

INSTITUTIONAL BUILDING

REHOBOTH CHRISTIAN SCHOOL



PROJECT CREDITS

OWNER

Rehoboth Christian School

ARCHITECT OF RECORD

Dickinson + Hicks Architects Inc.

ENGINEER OF RECORD

Tacoma Engineers

GENERAL CONTRACTOR

Graceview Enterprises

MATERIAL SUPPLIER

Stubbe's Precast

ADDITIONAL PARTICIPANTS

Sika Canada Inc.

PROJECT FACTS

LOCATION Norwich, Ontario

COMPLETION 11/10/2017

QUICK PROJECT FACTS

The school addition consists of 10 classrooms, a staffroom, a library and some offices with a gross floor area of just over 16,000 sq. ft. The gymnasium and tech shop project site include 13,250 sq. ft. of wall panels and 8,000 sq. ft. of hollowcore.





PROJECT DESCRIPTION:

Rehoboth Christian School in Norwich is a 2-storey school addition comprised of precast walls and hollowcore slabs. There is also a large gymnasium/auditorium with structural precast walls supporting a steel roof. A second building on site was added as well, which is an auto/tech shop for the school, this building is also comprised of precast walls supporting a wood truss roof and has a hollowcore mezzanine inside. The school addition consists of 10 classrooms, a staffroom, a library and some offices with a gross floor area of just over 16,000 sq. ft. The gymnasium and tech shop project site include 13,250 sq. ft. of wall panels and 8,000 sq. ft. of hollowcore. With these added spaces the school was able to offer better programs recreationally and technologically.

Rehoboth Christian School teamed up with Graceview Enterprises, Dickson + Hicks Architects, Tacoma Engineering and Stubbe's Precast, and together this dynamic team brought the project to life.

A challenge of any addition is making it blend into the existing structure. Knowing that this would be difficult since the existing building consists of brick and some metal sheeting the team decided to go in another direction. That was to make the look completely different and give a new revamped look on an old building. With all the exterior walls being precast we were able to combine some simple band features with different paint colours to break up the tall flat walls.

With this project being an addition to an existing school, another challenge faced included the uninterrupted operation of the day to day activities of the school. This meant minimalizing the noise and timelines to limit the interruption of the school year. Hinge that off of a rapidly expanding enrollment meant that a good solid and quick structure was required. Using precast walls and floors for the main structure solved the biggest concerns. With production of walls and floors being completed off-site, the noise levels during construction were vastly reduced therefore disturbance of the existing school was limited. An added benefit of everything being produced offsite meant that installation duration of the structure was drastically reduced. The entire precast structure was installed over a 5-week time period finishing the buildings in early November 2017.

Precast was the preferred choice for another reason also, durability. Being that the project is a school with children and teenager's durability was also a key factor. The possibility of damage is significantly increased in this environment, so a strong solid product would help minimize damages and drastically reduce the future maintenance required in the school.

The many benefits to precast construction of Rehoboth Christian School contributed to this project being as successful as it was. Precast concrete's structural integrity, durability, speed of construction, and aesthetic flexibility made this a successful project exceeding all of the client's expectations.

