

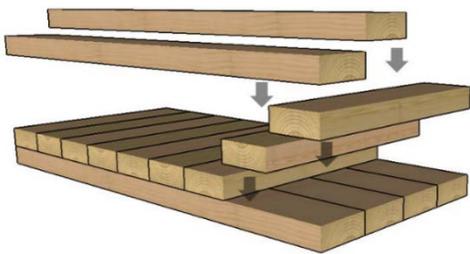
# CROSS LAMINATED TIMBER PANELS MADE FROM LOCAL NE SPECIES

## BCT RESEARCH SPOTLIGHT

### About

Cross Laminated Timber (CLT) panels are made from orthogonal layers of glued, solid-sawn lumber. They are employed in large scale construction projects in much the same way as concrete slabs and walls.

Studies currently underway in BCT at UMass Amherst are demonstrating that **lower value local species, such as Eastern Hemlock, can be used to make strong and reliable CLT panels**. Finding construction markets that utilize these trees can provide needed jobs in local communities and help boost the forest economy in the surrounding New England area.



The **John W. Olver Design Building at UMass Amherst** uses CLT in its floors, roofs, and stair wells.

The image above shows a prototype CLT panel in our Wood Mechanics Laboratory, ready for testing.

### Key Publications

KABOLI H., CLOUSTON P.L., LAWRENCE S. 2019. *Viability of Eastern Hemlock in ANSI Approved Cross Laminated Timber*. ASCE Journal of Materials in Civil Engineering. In press.

BAHMANZAD A., CLOUSTON P.L., ARWADE, S.R., SCHREYER A. 2019. *Planar Shear Properties of Eastern Hemlock for Different Fiber Orientations*. ASCE Journal of Materials in Civil Engineering. In press.

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