

# Katerra CLT and the Environment

Summer 2020

## At A Glance: Kattera's CLT Sustainability Commitments

- 100% Timber Sourced from Well-Managed Forests
- FSC, PEFC, SFI Chain of Custody Upon Request
- Declare Label - LBC Red List Approved
- Utilization of Small-Dimensional Lumber
- ISO 14025 Type III EPD for CLT Product Line In Progress

## At Kattera, we believe Cross-Laminated Timber (CLT) will become the backbone for future generations of high-performance, low carbon buildings across North America.

As building energy efficiency improves and the planet rapidly urbanizes, embodied carbon is estimated to be responsible for almost half of new construction emissions between now and 2050<sup>1</sup>. Switching to building materials with lower embodied carbon can significantly reduce a building's negative environmental impacts.

CLT provides lighter, stronger, and a more sustainable alternative to carbon-intensive concrete and steel structures, but limited availability in the North American market has constrained the transition. Kattera is changing that. Our new CLT plant in Spokane Valley, Washington was built to bring environmentally-responsible, cost effective mass timber building systems to the North American Market.

## Chain of Custody Certifications

Kattera's CLT factory in Spokane Valley, Washington has earned chain of custody certification for three major certification programs: Sustainable Forestry Initiative® (SFI-03536), Forest Stewardship Council® (FSC C156195), and the Programme for the Endorsement of Forest Certification (PEFC/29-31-382).



## Responsible Supply Chain

Sustainably managed forests support rural economies. Kattera is committed to sourcing environmentally responsible North American forest products, with 100 percent of our lumber for CLT sourced from well-managed forests.

## Environmental Transparency

Kattera is committed to third-party environmental certification and material content disclosure. Our CLT product line has earned a Declare Label and is certified "Red List Approved" for use on Living Building Challenge projects as well as contributing to the LEED Building Product Transparency and Optimization (BPDO) Material Ingredient Reporting credit. We are also committed to procuring a Type III Environmental Product Declaration (EPD) to ISO 14025 for our CLT product line. This will commence once the factory has been in operation for a minimum of 12 months in accordance with the standard.

## Resource Efficiency

Our CLT panels are manufactured with small dimensional lumber, making them much more resource efficient than conventional heavy timber framing. With natural wood's pleasing aesthetic and superior fire resistance (5-ply CLT panels exceed a two-hour rating), the structure can be left visually exposed, eliminating supplemental finish materials while providing the biophilic benefits of natural wood. Mass timber buildings are significantly lighter than comparable concrete buildings, reducing foundation size and seismic forces in addition to embodied energy<sup>2</sup>.

## Construction Efficiency

Mass timber building systems enable increased construction productivity, with automated fabrication in a controlled factory environment reducing waste and enabling streamlined field assembly. Mass timber buildings are roughly 25% faster to construct and require up to 90% less construction traffic than concrete buildings<sup>3</sup>.

## Occupant Well-Being

People have an affinity for natural materials and elements that incorporate or evoke nature, known as the "biophilic effect." Studies have found that subjects perceive wood as "warm," "inviting," "homey," and "relaxing" than all other tested materials, and demonstrate physiological and psychological benefits to viewing wood<sup>4</sup>.

<sup>1</sup> "New Buildings: Embodied Carbon," Architecture 2030.com, [architecture2030.org/new-buildings-embodied](http://architecture2030.org/new-buildings-embodied)

<sup>2</sup> <sup>3</sup> "4 things to know about Mass Timber," ThinkWood.com, April 25, 2018, [thinkwood.com/news/4-things-to-know-about-mass-timber](http://thinkwood.com/news/4-things-to-know-about-mass-timber)

<sup>4</sup> "Nature in Design: The Biophilia Effect," APA – The Engineered Wood Association.com, [apawood.org/designerscircle-nature-in-design-the-biophilia-effect](http://apawood.org/designerscircle-nature-in-design-the-biophilia-effect)