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JOURNAL

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PUSHING **GREEN**
GREEN MATERIALS **RAISE** THE BAR
ART GALLERY OF ONTARIO

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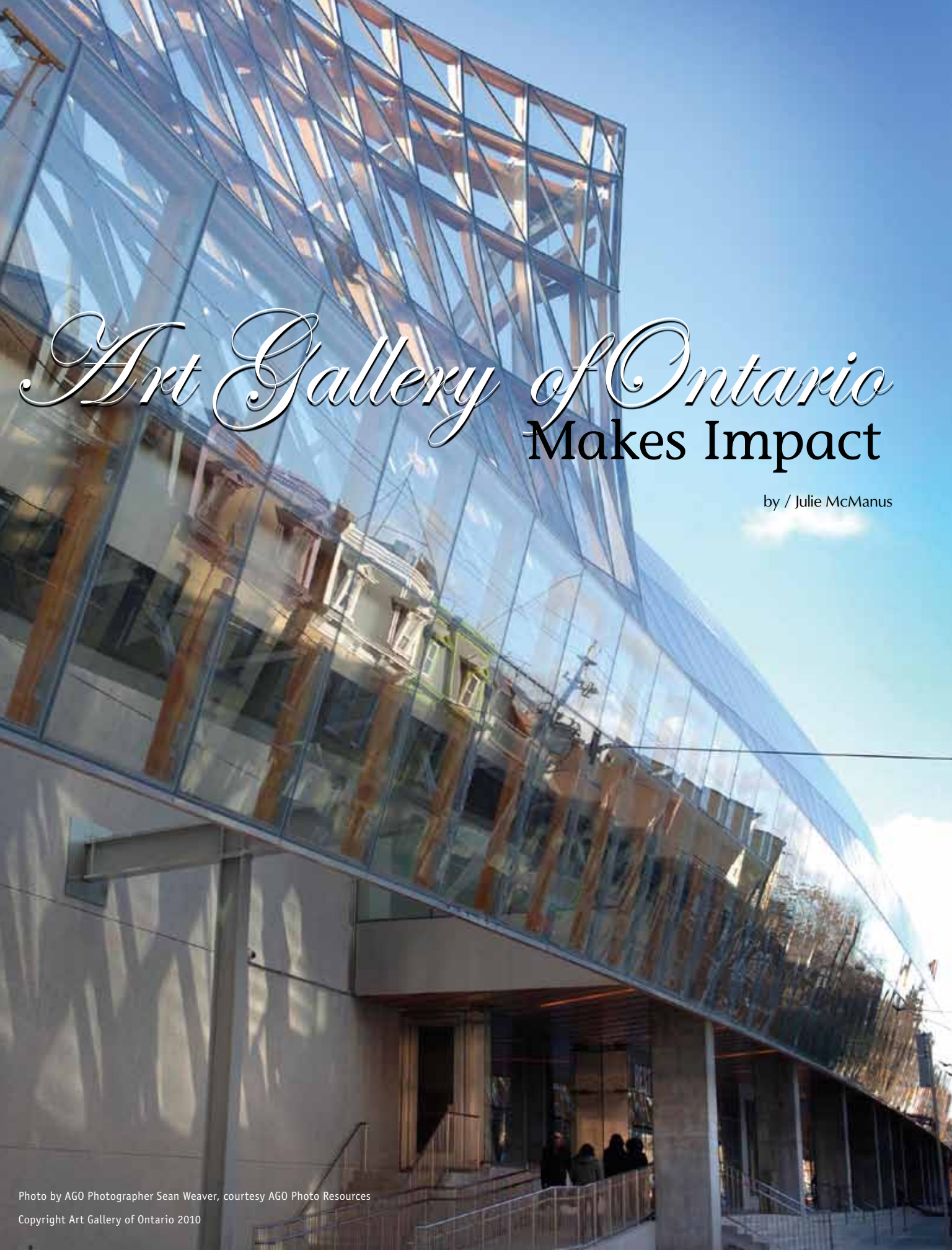
The Art Gallery of Ontario (AGO) received 47 percent more gallery space and a complete redesign after eight years of planning and building.



cover photo courtesy of Flynn Canada Ltd.

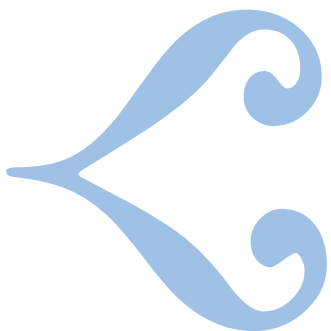
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Art Gallery of Ontario Makes Impact

by / Julie McManus



The Art Gallery of Ontario (AGO), the tenth largest art gallery in North America, received 47 percent more gallery space and a complete redesign after eight years of planning and building. The redevelopment plan, under the official title of Transformation AGO, was first discussed in 2000 and was approved by city council in 2004. The \$276 million project was finally finished in November 2008 and saw over sixty thousand visitors during its opening day.

The idea behind the transformation was not just to allow for more space for art collections, but to integrate groundbreaking ideas about the ways art and people connect. Under direction from world-renowned architect Frank Gehry, the exterior of the building now livens up surrounding streets and connects the city to the activity of the gallery by use of visible walkways and extensive use of glass. Glazing on both the north and south façades allow visitors to experience the surrounding cityscape from the gallery interior, and a new glass roof over Walker Court helps integrate natural light throughout the building.

Flynn Canada Ltd. supplied and installed three main cladding elements on the building including 38,000 square-feet of blue titanium flat-lock tiles on the exterior walls of the new gallery addition, 14,000 square-feet of Angel Hair finish stainless steel roofing, wall and soffit cladding on the feature stairs, and 15,000 square-feet of white, pre-finished metal cladding on the mechanical penthouses.

Although the building did not apply for a LEED rating, the AGO transformation was completed with durability in mind, says Magdi Gabriel, Flynn's senior project manager on the job. "Extraordinary measures were taken to ensure the building envelope was absolutely sealed and durable. We knew the exhibits in the building were actually worth more than the addition construction cost themselves. They have to be protected for a long time."

At peak construction, 30 people from Flynn were on site. The team are most proud of completing this difficult project in time for its scheduled grand opening, which was no easy task.

One of the main challenges was with accessibility.

"Some of the areas were impossible to gain access to without a scaffold system specifically engineered to suit," says Gabriel. "In particular, the feature stair over the Walker Court skylight. The scaffold had to wrap around the protruding stair case that winds its way up the exterior of the addition while straddling the skylight framing."

Flynn also had to be careful when it came to managing and conserving unique building materials, particularly the blue titanium sheet metal that was manufactured in Japan and took more than nine months to arrive after ordering.

"We had to be very precise with our estimate of material we needed to ensure we ordered enough, yet not too conservative because the material is quite costly," says Gabriel. "We also needed to ensure that damage from mishandling was zero. We faced dire consequences if we delayed the opening for a year by running out of material and having to order more. Thankfully this didn't happen."

Then, there was the difficulty of working in such a confined space of a bustling downtown city centre.

■ Art Gallery of Ontario



Photo by AGO Photographer Craig Boyko, courtesy AGO Photo Resources
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“The transformed AGO has dramatically enriched visitors’ experiences and continues to provide greater access to the full vibrancy of the art museum.”

Galleria Italia. Photo by AGO Photographer Sean Weaver, courtesy AGO Photo Resources
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“The delivery of the material proved to be a challenge due to the limited space available around the site. Material had to be delivered very early in the morning and sometimes on the weekends pending the accessibility conditions.”

Adding to the complexity of the work was the geometry of the exterior staircase that proved to be quite difficult.

“Both feature stairs on the north and south faces of the addition are ‘Gehry-esque’ in that they are curvilinear shapes that seem to grow organically from the blue titanium box,” Gabriel says. “Building Information Modeling was used to essentially build our respective components in cyberspace. The idea being that all components should match the geometry Gehry intended. The end result matches very closely with the Gehry model.”

Majority of funding for this exciting addition to the city of Toronto came from the Kenneth Thomson family, who contributed a total of \$100 million. The Government of Canada contributed \$24 million and the Government of Ontario contributed \$39 million, while 3,500 private and corporate donors helped raise the remaining funds.

The current staff at the AGO are very pleased with the completed project, and say that as the imaginative centre of the city, the transformed AGO has dramatically enriched visitors’ experiences and continues to provide greater access to the full vibrancy of the art museum. Gabriel considers the museum to be one of the crown jewels of Toronto’s architectural repertoire. ■

Photos by AGO Photographer Sean Weaver, courtesy AGO Photo Resources
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AT A GLANCE

Total Budget: \$276 million

Total Space: 583,000 square feet

Location: 317 Dundas Street West, Toronto

Architect: Frank Gehry, Gehry International Architects, Inc.

Structural Engineer: Halcrow Yolles Engineering

Mechanical Engineer: H.H. Angus & Associates Limited

Construction Manager: EllisDon Corporation

Exterior Cladding: Flynn Canada Ltd.

Glazing: Antamex International Inc.

Mechanical: Geo A. Kelson Company Ltd.

Drywall: Cesaroni Contracting Inc.