



WELLS // BUILD WITHOUT LIMITS

Design Assist in Action: Real World Benefits for Your Next Project

Webinar | October 2025



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send requests to:
megan.nesius@wells.build



Presenters



Michael Trosset

Director of Architectural Systems



Chase Radue, PE

Director of Engineering



Abhi Mummaneni, PE

Engineering Manager



What to Expect

1. Understand what Design Assist entails, especially in relation to traditional project delivery methods.
2. Recognize how early engagement supports design intent, budget control, speed, and constructability.
3. Identify the unique Design Assist processes and benefits across hybrid, industrial, and architectural project categories.
4. Understand how BIM is used in the design assist process and how it contributes to design schedule in this setting.
5. Apply key lessons and best practices from real-world Design Assist case studies.



Build Without Limits

For those ready to build without limits, Wells offers boundary-pushing building solutions, systems, and services grounded in regional connections strengthened by our trusted team. Together, we can transform your bold ideas into beautiful spaces that stand the test of time.

Strength That Inspires

2700+

Team Members

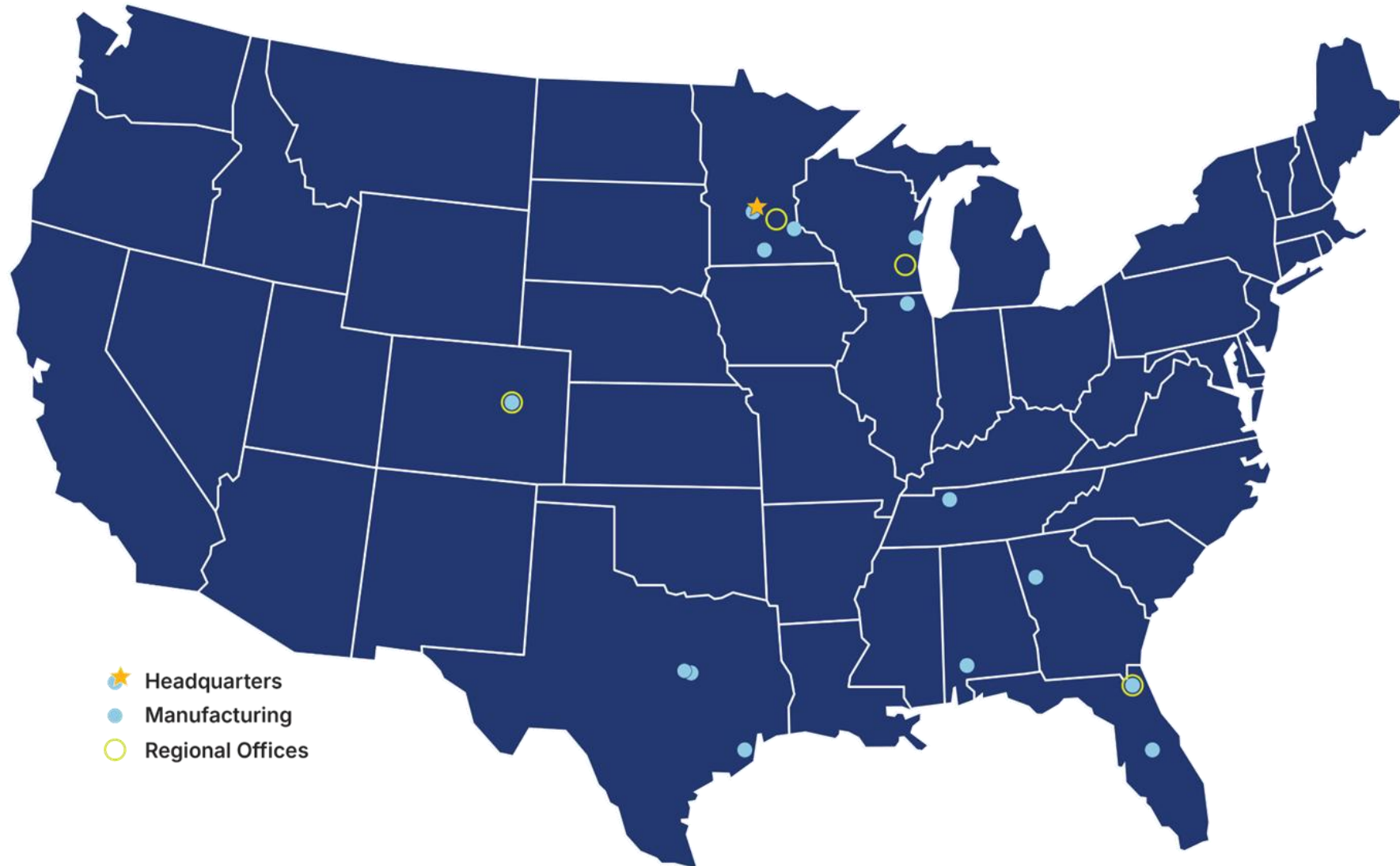
650+

Projects Each Year

\$5.2B

Worth of Projects in 2024







Wells Building Systems

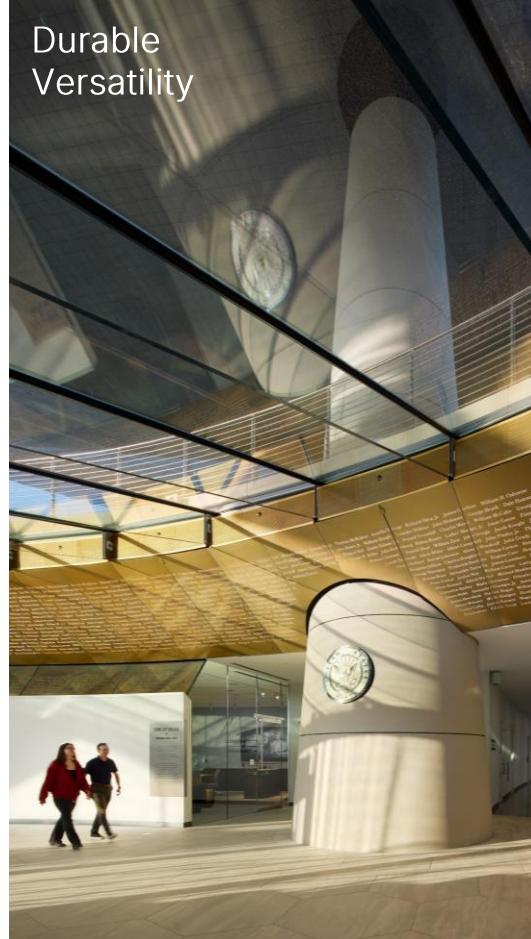
ARCHITECTURAL

Limitless,
Imaginative



STRUCTURAL

Durable
Versatility



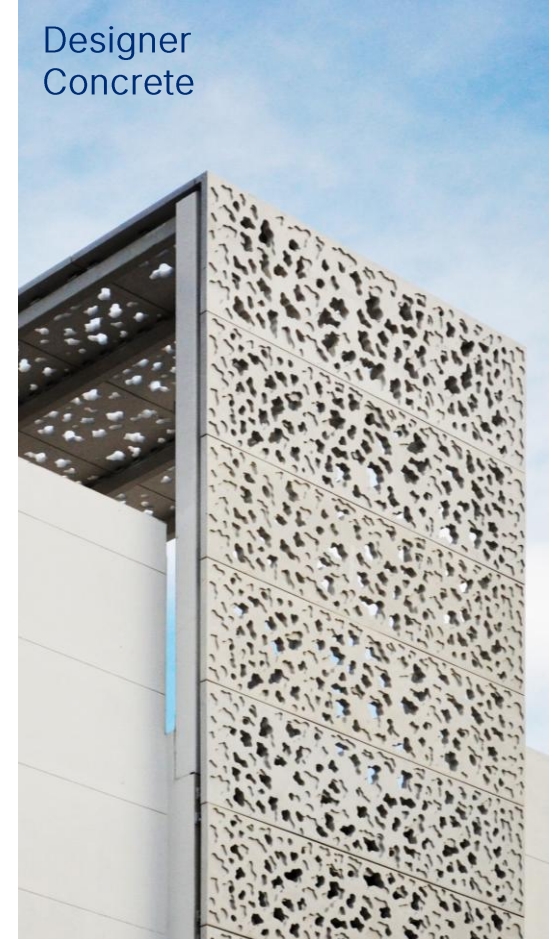
GATELITE®

High
Performance
Facade



DEX

Designer
Concrete





Transforming Communities



CIVIC & COMMUNITY



EDUCATION



HEALTHCARE



**INDUSTRIAL &
WAREHOUSE**



**MANUFACTURING &
FOOD PROCESSING**



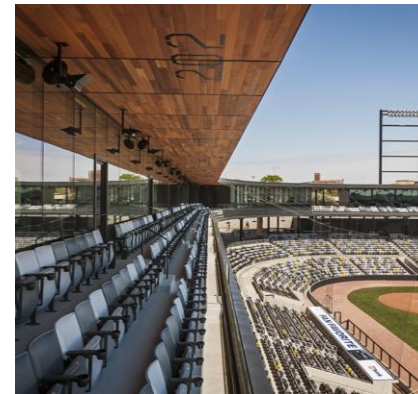
OFFICE



PARKING



RESIDENTIAL



**SPORTS &
ENTERTAINMENT**



MISSION CRITICAL

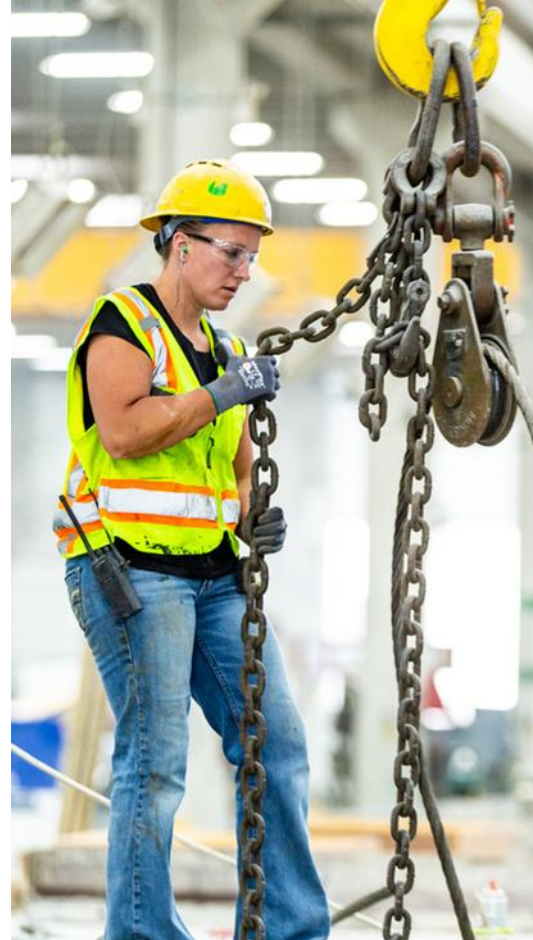


The Wells Full-Service Experience

DESIGN



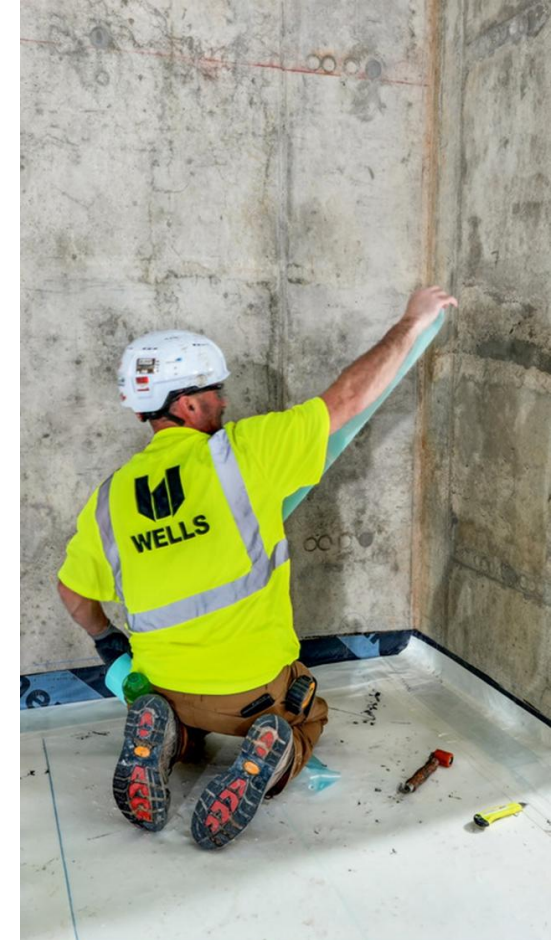
MANUFACTURE



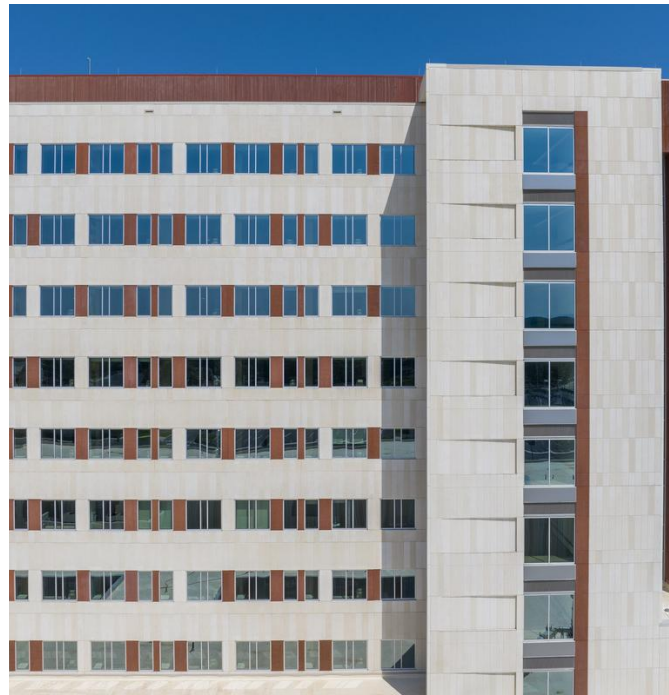
BUILD



PROTECT



Design Assist in Action: Real World Benefits for Your Next Project



What is Design Assist?

Definition:

- Collaborative partnership with design teams from project start
- Early engagement during schematic design to optimize solutions
- Manufacturing insights brought directly to the design table
- Enhances architectural vision through thoughtful collaboration
- Uncovers challenges before they become costly problems
- Clearly defining scopes to limit risk of gaps

What it is not:

- Not design-build, not full delegated design – traditional roles remain intact
- Not a takeover of design responsibility – we enhance, don't replace
- Not cost-plus – awarded on best-value basis with clear expectations
- Architect still leads – we support design intent, never override it

Process Overview

INITIAL COORDINATION

Project stakeholders establish a collaborative framework to align design intent with specialized manufacturing expertise and project requirements.

SCOPE DEFINITION

Design team and specialty contractor define collaborative scope, deliverables, and professional responsibilities within the design assist framework.

DESIGN DEVELOPMENT

Architect and specialty contractor collaborate on design optimization, integrating manufacturing knowledge with architectural vision through iterative processes.

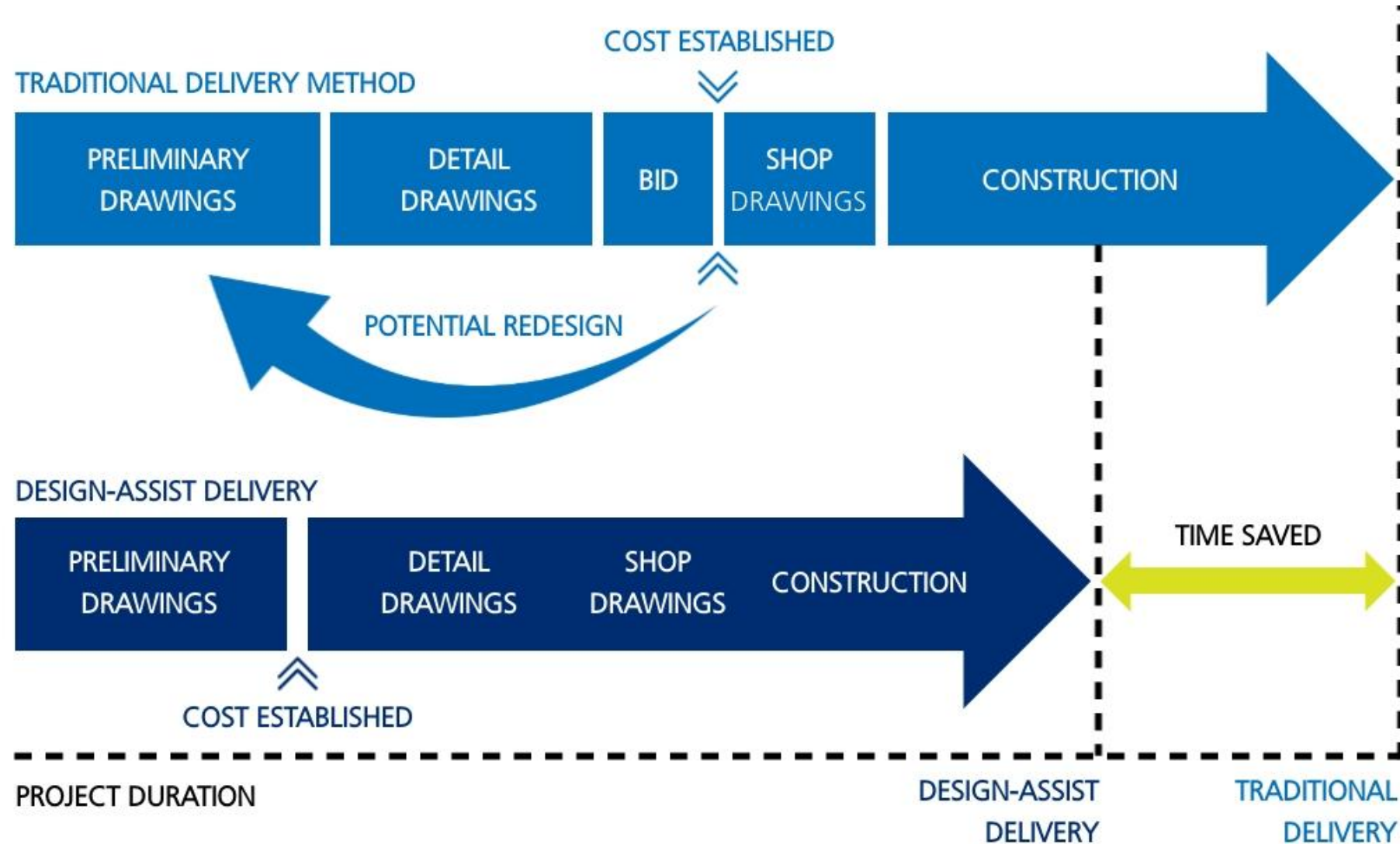
COST INTEGRATION

Continuous cost feedback throughout design development enables informed decision-making and value engineering opportunities for optimal project outcomes.

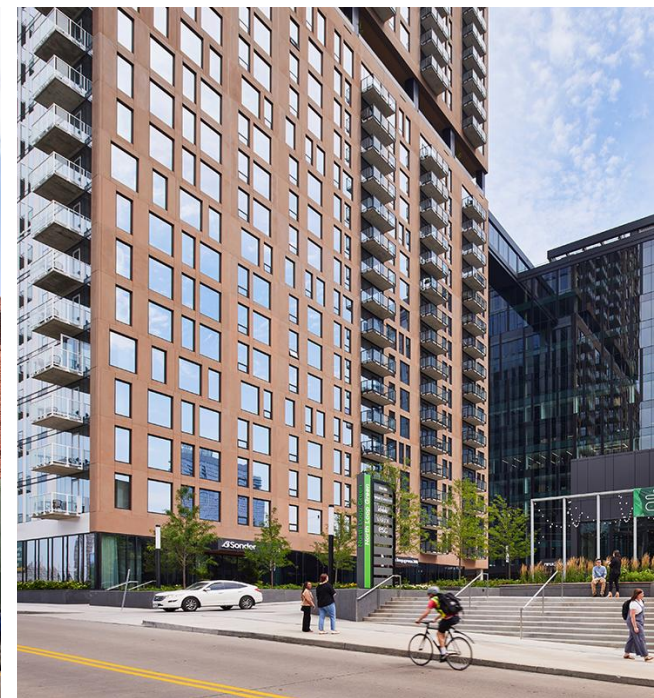
DOCUMENTATION FINALIZATION

Design team finalizes construction documents with integrated specialty contractor input, ensuring buildability and design intent alignment.

Traditional vs. Design Assist



Design Assist // Hybrid Projects



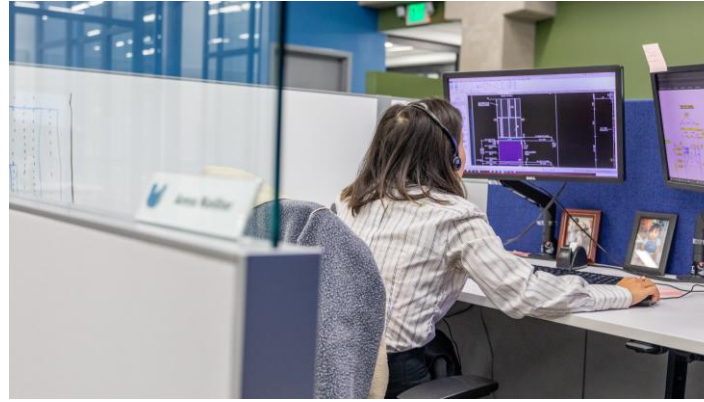
Hybrid Projects



Project Types

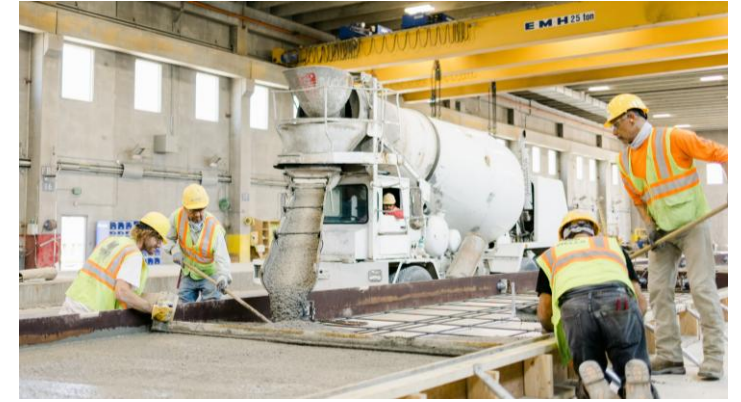
Civic, municipal, parking structures, etc.

Mixed-material projects where precast is one of many systems.



Focus

Design Assist provides reassurance for complex integrations.



Prefabricator's Role

Handling all precast-related aspects so others can focus elsewhere.

Process Overview

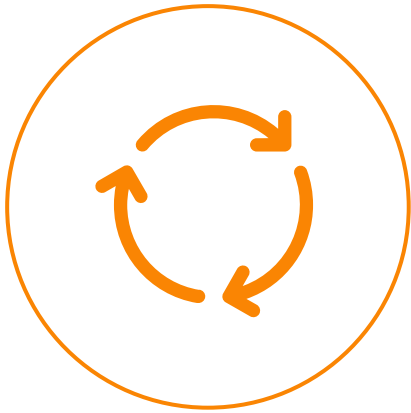
A COLLABORATIVE APPROACH FROM CONCEPT TO CONSTRUCTION



1

DESIGN ASSIST AGREEMENT

Brought on before full
subcontract



2

SCOPE TRACKING

Aligned with Design
Team deliverables



3

FULL COORDINATION

Active in consultant &
OAC meetings



4

LOCK STEP PRICING

Trend log pricing
through design
development



5

DRAWING INTEGRATION

Selective precast
drawing incorporation
into design packages



CASE STUDY

Baptist Health Care, Pensacola, FL

- **958 precast panels covering 189,000+ of building envelope**
- **70% reduction in material usage compared to traditional panels with punched windows**
- **4,800 manhours saved on jobsite through pre-glazed panel solutions**





CASE STUDY

**Montbello High School Addition,
Denver, CO**

- Multi wing addition to aesthetically compliment original structure
- Full height load bearing architectural panels with multiple finishes





CASE STUDY

Alta Flatirons, Superior, CO

- Total Precast pretopped parking garage and podium wrapped by wood frame multifamily housing
- Precast and wood structures designed concurrently



ALTA FLATIRONS

350 GATEWAY DRIVE, SUPERIOR, CO

CLAYTON SYMBOLS

JB1g

ABBREVIATIONS

Abbreviation	Description
AC	As Cast
AD	As Designed
AE	As Erected
AF	As Fabricated
AG	As Grouted
AH	As Hatched
AI	As Installed
AL	As Laid
AM	As Measured
AN	As Noted
AO	As Ordered
AP	As Proposed
AQ	As Quoted
AR	As Received
AS	As Shown
AT	As Treated
AV	As Valued
AW	As Warranted
AX	As X-rayed
AY	As Yanked
AZ	As Zoned

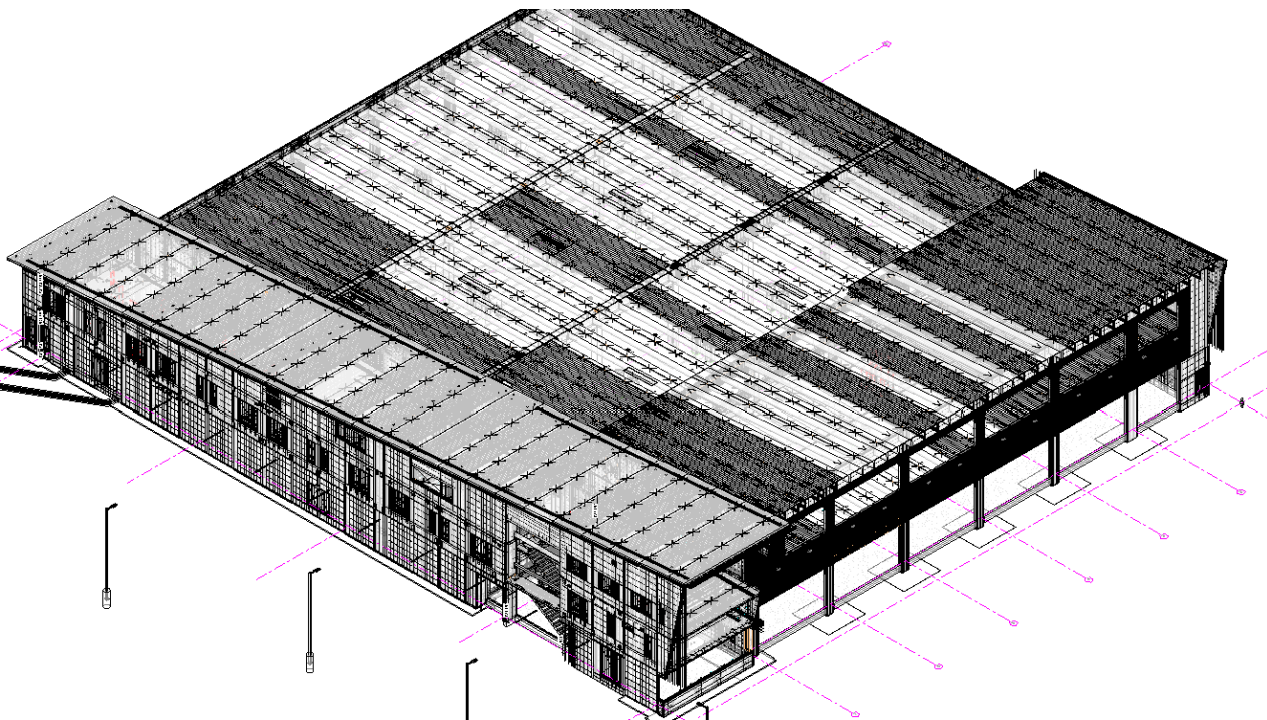
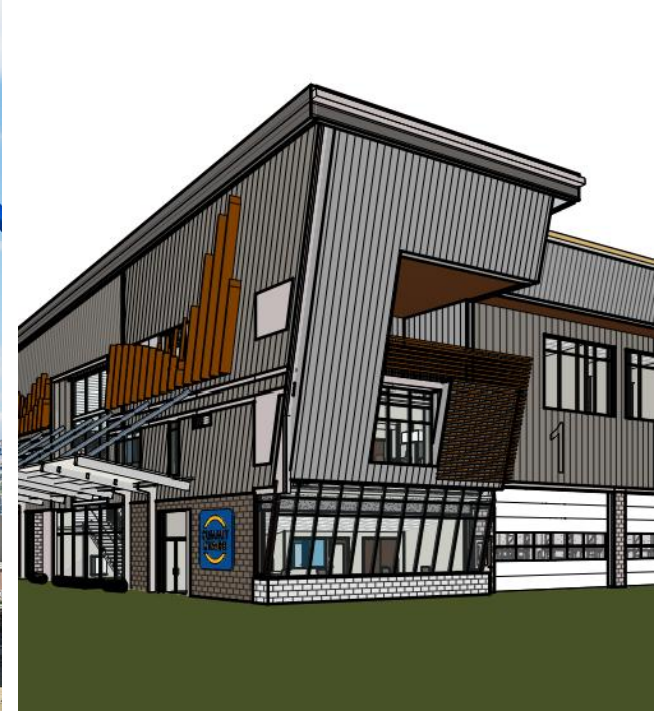
NOTES

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KEPHART

ALTA FLATIRONS, LLC
350 GATEWAY DRIVE, SUPERIOR, CO

WGO 00



CASE STUDY

Summit County Transit
Operations Center, Frisco, CO

- Original block and steel superstructure converted to total precast
- Utilized to satisfy unique constructability, fire separation, and framing requirements



Design Assist // Industrial + Data Centers



Industrial / Data Center Projects



Project Types

Industrial, data centers, food processing.



Focus

Speed of construction, coordination, and system recommendations.

Integrating with mechanical, electrical, and plumbing systems (equipment stacks, embeds, etc.)



Prefabricator's Role

Help coordinate critical interfacing details early and setting framing around program needs.

Process Overview

FAST-TRACK DELIVERY THROUGH EARLY ENGAGEMENT AND ADAPTIVE PLANNING



1

EARLY AWARD

Project subcontract
awarded early for
Design Assist input



2

PROTOTYPE CONCEPTS

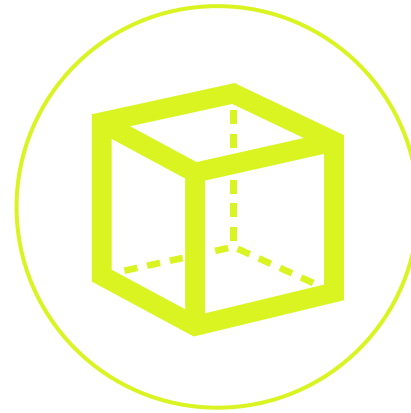
Design Assist
Agreement for
prototype development



3

SCHEDULE DRIVEN

Scope based on project
schedule needs



4

3D MODEL COORDINATION

Single source of truth
through design stage



5

DYNAMIC PRICING

Schematic budget
routinely updated to
final pricing as design
develops



CASE STUDY

Grainger Distribution Center, Hockley, TX

- Knowledge sharing transformed the team approach
- Early collaboration exceeded expectations
- Capable delivery surpassed traditional methods



CASE STUDY

**DC Blox Data Center,
Birmingham, AL**

- Award recognized collaborative excellence
- Reliable delivery for mission-critical operations
- Knowledge-driven approach to embedded systems safely

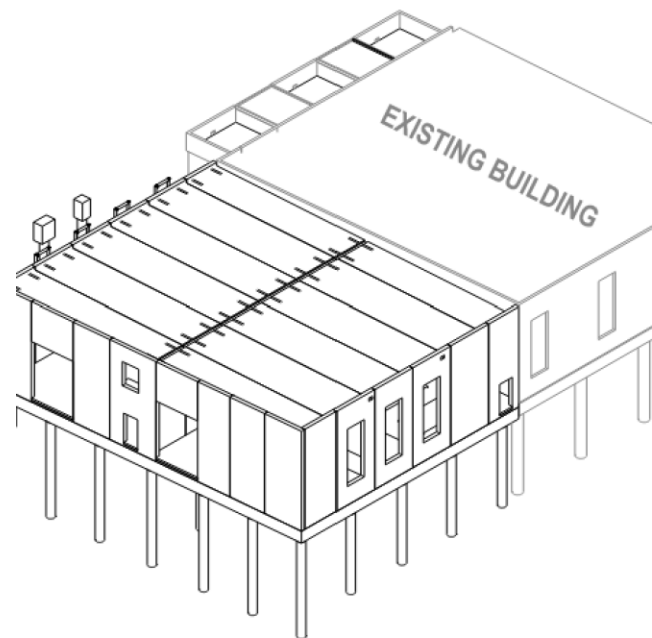
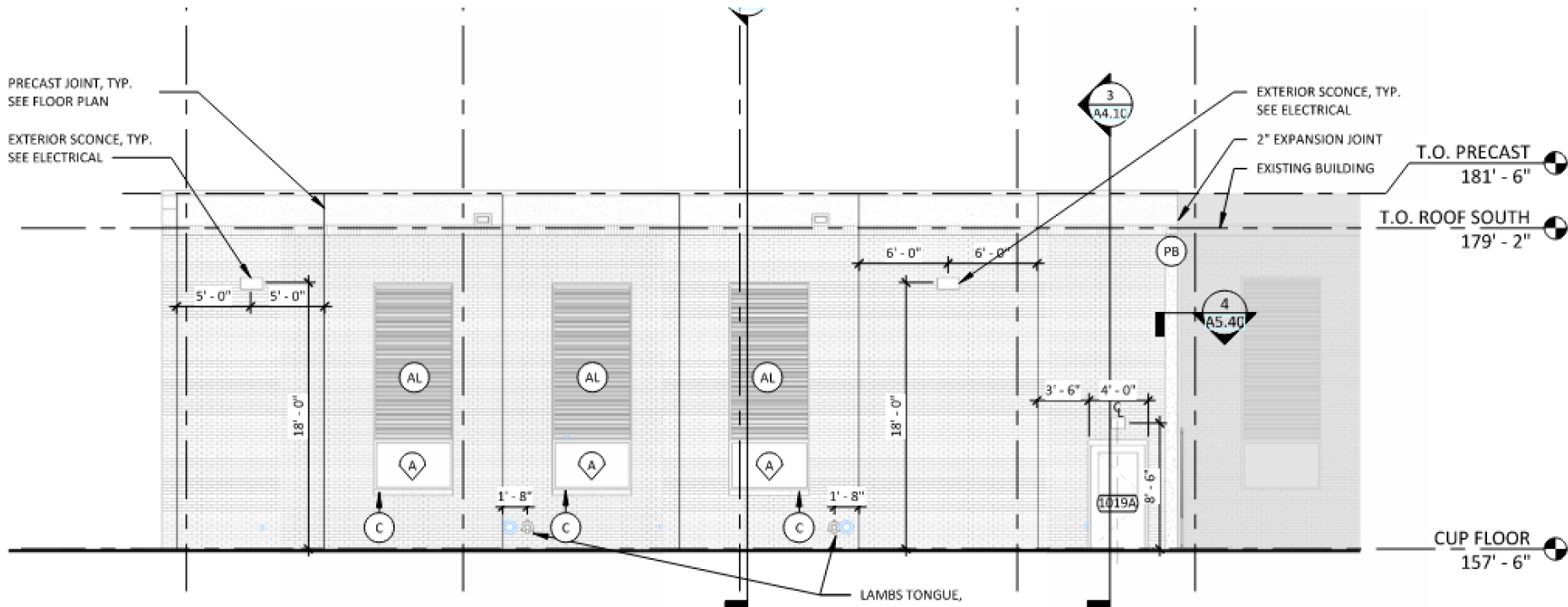




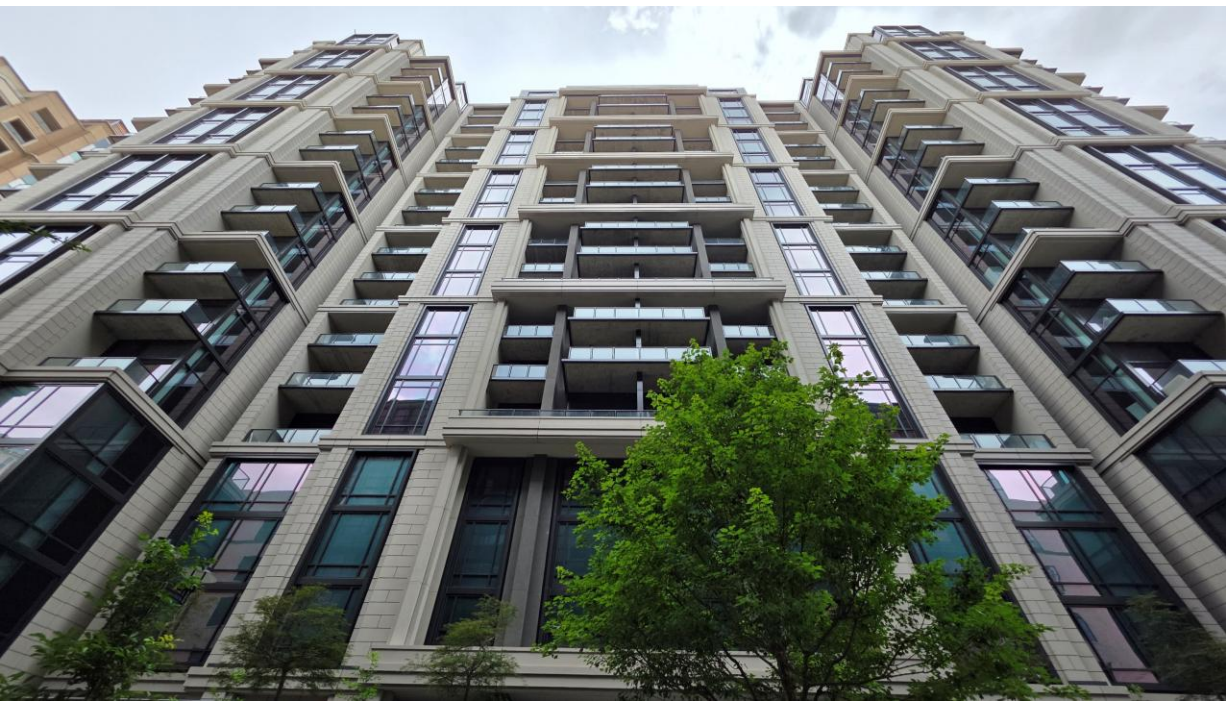
CASE STUDY

AdventHealth Porter CUP Expansion, Denver, CO

- Load bearing architectural addition to existing brick building
- Total precast accommodating high density of equipment within structure



Design Assist // High-End Architectural



High-End Architectural Projects



Focus

Maximizing the aesthetic and performance potential of precast.

- Supporting ambitious design geometries and façade performance.



Capabilities

- Mold modules, CNC machining, C&C tech.
- Access to advanced software.
- Structural feasibility, pre-glazing, form liners, performance targeting.



Precaster's Role

High stakes - precaster ensures the design is buildable without compromising the design vision/intent.

Process Overview

Seamless collaboration for precision-crafted architectural precast



1

DESIGN ASSIST AGREEMENT

Agree upon scope and
duration of design
assist



2

SETTING MILESTONES

Design assist
milestones are set



3

COLLABORATION

Continued input from
precast team geometry,
connections, loading.



4

FINAL PRICING

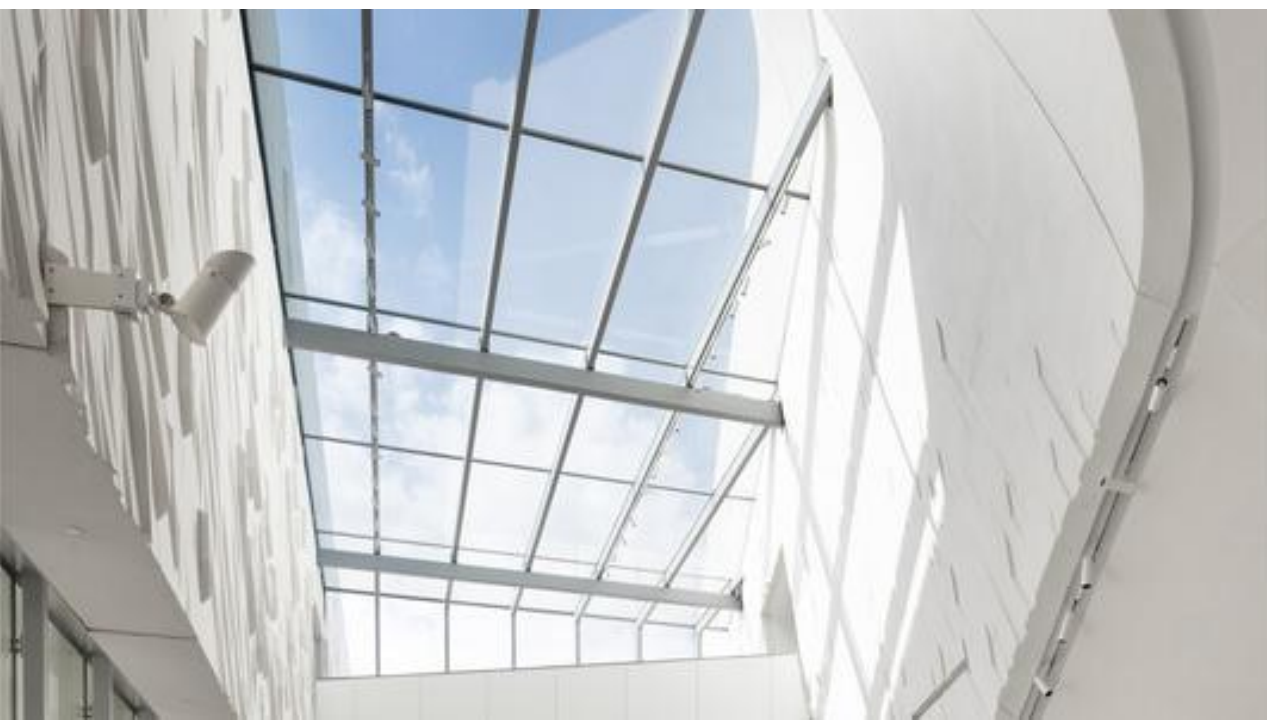
Pricing locked in after
100% CDs



5

PRECAST DESIGN AND SHOPS

Preparation of shop
drawings for approval



CASE STUDY

**Crow Museum of Asian Art
UTD Athenaeum Complex,
Dallas, TX**

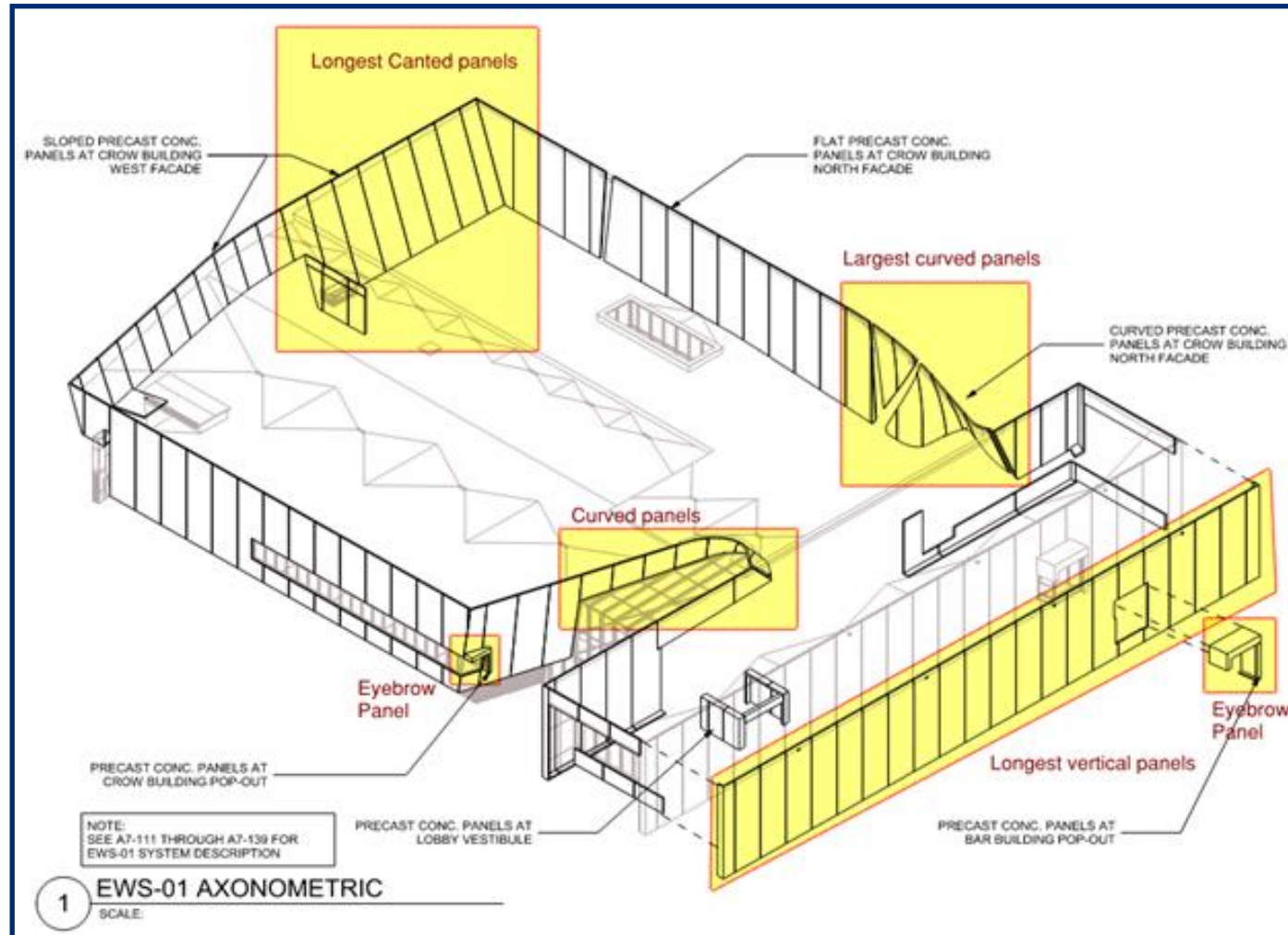
"By embracing our construction and fabrication partners early in the design process, we're able to receive real-time feedback on constructability and cost, which optimizes the design and construction process."

-Arne Emerson Partner, Morphosis



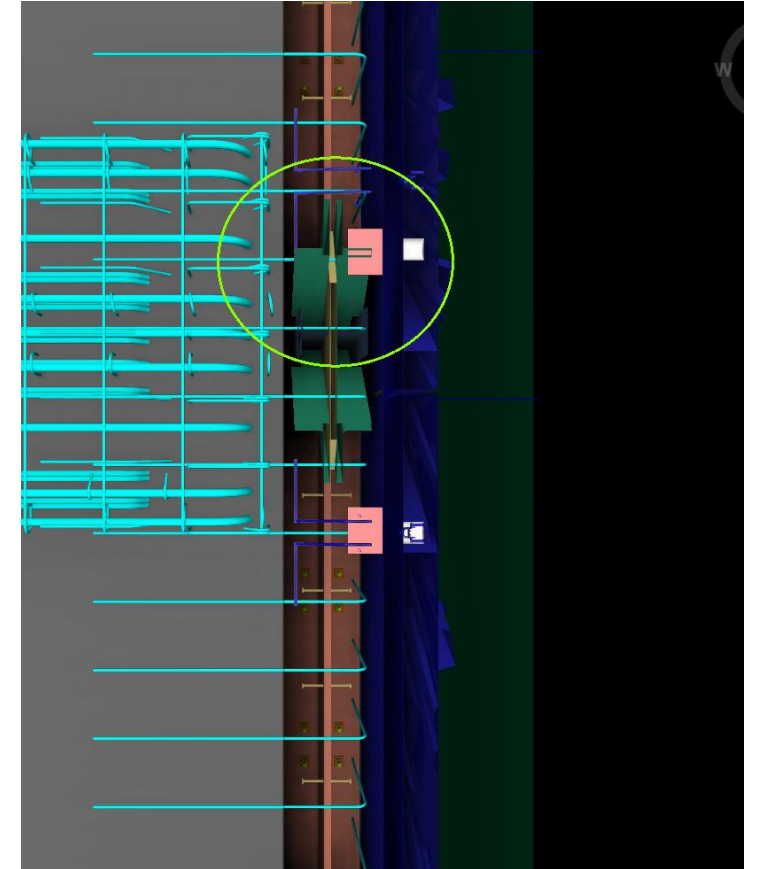
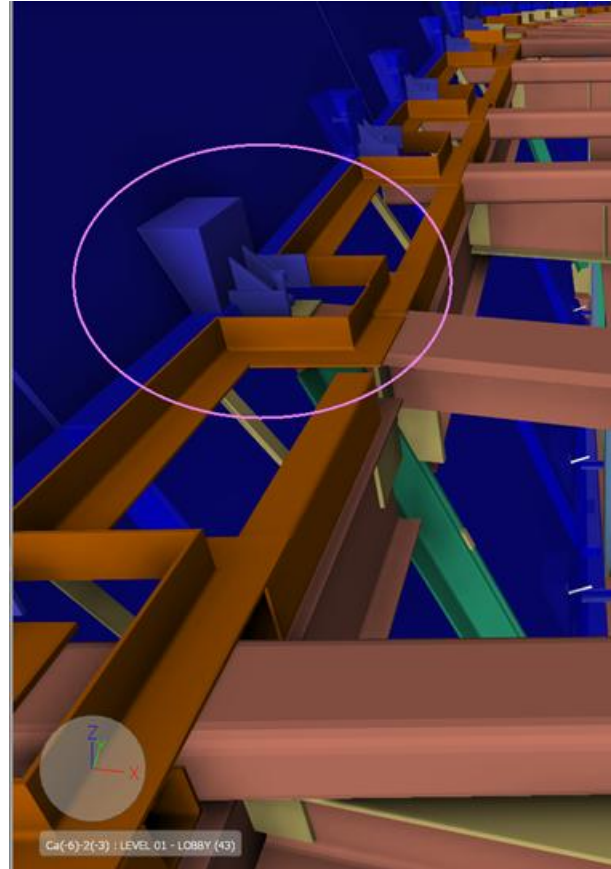
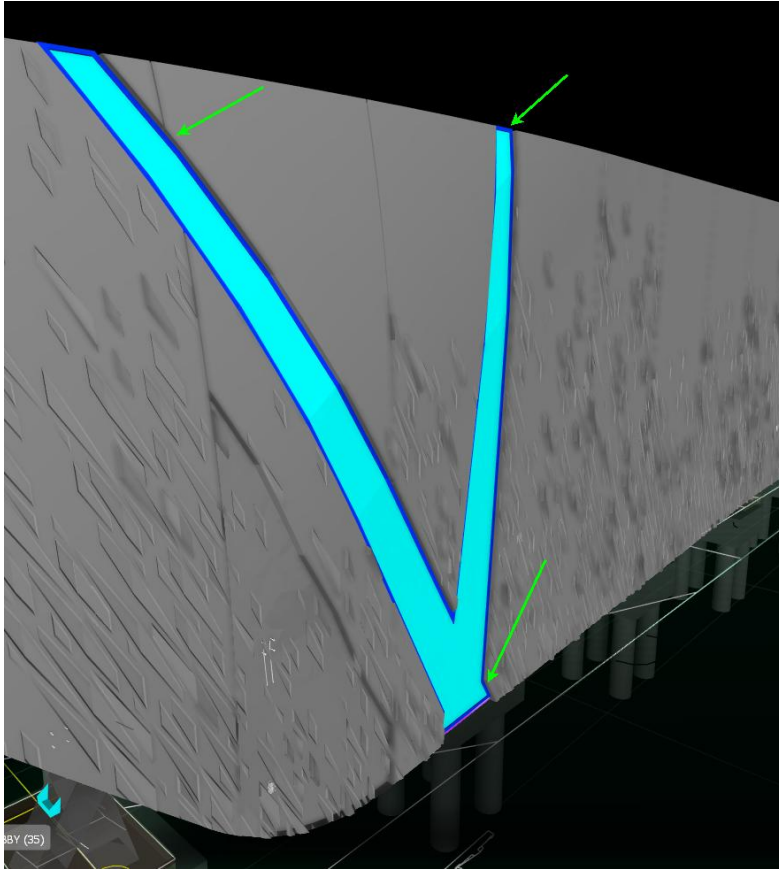
BIM / VDC

CROW MUSEUM OF ASIAN ART, UTD ATHENAEUM COMPLEX



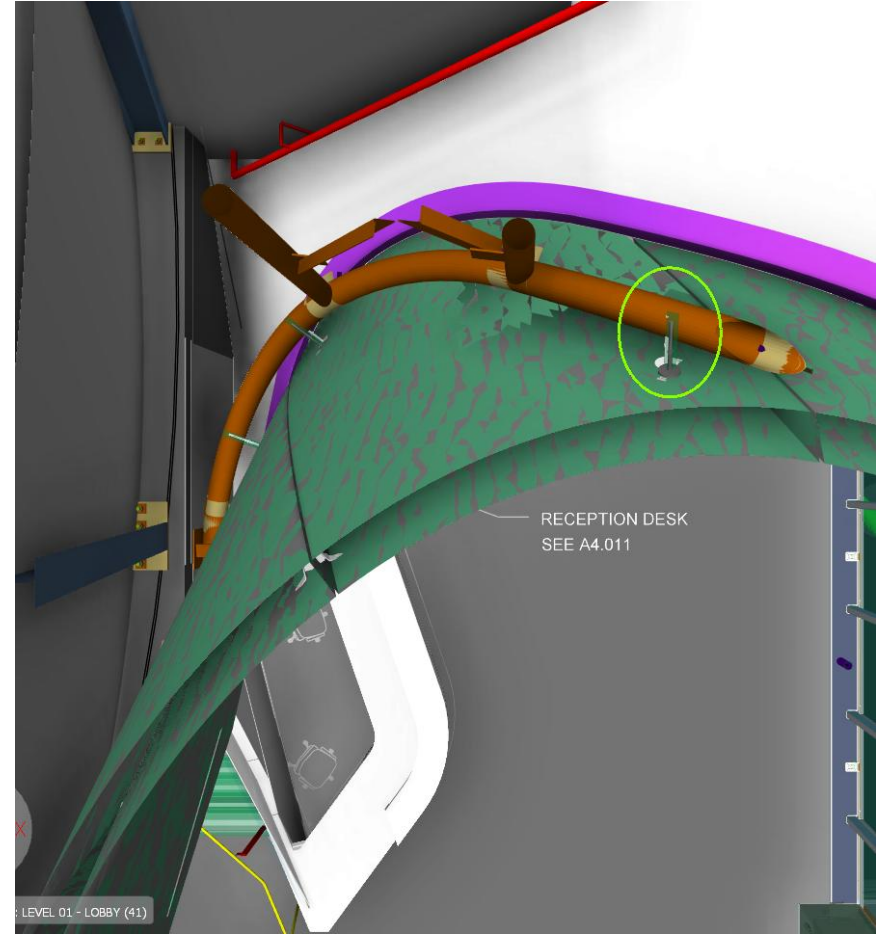
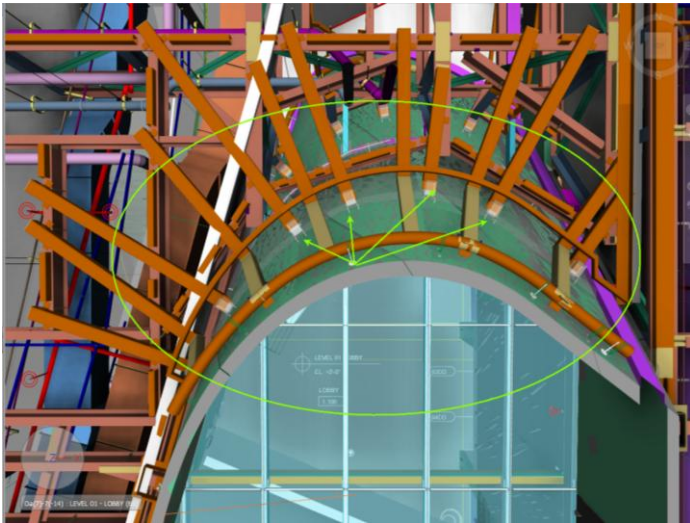
BIM / VDC

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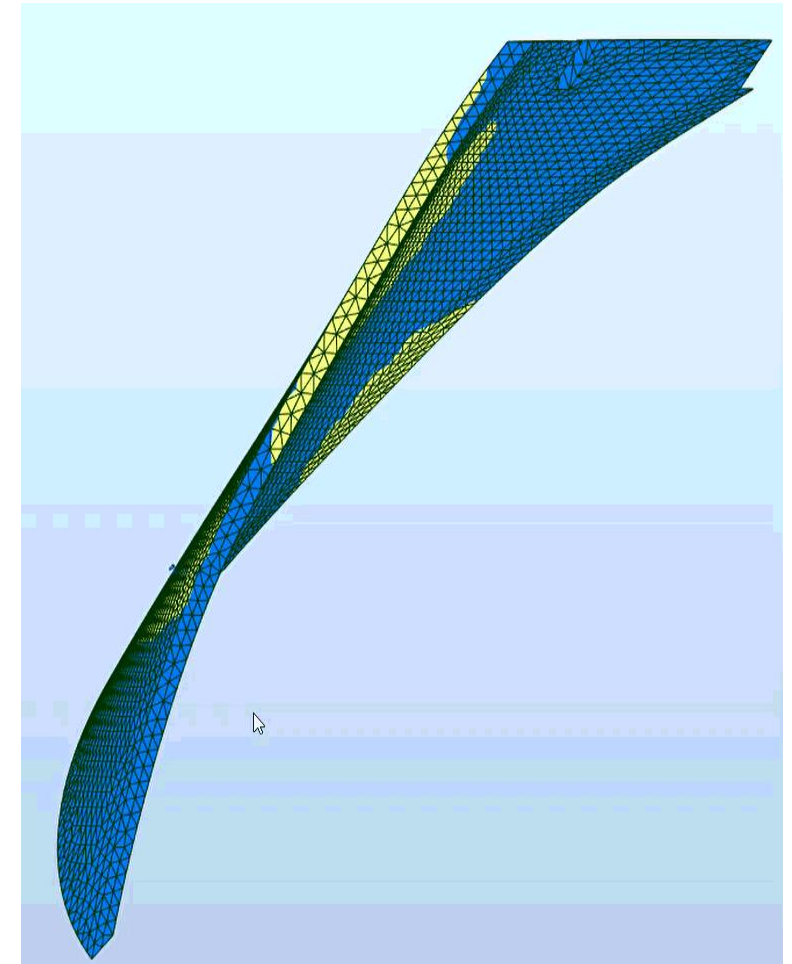
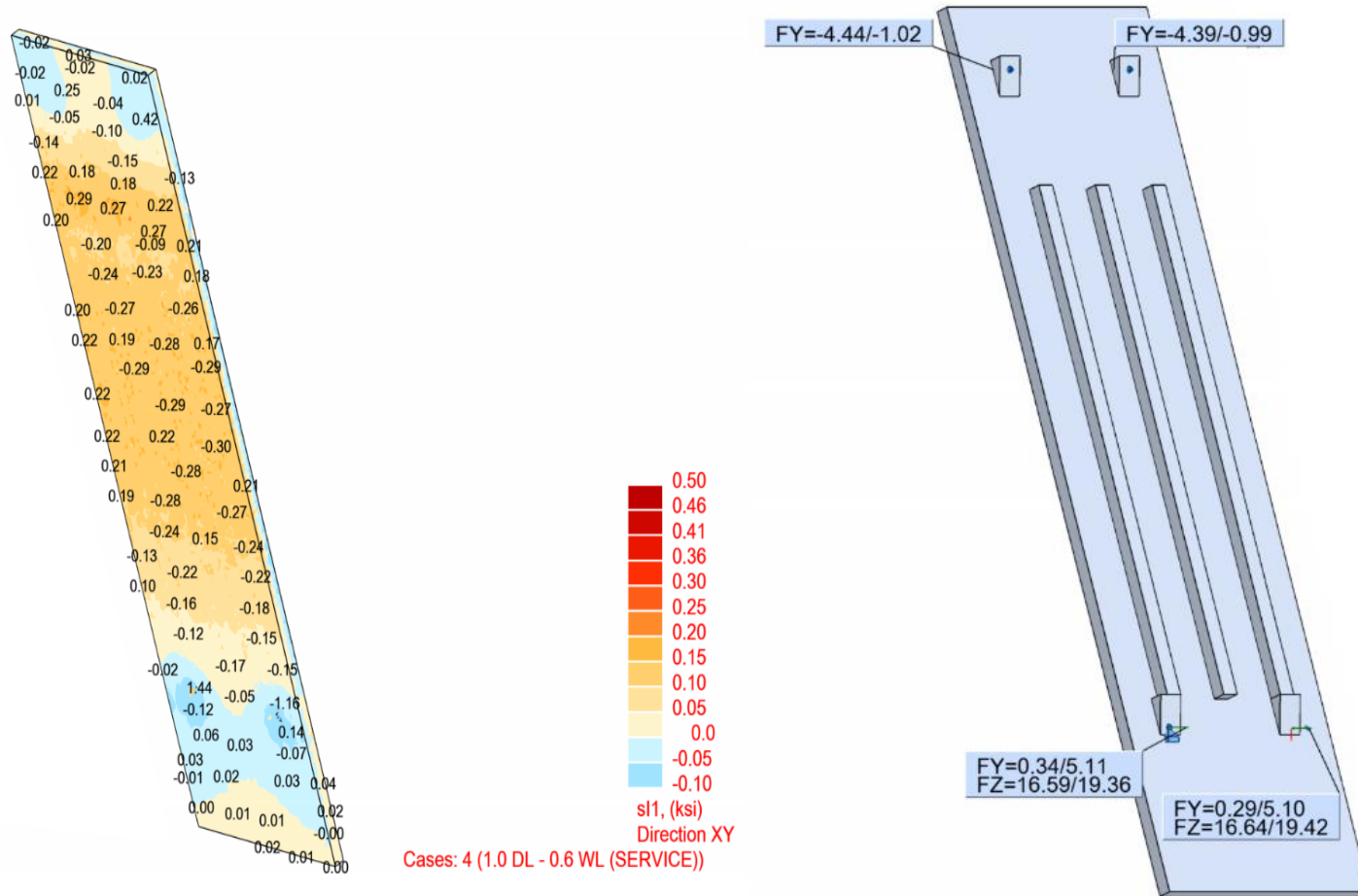
BIM / VDC

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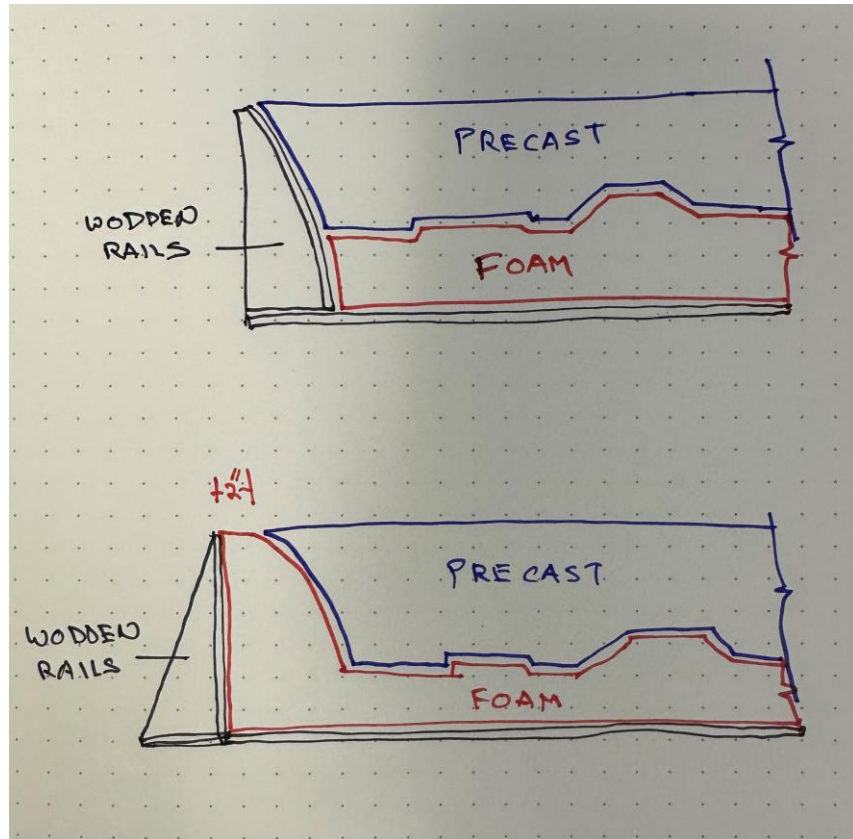
Finite Element Analysis (FEA)

CROW MUSEUM OF ASIAN ART, UTD ATHENAEUM COMPLEX



Forming

CROW MUSEUM OF ASIAN ART, UTD ATHENAEUM COMPLEX



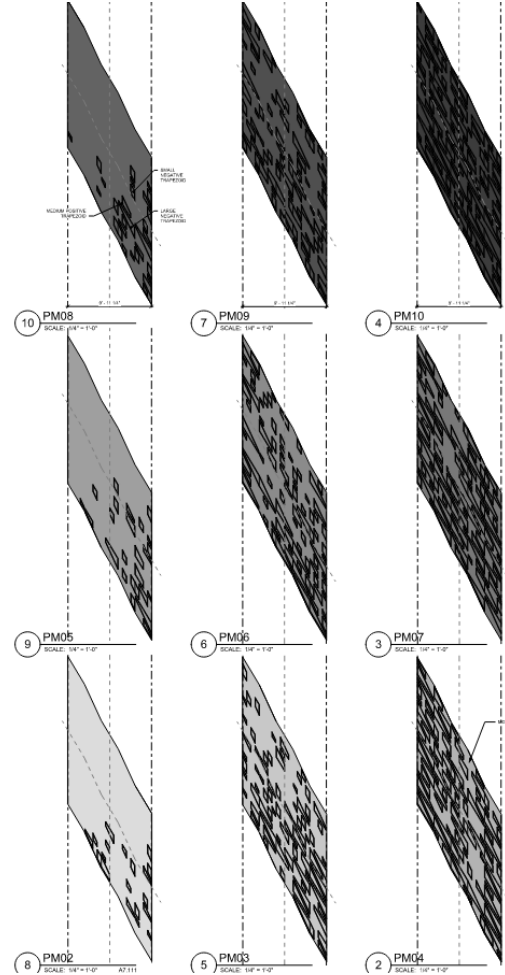
Forming

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Forming

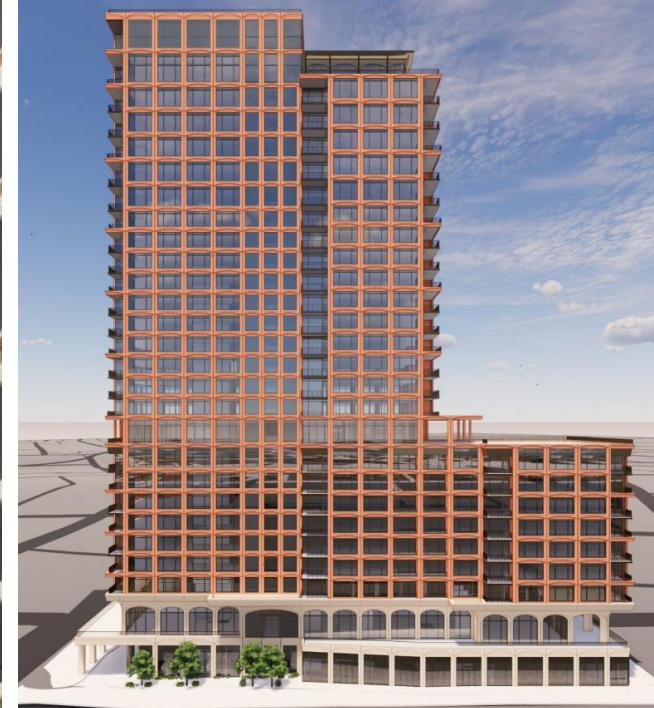
CROW MUSEUM OF ASIAN ART, UTD ATHENAEUM COMPLEX



Forming

CROW MUSEUM OF ASIAN ART, UTD ATHENAEUM COMPLEX





CASE STUDY

Knox Tower, Dallas, TX

- 100,846 SF of Precast | 1,200 Pieces
- 28 Levels
- Traditional architectural window punch, spandrels & column covers
- Two mix designs | Two finishes
- 4" & 6" projected tapered profiles

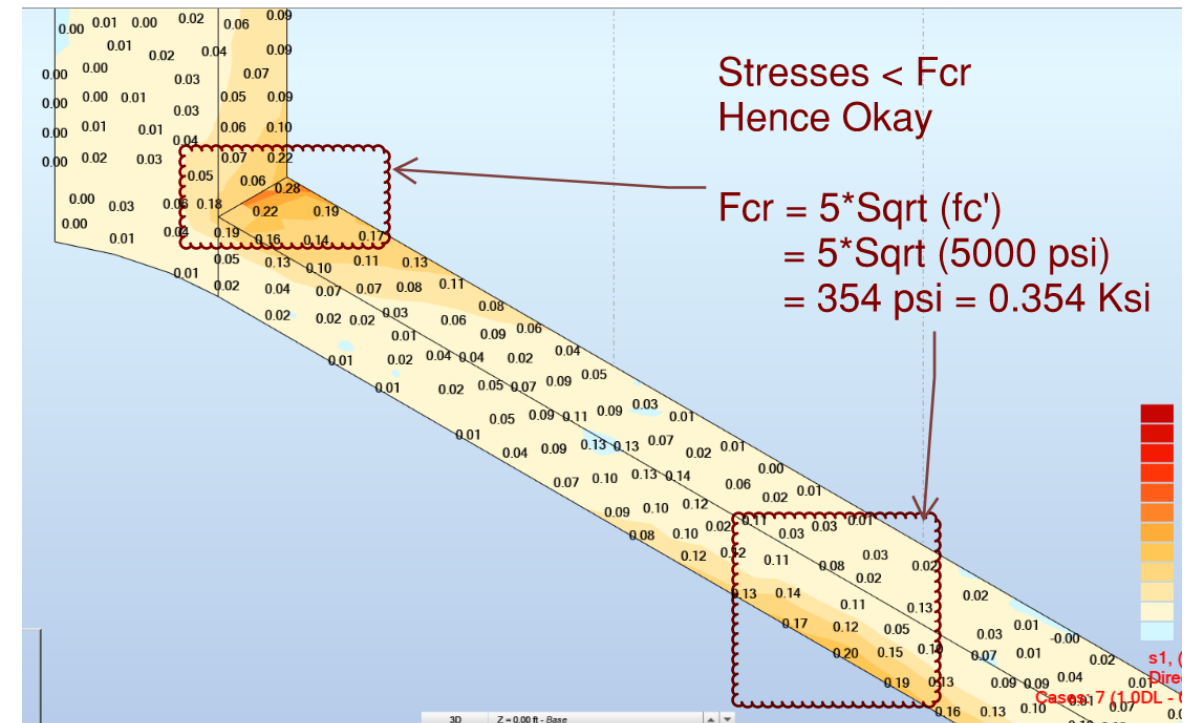
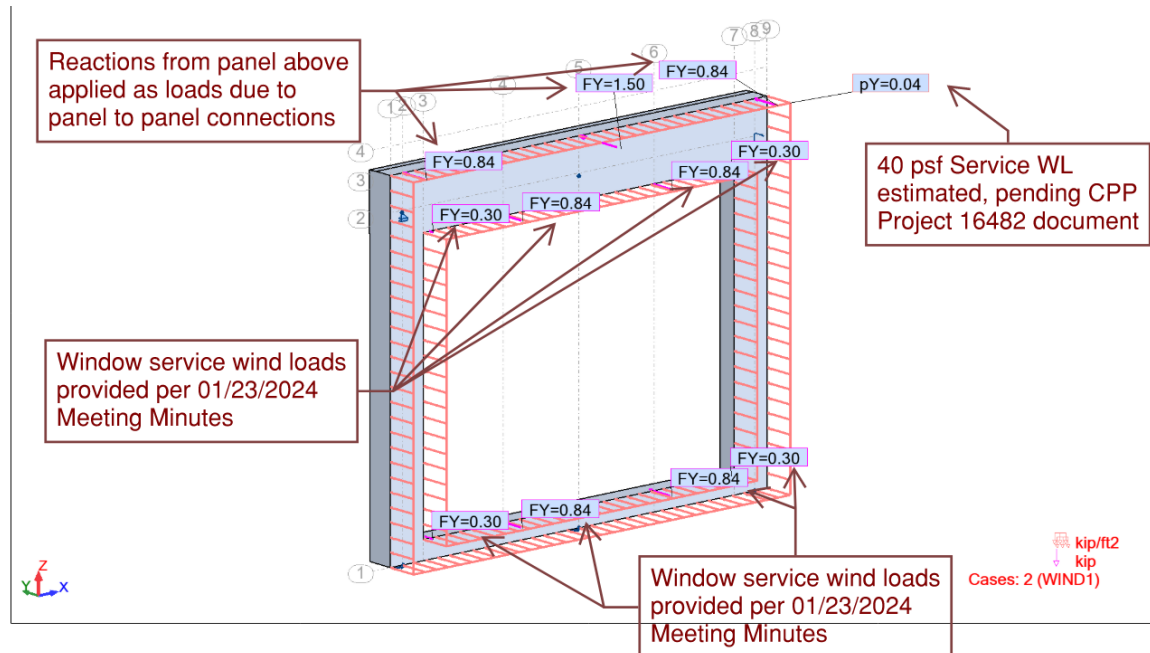
Design

KNOX TOWER



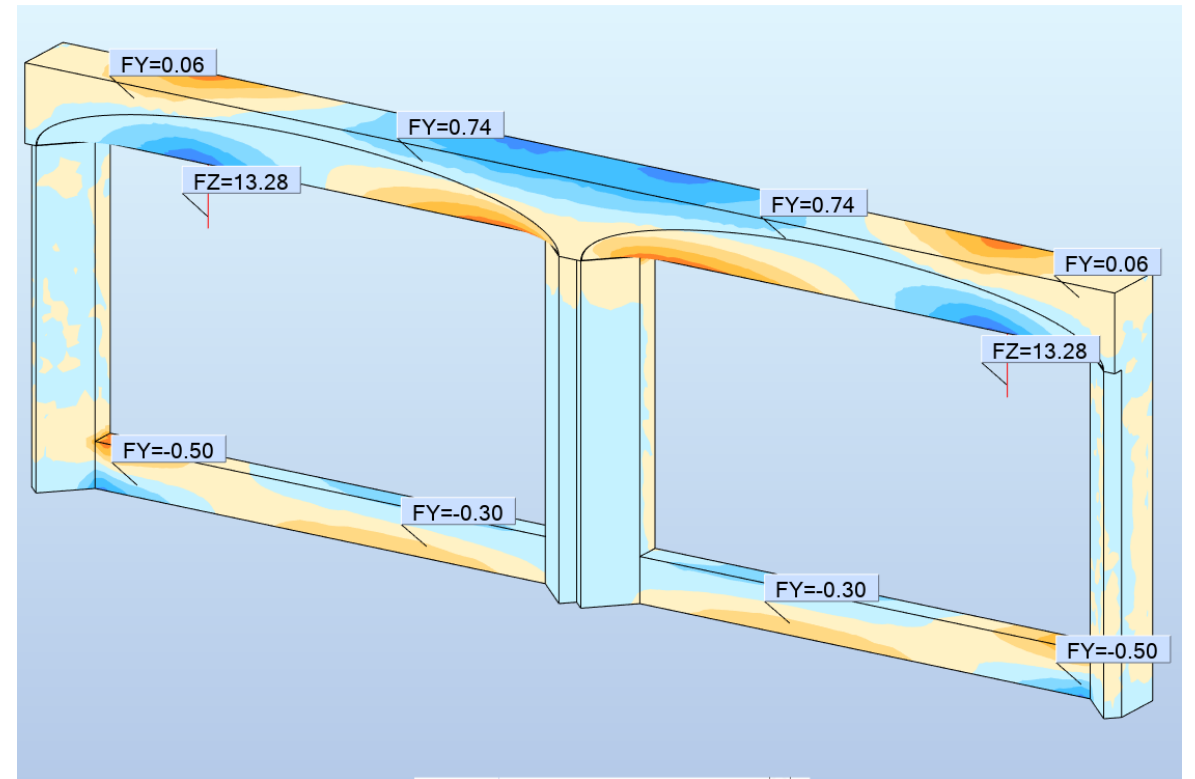
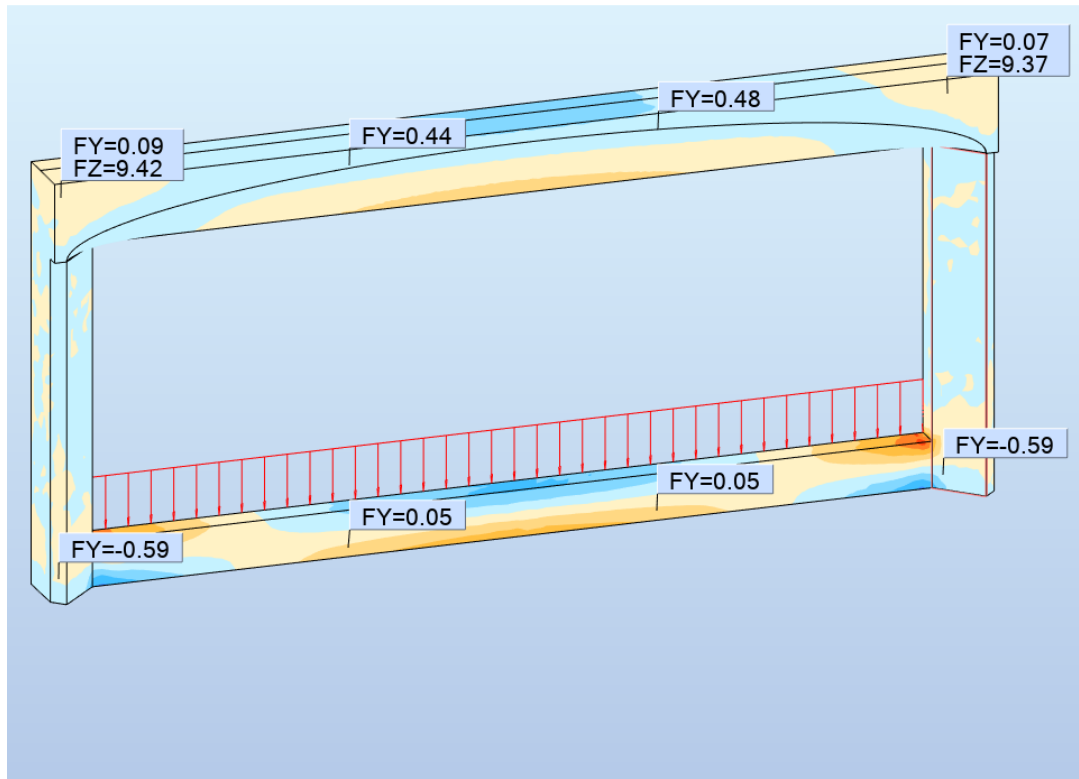
Finite Element Analysis (FEA)

KNOX TOWER



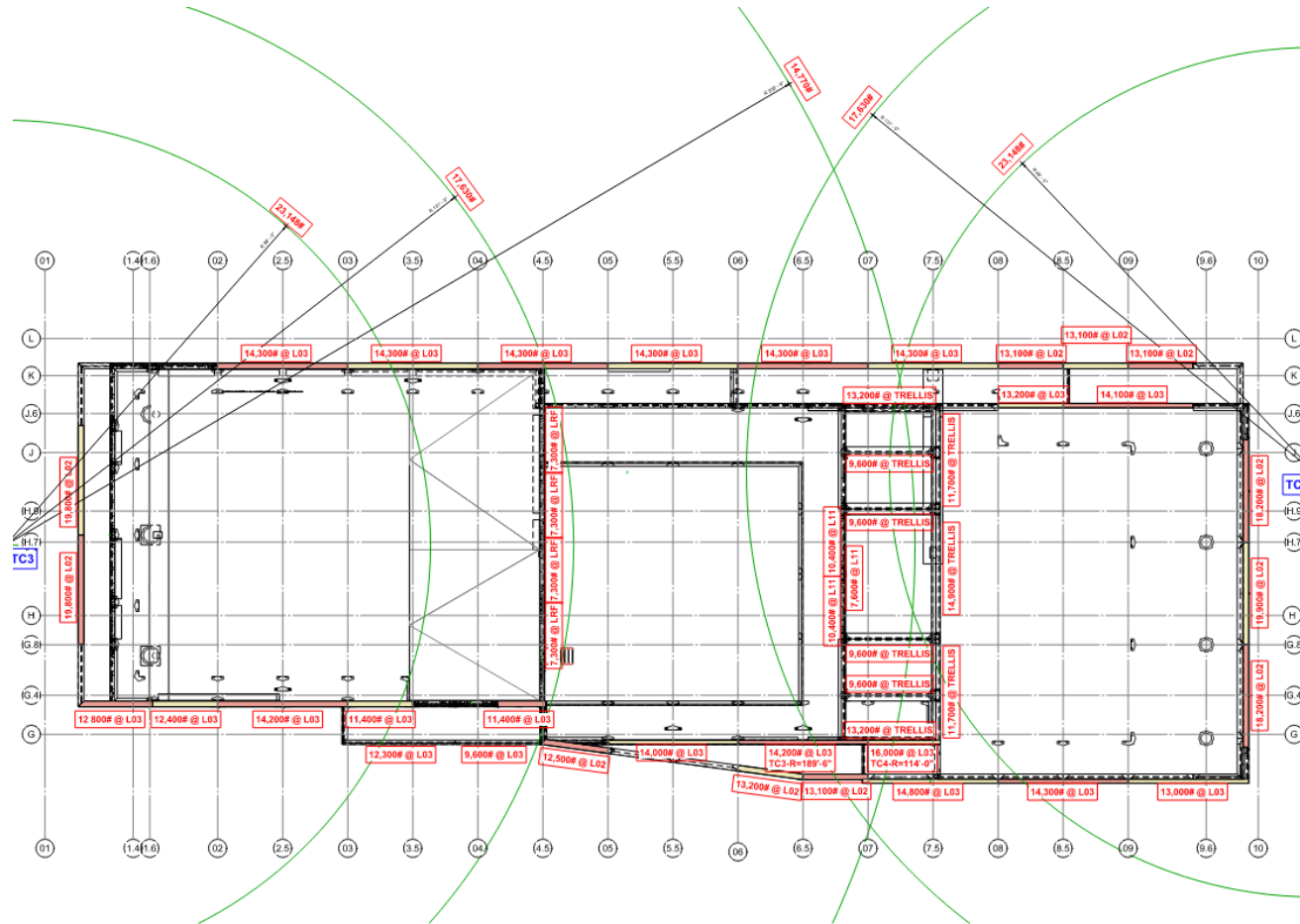
FEA

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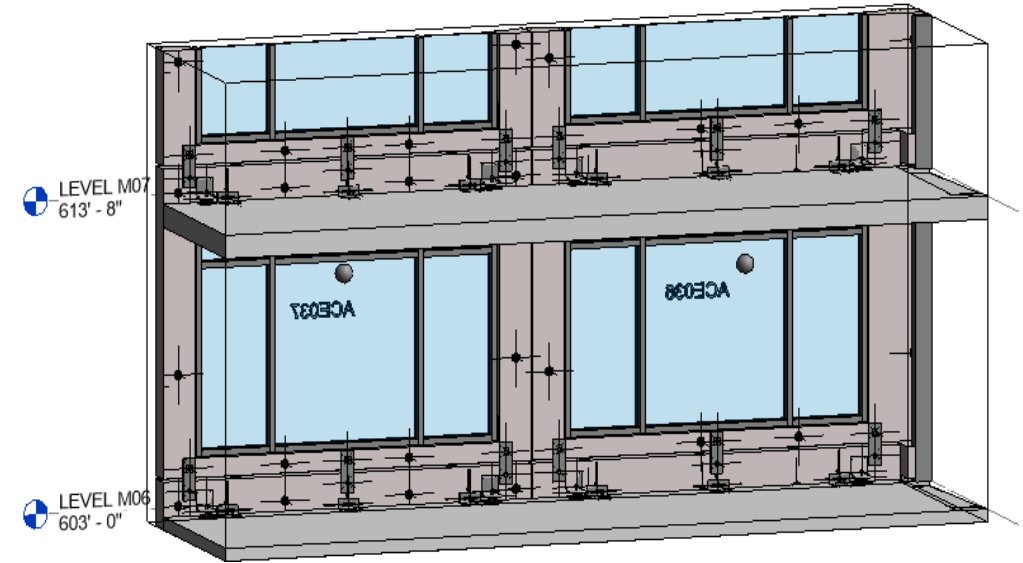
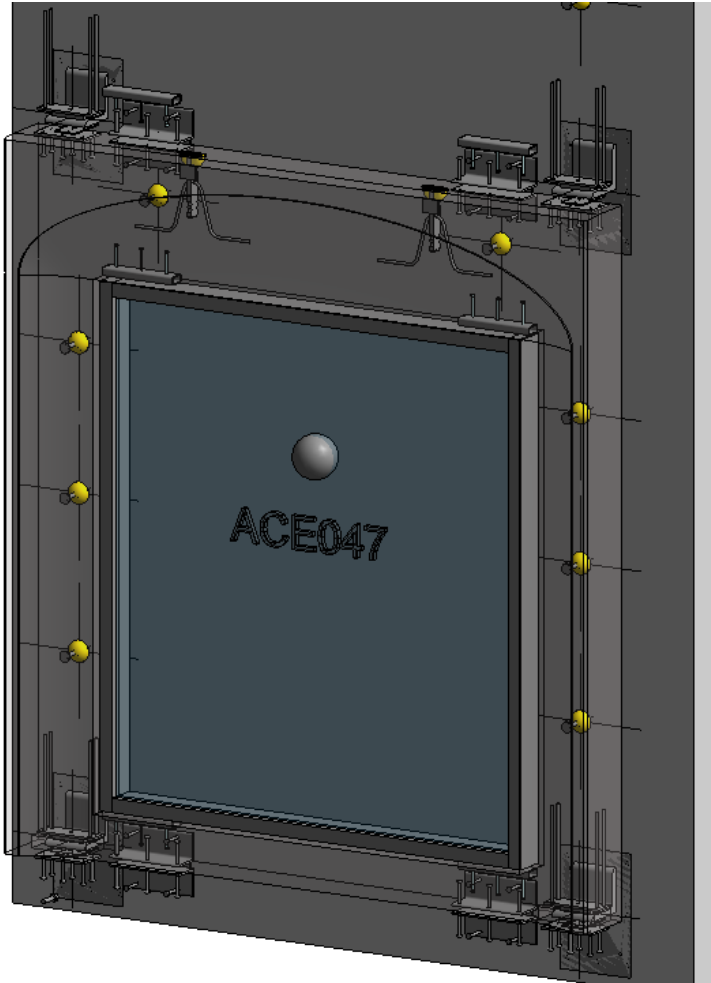
BIM / VDC

KNOX TOWER



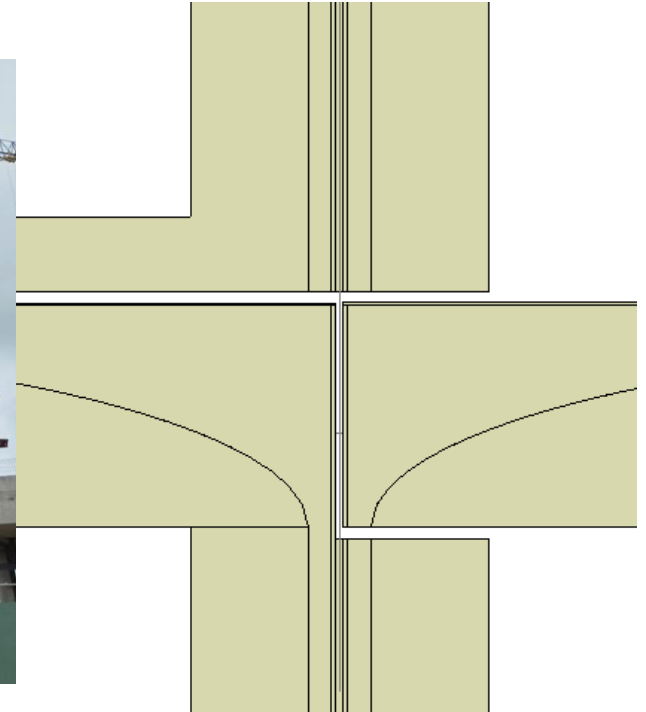
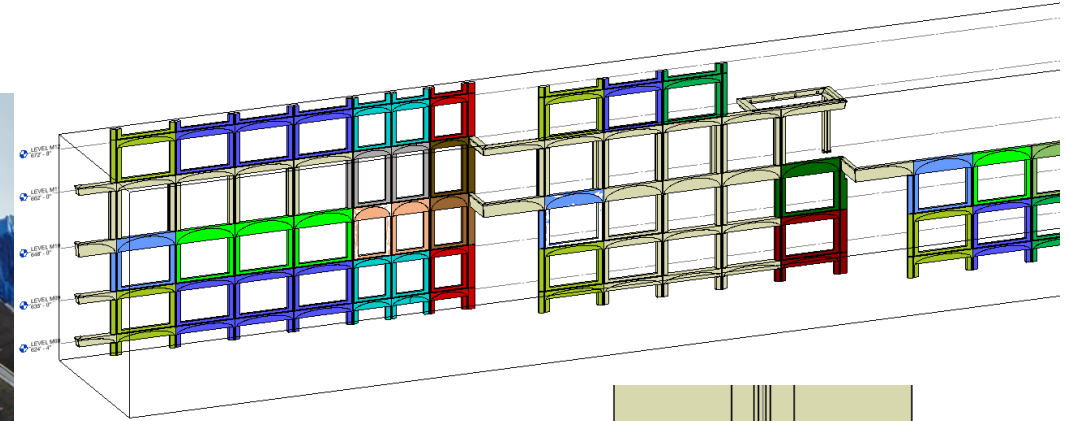
BIM / VDC

KNOX TOWER



Forming

KNOX TOWER



Forming

KNOX TOWER



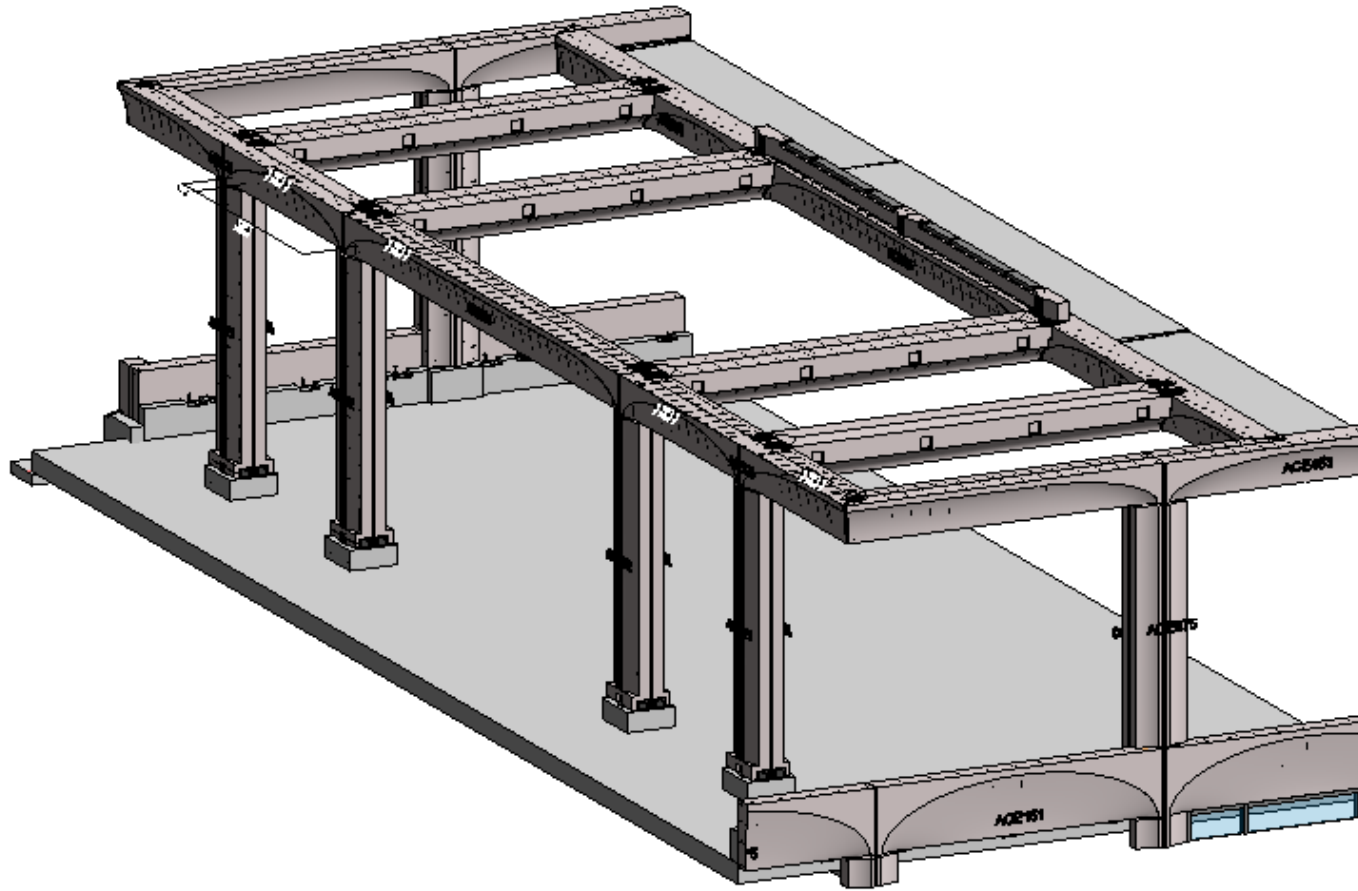
Forming

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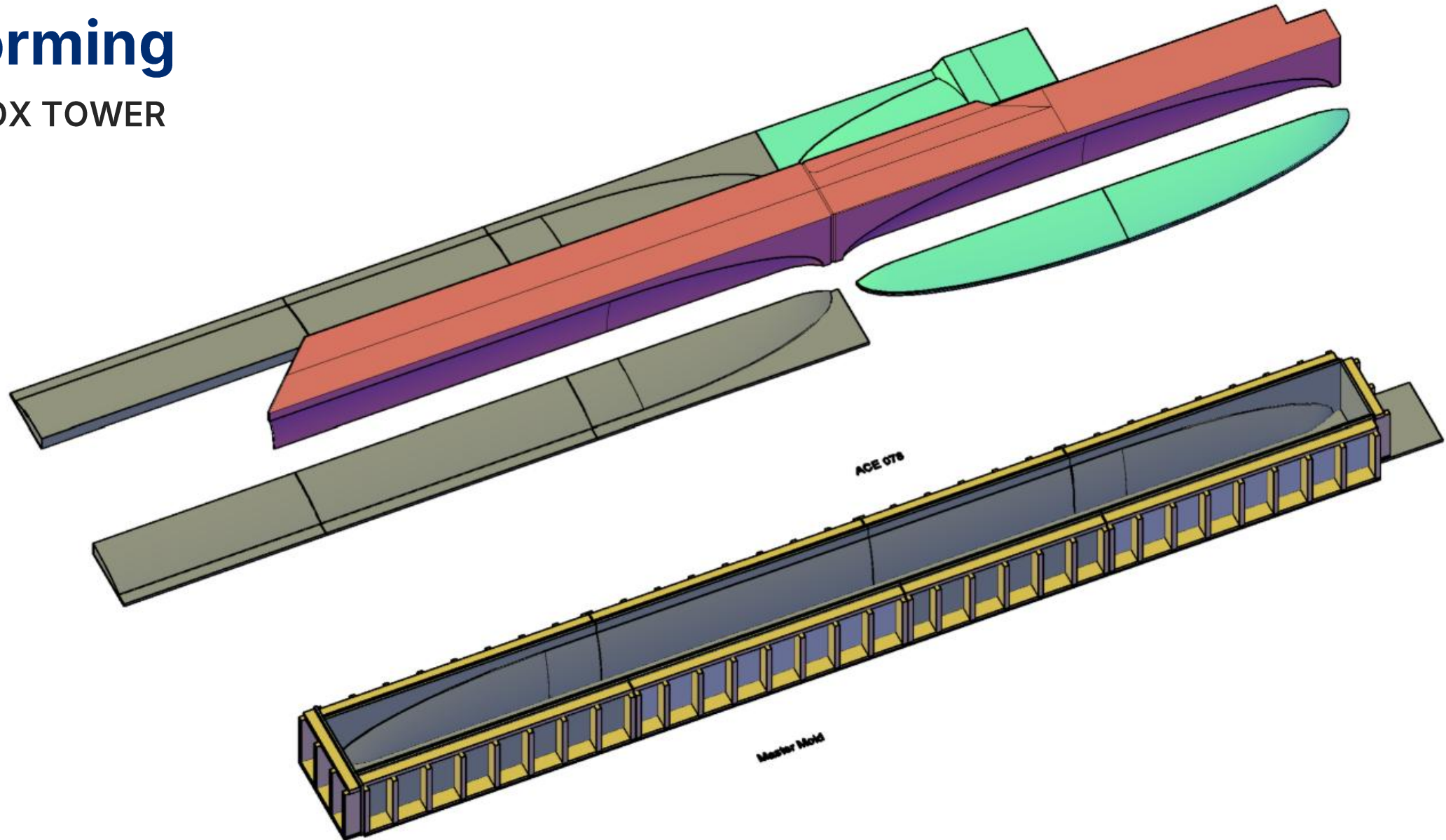
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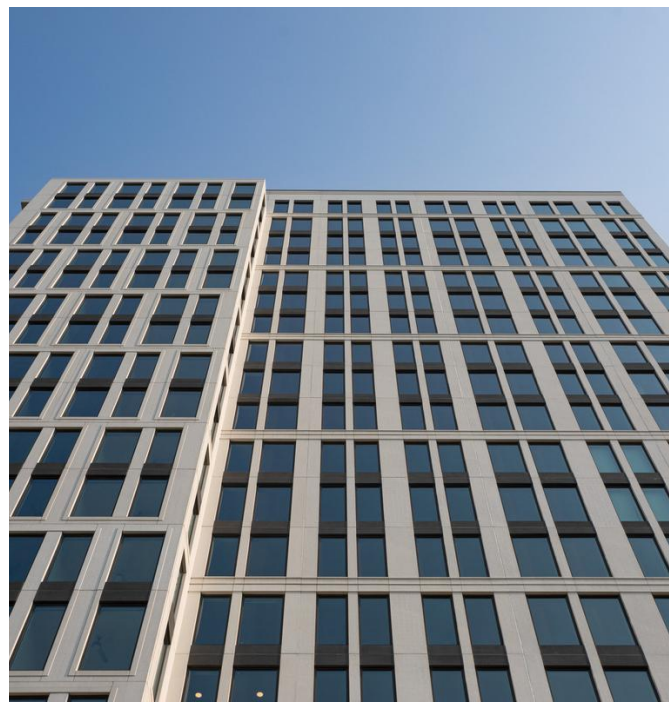


Forming

KNOX TOWER



All-encompassing Project - Maeve





CASE STUDY

Maeve, Raleigh, NC

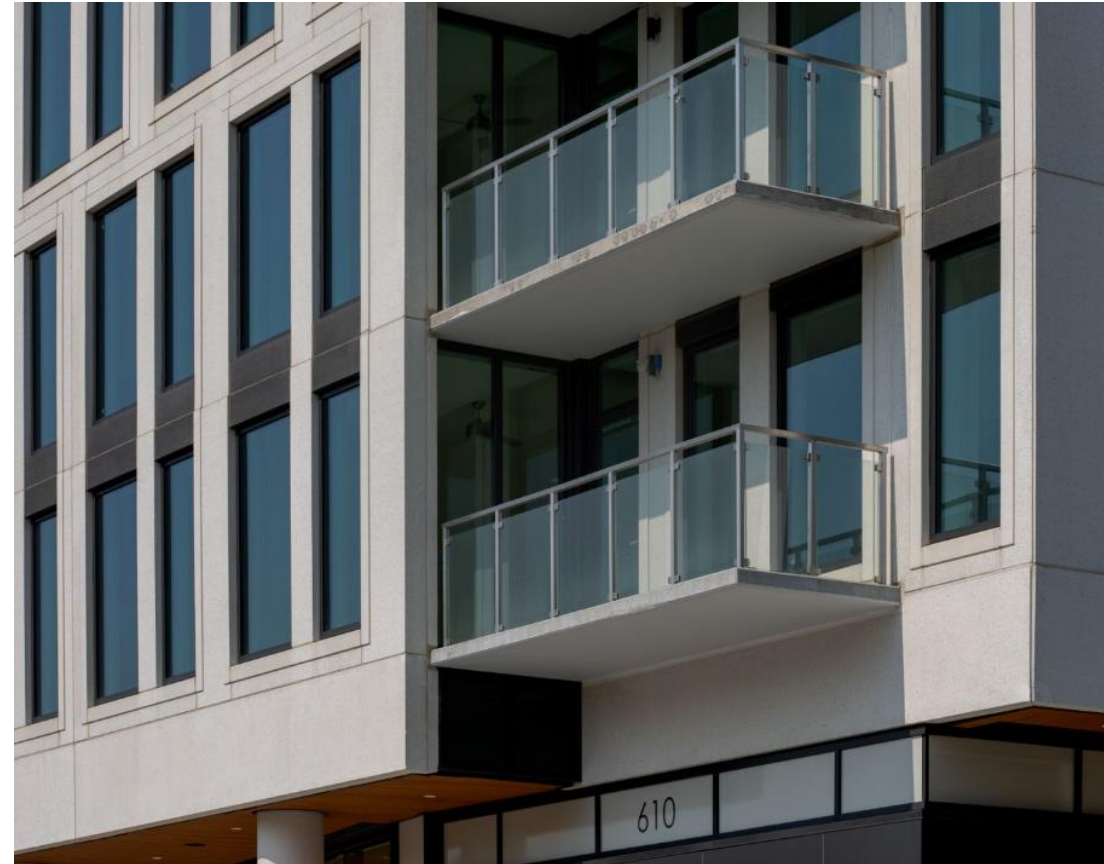
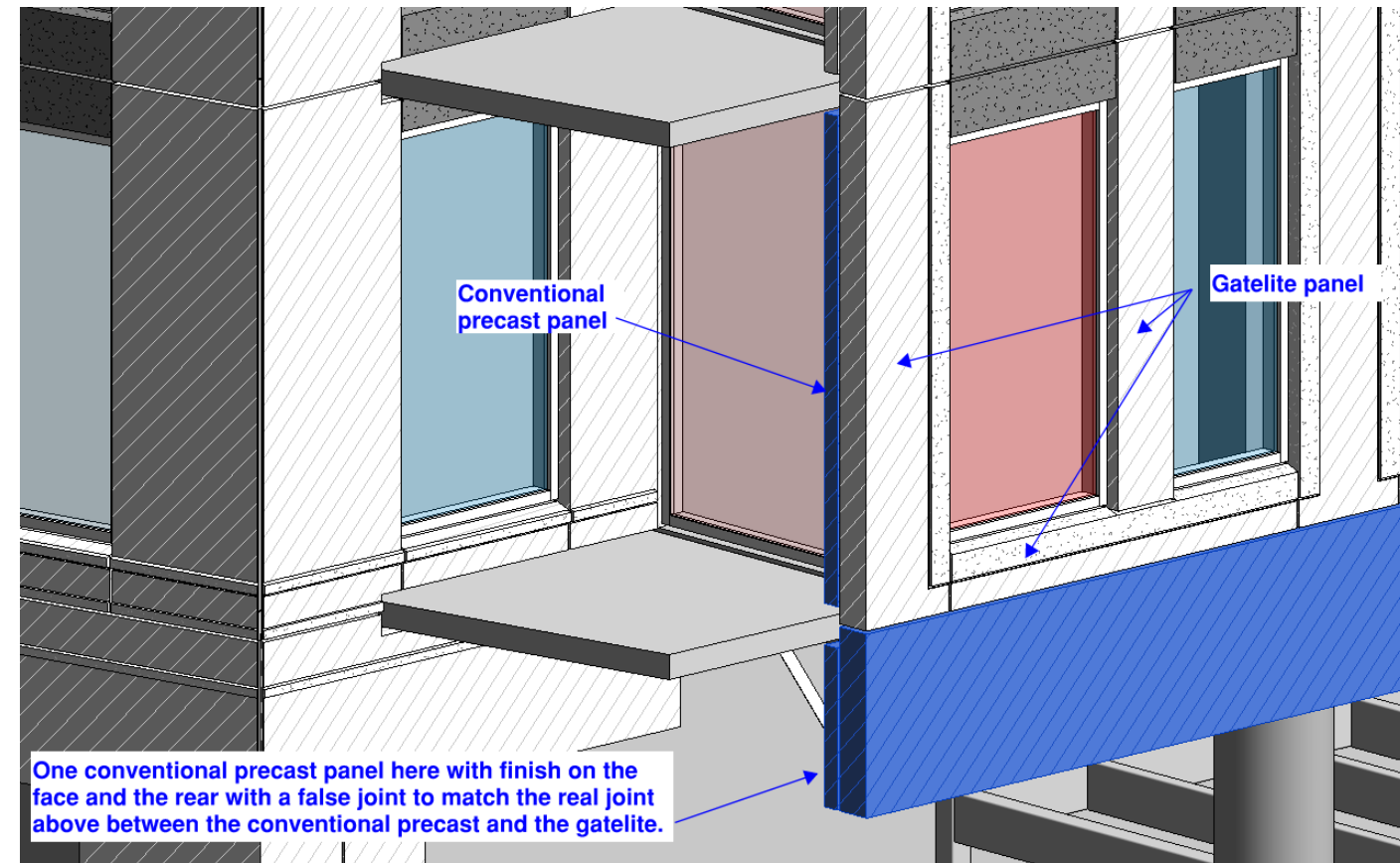
- 680 total units
- 547 are GateLite units
- 133 are Arch precast panels
- 81,204 total concrete skin sq ft

Versatility

MAEVE



APC & Unitized Facade



Performance

Unitized building facade

GateLite Performance Criteria

- Air Infiltration – ASTM E283/E283M-19
- Static Pressure Water Resistance – ASTM E331-00 (16)
- Dynamic Pressure Water Resistance – AAMA 501.1-17
- Structural Performance – ASTM E330/E330M-14
- Water Vapor Transmission – ASTM E96
- Hydrostatic Pressure Resistance – ASTM D5385
- Hurricane Missile Impact – ASTM E1886-19, ASTM E1996-17
- Fire Rating – ASTM E119
- NFPA 285 Compliant
- R-Values – 11 to 16
- WUFI Hygrothermal Modeling
- Glumac – Study for Embodied and Operational Carbon





Recap

- When to consider Design Assist
- How to start the conversation with a prefabricated building provider



Open Q&A

Questions? Please contact:

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