

Markham Stouffville Hospital — Markham, Ontario

PROJECT OVERVIEW

MAPEI surface-preparation products were used to treat concrete substrates, which were then covered with 800,000 square feet (74 322 m²) of rubber flooring and 70,000 square feet (6 503 m²) of tile using MAPEI adhesives during the expansion of a hospital in the Toronto area of Ontario.



PROJECT INFORMATION

Project Category: **Public Building — Hospital**
 MAPEI Sales Reps: **Jeff McCoppen and Gaspare Clemenzi**
 Project Owner: **Markham Stouffville Hospital**
 General Contractor: **PCL Constructors of Canada**
 Architects: **Bregman + Hamann and Perkins + Will**
 Distributor: **Durox**
 Floor-Covering Installer: **North Wood**
 Tile Installer: **Maple Terrazzo**
 Project Manager: **Paul Piggott (PCL)**
 Project Size: **870,000 square feet (80 826 m²)**



MAPEI PRODUCTS USED

- *Mapecem[®] Premix*
- *Planiseal[™] VS*
- *Planiprep[™] FF*
- *Mapelastic[™] AquaDefense*
- *Ultrabond ECO[®] 560*
- *Ultraflex[™] LFT[™]*
- *Ultraflex 2*
- *Ultracolor[®] Plus*



Markham Stouffville Hospital — Markham, Ontario

Hospital expansion fast-tracked with MAPEI moisture-mitigation products and adhesives

Background Information:

Markham Stouffville Hospital is an acute-care (215 beds) and general hospital serving the southeast York Region of Ontario. It is also referred to as a base hospital, as it is a resource center for paramedics regionwide.

Opened in 1990, the hospital was created to relieve stress on York Central Hospital in Richmond Hill and hospitals in the north part of Toronto. It was one of a few Greater Toronto Area hospitals dealing with severe acute respiratory syndrome (SARS) patients during the SARS outbreak in 2003. In 2010, Markham Stouffville became an affiliated and community teaching hospital linked with the University of Toronto's Faculty of Medicine.

Markham Stouffville Hospital is expanding to meet the needs of its growing communities. Built to provide care to a community of 110,000, the hospital currently serves a population of 300,000.

To continue to provide exceptional care, the hospital's expanded building opened on March 10, 2013. The hospital continues to undergo extensive renovations to the original building, with an expected completion in 2014.

MAPEI Products at Work on the Jobsite:

North Wood, a division of Maple Terrazzo, installed 800,000 square feet (74 322 m²) of rubber flooring using *Ultrabond ECO 560* as part of the renovation and expansion

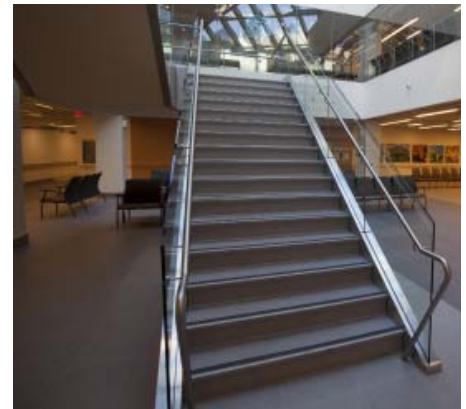


of Markham Stouffville Hospital that included an emergency room, operating rooms and patient rooms.

To prepare the substrate for the installation of the rubber flooring, the entire 800,000 square feet (74 322 m²) was covered with *Planiprep FF* as a skimcoat, creating a strong, durable, high-compression-strength surface ready for the floor-covering application.

Tile work took place in the new area, including the main lobby, public restrooms and administration offices. About 20,000 square feet (1 858 m²) of walls and 50,000 square feet (4 645 m²) of floor space were tiled, using *Ultraflex LFT* mortar for the limestone tiles on the walls and *Ultraflex 2* for the large-format tiles on the floors. All of the tile was grouted with *Ultracolor Plus*.

Mapelastic AquaDefense was used to waterproof bathrooms and showers in the 10,000-square-foot (929 m²) new area before floor and wall tiles were set.



Moisture mitigation was required in some areas. This challenge was met with the application of 40,000 square feet (3 716 m²) of *Planiseal VS* in places where high moisture readings were recorded and there was no time to wait for an extended period for the concrete substrates to cure completely.

The *Planiseal VS* brought the moisture content into acceptable levels as required for the floor finish and allowed the flooring installers to keep up with the time schedules. *Mapecem Premix* was used to patch the substrate where needed.