



Monthly Newsletter from your Friends at Team Engineering

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Commercial

Steel Joist Modifications

By Dan Martel, Senior Engineer



Does your building utilize steel open-web joists for the floor or roof framing? Not sure? They might look something like this:



You commonly see them framing the roof of large grocery stores and home-improvement warehouses. These truss-type structures are lightweight, strong, and a very economical and common floor and roof-framing structure used in commercial applications. While they are a practical choice for new construction, they are difficult and expensive to modify once in service.

Why would you need to modify a joist? Perhaps you want to add a new roof-top mechanical unit and the

load exceeds the joist design capacity. Or perhaps you want to install a new elevator in the building and need to cut the joists mid-span. The first step in the process is to understand what you have. Start by filling out our **joist designation form**, and with any luck, we can identify the joist and know very quickly the manufacturer, type, and load-carrying capacity.

If your joists are not strong enough for your planned project, there may be ways to supplement them, or re-arrange the anticipated loads, to avoid expensive modifications to the joists. Contact us to see how we can bring our strong recent experience renovating existing buildings with steel joists to your project!

Project Spotlight

Southern NH University

By Brian Hansen, Project Manager

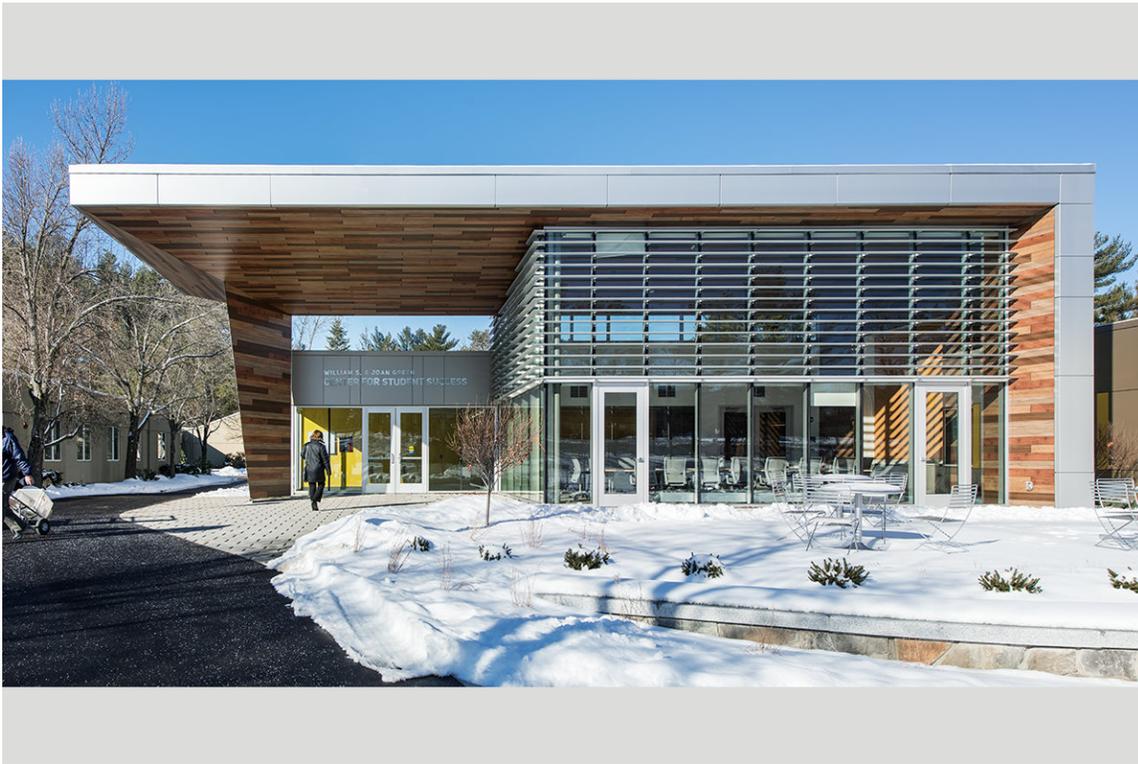


Ice dams are generally the result of uneven melting of the rooftop snow often caused by warm air rising inside the attic which warms the roof and melts the snow above. As the water runs downhill, it crosses over the lower and colder parts of the roof re-freezing at the roof's edge. Layer after layer, the ice dams form and sometimes they even fall off shattering on anything sitting below them. One of our clients was experiencing exactly this issue.

We were proud to assist Southern New Hampshire University (SNHU) in Hooksett, NH a couple of years ago when they had several incidents of ice dams on various campus buildings. Our team met with the professionals at SNHU, examined each of the buildings inside and out and identified factors contributing to the issue. We classified the buildings into building types and created a specific solution for each type of building. The Specification of repairs was over 50 pages including instructions, custom diagrams we created and the specific methods to use.

In the summer of 2017, SNHU remodeled an alumni building on campus. Part of that project included Team Engineering's ice-dam reduction strategy. We learned through feedback from the contractor that our solution was simpler and easier to perform than most of the projects they had completed for other Universities who were trying to correct the exact same issue.

In 2018 we are administering a construction project for SNHU that includes the installation of several of the ice-dam reduction features. As the construction administrator, we are assisting the University by writing the scope of work, identifying contractors, assisting in the bidding/ selection process, and visiting the site to report on progress. We are very excited to continue our service to SNHU and help them reduce the ice dam issue that has dogged several of their buildings.



Client of the Month



By Brian Hansen, Project Manager



Southern New Hampshire University has enjoyed robust growth thanks to a heritage of innovation and flexibility to suit the needs of their students.

Originally founded as a business training school in 1932, the New Hampshire Accounting and Technical School offered one-year programs designed to train local workers for entry level positions as secretaries, bookkeepers, and junior accountants. The flexible format of the programs appealed to working students who could not attend traditional day classes.

SNHU now awards degrees at five levels, both on campus and online. Bachelor's Degrees are available in 84 concentrated fields of study on campus in Hooksett, NH; and 114 concentrations are available through an online platform that was one of the first of its breed. This online platform has helped the enrollment in the last 15 years jump from 2,500 to over 95,000 earning recognition as "The Most Innovative University in the North" for the third consecutive year (US News and World Report). More than eighty years later that heritage of innovation and flexibility has resulted in an explosion of growth on campus and online.

The growth on campus has been especially unique in the last 10 years. Many of the original buildings have been replaced with more comfortable modern facilities. Team Engineering has been fortunate to assist the facilities department multiple engineering projects. The staff and professionals are always open to innovative and flexible engineering solutions to complex buildings issues. They truly care about the culture at SNHU and they understand the role that buildings play in that culture.

Since 1932, SNHU pioneered new boundaries of higher education to serve students for whom college degrees seem out of reach. More recently, SNHU pioneered the way students learn on an online higher-education platform. It seems likely that SNHU will continue to be a place where high-achieving folks combine to create a culture of innovation, flexibility, and success.

Charity of the Month



Bedford Presbyterian Church Mission Trip to Rebuild Houston after Hurricane Harvey

From February 24 to March 3, 2018, BPC will be working to rebuild Houston, which is still recovering from Hurricane Harvey. An inter-generational team of 17 volunteers will focus on rebuilding homes of those that have not been able to recover on their own. This is BPC's 12th annual mission work trip. Past trips include rebuilding New Orleans after Hurricane Katrina and New York after Hurricane Sandy. The Church relies on donations (including from the volunteers themselves) to fund travel, food, and lodging expenses for the volunteers. Godspeed!

Team Engineering has proudly donated \$150 this month to the **Bedford Presbyterian Church**.



What's happening with Turbo



Turbo earned his first title in Scentwork! - Novice Buildings

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