

## Ottawa Convention Centre - A Green and Golden Tulip

MAPEI Products Level the Floors and Glue Down the Carpets



Like an abstract crystal vision of a giant tulip petal, the new Ottawa Convention Centre (OCC) nestles between the Westin Hotel and the McKenzie King Bridge in Canada's capital city. It replaces an earlier building on the same site. The original Ottawa Congress Centre (opened in 1985) had 70,000 square feet (6,500 m<sup>2</sup>) of exhibition space that was built on former railways lands. It was used for conventions, public exhibitions and music concerts. As Ottawa's presence as an international conference and convention site grew, its needs expanded beyond the old building's capabilities.

In 2008-2009, nearly all of the old building was demolished by PCL Construction. In its place, construction began on the new Ottawa Convention Centre. As green in spirit as the beautiful tulips that are celebrated each year at the Ottawa Tulip Festival, the OCC was built to LEED Silver Certification standards and adheres to sustainable practices in its operation. As part of the process, 90 per cent of the demolition debris was recycled.



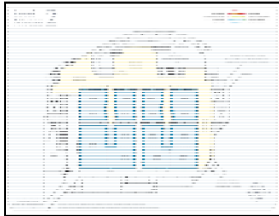
According to the Centre operations management, "Site planning, safe and efficient water systems, renewable energy efficiency, conservation of materials and resources, and indoor air quality were a "green" component of the redevelopment as well as a lifecycle renewal process in place for a continuous updating of the new convention centre throughout the life of the building."

### Concrete Pours and Repairs

Bellai Brothers Construction Ltd. was selected to pour all concrete slabs and walls in the new convention centre. For over 50 years, Bellai Brothers has serviced the Ottawa Valley with quality workmanship in the commercial, industrial and residential sectors. The company's commitment to quality, schedules and budgets has enabled them to become leaders in formwork, concrete placing, finishing, masonry, concrete pumping and restoration. Bellai Brothers is also a distributor for the Mapei line of construction products.

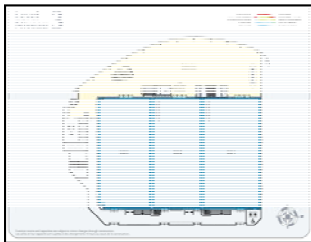
Along with pouring the concrete slabs and walls, Bellai Brothers was contracted to fix recesses in the slabs that occurred due to engineering requirements and to do an extensive amount of leveling work in all

areas of the OCC. For these tasks, they used a variety of MAPEI's repair mortars and self-leveling underlayments.



On the second floor, wherever a deep pour needed to be filled, *Mapecem 100* was used for the first 1 ½ inches; then the area was coated with *Primer L* and covered with another 1 ¼ inches of *Ultraplan 1 Plus*.

In other areas on the second floor, and throughout the convention centre, wherever a 2-inch thickness was needed to complete a recess repair, the crew used *Primer T* and *Ultraplan Easy* self-leveling underlayment for time-saving repairs. *Ultraplan Easy* was especially useful for leveling over top of old residue in the remaining part of the original building. *Ultraplan 1 Plus* self-leveling underlayment and *Novoplan 2* were used with *Primer L* in many areas for effective, cost-efficient leveling of slabs, including areas such as the mechanical room and bathrooms. *Ultraplan 1 Plus* was preferred for all areas where a quick turnaround time as needed. *Planitop X* repair mortar was employed for vertical and overhead horizontal repairs wherever necessary.



The Bellai Brothers team also used MAPEI products for a specialty repair on the third floor of the Convention Centre. To effect a structural repair for a large recess, they laid down ¼ inch of pea gravel and then topped this with *Ultraplan M20 Plus* self-leveling underlayment.

In total, Bellai Brothers used 25 truckloads of MAPEI self-levelers on the Ottawa Convention Centre; but that was not the end of the self-leveling story for this project. There are different views between concrete contractors' requirements for self-leveling and the needs of flooring contractors.

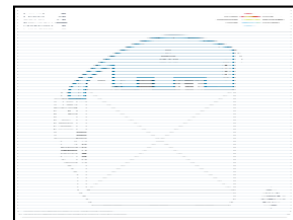
## Carpeting the Floors

Jacques Lamont Ltée has evolved from a well-respected interior design firm into the leading surface covering company in the Ottawa Region. Since its opening in 1958 it has developed a reputation for innovation, quality, and service. It continues to win high regard throughout the building industry.

Jacques Lamont crews set nearly 200,000 square feet of Earthwerks carpet tile in the pre-function rooms and ballrooms of the OCC; and for this job they needed an ultra-smooth substrate. They ordered an extra nine truckloads of *Novoplan 2* and *Primer L* to achieve their goal.

In one particular area, the Jacques Lamont crew had to fill in 3 ½ inches where there was a recess in the concrete slab in the old portion of the building. For this repair, they used *Topcem Premix* mortar for its fast curing time and then covered the space with *Novoplan 2* self-leveling underlayment after priming with *Primer L*.

After the surfaces were smooth and level enough to satisfy the Jacques Lamont crew, they set the eco-friendly carpet tiles from Shaw with two MAPEI adhesives. Where foot traffic was predominant during construction, they used *Ultrabond ECO® 810* to install 140,000 square feet of the Ecowerks carpet tiles. In the ballroom and other convention rooms where heavy machinery was scheduled to be used shortly after the installation, the crews set the carpet tiles (60,000 square feet) with *Ultrabond ECO 885*, a new MAPEI carpet adhesive specifically designed to provide a very aggressive bond to polyolefin-type carpet backings where traditional adhesives will not work.



The Ottawa Convention Centre construction lasted for one-and-a-half years, and Bellai Brothers worked in close contact with MAPEI representative Justin Lafontaine to deliver solutions to all concrete repair challenges that arose on the construction site. Justin was also instrumental in consulting with Jacques

Lamont Ltée to provide the additional self-levelers and deliver exactly the right adhesives needed to do the project right.



Ultratop M20 Plus



Ultrabond ECO 885



Ultrabond ECO 810

The new, modern building – with its bright naturally lit interior and magnificent views, its sustainable vision for operations, and its new age ambience – is set to cement Ottawa and the Ottawa Convention Centre's position as a world-class location for concerts, meetings and conventions. Gold gleams among the green, too. The OCC is already drawing in conventions that would not have been possible before, further brightening the economic picture for the city. MAPEI is glad to have helped produce this green and golden vision!

