Mass Timber and the WoodWorks Construction Management Program

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Glue Laminated Timber (GLT)

Photo: Manasc Isaac Architects/Fast + Epp
Cross-Laminated Timber (CLT)

With solid sawn laminations

**General Panel thicknesses**
- 4 1/8” to 19 1/2”

**General Panel dimensions**
- 4 to 12 ft wide
- 24 to 64 ft long

*Consult with manufacturers for available panel sizes*
Cross-Laminated Timber (CLT)

With SCL laminations

Photos: Freres Lumber
Nail-Laminated Timber (NLT)

Photo: StructureCraft

Photo: Think Wood
Dowel-Laminated Timber (DLT)

Photo: StructureCraft
Other Mass Timber Product Options

- Laminated Veneer Lumber (LVL)
- Parallel Strand Lumber (PSL)
- Laminated Strand Lumber (LSL)
- Timber-Concrete Composite (TCC)
- Decking

Photos: StructureCraft
Mass Timber Projects In Design and Constructed in the US (March 2021)

Considering mass timber for a project? Ask us anything.
For free project support, contact: help@woodworks.org
woodworks.org/project-assistance
Obstacles Preventing the Increased Adoption of Sustainable Mass Timber

A study of 84 projects that could not clear the hurdles
# Mass Timber Obstacles Report Results

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Number of Times Noted</th>
<th>Percent of Projects That Experienced This Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>42</td>
<td>50%</td>
</tr>
<tr>
<td>Lack of general contractor/installer experience</td>
<td>32</td>
<td>38%</td>
</tr>
<tr>
<td>Design limitations</td>
<td>31</td>
<td>37%</td>
</tr>
<tr>
<td>Design team education needed</td>
<td>18</td>
<td>21%</td>
</tr>
<tr>
<td>Comparative business case needed</td>
<td>14</td>
<td>17%</td>
</tr>
<tr>
<td>Building code</td>
<td>14</td>
<td>17%</td>
</tr>
<tr>
<td>Lack of owner/developer familiarity</td>
<td>10</td>
<td>12%</td>
</tr>
<tr>
<td>Material supply/manufacturing</td>
<td>9</td>
<td>11%</td>
</tr>
<tr>
<td>Design too far along to switch</td>
<td>9</td>
<td>11%</td>
</tr>
<tr>
<td>Project did not go forward at all</td>
<td>7</td>
<td>8%</td>
</tr>
<tr>
<td>Durability</td>
<td>4</td>
<td>5%</td>
</tr>
</tbody>
</table>

| Total                                    | 190                    | 84 Projects                                     |
Construction Management Program
Strategic Focus Areas

• Contractors - Expansion of 2020 Construction Management Education
• Community Colleges - Construction Technology Departments
• Workforce Programs - Federal, State, Regional, Local where Projects are Located
• Training Centers & Construction Associations – Project Managers and Installers
• University Construction Management Departments
Results to date...

- WoodWorks sponsored training programs....
  - Chicago Carpenters completed over 2,500 training hours (32 hours/person)
  - Seattle Carpenters completed over 150 training hours (8 hours/person)

- Construction Management Workshops 2019 – 2020
  - 216 attendees at in-person regional events
  - 440 attendees at nationally distributed virtual events
## Construction Management Program
### 2021 Program Expansion and Beyond

<table>
<thead>
<tr>
<th>In Progress/Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass Timber Construction Manual</td>
</tr>
<tr>
<td>Installer Training Packages and Training Center Collaboration</td>
</tr>
<tr>
<td>Virtual and/or In-Person Workshops</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage with General Contractors</td>
</tr>
<tr>
<td>Community Colleges</td>
</tr>
<tr>
<td>Partner with Construction Associations</td>
</tr>
</tbody>
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Woodworks Standard Mock-Up Drawings  
Photo Credit: WoodWorks
WoodWorks
Mass Timber Construction Manual

Photo: Ema Peter Photography
**We’re stronger together.**

Our network of affiliated professionals offer a wealth of shared knowledge, expertise, and opportunity for growth. Find experienced professionals who share a mutual interest in the future of timber design and construction.

<table>
<thead>
<tr>
<th>Architects</th>
<th>Engineers</th>
<th>Contractors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installers</td>
<td>Developers</td>
<td></td>
</tr>
</tbody>
</table>

+ VIEW ALL

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**WOODWORKS INNOVATION NETWORK**

*Photo: Marcus Kauffman*
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