DAYTON SUPERIOR®

Four inches of rigid insulation was incorporated into the Tilt-Up sandwich panel wall design. The panels, which were cast on site, used Dayton Superior's P24 Delta Ties to connect the fascia and structural sections through the insulation.

By using Delta Ties in the large, complex panels, the contractor saved time and money, and the owner will save on heating and cooling bills.

Making the Right Connections on Campus

SUMMARY

Recognized with an Ontario Concrete Award, Humber College Building B is an architectural narrative whose story encompasses the use of tilt-up and precast construction resulting in a unique facility for higher learning. The three-story, 83,694 sq. ft. Building B is home to the student testing center, new classrooms and administration offices for the college's president and vice-presidents.

CUSTOMER

Owner: Humber Institute of Technology & Advanced Learning

General Contractor: Graham Construction and Engineering, a JV

Tilt Up Contractor: Tilt Wall Ontario Inc.

PROJECT

Humber College, Building B

Toronto, Ontario

CHALLENGE

Design of the building would mean constructing wall panels averaging just over 42 feet tall and 35 feet wide. Each panel consisted of three layers, 12" structural concrete, 4" Rigid Insulation and 3" exterior concrete with an average weight of 150,000 pounds.

SOLUTION

The project made use of Dayton Superior's P24 Delta Tie to connect the insulated panel layers together. With over 16 years of proven performance and millions of square feet of sandwich walls constructed, the Delta Tie system was used to save both time and labor in an already aggressive project schedule. Very little training was required for the workers to install the ties in a fast, easy and money-saving way. In addition, the Delta Tie design was the perfect product to provide minimal thermal bridging while offering the owner proven strength, durability and reduced building operating costs.

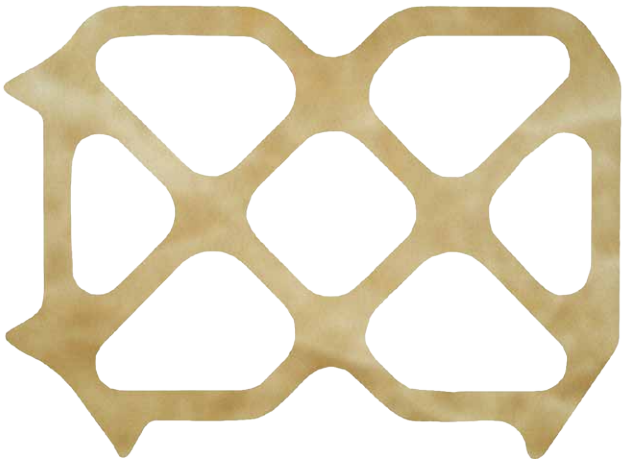
DAYTON SUPERIOR

RESULTS

- Dayton Superior was able to provide a versatile panel connection solution to work with the contractor's choice of rigid foam insulation.
- The contractor recognized a labor savings as the Delta Tie requires no drilling or pre-installation and can be installed in seconds.
- The Delta Tie offered increased safety due to use of an engineered composite matrix and increased insulating efficiency.

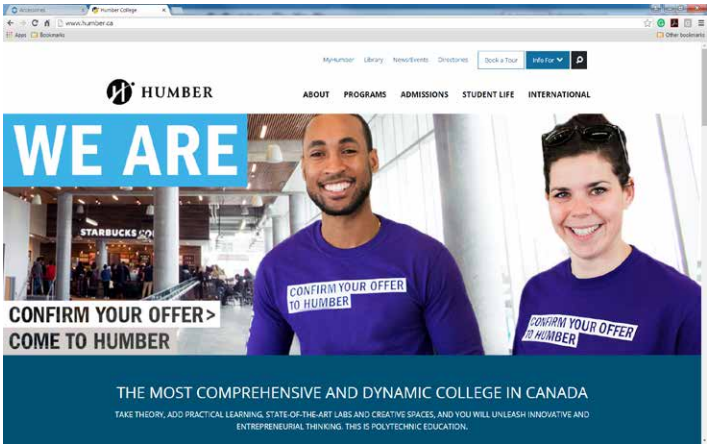
RESOURCES

Learn more about the Dayton Superior P24 Delta Tie at www.daytonsuperior.com/deltatie



The 5"x7" P24 Delta Tie fits insulation thicknesses up to 4", and the 9"x11" P24XL Delta Tie fits insulation thicknesses between 4" and 8".

Because no two tilt-up panels were alike, the versatility of the Delta Tie allowed the contractor to adapt installation as needed.



Information about Humber Institute of Technology & Advanced Learning is available on the www.humber.ca site.