

POMERLAU CONSTRUCTION, TORONTO

REACHING NEW HEIGHTS: OUR
SUPERDECKS ASSIST WITH CANADA'S
TALLEST MASS TIMBER BUILDING

BRIEF

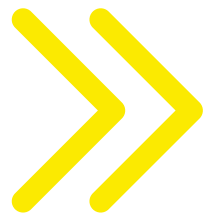
Clients	Pomerlau Construction
Projects	University of Toronto
Location	Toronto, Canada
Equipment	2 x 2.6 Superdecks

Preston Rentals was engaged by Pomerleau Construction to provide a material handling strategy for their unique project at the University of Toronto. The university's St. George campus is currently undergoing an expansion, with the construction of an Academic Wood Tower which will house several academic units, including the Munk School of Global Affairs. The tower is a hybrid steel and mass timber structure which, at 14 storeys and 77 metres high, is set to be the tallest mass timber building in Canada.

Engineer's drawing for rear propping and physical installation



TYPICAL RESHORING DETAILS:
HEIGHT = 4.8 - 6.25m: PERI MP625
HEIGHT = 3.5 - 4.8m: PERI MP480
HEIGHT = 2.5 - 3.5m: PERI MP350
HEIGHT = 1.5 - 2.5m: PERI MP250
HEIGHT < 1.5m: DOUBLE 4X6 TIMBER POSTS
USE TYPICAL BLOCKING DETAIL FOR ALL
RESHORING ON DIAGONAL BRACING



This project follows a growing international trend of implementing more mass timber in construction, with the material being praised for its superior fire safety and low carbon footprint. Pomerleau was looking for an efficient way to load interior materials, including drywall, glass, tiles, plumbing, and electrical fixtures, into the building. Our experience with this material allowed us to navigate the inherent challenges involved when working on hybrid mass timber structures. The angled timber beams forming a cross in the building's facade meant we could only place the SuperDecks in certain locations. These locations also restricted platform width to a maximum of 2.6m. Accordingly, we supplied Pomerleau with two of our 2.6m SuperDecks for the task.

A rear bolt down was the chosen installation method for a few reasons. Firstly, the lowest floor of the building comprised a concrete steel reinforced slab. To safely counter the load put into the structure, we had to bolt both SuperDecks to this floor using a threaded rod system. This was necessary because of the lightweight nature of mass timber; we needed something that could take the forces being applied as our equipment was loaded. The ceiling in both installation locations also prevented the use of rear props due to interference from structural beams. On the cross members at the slab edge, we anchored L brackets to accommodate reshoring. Pomerleau wrapped the columns to prevent marking the timber.

Preston Rentals accomplished this challenging installation with solid engineering, allowing Pomerleau to safely load materials with minimal impact on their structure. Delighted with our solution, Pomerleau will have our SuperDecks on site for several months as the tower is completed. With plans for our retractable loading platforms to go all the way to the top, our SuperDecks will soon be catching a bird's eye view of the vibrant city. As the SuperDecks move up the building, we'll be able to use rear prop installation with the bolt down method as they'll be no obstruction or hindrances to work around.

At Preston Rentals, you can COUNT ON US to provide the perfect material handling solution for your mass timber project.

