

# Ritz-Carlton Montreal hotel and the Residences at Ritz-Carlton Montreal – Montreal, QC, Canada

## Project overview

MAPEI supplied products for concrete repairs and surface preparation, as well as tile-setting and grouting systems, for the renovation of the Ritz-Carlton Montreal hotel – and the adjacent Residences at the Ritz-Carlton Montreal\* – in Montreal, QC. *Mapelite™* was used to lighten the weight of the cement repairs in some areas in order to meet structural-engineering requirements.



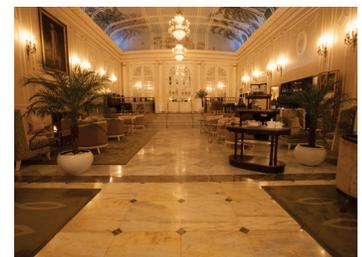
## Project information

<b>Project category:</b>	Hospitality – Hotel and residences
<b>MAPEI coordinators:</b>	Michel Lafortune and Pat Desanctis
<b>Project owners:</b>	Hotel – The Ritz-Carlton Hotel Company, L.L.C. Residences – Golden Square Mile Holding, Inc. (developer)
<b>MAPEI distributors:</b>	Concrete restoration – Reno-Direct, Inc. Tile and stone installation for Residences – Prosol Distribution, Inc. Tile and stone installation for hotel – Ciot (QC)
<b>General contractor:</b>	Pomerleau
<b>Installer companies:</b>	Concrete restoration – BTM Construction Tile and stone installation for Residences – Carrelage de Montreal Tile and stone installation for hotel – Olympia Tile + Stone
<b>Original designer:</b>	Warren and Wetmore (1912)
<b>Architect:</b>	Provencher Roy
<b>Engineer:</b>	SBSA Structural Consultants
<b>Photographer:</b>	Olivier Gariepy
<b>Project size:</b>	150,000 sq. ft. (13 935 m <sup>2</sup> )



## MAPEI products used

- *Primer L™*
- *Novoplan® 1*
- *Mapelite*
- *Ultraplan® M20 Plus*
- *Mapelastix™ AquaDefense*
- *Mapecem® 100*
- *Mapelastix 315*
- *Ultraflex™ LFT™*
- *Ultraflex 2*
- *MAPEI Ultralite™ Mortar*
- *Kerabond/Keralastic™ System*
- *Keracolor™ S and U*



# Ritz-Carlton Montreal hotel and the Residences at Ritz-Carlton Montreal, QC, Canada

## Restoring history and creating new architecture for Montreal hotel

Since its grand opening on New Year's Eve, 1912, with original construction costs of \$2 million, the Ritz-Carlton Montreal has offered respite, warmth and wonder to stars, royalty and important people hailing from the four corners of the world.

Starting in January 2013, the original Ritz-Carlton hotel began an incredible transformation. The facade, lobby, Palm Court, Grand Ballroom and Ritz Garden – known as shining examples of avant-garde design and careful preservation – have been restored to their original splendor. One half of the original building remains as a Ritz-Carlton hotel, while the other half has been renovated and turned into 46 whole-ownership, private residences (according to company information).

Designed by Montreal architectural firm Provencher Roy, the new Ritz-Carlton was expertly planned to incorporate the iconic original facade designed by New York's Warren and Wetmore, while showcasing some of the finest contemporary design seen in Montreal and around the world.

Many of the exquisite exterior details of the original Ritz-Carlton serve as leitmotifs for the interior design of its residences. The intricate stone molding that was restored to perfection on the exterior is echoed on the interior, while the delicate string of stone pearls that snake around the building serve as inspiration for the elegant circular design in the marble flooring of residence lobbies. Actual pieces of the original facade were restored, preserved as an art piece – paying tribute to the Ritz-Carlton's noble past – in each elevator lobby.

After the restoration and conversion of a sizeable portion of the original building, an elegant structure of steel and glass now graces the roof and western face of the building. This new residential wing discreetly revives and enlivens the already unique character of the original Ritz-Carlton hotel.

### MAPEI products on the jobsite

The renovations included overall updates to the rooms and common areas, as well as an expansion of the building to create luxury residences.

In all 19 stories of the Residences, there were new concrete slabs from 2012 and old slabs from 1982 (when the original floors were poured). The concrete was soft and had cracks.

### Concrete repairs at the hotel and the Residences

**Novoplan 1** underlayment with its high strength was used for self-leveling on 90% of the jobsite. **Novoplan 1** was pumped over **Primer L**; this primer improves the

bond between a properly prepared and profiled concrete substrate and the self-leveling underlayment.

On approximately 10% of the jobsite (in an older section of the hotel), the structural engineers required the use of a "light" concrete. Such a concrete was needed because the amount of regular concrete that would have to be used would exceed the capabilities of the building to withstand the stress of all that weight. MAPEI was able to meet this challenge by supplying **Ultraplan M20 Plus** underlayment mixed with **Mapelite**. (*Mapelite* is a mixture of aggregates engineered to significantly reduce the total weight when added to cementitious mixtures.)

Use of the **Ultraplan M20 Plus/Mapelite** mixture allowed the contractor to pour the concrete at the same level on all the floors without any difference between the old floors and the new ones. The weight of the mixture also met the requirements of the structural engineers.

### Tile setting at the hotel and the Residences

The use of MAPEI products was extremely successful in preparing the floors for the tile-setting process.

The tile work in the hotel was performed by Olympia Tile + Stone; they began by waterproofing "wet" areas with **Mapelastix AquaDefense** membrane. Next, the Olympia installers set approximately 50,000 sq. ft. (4 645 m<sup>2</sup>) of large-format marble tiles (24" x 24" [61 x 61 cm] and 12" x 24" [30 x 61 cm]) from Botticino in Italy, using **Ultraflex LFT** mortar for wall tiles and **Ultraflex 2** mortar for floor tiles. Due to the delicate nature of the marble, all tiles were grouted with **Keracolor U** unsanded grout.

In the Residences, installers from Carrelage de Montreal set tile in each kitchen, master bathroom, second bathroom and entrance area. The total area for the Residences was approximately 100,000 sq. ft. (9 290 m<sup>2</sup>).

**Mapecem 100** mortar was used to make substrate repairs where necessary. Then, the bathrooms were waterproofed with **Mapelastix 315** membrane. **MAPEI Ultralite Mortar** was used to set marble (4" x 4" [10 x 10 cm]) and mosaic (5/8" x 5/8" [16 x 16 mm]) wall tiles, and these areas were grouted with **Keracolor U**. **Kerabond/Keralastic** mortar system was used to set the 16" x 16" (41 x 41 cm) and 16" x 24" (41 x 61 cm) marble floor tiles, and **Keracolor S** sanded grout was used for grouting.

In the lobby of the Residences, **Mapecem 100** was also used for repairs. The 16" x 16" (41 x 41 cm) large-format tiles were set with **Kerabond/Keralastic** and grouted with **Keracolor S** and **U**.

Within the rooftop pool area, MAPEI products were used for the installation of porcelain and mosaic tiles from Italy in the pool and showers. **Mapecem 100** was used for substrate repairs, **Mapelastix 315** for waterproofing, **Kerabond/Keralastic** for setting the tiles, and **Keracolor S** and **U** for grouting.

\* The Residences at The Ritz-Carlton Montreal are not owned, developed, sold or operated by The Ritz-Carlton Hotel Company, L.L.C. Golden Square Mile Holding, Inc. uses The Ritz-Carlton marks under a license from The Ritz-Carlton Hotel Company, L.L.C. Exclusively offered by Sotheby's International Realty Québec. Real Estate Agency. Independently owned and operated.

