

VERGREEN

CROSS-LAMINATED TIMBER SOLUTIONS, LLC



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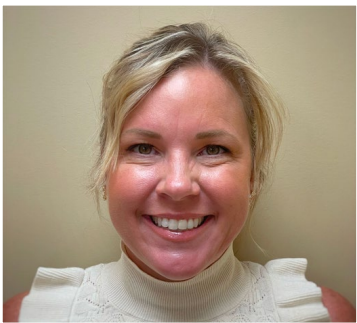
Questions

OUR COMPANY

At Evergreen, our goal is to effectively manufacture a sustainable building material that surpasses quality standards. By implementing a green technology that has been proven effective in various applications, Evergreen hopes to transform the residential housing market.



OUR TEAM



JENNIFER SHERRILL
Owner/CFO



HARRY WATT
Owner/ Wood Scientist



MAKAYLA WARREN
Outside Sales/Mech Engineer

THE FOUNDING

WERC Innovations Grant Residential Cross Laminated Timber Panel Project-2018 to 2023

- Harry Watt – NC State University
- Development of a system of using existing cold presses left over from the US casegoods furniture industry that are largely idle and press a stack of CLT panels for residential homes
- Offer a significant market for lower grade pine lumber from the Southern states from plantation and natural pine stands



EVERGREEN IS BUILDING THE FUTURE, LAYER BY LAYER

- Premier supplier of 4' x 8' Cross Laminated Timber (CLT) panels in the United States
- Meticulously crafted and proudly manufactured right here in the USA, our 3-layer CLT panels derive from timber sourced from forests on the East Coast
- ANSI/APA PRG320 Certification: Timber Products





WHAT IS CROSS-LAMINATED TIMBER?

- Prefabricated, Solid Engineered Wood Panel
- Basic Manufacturing Process of CLT:
 - Lumber is Kiln-Dried (moisture content of 12%), Planed, & Primer Misted
 - Prepared Boards are Assembled in Layers of Alternating Grain Direction with a thickness of 4 1/8"
 - Structural Adhesive is Applied Between Each Layer
 - Layers are Pressed Allowing Adhesive to Set & Dry
 - Finishing Trims Create a Solid, Straight, Rectangular Panel of 4x8 ft

WHAT IS CROSS-LAMINATED TIMBER?

CONCEPT ESTABLISHED
GERMANY AND AUSTRIA



**ADDED TO INTERNATIONAL
BUILDING CODE**



GROWING IN POPULARITY



WHAT IS CROSS-LAMINATED TIMBER?

Cross Laminated Timber (CLT) is our core strength – sustainable, efficient, sturdy, and economical. Experience the cutting-edge technology of CLT, redefining construction with unmatched strength and eco-consciousness.

GREEN TECHNOLOGY

- Carbon Capturing - Circular Carbon Cycle
- CLT has the Lowest Carbon Content of any Commercially Available Building Material
- Renewable Resource

IMPRESSIVE SEISMIC PERFORMANCE

- Strength-to-Weight Ratio Comparable to Concrete
- Five Times Lighter than Concrete

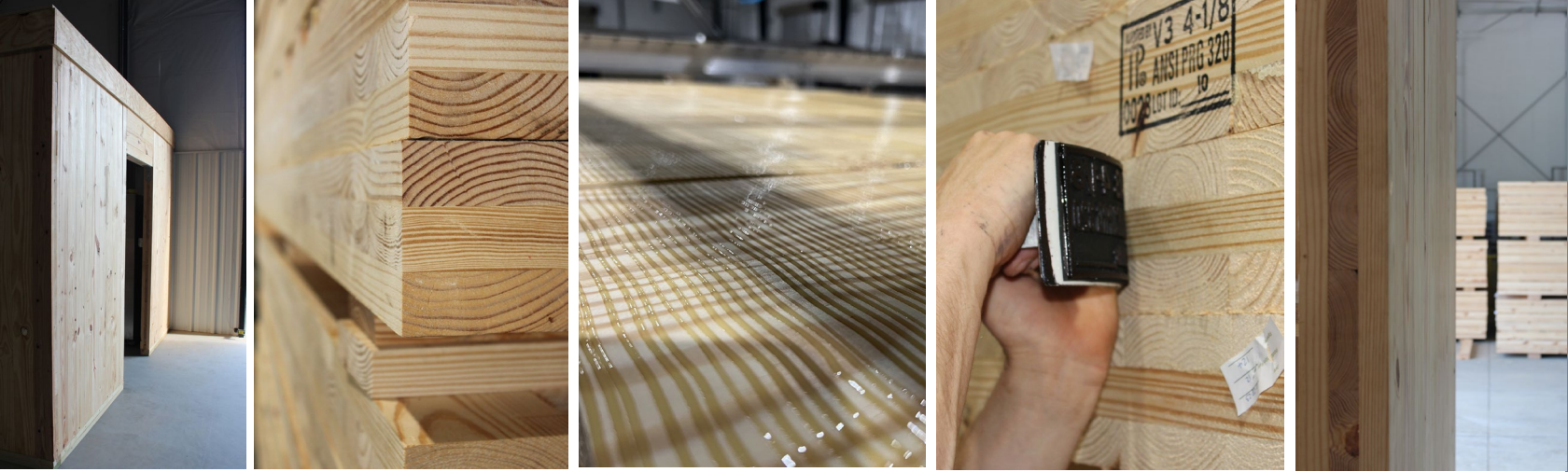
HURRICANE & TORNADO RESISTANT

- Excellent Resistance to Lateral Wind Loads
- Clemson Study Indicates CLT Can Withstand EF3 Tornadoes
- EF3 Tornado Wind Speeds: 136 -165 mph

FIRE SAFE

- Wood Charcoals Overtime Does Not Ignite
- CLT Panels Fire Tested to meet ASTM E119 (demonstrating a two-hour FRR)

WHY USE CROSS-LAMINATED TIMBER?



WHY USE CROSS-LAMINATED TIMBER?

STURDY

- Increased Capacity for Horizontal and Lateral Loads Due to the Nature of Cross-Directional Grains

ECONOMICAL

- Competitive with Cost of Standard Stick Built Home
- “Time is Money” (reduced cost and time of labor)

EFFICIENT

- Automated Manufacturing Process
- Constructed on-site using crane system
- Decreased Labor On-Site

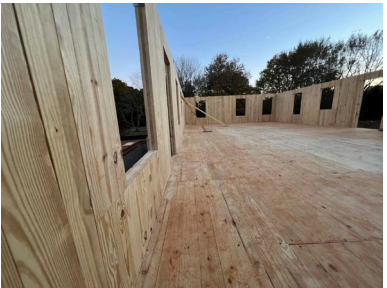


AFFORDABLE HOUSING BENEFITS

- **CUSTOMIZABLE:** CLT provides a Solution for Designing Multiple Different Floor Plans of Affordable Housing
- **PREFABRICATION:** Configurable Kits per Customer Spec
- Proposing Use of CLT Panels to Construct Small, Quality Homes (two-three bedroom, 900-1200 sq ft)
- Sustainable Building Material with a Proven History of Success



USING CLT FOR RESIDENTIAL HOUSING



USING CLT FOR RESIDENTIAL HOUSING



ACTIVE CONTRACTS

- NORTH CAROLINA OFFICE OF STATE BUDGET AND MANAGEMENT: Two Active CLT Construction Contracts in Western North Carolina
- PURPLE HEART HOMES: One Active Contract in Eastern North Carolina



LOCAL IMPACT

- North Carolina Native Company Pushing the Envelope to Expand the Production and Uses of CLT in the US
- Supporting Local Saw Mills
 - Utilizing Native Southern Yellow Pine
- Creating Jobs and Engaging Local Suppliers
- Bringing CLT to the East Coast
- Supplying Local Options for High Quality, Affordable Housing
- Providing a Solution with Quick Constructability for Those Impacted by Natural Disasters in NC



CHALLENGES & SOLUTIONS

- CLT is Supported in the Current Building Code
 - Lack of Public Awareness
 - Builders and Homeowners have been Slow to Adopt the Engineered Building Material Due to Unfamiliarity
- Educating Local and Nationwide Architects, Engineers, and Builders on Ease of Construction and Opportunities for Implementation of CLT in their Projects

THANK YOU FOR YOUR TIME

Questions and Closing Remarks

