

# THE WALL STREET JOURNAL.

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <http://www.djreprints.com>.

<https://www.wsj.com/articles/the-big-new-thing-in-building-wood-1507820495>

## THE TRADE

# The Big, New Thing in Building? Wood

Builders are turning to cross-laminated timber, or CLT, for a new generation of mid-rise buildings.



The Framework Project, a 12-story mixed-used building in Portland, Ore. ILLUSTRATION: LEVER ARCHITECTURE

By Adam Bonislawski

Oct. 12, 2017 11:01 a.m. ET

**One of the newest** materials in mid-rise residential and office construction comes from an old source: trees.

With the emergence of cross-laminated timber, or CLT, and nail-laminated timber (think plywood, but much thicker and stronger), architects are able to design buildings of 10-to-12 stories or more with timber cores and panels. While engineered wood hasn't entirely replaced steel, reinforced concrete or masonry in mid-rise construction, some builders say the cost savings and environmental benefits make timber a good alternative for many uses.

Here's a look at buildings around the world built using engineered wood.



Scheduled for completion in early 2019, Framework will house 60 affordable apartments along with a mix of retail and office space. ILLUSTRATION: LEVER ARCHITECTURE

## PORTLAND, ORE.

In June, the city issued building permits for the Framework Project, a 12-story (148-foot) mixed-used building constructed mainly with sustainably harvested engineered lumber. To get the permits, developers had to submit designs that passed rigorous fire, seismic and other safety tests to prove its durability was comparable to typical steel-

and-concrete construction. Scheduled for completion in early 2019, Framework will house 60 affordable apartments along with a mix of retail and office space.

Portland is also home to Carbon12, an eight-story steel-and-timber condo building that topped out this spring. The development features 14 apartments ranging in price from around \$800,000 to \$1.5 million and includes direct elevator access to each unit along with automated underground parking.



Amsterdam's Patch22, completed in 2016, is a 26-unit apartment building that tops out at just under 100 feet. PHOTO: LUUK KRAMER

## AMSTERDAM

Completed in 2016, Patch22, a 26-unit apartment building, tops out at just under 100 feet. According to architect and developer Tom Frantzen, its wood-based cladding and framing were intended to make it stand out in a sluggish housing market.

“No one was buying homes, so we knew we had to do something different,” he said. “Building in wood would attract what we called the crazy people, and we thought, there must be some crazy people in Amsterdam even during the crisis. Which turned out to be true.” Apartments in the building (originally sold as raw space) ran about \$300 per square foot. Resales are going in the range of about \$645 per square foot.



Forté, a 10-story, 23-unit building in Melbourne's Victoria Harbour neighborhood, was Australia's first timber mid-rise. PHOTO: LENDLEASE

## MELBOURNE

Forté, a 10-story, 23-unit building in Melbourne's Victoria Harbour neighborhood, was Australia's first timber mid-rise when completed in 2012, according to developer Lendlease. The building uses European spruce grown in Austria and made into cross-laminated panels. Each unit comes with its own vegetable garden.

## LONDON

Light but sturdy, CLT panels can be transported relatively easily, which opens up new possibilities around modular construction. Case in point: the Cube, a 108-foot hybrid timber-steel apartment structure built in the Shoreditch neighborhood in 2015. According to the developer, Regal Homes, the building's CLT panels were constructed in Austria, then trucked to the build site and assembled according to a computer model of the project. Apartments in the building range from about \$1,260 to \$1,575 per square



The Cube, a 108-foot hybrid timber-steel apartment structure built in London's Shoreditch neighborhood in 2015. PHOTO: REGAL LONDON

foot.



Vienna's timber-and-concrete HoHo building will rise 24 stories when completed. ILLUSTRATION: RÜDIGER LAINER + PARTNER ARCHITECTS

## VIENNA

Austria is one of the biggest producers of CLT and Vienna is the site of one of its most ambitious projects. Upon completion (projected for 2018), Vienna's timber-and-concrete HoHo building will rise 24 stories—considerably taller than most other timber structures—and feature short-term rental units, along with a hotel and restaurant.

---

### RELATED READING

---

- Manhattan's Skyscrapers, Now Yours to Call Home
- Developers Scour the Earth for Rare Condo Finishes
- A High-Rise Built for Me

Copyright ©2017 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <http://www.djreprints.com>.