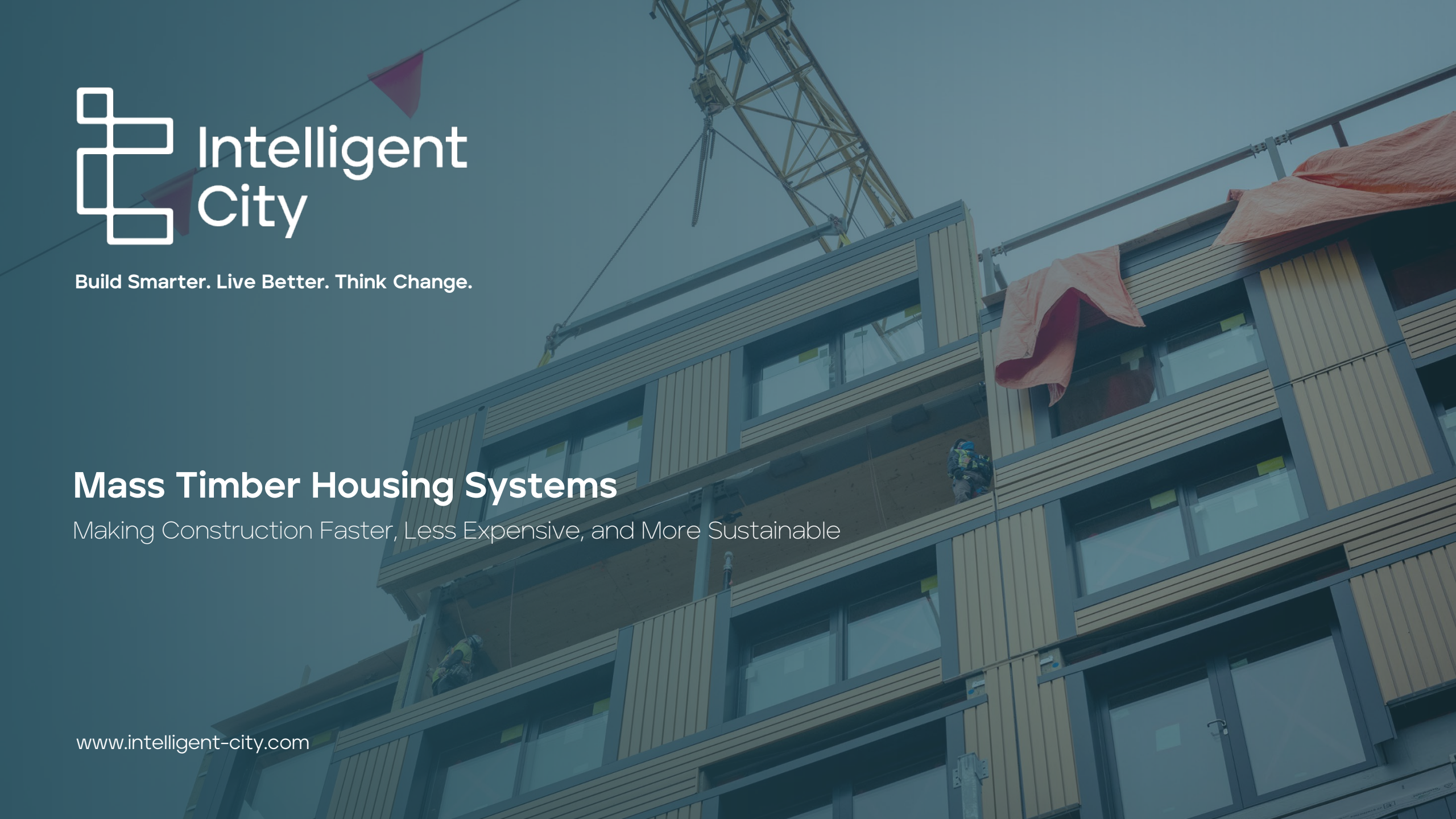

Intelligent City

Build Smarter. Live Better. Think Change.

Mass Timber Housing Systems

Making Construction Faster, Less Expensive, and More Sustainable

www.intelligent-city.com

Housing Is Facing Challenges From All Sides

Real estate developers and the construction industry cannot scale sustainably

Rising Construction Costs

Construction prices have increased by 7.5% YoY for the past 20 years

Rising ESG Requirements

Construction and operation of buildings account for 40% of global GHG

One-off Projects

Drawn-out construction timelines with overruns and deficiencies

Low Productivity

Almost no productivity improvements per capita for 70 years

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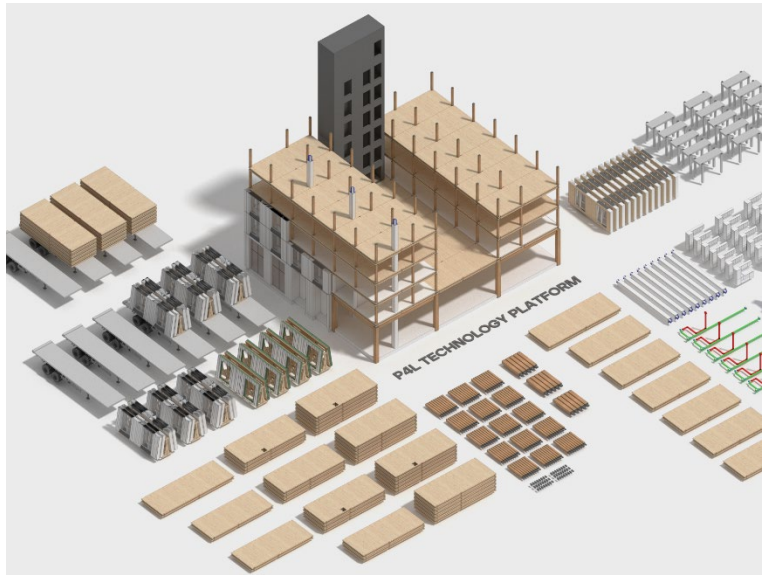
Solution: Systematization and Automation

Intelligent City technology ecosystem

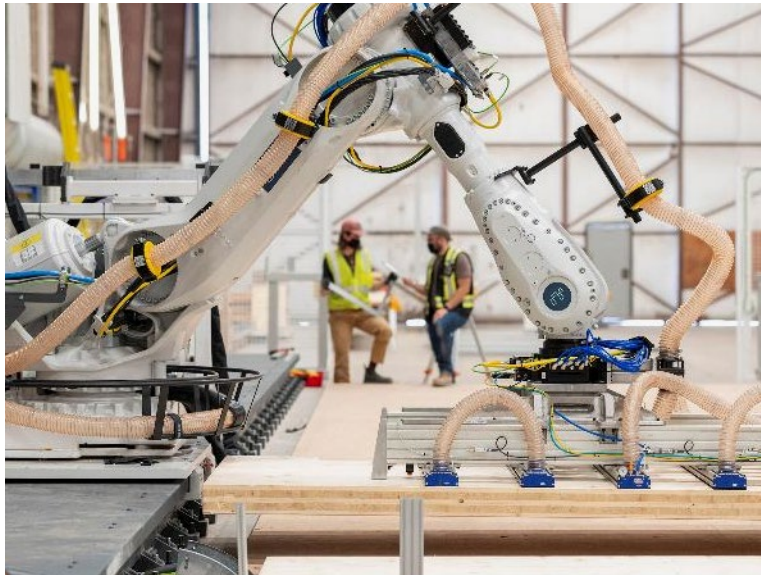
Customizable Building Systems

Certified and adaptable mass timber building systems with MEP integration



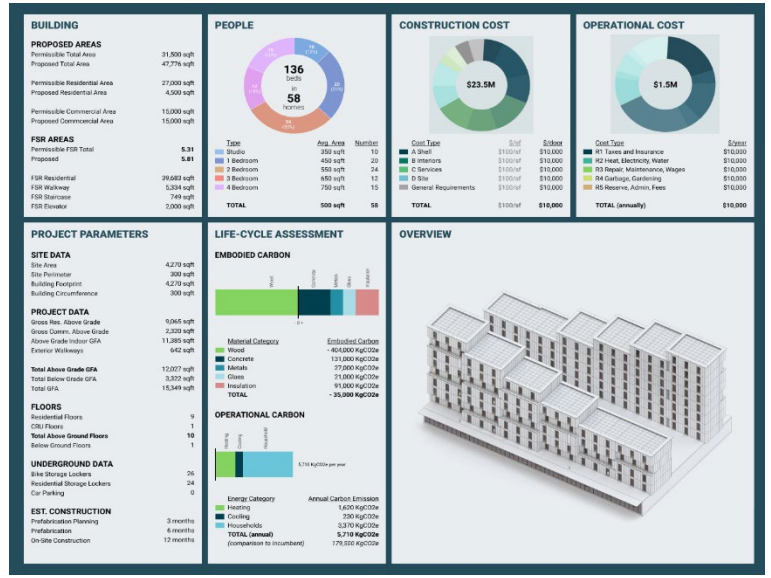
Automated Robotic Manufacturing

Enabling industrialized production at 2x the output and construction speed



Parametric Design System

Augmented design process to accelerate planning process and visualize data upfront



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Mid-to-High-Rise Urban Housing

The growing demand for densification opens a new market for rental housing, student housing, and condo developments

Urban Sprawl
(1 – 2 storeys)

Stick-frame construction

Rubber-stamped single-family housing is not sustainable

Mid-Rise Densification
(4 – 18 storeys)

Opportunity: mass timber

An industrialized and productized approach enables faster planning and construction

High-Rise Towers
(20+ storeys)

Concrete and steel

One-off light-house projects work in downtown cores only

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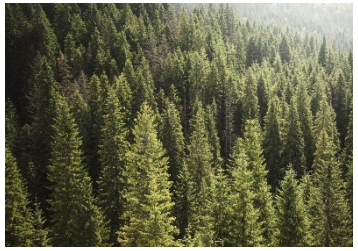
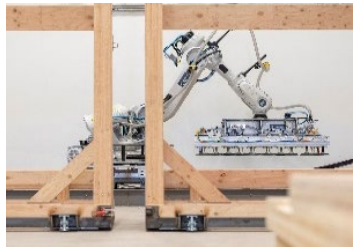
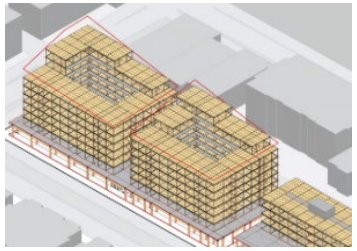
Enabling the Mass Timber Value Chain in Canada

Intelligent City's building system can accelerate the development of Canada's integrated mass timber value chain

Canada has the potential to build a vertically-integrated mass timber supply chain and play a leading role in the construction of sustainable urban housing.



Creating Supply

Leveraging Canada's natural resources

Creating new demand for high-quality, sustainably sourced mass timber

Collaborating with local Indigenous communities

Creating Demand

Meeting urgent needs for affordable and quality urban housing product

Creating high performance building systems on consistent technology platforms

Addressing labour shortage and creating high value jobs

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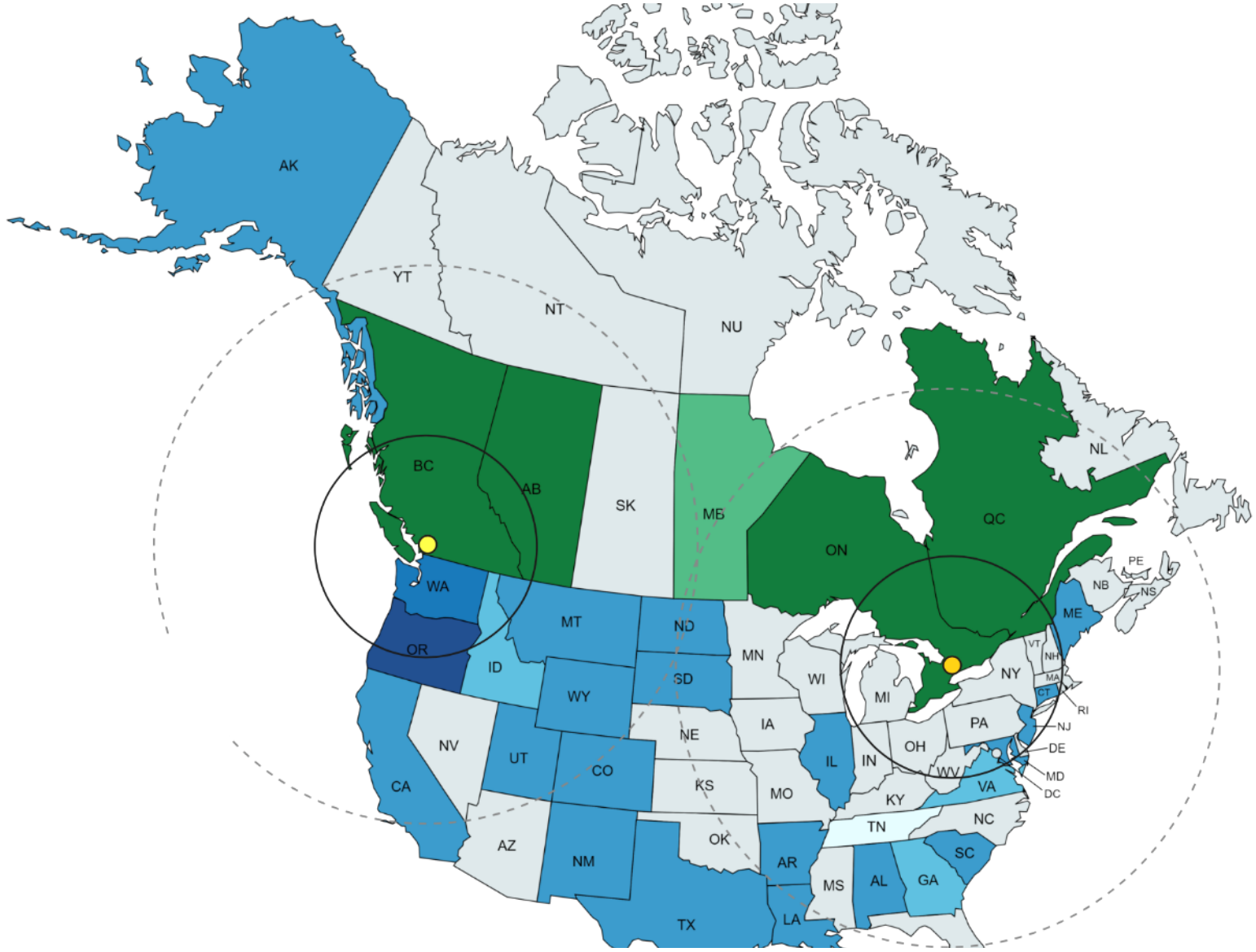
Mass Timber Building Code Adoption & Scalable Expansion

Intelligent City Factory Locations

Adoption of Provinces and States
For high-rise 7-18 storey mass timber buildings

Opportunity
Unified Building Codes across North America allow for a highly scalable system solution.



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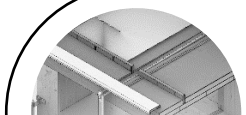
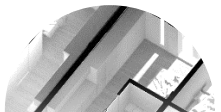
A Product Platform for Housing

Parts of an adaptable product platform

Core Elements

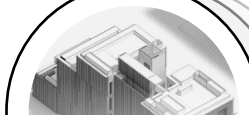


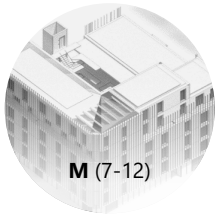


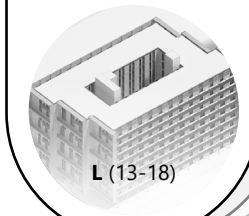
Complementary Elements

P4L Product Platform

Product Family







+

Bespoke elements

Individual Projects

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Buildings as Products

Based on a parametric platform

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Intelligent City Product Family

Pre-engineered building typologies with infinite design customization

3-6 Storeys

Low-rise buildings with distributed lateral systems competing with timber-frame

7-12 Storeys

Mid-rise buildings with separated lateral system for code-compliant mass timber construction

13-18 Storeys

High-rise buildings with separated lateral system for site-specific permits

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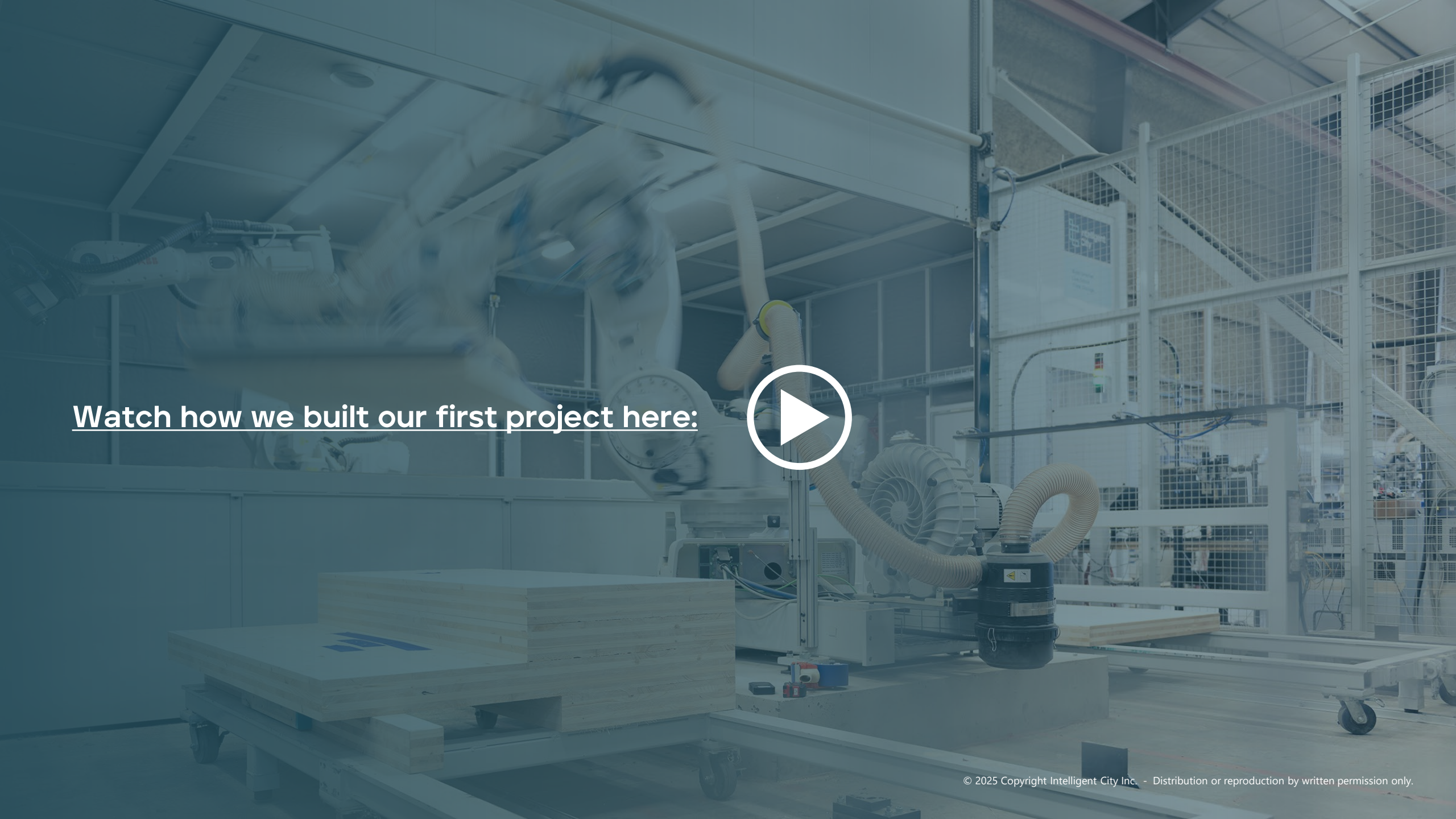
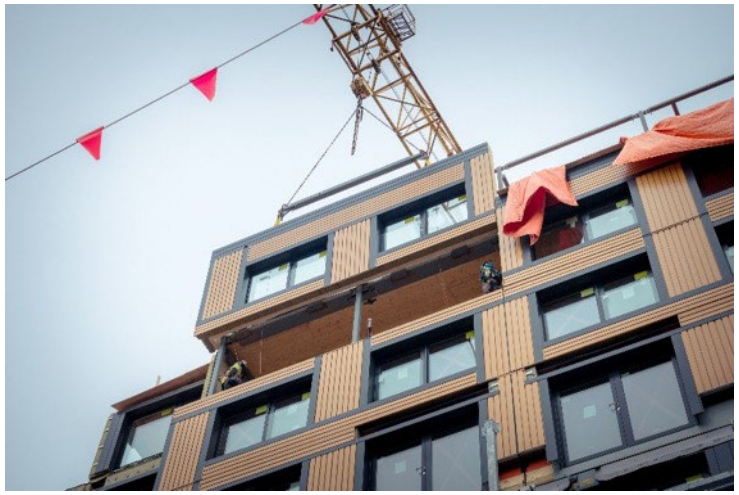


Highlight: Frances St Project for BC Indigenous Housing Society

Completed manufacturing and installation of 122 mass timber and Passive House compliant facade panels.



Pictures from manufacturing

Pictures from on-site assembly of the last panels

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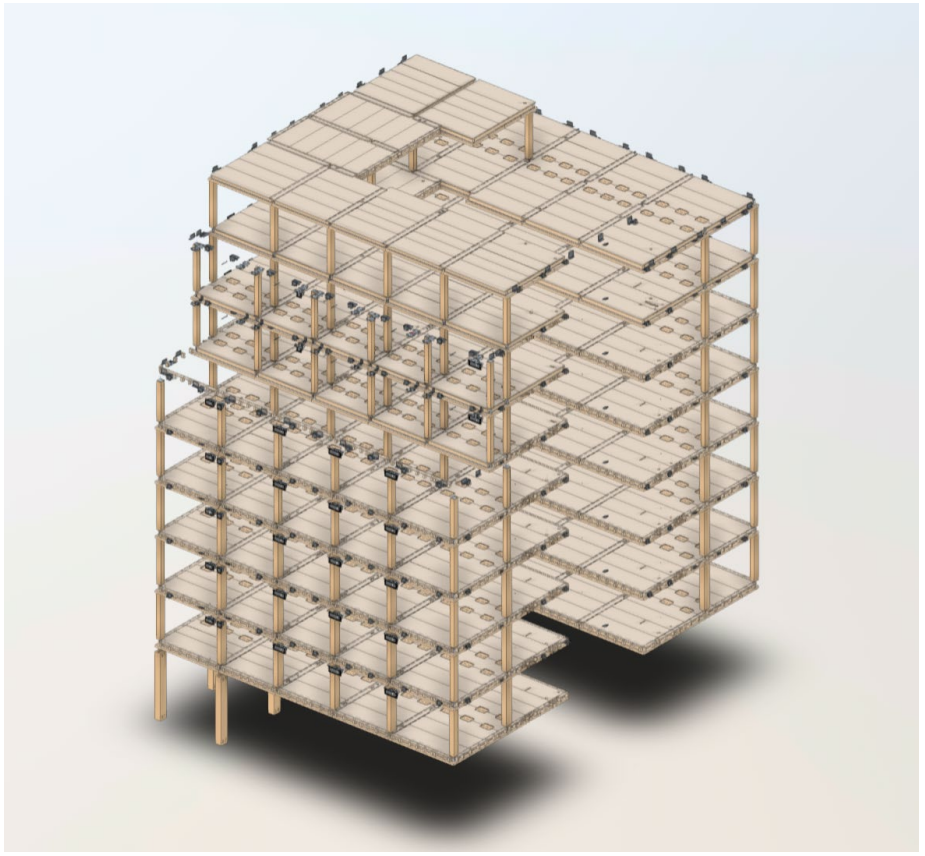
Highlight: 230 Royal York

First 9-storey building in Toronto



Halsa One, 230 Royal York, Toronto - 9 storeys, 50-unit rental, for Windmill and Leader Lane Developments

Full Intelligent City design and building systems, construction Started Sep. 2024, manufacturing Start February 2025

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Customer Journey

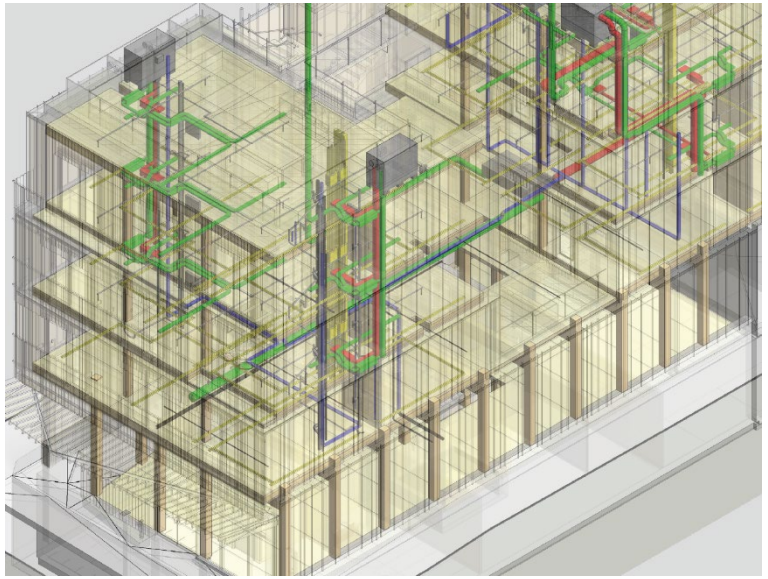
From initiation to project delivery – increasing cost and timeline certainty

Feasibility Phase

Bringing cost and yield certainty by analyzing the site and building designs within our system

Planning Phase

Rigorous planning through detailed BIM planning and a preferred set of consultant partners



Execution Phase

Collaboration with a builder to combine off-site and on-site construction in a timely manner

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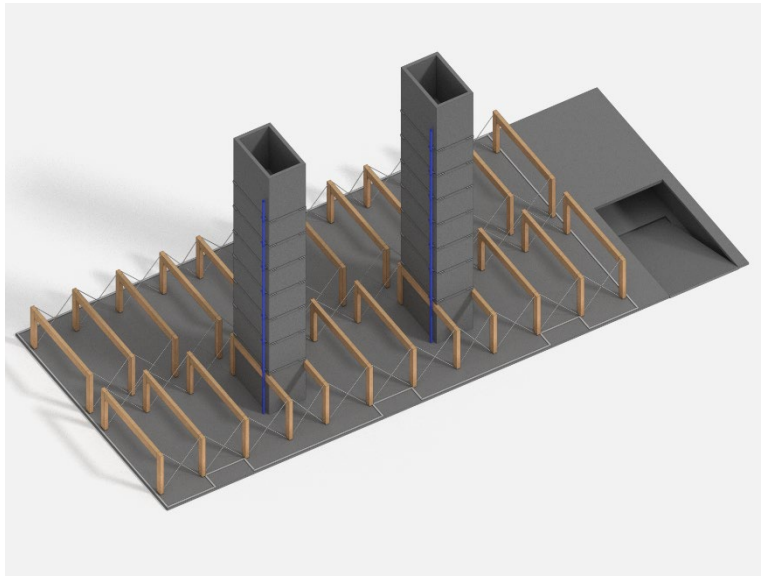
On-Site Assembly

Our product platform enables construction within weeks - assembling a building with 400 parts instead of 400,000

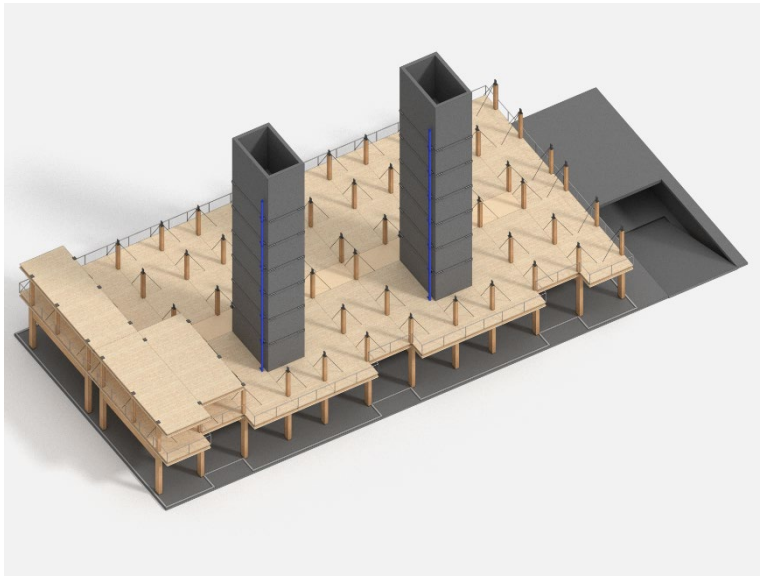
Preparation

Foundations and underground parking, as well as structural cores and load-transfer on ground floor



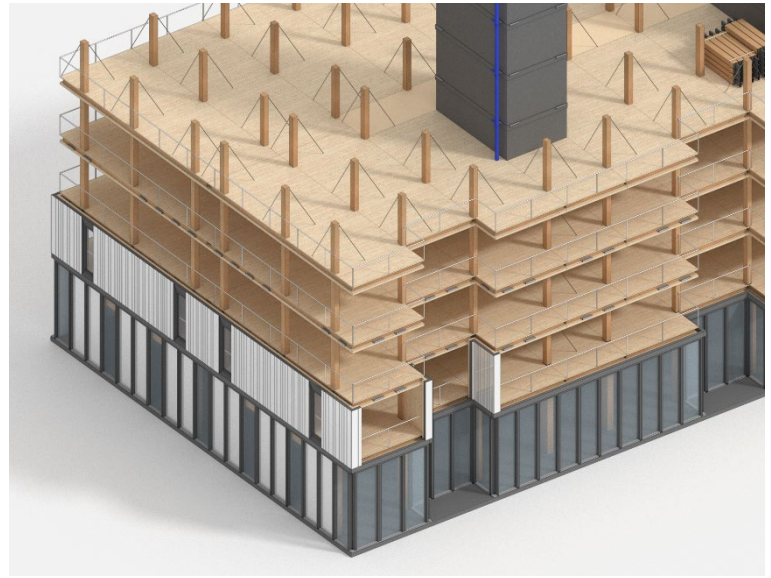
Structural System

Mass timber columns, floor cassette system, and structural tie-ins are installed in 1-2 days per floor



Envelope System

Envelope panels wrap around the building to close it off in 2-3 days per floor



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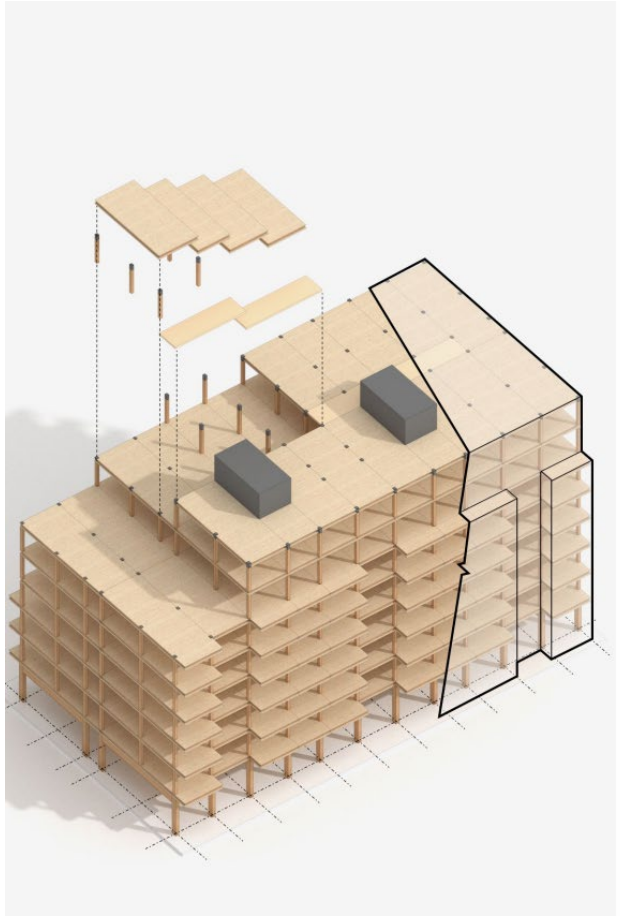
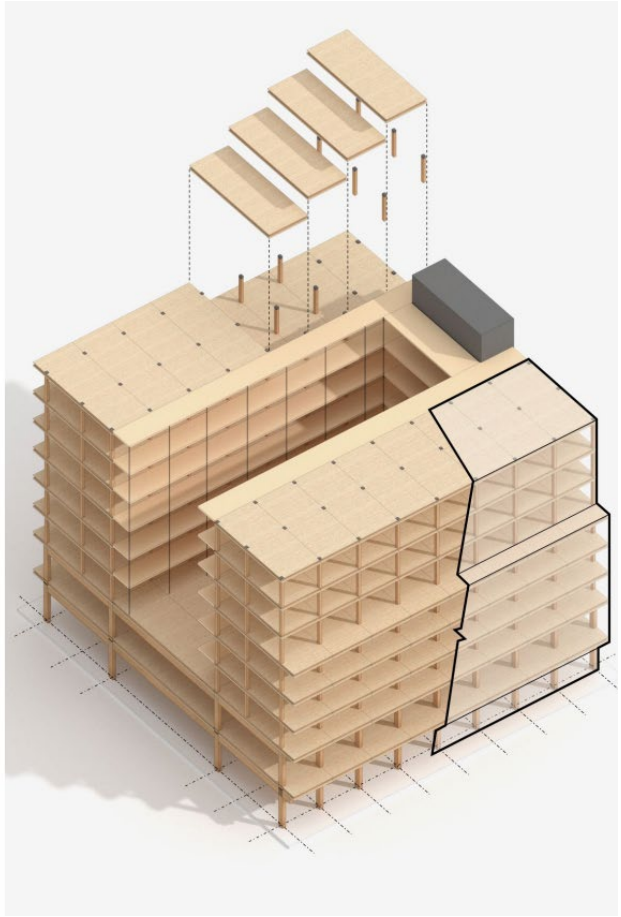
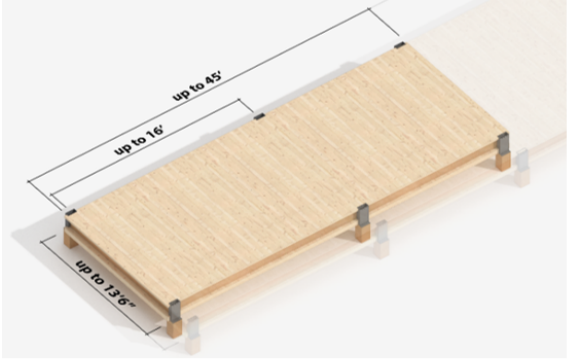
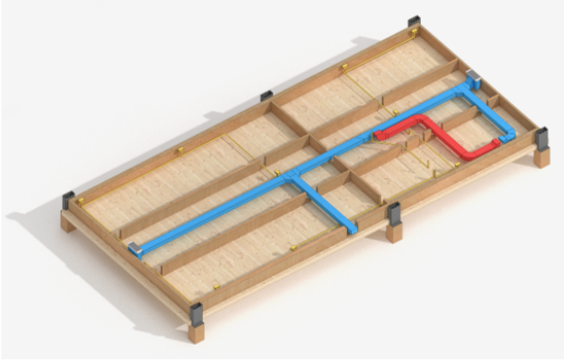
P4L Mass Timber Floor Panel Structure

Stressed skin floor panel construction without the need for beams









CRITERIA	SPECIFICATION
Mass Timber Type and Species	CLT (PRG-32) and LVL panels, Glulam columns; SPF blend
Surface Grade	Non-visible, industrial, architectural, incl. varnishes
Acoustic Ratings	STC > 55; IIC > 50
Fire and Smoke Rating	2-hr tested according to ASTM E119 / CAN / ULC S101
Encapsulation	Optional, depending on jurisdiction
Mechanical and Electrical Integration	Conduits, pre-wiring, and ducting up to 6" high
Typical Thickness	12" to 18"
Available Length and Width	8' to 13'6" wide by 8' to 45' length
Maximum Span	Up to 13'6" x 16' grids
Structural Capacity	40 psf live load, plus 52 psf superimposed dead load
Weight	16 - 18 lbs/ft^2

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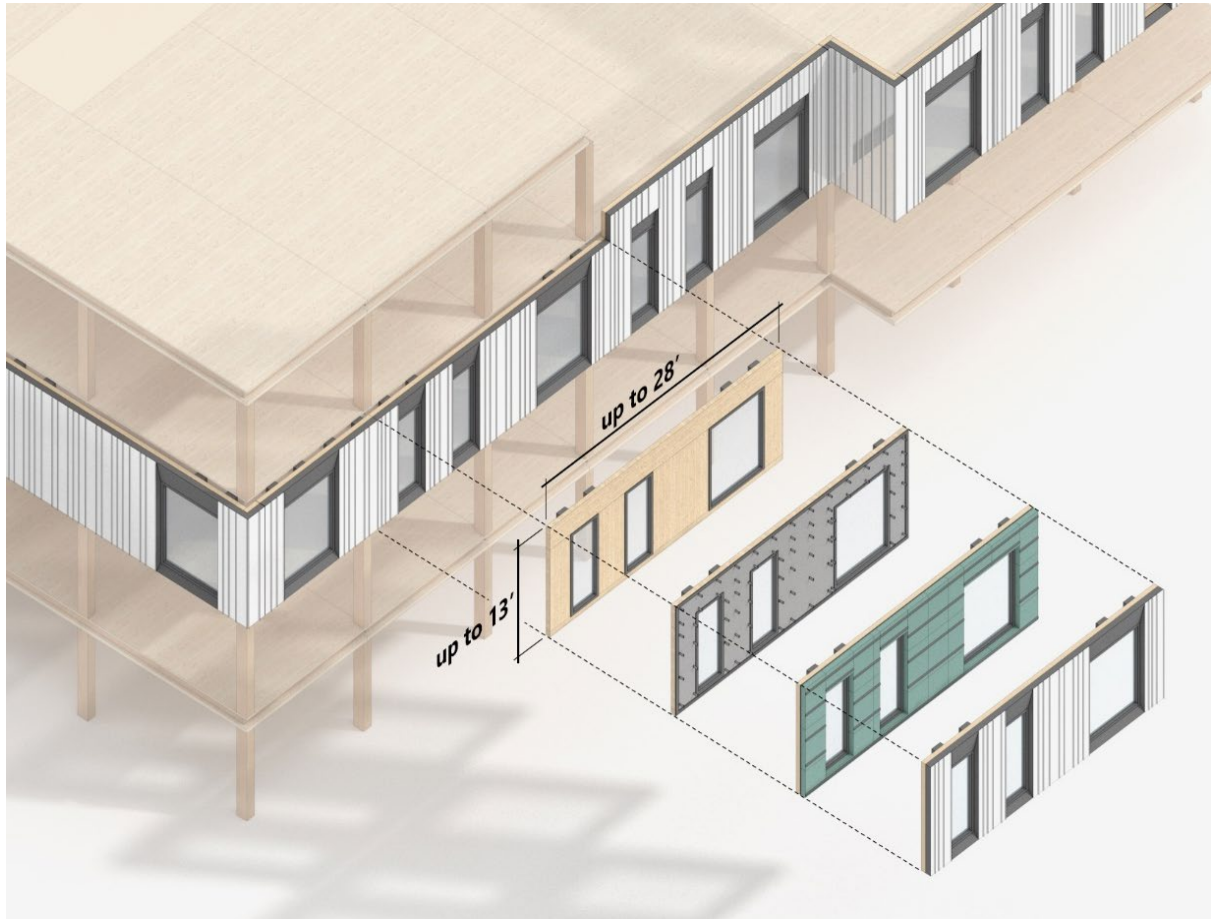
P4L Mass Timber Envelope System

Customizable mass timber curtain wall system for Passive House certified mass timber construction



CRITERIA	SPECIFICATION
Mass Timber Structure	100mm thick, 5-PLY CLT, PRG 320 rated
Interior Surface Finish	Non-visible, industrial, architectural, varnishes possible
Floor-to-Floor Height and Span per Panel	8' to 13' height by 4' to 28' length
Total Assembled Panel Thickness	8" - 15", depending on insulation and cladding
Fire Safety	Fire stopping solutions and/or encapsulation possible
Acoustic Performance	Flanking noise solutions available
Design Wind Pressure	60lb/ft^2 [2.87 kPa] (tested at 90 lb/ft^2 proof load), ASTM E330
Out-of-Plane Deflection Limit	L/175 tested in accordance with AAMA 501.4, 501.7, 501.4
Thermal Performance of Opaque Panel	Up to R-40, Passive House performance, AAMA 501.5
Air and Water Tightness	Tested to ASTM E283, ASTM E331, and AAMA 501.1
Weight	14 - 16 lbs/ft^2

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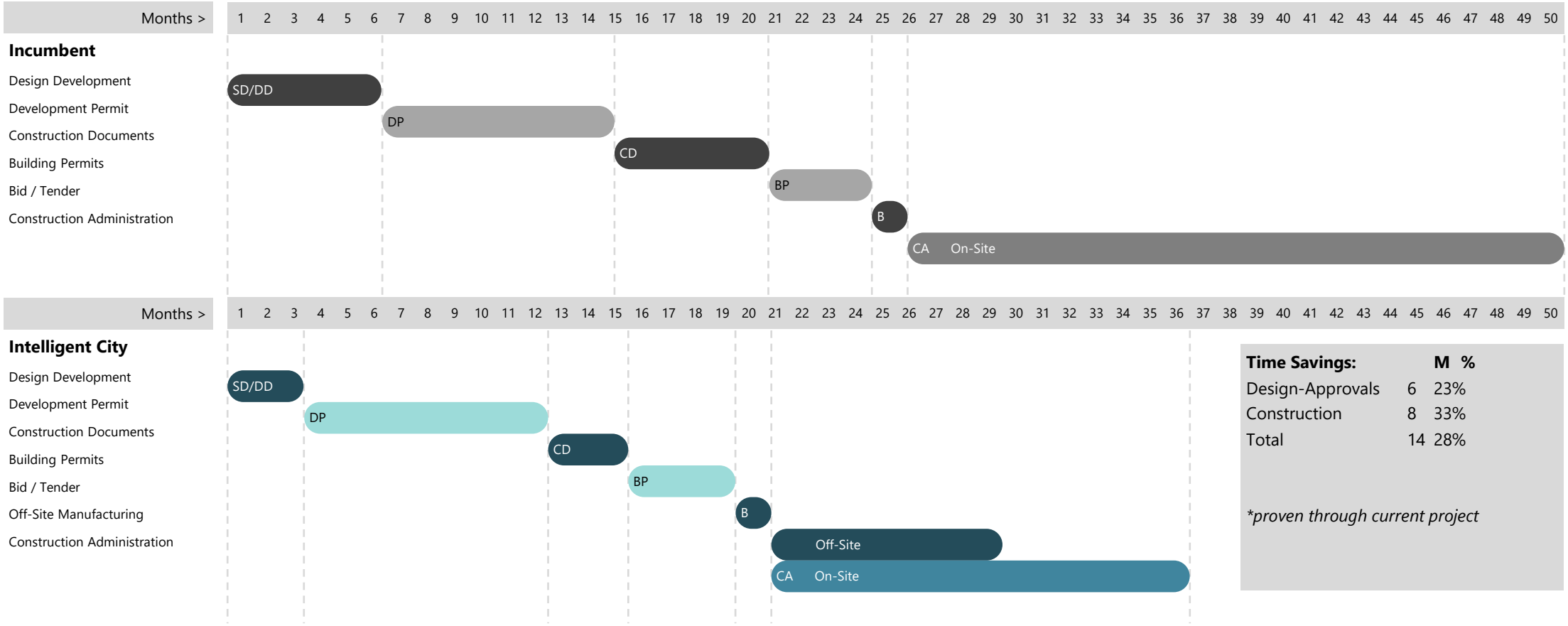
Customer Benefit: Faster Design, Planning and Construction

Reducing project timelines can generate millions of dollars of savings for developers



Time Savings:	**M**	**%**
Design-Approvals	6	23%
Construction	8	33%
Total	14	28%

**proven through current project*

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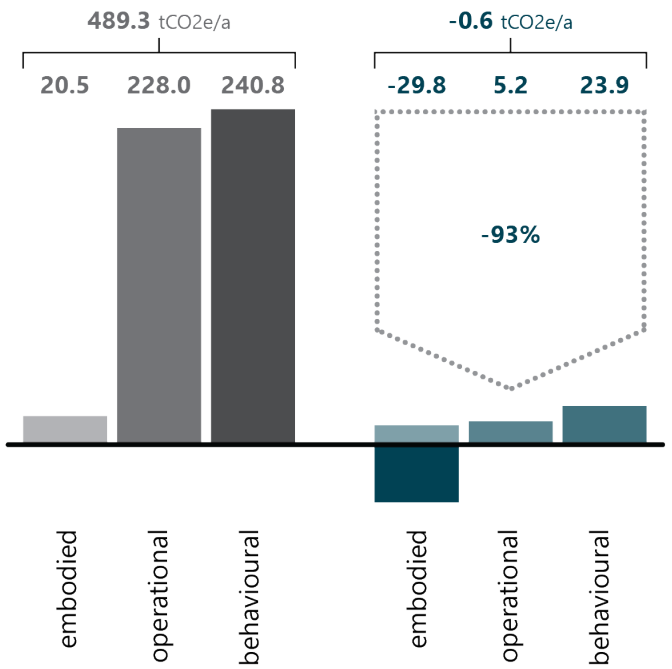
Benefit: More Sustainable

93% reduction in annual GHG emissions and potentially carbon-negative at a 90-year life cycle

Annual GHG emissions

(tCO2e/a) for a 100,000sf building

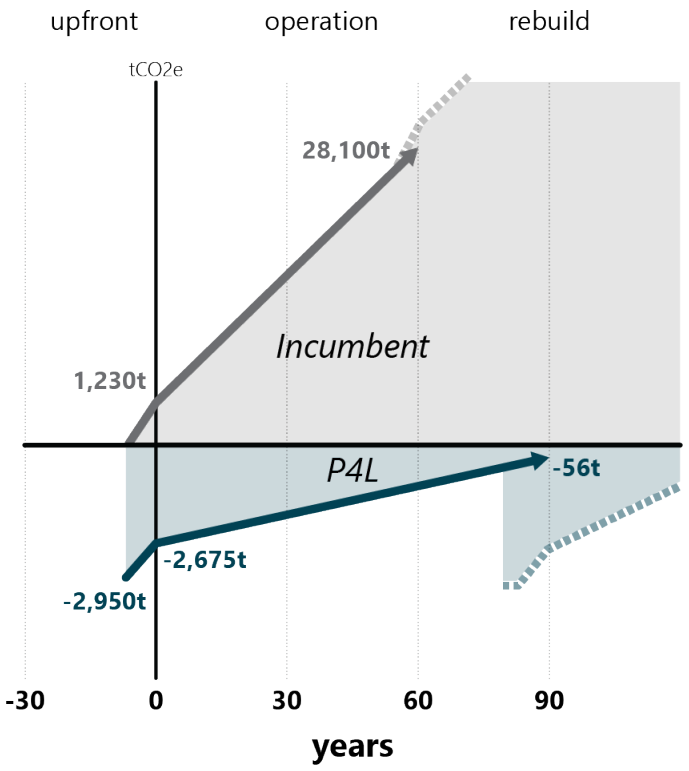


Incumbent
60 year life cycle
(traditional concrete construction)

P4L
90 year life cycle
(Intelligent City mass timber building)

Life cycle GHG emissions

(tCO2e) for a 100,000sf building



(includes embodied and operational emissions)

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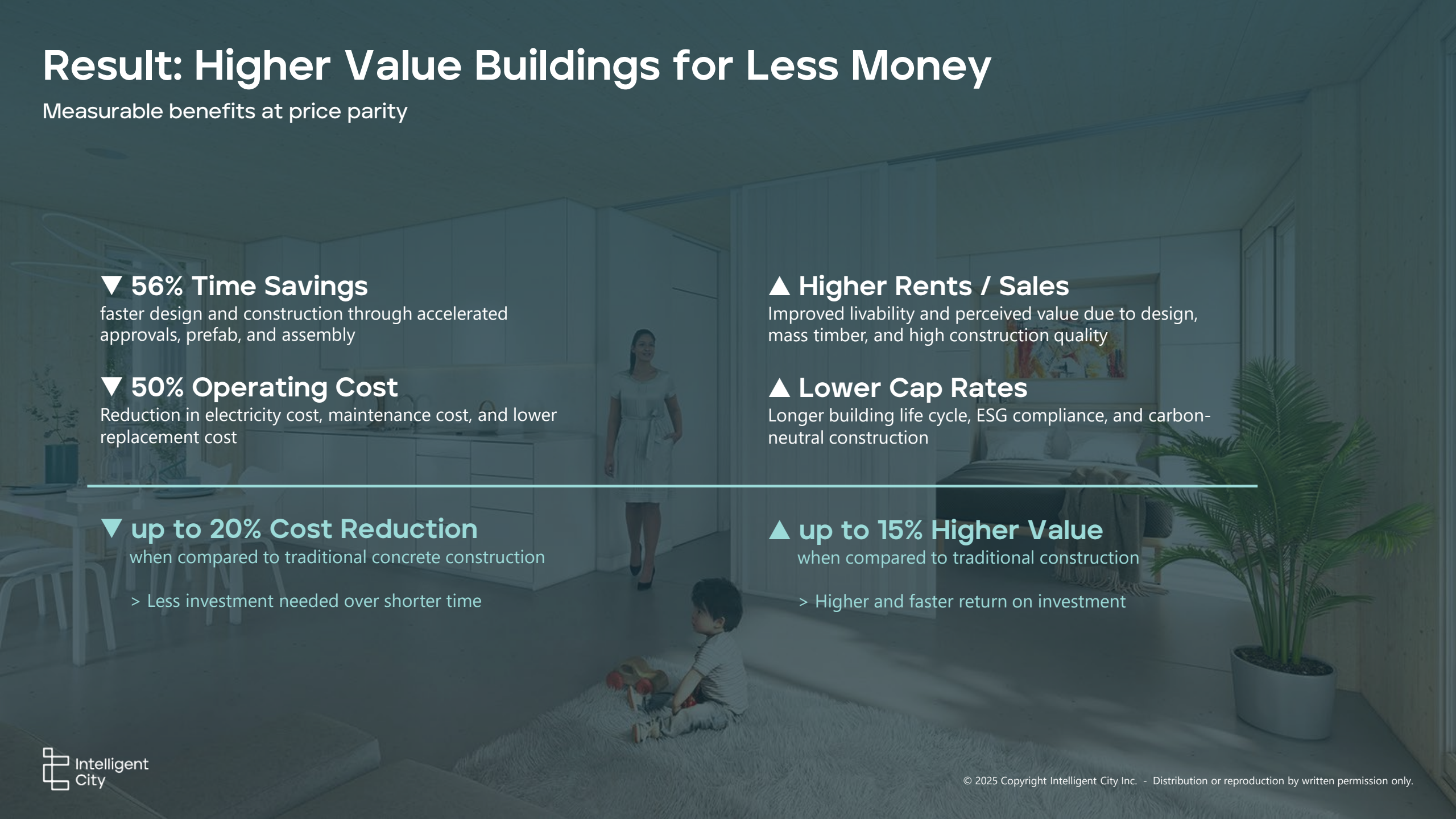
Result: Higher Value Buildings for Less Money

Measurable benefits at price parity



▼ 56% Time Savings

faster design and construction through accelerated approvals, prefab, and assembly

▼ 50% Operating Cost

Reduction in electricity cost, maintenance cost, and lower replacement cost

▲ Higher Rents / Sales

Improved livability and perceived value due to design, mass timber, and high construction quality

▲ Lower Cap Rates

Longer building life cycle, ESG compliance, and carbon-neutral construction

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▼ up to 20% Cost Reduction

when compared to traditional concrete construction

> Less investment needed over shorter time

▲ up to 15% Higher Value

when compared to traditional construction

> Higher and faster return on investment

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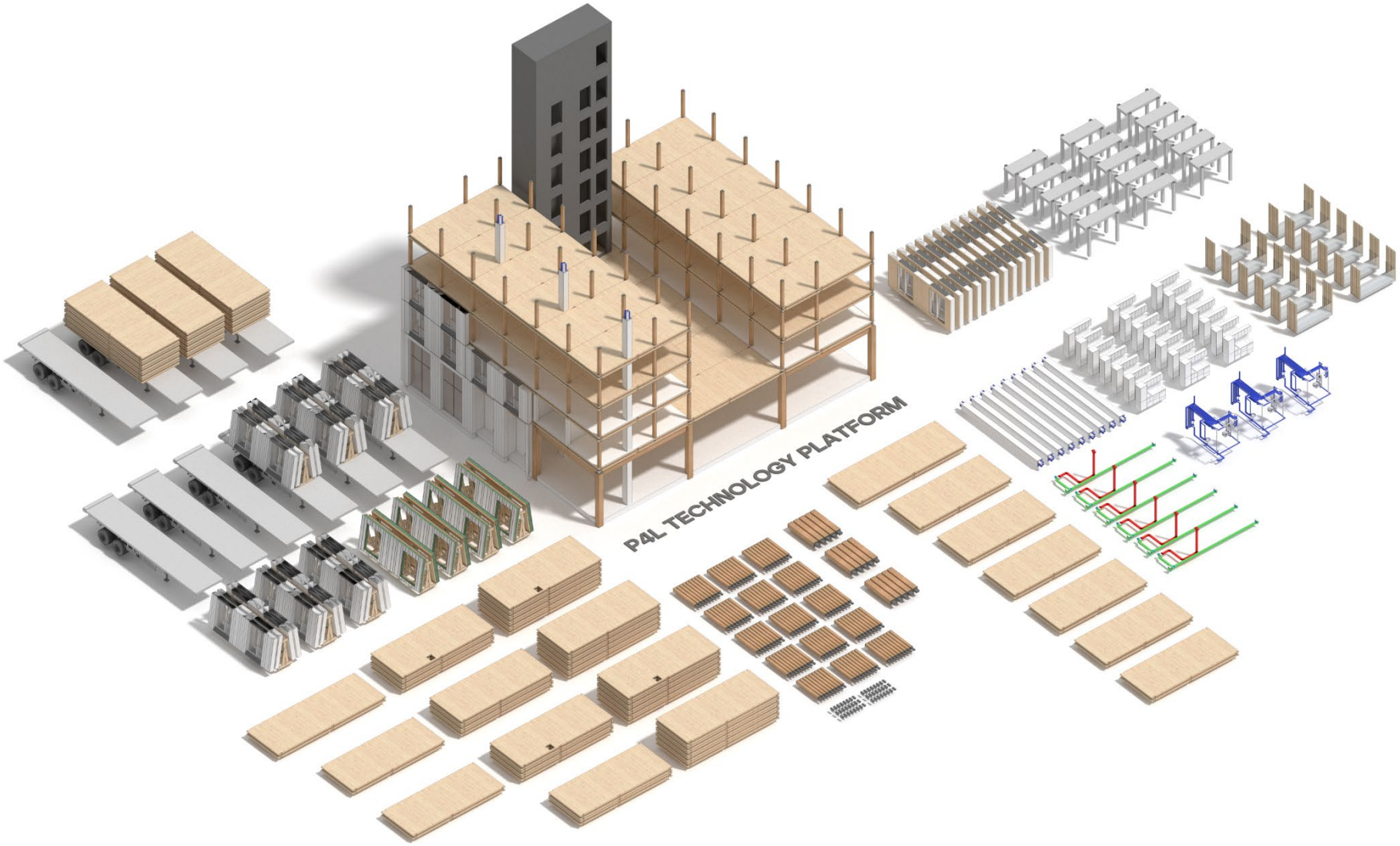
Build the Future of Urban Housing with Us

Contact us to learn more about mass timber and industrialized construction



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Making Urban Housing Construction Faster, Less Expensive, and More Sustainable.

Thank you

Oliver David (OD) Krieg, *President*
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