

Canadian Science and Technology Museum – Ottawa, ON, Canada

Project overview

A major renovation was conducted at the Canadian Science and Technology Museum after museum officials discovered that the building contained mold and asbestos, and had a structurally compromised roof. The renovation also included work on the flooring. MAPEI's *Planibond*® *EBA* bonding agent was installed over the old concrete to ensure the proper adhesion of MAPEI's *Ultratop*® *PC* concrete topping.



Project information

Project category:	Public Building – Museum
Period of construction:	2014
Year of MAPEI involvement:	2016
MAPEI coordinator:	Justin Lafontaine
Project owner:	Canadian Government
MAPEI distributor:	Réno-Direct
Architect:	NORR
General contractor:	Pomerleau Inc.
Installer company:	BTM Construction
Project manager:	Jean François
Photographer:	Olivier Gariépy
Project size:	95,000 square feet (8 826 m ²)



MAPEI products used

- *Planibond EBA*
- *Ultratop PC*

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Museum floor renovated and rejuvenated

The largest museum of its kind in Canada, the Canadian Science and Technology Museum allows visitors to experience science and technology firsthand with multiple exhibitions, collections, special events, workshops and more. The museum is a popular destination for schools and families alike.

In 2014, the Canadian Science and Technology Museum closed for renovation when the museum administration discovered that the building contained mold and asbestos – in addition to learning that the roof was structurally compromised. The museum manager described the building as “tired and in need of a reboot.” The administration turned to general contractor Pomerleau Inc. to fix the issues and bring the museum into the 21st century.

The \$80 million (CAD \$105 568 468) renovation included mold and asbestos remediation, transforming the 10-acre (4.05-hectare) front

lawn into a park, raising the entranceway roof by 40 feet (12.2 m) and adding a 1,172-square-foot (109-m²) canopy along with a 250-foot (76.2-m) facade for visual projections.

MAPEI products at work on the jobsite

One of the biggest parts of the job involved rejuvenating the building's 95,000 square feet (8 826 m²) of concrete flooring – an area of high-level foot traffic for pedestrians throughout the day. The contractors knew they needed a product that could withstand constant high volumes of traffic while maintaining a beautifully polished finish.

First, MAPEI's *Planibond EBA* – a two-component, high-modulus epoxy bonding agent – was installed on top of the existing concrete floor. Sand was then hand-broadcast into the wet epoxy to the point of refusal in order to ensure the proper adhesion of MAPEI's *Ultratop PC*. A self-leveling, cementitious

topping that is optimized for polishing, *Ultratop PC* was an easy choice to use across the entire 95,000 square feet (8 826 m²) of concrete flooring. This extremely dense, hard and durable resurfacing material will enable the museum to maintain a high-polish shine on its floor in spite of high-volume traffic.

