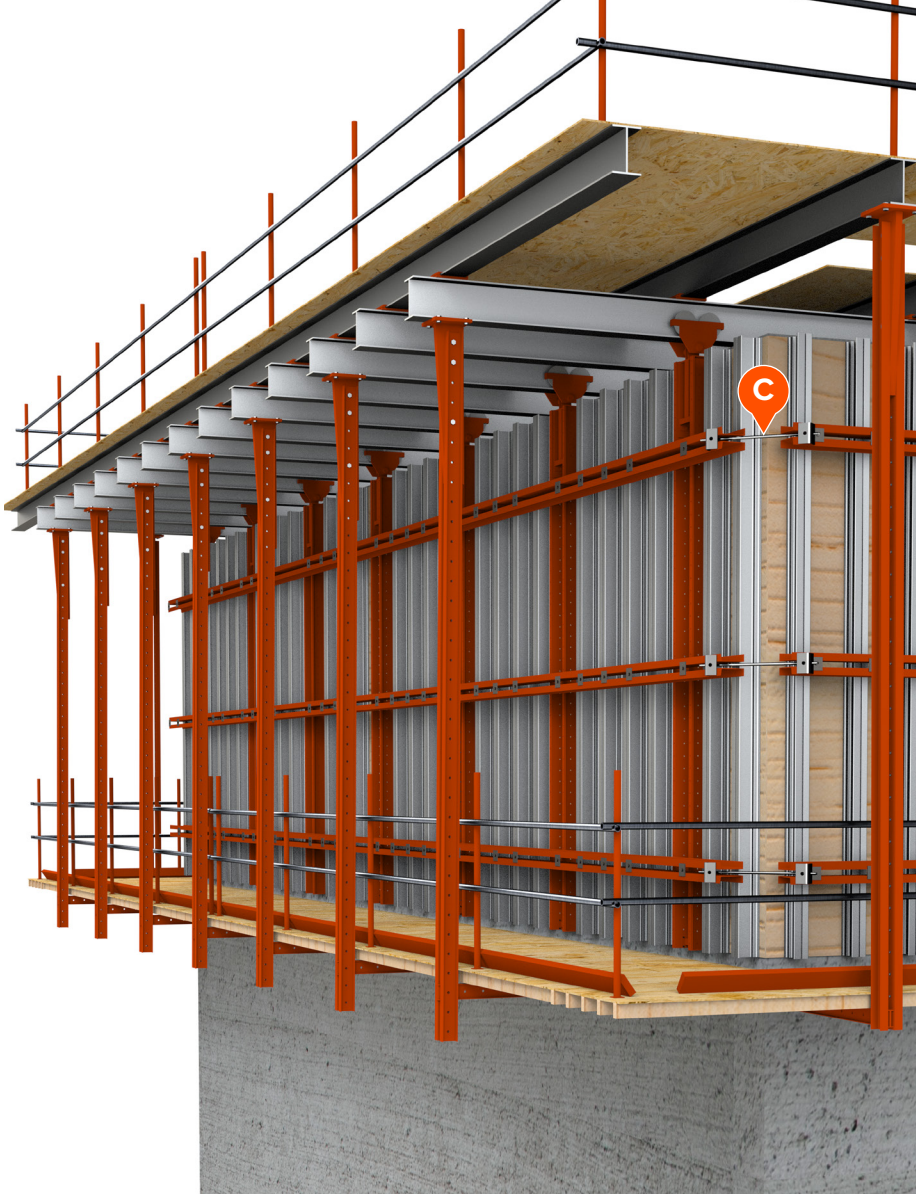
B Individual pumps & reservoirs in each hydraulic cylinder, filled with Dextron III transmission fluid, eliminating the need for heaters in cold climates

C Corner Yokes for fast assembly

D Walkway & work platform for easy access to anchor all areas of the form

E Re-usable, widely spread (up to 6'x6') Taper Ties

F Lighter weight Aluminum Gang® forms, allow for additional hydraulic power to lift reinforcing steel & placing boom

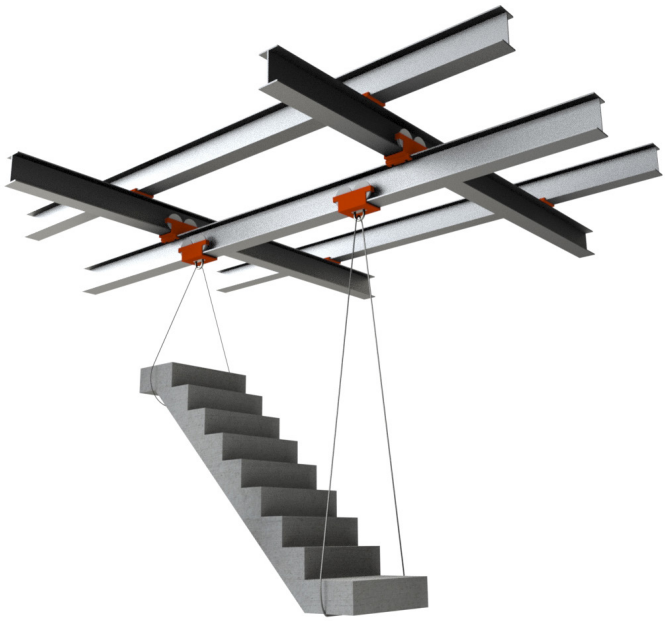


Additional Features

TRU-LIFT® | SELF-CLIMBING CORE FORMWORK SYSTEM

Available Material Trolley System

A trolley system is available on the New Generation Tru-Lift Self-Climbing Formwork System in order to move steel beams, stairs or materials below the lower platform of the Self-Climbing core form. Once installed this trolley system raises with the Tru-Lift form system on every lift. The trolley system speeds installation of equipment or building materials in the cores below the form system.



Waterproof Shed

Weatherproof sheds are supplied with all New Generation Tru-Tech Tru-lift computer control systems. These sheds come complete with access doors for wiring. The computer control units are pre-installed. Once the shed arrives on the truck it merely needs to be lifted into position and wiring run through the sheds access doors. The shed speeds on-site assembly and eliminates unpacking and repacking of computer components. This greatly reduces the risk of any shipping damage.

Larger Grid Spacing

Forming Concepts' New Generation system allows for larger grid beam spacing than the basic system. This is accomplished with the use of high capacity hydraulic cylinders and high capacity grid beams. Larger grid beam spacing allows for larger rebar cages to be built and installed speeding construction.

The Sky's The Limit!

TRU-LIFT®

SELF-CLIMBING CORE FORMWORK SYSTEM

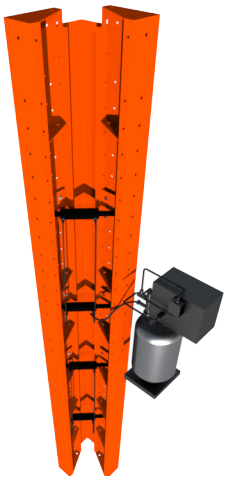
Aluma Systems | SGB | HÜNNEBECK | BY BRAND SAFWAY

Components

TRU-LIFT® | SELF-CLIMBING CORE FORMWORK SYSTEM

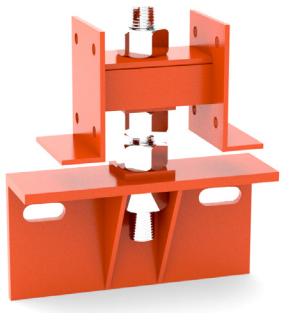
Internal Corner

Rigid, flexible and strippable corners are used depending on the core profile, however where possible flexible internal corners are used in conjunction with corner pins eliminating to need to dismantle forms minimizing labour time between cycles.



Slotted Landing and Support Bracket

Forming Concepts' New Generation slotted landing and jack brackets allow for much greater flexibility in horizontal insert placement. If insert placement falls in line with a piece of rebar or imbed the insert can be moved horizontally up to 3 inches in either direction.

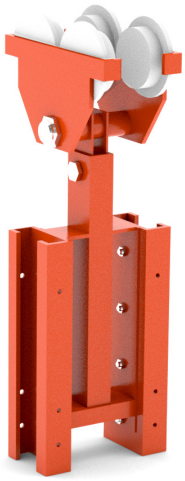


Walkway Bracket

External hanging walkway bracket is bolted to the overhead beam system, designed to hang below the bottom of the formwork system to facilitate in retracting forms, steel reinforcement fixing and cleaning of the forms. Walkway Brackets are designed to be used in conjunction with Aluma Beams® and plywood sheeting creating a level and hazard free working platform.

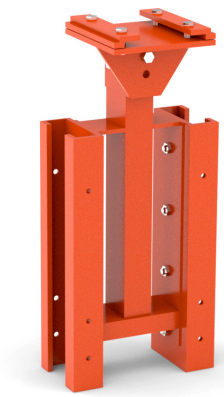
Trolley

Trolley designed to roll along lower flange of the overhead beam supporting the external form using threaded rod for vertical adjustment attached to brackets bolted to wall forms.



Internal Form Hanger Bracket

Adjustable form support bracket head and clamp plates are bolted into wall support frame facilitating the connection to the overhead primary beam.



Jack Bracket

Supports and houses the hydraulic cylinder. Jack Brackets are bolted into inserts cast in with the previous pour and designed to support the formwork system during the lifting sequence. Brackets remain fixed to the hydraulic cylinder during retraction and relocation to the subsequent lift.

Corner Pin

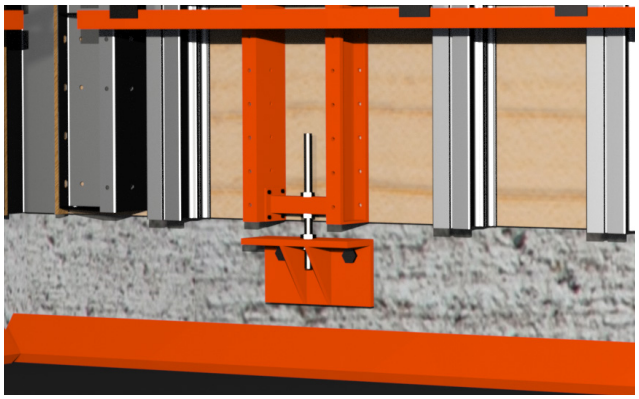
Corner Pin used to “strip” internal form by driving through offset holes and reversed for “reset”.

Corner Yoke

External corners are easily tied between yoke blocks and bolted to horizontal channel walers using fast threaded rod.

Internal Trailing Platform

Internal platforms are designed to be supported from overhead steel work and can be decked out to cover the entire opening or allowing sufficient room to access ties, stripping corners and hydraulics.

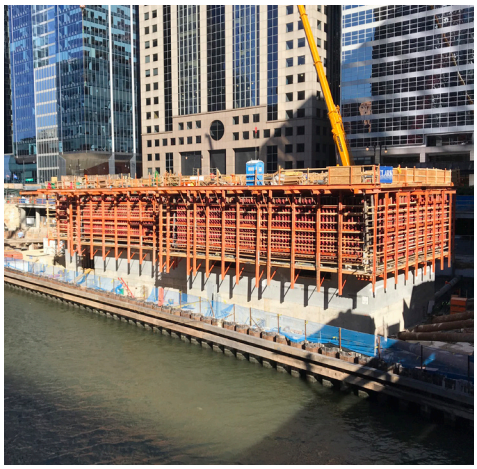


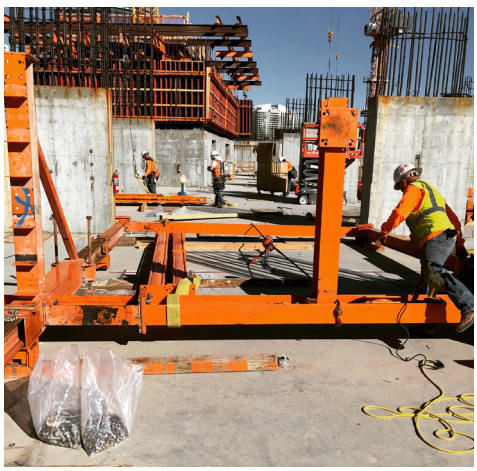
Wall Bracket Assembly

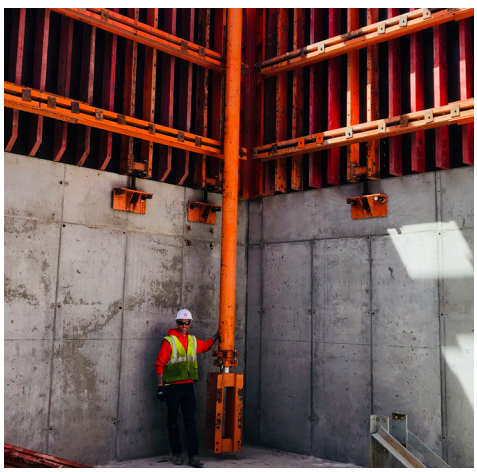
Brackets are bolted into inserts cast in with the previous pour and connected into the wall support frame, supporting the formwork system once in the lifted position. Threaded bar forming part of the support system allows finite adjustment for leveling the form if necessary.

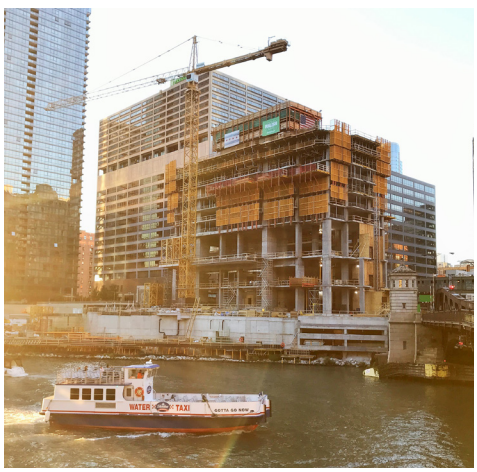




BUDROVICH


416


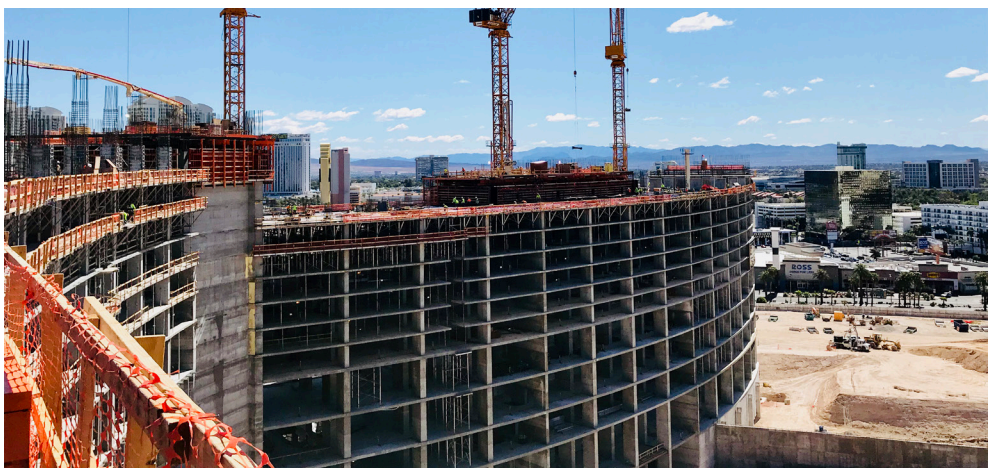
Hines

WATER TAXI


Mortenson
Building what's next
SNOW EMERGENCY ROUTE


MARTIN CEMENT
ZENERE


SCG
SCG
at 3:58:04 PM


THRIVENT



USA

Atlanta, GA
T 404.699.0979

Fontana, CA
T 909.440.0051

Tampa, FL
T 813.626.1133

Baltimore, MD
T 301.937.5090

Linden, NJ
T 732.396.1269

St. Charles, IL
T 847.838.4366

Sacramento, CA
T 530.662.5245

Houston, TX
T 281.860.1900

Seattle, WA
T 425.251.0270

Gilberts, IL
T 847.426.4400

Las Vegas, NV
T 773.617.9657

CANADA

Toronto, ON
T 905.669.5282

Bolton, ON
T 905.857.8562

Montreal, QC
T 514.383.1985

Edmonton, AB
T 780.440.1320

Calgary, AB
T 403.259.2600

Coquitlam, BC
T 604.472.8000

Sidney, BC
T 250.652.9409

Aluma.com

Aluma Systems | SGB | HÜNNEBECK | BY BRAND SAFWAY