Cross-Laminated Timber and Other Value-Added Engineered Products

Bob Ross
USDA Forest Service
Forest Products Laboratory
Madison, WI
Mass Timber (CLT) Research Workshop

- WoodWorks-Wood Products Council
- USDA Forest Service, Forest Products Laboratory
- November 2-5, 2015

Purpose
- Review past and present research
- Identify and prioritize research needs, shape future research efforts
Program

• Plenary Session-Mass Timber in North America
• Resistance to Lateral Loads
• Building Performance—Durability, Sound, Vibration, Life Cycle Analysis
• Fire Safety
• Material Resources and Other Research Topics
Production of Some Engineered Wood Building Products, 2014

North America Production (U.S. and Canada)—

Glulam (million board feet)—254.8

Laminated veneer lumber (LVL, million cubic feet)—63.9

I-joists (million linear feet)—677.3 (enough to circle the globe approximately 4 times!)
Undervalued Hardwoods for Engineered Materials and Components
Second Edition

Robert J. Ross
Undervalued Hardwoods for Engineered Materials and Components

Cooperative effort by Michigan Tech, USDA Forest Service

Fundamental properties

Manufacturing--sorting, grading and properties of hardwood industrial materials (logs, veneer, lumber)

Engineered products--trusses, I-joists, laminated veneer lumber, glulam, timber bridges, CLT, specialty engineered materials, nano-cellulosic products
CONGRATULATIONS
NEW YORK
( FOR KEEPING UP WITH OREGON )

Projects in Portland and New York have each won $1.5 million in the U.S. Tall Wood Building Competition, placing both cities at the forefront of environmentally responsible construction and cutting-edge timber technology. These projects help highlight how the use of wood can help fight climate change and support rural communities. Now, if only New York could borrow a trick from OR.
Orr.org/wood/tallwood.

In addition, we recognize the following organizations who are supporting innovative efforts to develop and prove the viability of mid-rise wood construction: Oregon Department of Forestry, Oregon State University, Portland State University, University of Oregon, University of Washington, Washington State University, and Western Wood Products Association.
Thank you! Questions?