Member Communication Experience

The Kendeda Building for Innovative Sustainable Design

CMAA Sustainability Project Spotlight submitted by: Jimmy Mitchell, Construction Manager, Skanska

Project Team

- » **OWNER:** <u>Georgia Institute of Technology</u>
- » AE: Lord Aeck Sargent & Miller Hull Partnership
- » BUILDER: Skanska USA Building

Project Statistics

- » USE: Multi-disciplinary University Academic building
- » **SIZE:** 40,000 square feet
- » CONSTRUCTION VALUE: \$20,000,000
- » CERTIFICATION(S) TARGETED OR ACHIEVED: Full Certification Living Building Challenge, LEED Platinum

What is the most excting sustainable feature of your project?

The structure is mass timber with glue laminated columns and beams and nail laminated timber decking. This structure minimizes the project's embodied carbon and is a beautiful use of a local material. The nail laminated decking panels incorporate over 25,000 linear feet of salvaged 2x4s, collected by a local reuse non-profit, Lifecycle Building Center. A workforce development partnership with Georgia Works! was created during the three to four months to make the 489 panels.



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Exterior of building and landscape

What was the biggest challenge your team faced and how did you overcome it?

The red list requirement for the Living Building Challenge is a team challenge for all stakeholders. Research on every material installed on the building is conducted to ensure that the building's materials are as healthy and safe as possible for the market. In the case of a material not being fully compliant, then advocacy to the manufacturing community to inform them on the opportunities to improve the product is a requirement. An example of this would be the small amount of Teflon in a sprinkler head.

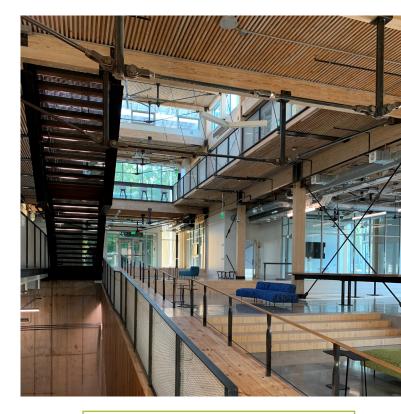
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What would you have done differently if given the change?

During the design phase the team compared both the possibility of using geothermal wells or connecting to the campus's chilled water loop. The team interest leaned towards the geothermal system, however by the end of analyzing the options at design development, connecting to the campus chill water loop was the chosen path as the mechanical room was located just a few feet away from both campus chilled water loop systems which made it the more cost-effective option. System solutions at a district scale can be a great way to spread costs as some technologies are justified as scale.



Production of Nail Laminated Timber Panel



Interior Central ADA Ramp

About the Project

CMAA has created the Sustainability Project Spotlight as a regular focus given to member projects nationwide that are building the way to a better future.

Kendeda Building for Innovative Sustainable Design at Georgia Tech is a 40,000 square-foot multi-disciplinary University Academic Building completed by the design team led by Lord Aeck Sargent & Miller Hull Partnership and builder team led by Skanska USA Building.

The CMAA Sustainability Subcommittee is actively seeking to spotlight your projects! Please email us at <u>communications@cmaanet.org</u> with a project name and person to contact.

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