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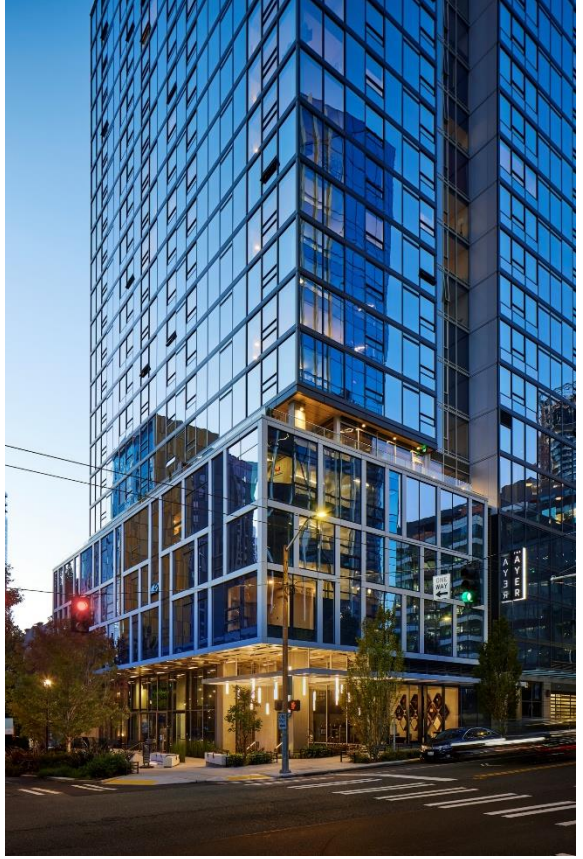
ckc STRUCTURAL ENGINEERS

The Ayer

Seattle, WA

ACI Excellence In Concrete Awards 2025



Inspired by Pacific Northwest tectonics, The Ayer's geometric façade mimics fractured blocks that adds a striking presence to Seattle's skyline.

Project Highlights

- 45 stories (480 ft.)
- 576,000 SF | 454 units
- 6 levels of below-grade parking & 3 above
- 30,200 CY concrete, 3,110 tons of rebar
- Completed Dec 2023 (30-month schedule)

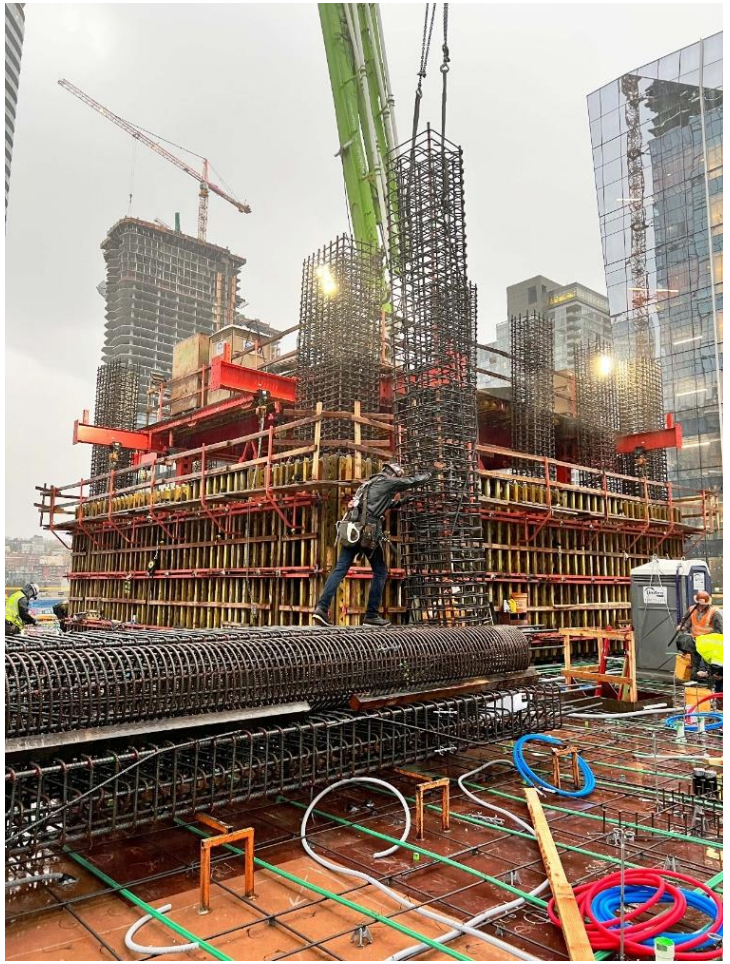
Developer: Holland Partner Group

Architect: Weber Thompson

Contractor: Holland Partner Group

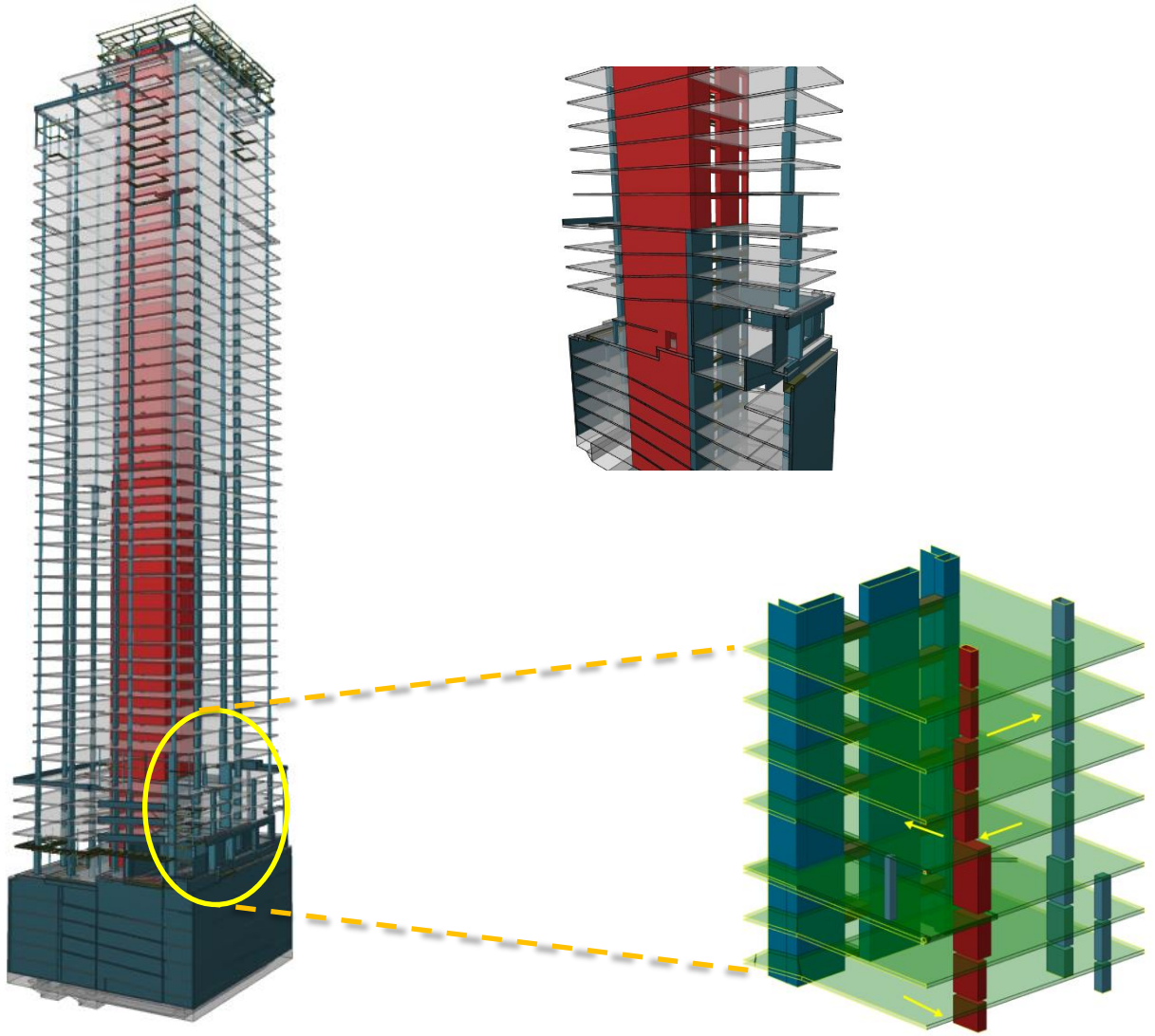
Structural System Overview

- 8” post-tensioned slabs, 12’ cantilevers
- High strength columns– 15,000 PSI
- Puddling elimination
- Shear wall core w/ steel fiber reinforced concrete (SFRC) coupling beams
- A706 grade 80 rebar was specified in the foundation, columns, and for all shear walls
- 16 vertically aligned columns, no transfer beams

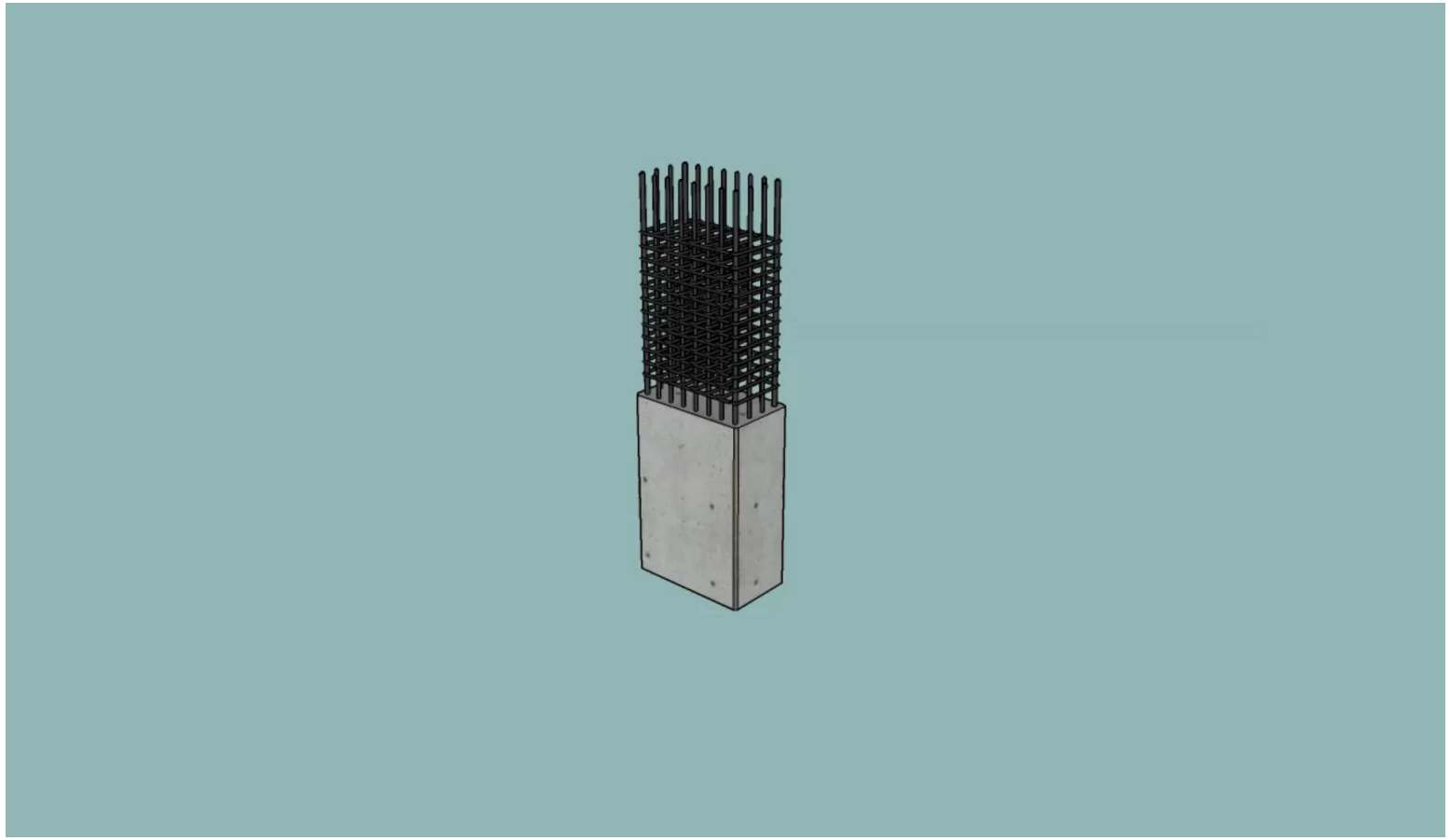


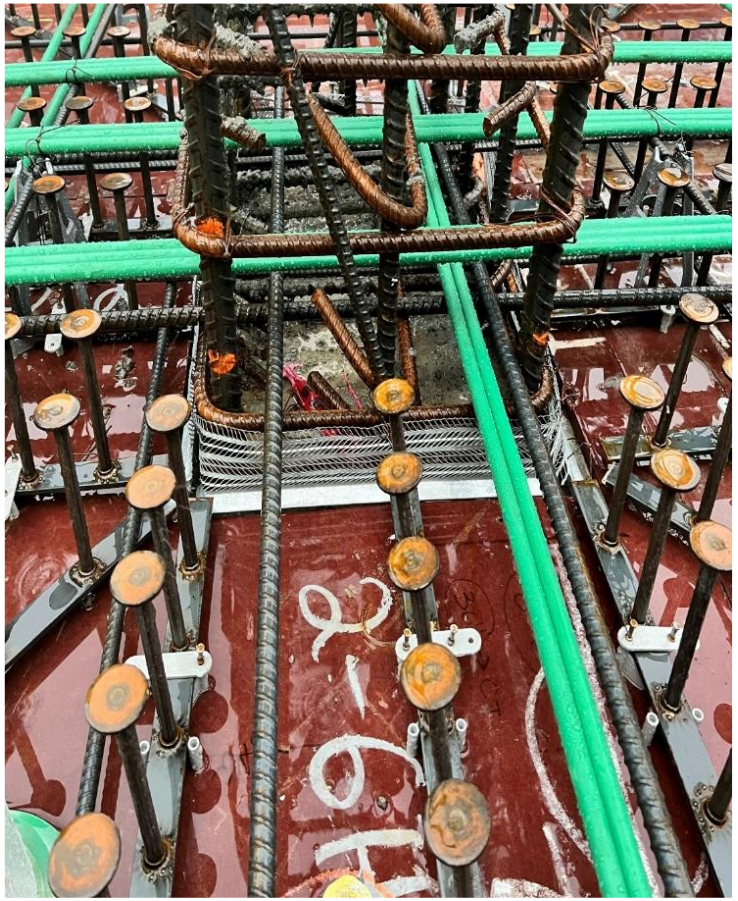
16 Columns without Transfer

Close collaboration between key design and construction team members resulted in a building layout requiring only 16 columns. **This *eliminated the need for transfer beams!***



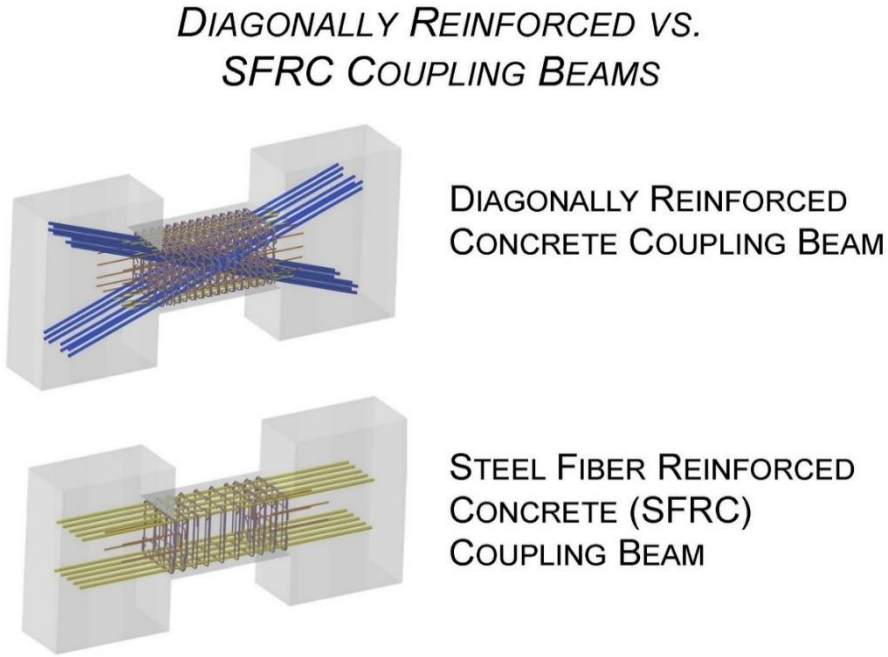
Elimination of Puddling



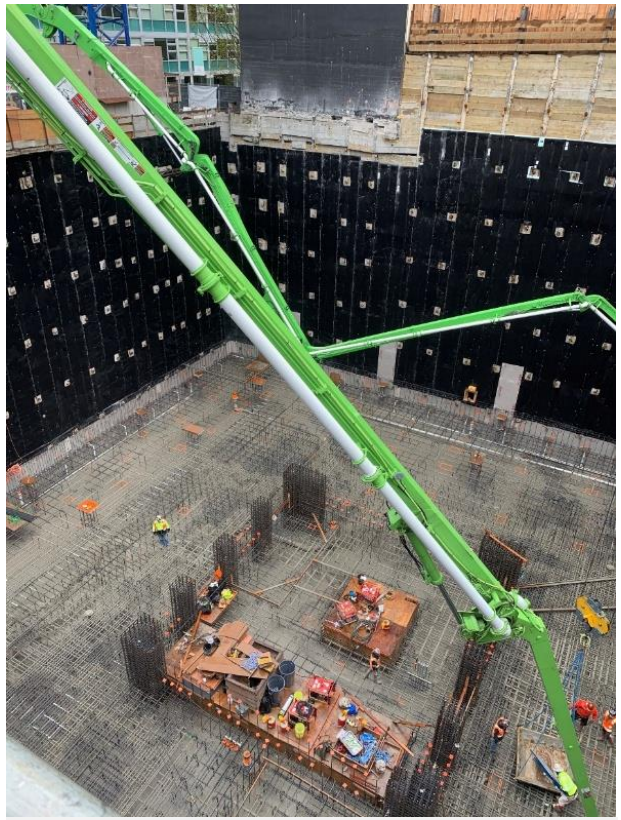


Steel Fiber-Reinforced Concrete Coupling Beams

The use of Steel Fiber Reinforced Concrete (SFRC) in lieu of the heavily congested diagonally reinforced beams commonly used in high seismic regions reduced The Ayer's cost, accelerated construction, and was well received by the contractor and owner.



Under Construction

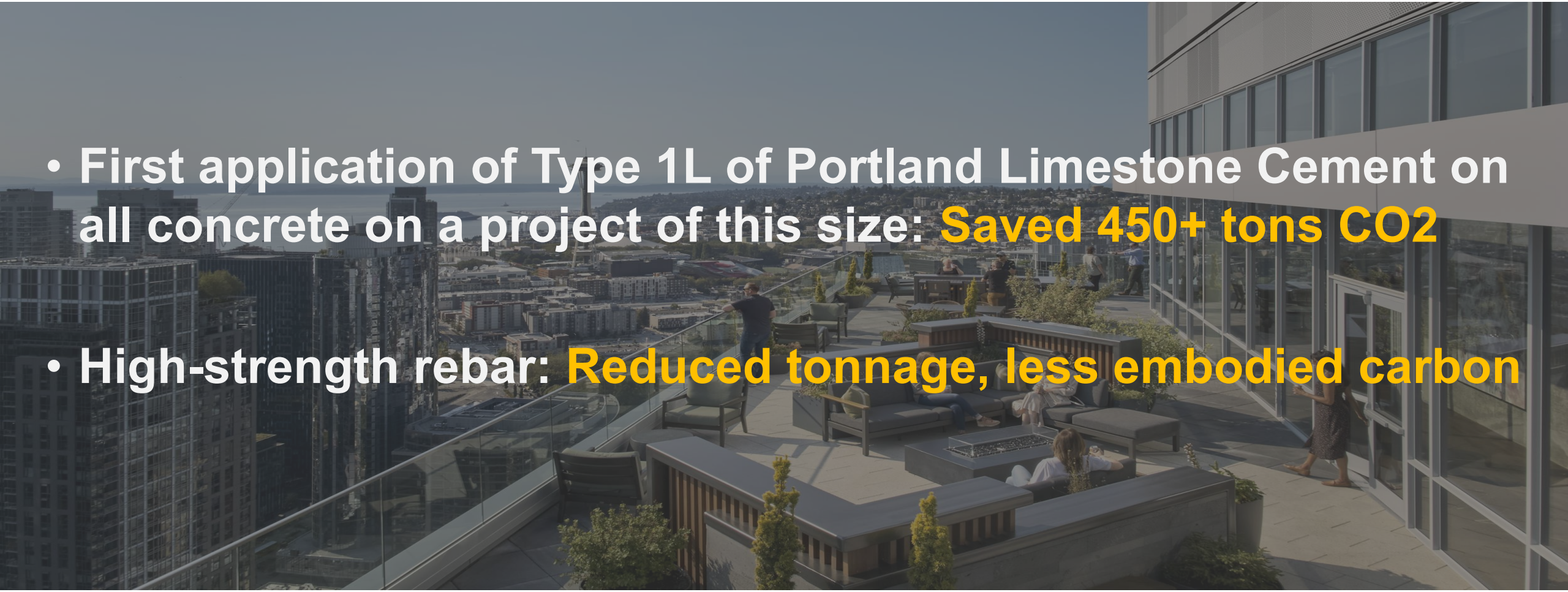


10’ Mat

Advancing the Core

Elimination of Tieback Blockouts

Sustainability



- First application of Type 1L of Portland Limestone Cement on all concrete on a project of this size: **Saved 450+ tons CO_2**
- High-strength rebar: **Reduced tonnage, less embodied carbon**

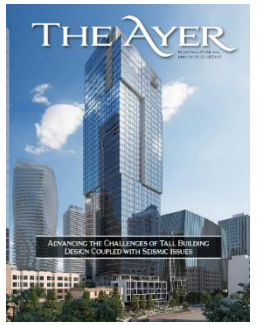
Awards & Publications

NCSEA Outstanding Multifamily High-Rise of the Year 2025

NAIOP High-Rise Residential Development of the Year 2024

CRSI Honors Award 2024 Residential or Hotel category

ACEC National Silver Winner 2025 Engineering Excellence Awards



"Advancing The Challenges Of Tall Building Design Coupled With Seismic Issues", STRUCTURE Magazine, June 2022

"In Search of Net Zero", STRUCTURE Magazine, June 2023

"Signature Tower Features Low-Carbon Portland Limestone Cement", CNCA, January 2022

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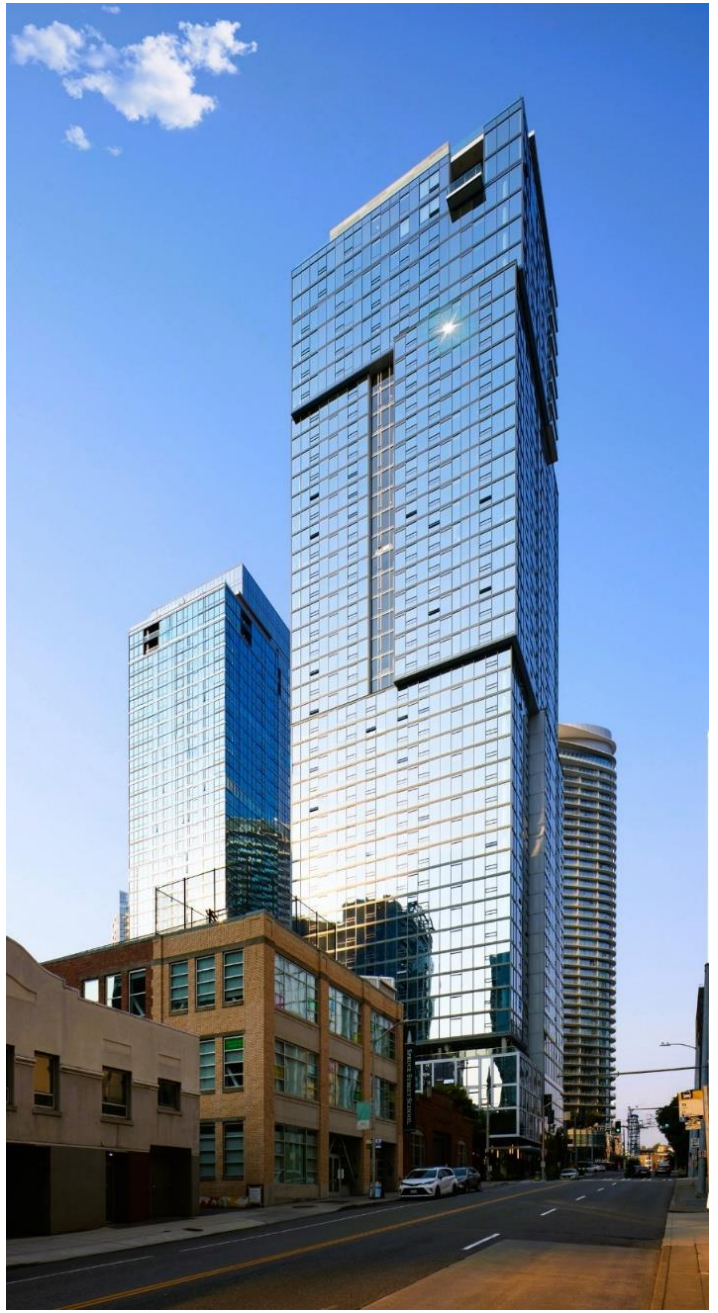
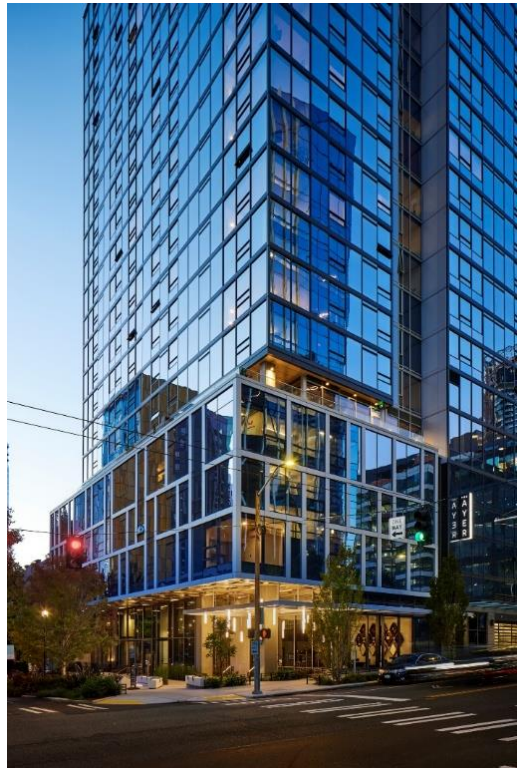
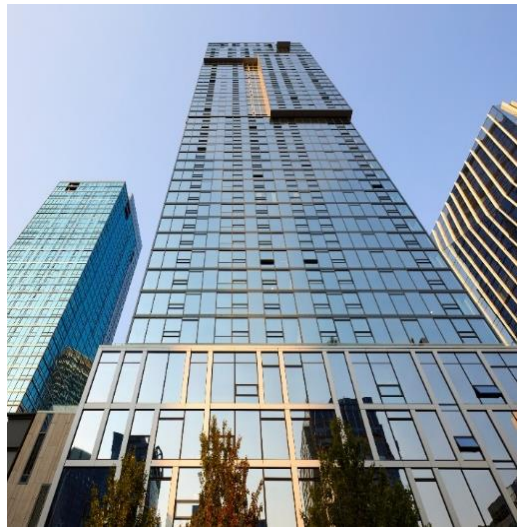
Conclusion & Impact

- Advanced materials + structural innovation
- Leading-edge constructability
- Deep collaboration from design to construction
- The Ayer redefines what's possible in high-rise concrete design.








Thank You!
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ONE WAY
THE AYER