Wood: A Versatile and Innovative Building Material

Wood is the building material of the future—versatile, beautiful and durable. And, thanks to advances in wood design and engineering, wood is being used in new and exciting ways to build taller, multi-story structures. Large public buildings like arenas, gymnasiums, office buildings and apartment complexes can be constructed from wood. New wood products, like Cross Laminated Timber and Glulam, are changing the face of construction, allowing taller wood buildings. Wood. It’s a better way to build.

BUILDING WOODEN SKYSCRAPERS

• The use of Cross Laminated Timber (CLT) is opening up new possibilities for using wood in non-residential, multi-story buildings. Developed in Europe in the 1990s, CLT is an engineered wood panel typically consisting of three, five or seven layers of dimensional lumber. Kiln-dried boards are layered perpendicular to one another and then glued. This cross lamination provides dimensional stability, strength and rigidity.¹

• A recent study conducted on behalf of the Canadian Wood Council concluded that CLT is feasible for 12 stories or more.²

• In November 2012, the International Code Council approved a code change to expand the use of cross laminated timber through the building code’s heavy timber construction classification. The action will lead the way for new U.S. markets for this emerging wood product in non-residential buildings.³

PROVIDING STRONG AND BEAUTIFUL STRUCTURE

• Glulam makes efficient use of wood by bonding smaller pieces of dimension lumber together to form larger beams and columns.

• Used in place of concrete for beams and columns, Glulam can bring innovation and beauty to both commercial and residential buildings.⁴
CASE STUDY
Branson Convention Center, Branson, Missouri

The Branson Convention Center is a major catalyst in the redevelopment of the historic Branson, Missouri city center. Inspired by the region’s Ozark Mountains, the use of Glulam and heavy timber for the 220,000 square-foot convention center ties the building to its natural setting. Heavy timber and Glulam allowed the building’s designers to create a contemporary building that combines the warmth of rustic wood with a sophisticated contemporary design.5

RESOURCES:
reThink Wood resource library: http://www.rethinkwood.com/resource-library/list
WoodWorks—Education, resources and technical support on non-residential wood building design: http://woodworks.org/
American Institute of Timber Construction: www.aitc-glulam.org
APA: The Engineered Wood Association: www.apawood.org


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