



Cross Laminated Timber

City of Tacoma | PDS

Infrastructure, Planning, and Sustainability Committee

Sept 26, 2018

ITEM 18-1109



OVERVIEW



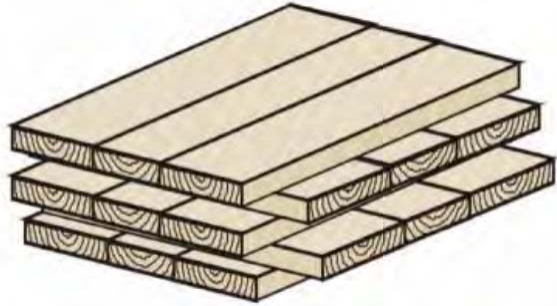
- What is cross laminated timber (CLT)?
- Advantages/Opportunities of using mass timber as a building material
- Update on adoption of building codes related to mass timber
- Challenges to using mass timber locally

BACKGROUND



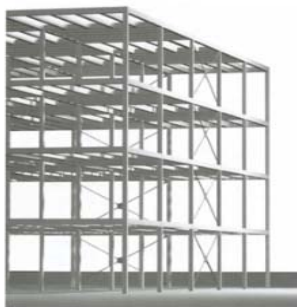
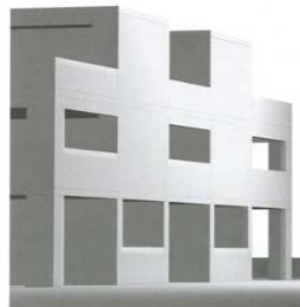
- What is CLT?

- Layers of lumber boards are stacked in alternating directions
- Bonded with structural adhesives
- Pressed to form a solid, straight, rectangular panel



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BACKGROUND

**LIGHT WOOD-FRAME****POST + BEAM****MASS TIMBER**

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BACKGROUND



Current Building Code Rules

- Considered Type IV
- Limited to 5 (residential) or 6 stories (office); Up to 85 feet
- Allowable building size varies depending on proposed use



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BACKGROUND



- Examples of CLT Construction in the Pacific NW



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BACKGROUND



- Examples of CLT manufacturing and construction

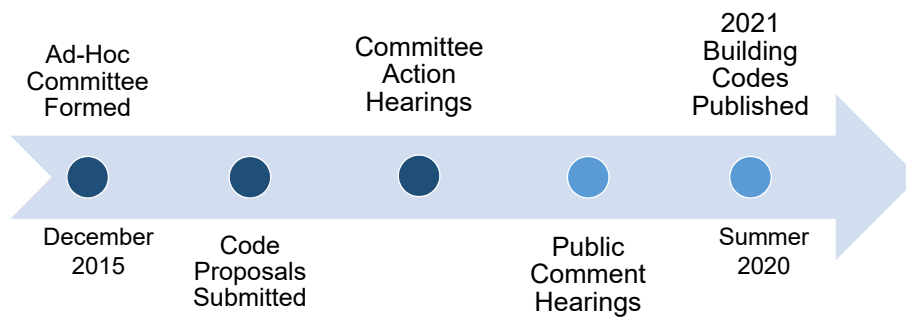


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BACKGROUND



Model Building Codes

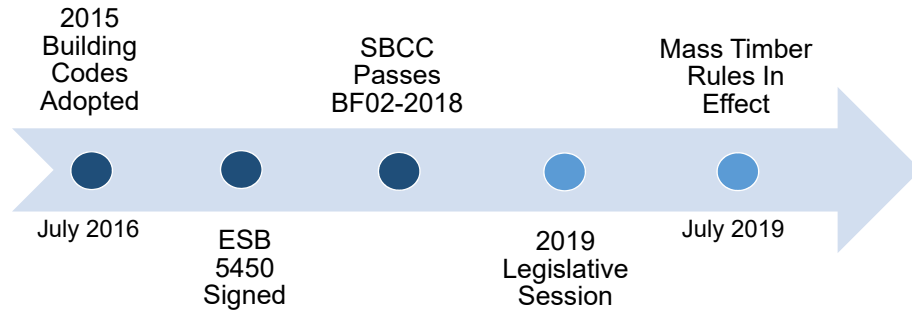


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BACKGROUND



State Building Codes



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HEALTH, EQUITY & SUSTAINABILITY ANALYSIS



- Sustainable
- High Performance
- Fire Resistive
- Reduced Installation Costs

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OPPORTUNITIES



Proposed Building Code Rules



18 STORIES MAX
BUILDING HEIGHT TBD
BUILDING AREA TBD

TYPE IV-A



12 STORIES MAX
BUILDING HEIGHT TBD
BUILDING AREA TBD

TYPE IV-B



7 - 9 STORIES
BUILDING HEIGHT TBD
BUILDING AREA TBD

TYPE IV-C

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OPPORTUNITIES



Building in Design -725 Commerce



atelierjones, llc
911 pine street floor two Seattle, WA 98101
206.624.9966 www.atelierjones.com

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OPPORTUNITIES

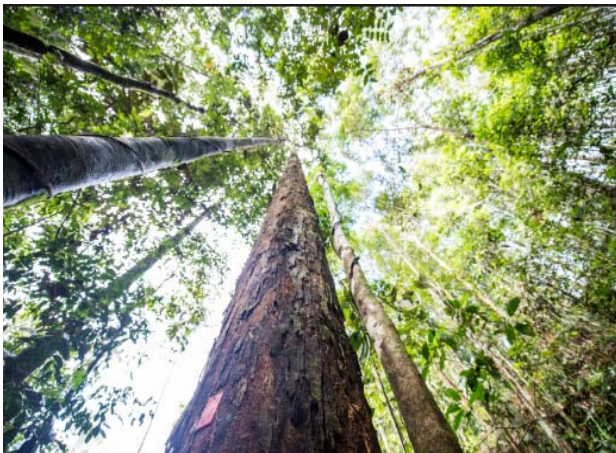


Building under construction - 2110 Commerce



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CHALLENGES



- Supply chain
- Contractor familiarity
- Staff training
- Seismic forces

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OUTREACH



- Committees
 - State Building Code Council TAG
 - WA Assoc. of Building Officials (WABO)
- Conferences/Hearings
 - International Code Council
 - CLT/Mass timber Building for a Sustainable Future event
- Other Contacts
 - APA, Tacoma, WA
 - UW Facilities staff

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NEXT STEPS



- Fall, 2018 -ICC Public Hearings/Voting
- Spring, 2019–WA State Legislature approval
- July, 2019 - State building codes amended w/mass timber rules
- July, 2019–Tacoma Building Code amended to adopt new state rules

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