MASS TIMBER INSTITUTE

UNIVERSITY OF TORONTO
JOHN H. DANIELS FACULTY OF ARCHITECTURE, LANDSCAPE, AND DESIGN

News From MTI

Hello Mass Timber Colleagues!

U of T Architecture Students take Sustainable Forestry Tour

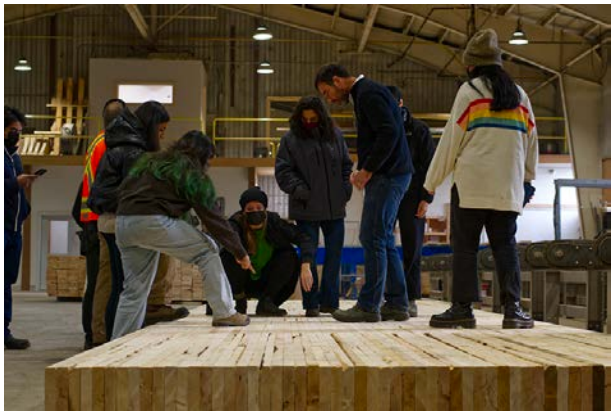
11 U of T Architecture students took a 2-day sustainable forestry tour across November 2nd and November 5th, learning about growing, harvesting, and manufacturing wood. On Tuesday, the students attended a lecture at the U of T campus to provide an overview of Sustainable Forestry Management, given by Rob Keen, CEO of Forests Ontario. Friday's itinerary included an overview of the Ontario's Agreement Forest program at the Red Pine House Forestry Education Centre, a walk through the Hendrie Tract in Anten Mills, and a factory tour at the Timmerman Timberworks facility in New Lowell. Tours were provided by Graeme Davis, a forester in Simcoe County, Rob Keen, CEO of Forests Ontario, Teri Hoang, the Stakeholder Relations Officer at Forests Ontario, and Michael Krans from Timmerman Timberworks.

Hoang remarks: *"It was a pleasure to be part of this collaborative effort! Thanks to all for your interest and enthusiasm for this topic. It made for a wonderful experience with great people.*

Students, hopefully you walked away with an appreciation for how forests are managed and the viability of building with local wood, a sustainable, renewable resource. Good look with the rest of your studies."

The excursion was a part of Professor Kelly Doran's Half Studio, where students investigate architectural interventions that can cut the GHG emissions of Toronto homes in half. Wood and mass timber, when produced by sustainable forestry practices, offers a sustainable building material. As wood gains popularity in this context, educating the students about the processes to produce wood can provide knowledge they may carry forward and use in their future design work.

Following the trip, students left a message for their hosts: "It changes the game to be able to touch and see the actual things and processes we read about, so thank you for this education."



Above: Students walk through the Hendrie Tract in Anten Mills. Below: Students tour the Timmerman Timberworks facility
Image Credit: Daniels Half Studio Fall 2021

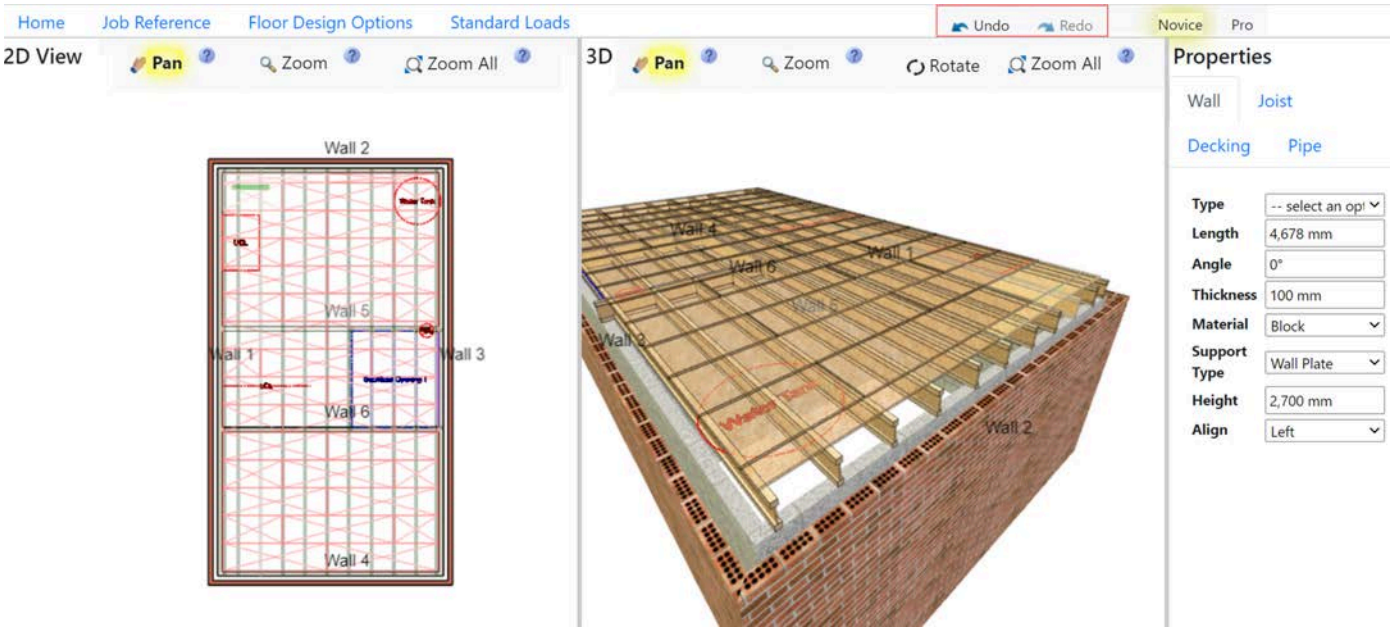
Carpenter's Union Hosts Orientation Breakfast for Mass Timber

The Carpenter's Union hosted an orientation breakfast last week alongside a four week training course held earlier this month at the CCAT to train carpenters in mass timber. With mass timber in high demand, the course responds to the uptake of this material in the construction industry. Further details about the course were covered in this article by Daily Commercial News.

DAISY Launch

North American launch of AI-powered design software DAISY AI enables structural engineers to find optimal timber designs with a click of a button.

DAISY (Design AI Systems) today announces the launch of its timber floor design tool in the USA and Canada. The software automates the process of designing with timber, reducing construction costs by 5–10%, eliminating up to 80% of timber waste and outputting optimal, production-ready, code-compliant structural timber designs in under 10 minutes.



Kasia Borowska, Director at DAISY AI explains: “The industry is riddled with inefficiencies in nearly every area of

the construction ecosystem, starting from design through to implementation, leading to increased costs and environmental impact such as materials wastage, inefficient space allocation, long turnaround times and increased pollution. Our artificial intelligence programme, DAISY AI makes timber an easier choice."

"It not only saves money on timber materials, but also saves time, as our DAISY Floor Optimiser reduces time required to produce a structural timber design by 2-3 hours." - says DAISY's Head of Product, an architect by trade Mario Selvaraj.

DAISY allows firms to reduce design bottlenecks, lead times and overheads, as well as allowing building designers to see directly, at the concept stage, what the implications of their design decisions might be on both structural feasibility and likely component costs.

DAISY has already proven a success in the United Kingdom, where just a year after introducing its I-joist floor design functionality it now designs an estimated 12% of timber floors in the UK residential market. Thanks to DAISY we will see reduced material wastage, faster construction time, more efficient transportation and maximised living space.

As Dr. Luke Whale, DAISY's Technical Director sums it up: "Artificial Intelligence provides a solution we need to work more efficiently. DAISY helps the construction sector choose timber over other, less sustainable construction materials like steel and concrete."

You can now start your free trial with DAISY's floor design tool by signing up at: https://app.daisy.ai/login

For further information, visit: https://daisy.ai/ or contact the DAISY team at contact@daisy.ai.

Image and Text Credit: Daisy AI

News from the Institute

Emmett Snyder, MTI Project Manager, has moved on to new ventures. Congratulations Emmett and thank you for all the hard work at MTI over the last couple of years. Shan Sukla is taking over some of Emmett's responsibilities and he can be reached at shan.shukla@mail.utoronto.ca

Other Updates

- Participate in the 2022 ULI Hines 2022 Student Competition! Teams have until December 10th to register. To learn more, click here.

You can reach us by phone at:
416-978-0561