What is Cross Laminated Timber (CLT)?

- Layers of dimension lumber stacked crosswise and glued on their wide faces. Adhesives follow requirements of Glulam beams.
- Width and thickness of laminations vary (2.4-9.5” wide, 5/8 -2” thick)
- Lumber is ~12% MC prior to manufacture,
  - Two way slab with odd number of layers identifying primary strength direction.
  - Manufactured panels are typically 8-10’ wide and up to 20” thick and up to 64’ long.
- Finished panels are planed, sanded, cut to size. Then openings are cut with precise CNC routers.
- Third party inspection at factory.
- Custom engineered for material efficiency.
- Custom designed for project.
Structural Flexibility
75% Lighter Weight Than Concrete
Reduced Construction Time

**Murray Grove, London UK**
- 8 stories of CLT over 1 story concrete podium
- 8 stories built in 27 days (~1/2 the time of precast concrete)

**Norwich Academy, Norwich UK**
- 102,300 ft^2 3 story secondary school
- 17 weeks to construct
Pre-fabricated and Precise
Minimal Waste
Product Availability

- Two North American producers of structural CLT
- ~425,000 ft³ of annual production capacity (structural CLT)
- 2-3 US Companies pursuing manufacturing facilities
- Non-commodity based product
- Standardized manufacture but custom fabrication
• SIP and CLT System
• Exposed CLT
• Tallest wall is 23.5 ft.
CLT as an alternate to Concrete/Masonry
US CLT Handbook

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2. Manufacturing
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5. Connections
6. DOL and Creep
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