SPECIALTY CONCRETE PRODUCTS

Tilt Wall Ontario Office

Woodstock, Ontario

PROJECT CREDITS

OWNER
Orangewood Holdings Inc.

ARCHITECT OF RECORD
Barry Bryan Associates

ENGINEER OF RECORD
Barry Bryan Associates

GENERAL CONTRACTOR
Tilt Wall Ontario Inc.

MATERIAL SUPPLIER
Lafarge Canada Inc.

ADDITIONAL PARTICIPANTS
- BASF Canada Inc.
- Dayton Superior Canada Ltd.

PROJECT FACTS

LOCATION
Woodstock, Ontario

CONSTRUCTION TIME
July 2014 to December 2014

SIZE
- Building Footprint: 9,886 sq. ft.
- Total Floor Area of Building: 11,996 sq. ft.
- Total Wall Panel Surface Area: 13,133 sq. ft.

TONNAGE
Heaviest Panel: 82,164 lbs.

SPAN LENGTH
- Widest Panel: 36'-11"
- Tallest Panel: 29'-4"
- Tallest Catilever*: 24'-0"
  *self-supporting from the foundation
- Largest Panel: 946 sq. ft.
- Largest Spandrel Panel: 10'-6"

GENERAL DIMENSIONS
- Building Dimensions:
  90'-2" x 109'-6"
- Total Number of Panels: 30

2015 Ontario Concrete Awards

First Tilt-Up Concrete Project for the Region

This project is the new home for a design build firm whose core business is promotion and construction for all things Tilt-Up. The primary objective of the building was to provide a showcase and canvas for the use of Tilt-Up construction, by displaying and promoting "Tilt-Up" in a construction market that is dominated by other systems.

The building is multi-tenanted, and the design reflects unique architectures for each suite. This promoted the creation of three unique frontages, and allowed the design builder to employ three different Tilt-Up solutions. The first tenant (the design builder) had the concrete take on a balancing act with the leading edge pushed beyond the building foot print.

Additional form liners were used on the side and rear elevations, and the interior spaces to show clients the many options available for their own projects. Additional concrete form liners were used in the interior walls to simulate various polished rocks and wood panelling.

The second tenant requested a more traditional facade treatment, which was showcased with a varied response of masonry veneer (and includes the "one degree of separation").

The third tenant space allowed the design builder to again flex some muscle by creating a facade that employed the use of suspended "key stone" panel.

The main building sign pylon was also made with tilt up, and again reflects the design ethos of the main building.

Currently the new building is sited in a vast field of a new industrial park. While the neighbouring steel framed complexes dwarf this new structure, this new contractor's office sits proud as a "jewel" for better construction possibilities.

The design builder always recognized the many benefits for Tilt-Up concrete construction, but that message can be difficult to be heard or seen within the current market of other dominant construction methods, traditions for the geographical area, and even the tough winter conditions. In this case the new building was used to transcend those issues and bring "home" this type of system.

From the beginning, as the walls were lifted into a place, media and other builders were on-hand to witness the amazing progress as the building came into being. Members of the local municipal council and the office of the local economic development department toured the site and facility and gained a new insight into the architectural merits and the potential of Tilt-Up construction for other developments.

Unlike the anonymous neighboring metal clad structures (seen everywhere in the developed world), this building is both sustainable and desirable, and architecturally rooted to its community. By this, we infer that while the local main street is miles away, this new development is seen as extension of that arterial road with its variable facade.

Currently this new "Tilt-Up" structure is clearly viewed from Highway 401, a major provincial arterial road; and, in fact is the only Tilt-Up structure within 320 km (240 miles) seen along this highway.

There have been many positive responses to this new building. A new Tilt-Up building is now under construction based on the owner's decision resulting from a "hands on" close-up tour of this design builder's new office — following the old adage "seeing is believing".

Special Features

- First Tilt-Up concrete project for the region.
- Unique design for twisting, suspending, and tilting of concrete (a facade that leans past the visual centre of gravity).
- Showcase and home for Tilt-Up design builder that reflects the many good design possibilities for concrete construction.
- Insulated concrete acts as a "thermos" to keep interior cool in summer and warm in winter (economical energy costs).
- Warehouse concrete floor has hydronic in-slab heating delivering economical energy costs.
- Building pylon sign also constructed using tilt-up concrete.