



REFERENCE PROJECT

Sport Facilities



Avenir Centre

Moncton, NB, Canada



Project Information

Project category:
Sport Facilities

Years of construction:
2016-2018

Years of MAPEI involvement:
2017-2018

MAPEI coordinator:
Paul André Babin

MAPEI distributor:
Prosol Inc. – Moncton

Project owner:
City of Moncton

Architect:
Raven Spanier of Stantec Architecture Ltd.

Photographer:
Paul André Babin



Project Overview

Situated within a two-hour drive of three Canadian provincial capitals, the Avenir Centre serves as a multi-purpose events venue in the heart of Canada's Maritimes region. The facility was built from the ground up using over a dozen MAPEI products to meet the exacting standards of this high-profile project.



Products Used

- ECO Prim Grip™**
- Kerabond® T / Keralastic® System**
- Kerapoxy®**
- Mapeguard® 2**
- MAPEI Flexcolor® CQ**
- MAPEI Ultralite™ Mortar**
- Mapelastic® AquaDefense**
- Mapelastic 315**
- Mapesil™ T**
- Planipatch®**
- Planipatch Plus®**
- Primer T™**
- Ultrabond® G19**
- Ultracolor® Plus FA**
- Ultraflex LHT®**
- Ultraplan® 1 Plus**



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Building the “Future” with MAPEI

In 2015, the city of Moncton, New Brunswick, finalized plans for a new 9,000-capacity, multi-purpose events venue to revitalize the city's downtown core. The facility would be a year-round drawing card, hosting big-ticket concerts, sporting events and community activities such as outdoor ice skating. City officials turned to local architect Raven Spanier, as well as two truckloads of MAPEI products, to realize their vision of the Avenir Centre (“avenir” means “future” in French).

While Spanier sadly did not live to see his creation's unveiling in September 2018, one imagines that he would find the results impressive. The Avenir Centre is an industry-award-nominated facility that includes modern acoustics and 13 VIP suites. It serves as the home for the Moncton Wildcats of the Quebec Major Junior Hockey League, and the Moncton Magic of the National Basketball League of Canada.

MAPEI products on the jobsite

MAPEI coordinator Paul André Babin knew that the project was no small job. “In the end, it was a \$113 million project,” Babin said. “It includes an NHL-sized hockey rink and basketball surface and a 64,580-sq.-ft. (6 000-m²) exterior civic plaza for winter and summer shows, plus a refrigerated outdoor skating oval.”

A multi-purpose venue requires a multi-disciplined approach to construction; with MAPEI's breadth of experience in surface preparation, sports flooring, waterproofing, and tile and stone installation, all aspects of the project were covered inside and out.

Interior floors

MAPEI's work began with the interior concrete slab. Crew members applied **Primer T**, a low-VOC primer used to enhance the performance and adhesion of **Ultraplán 1 Plus**, the quick-setting, high-strength, self-leveling underlayment that followed. **Mapeguard 2** load-bearing, sound-reduction and crack-isolation membrane was applied in select areas. Large-format, interior floor tile was then installed using **Ultraflex LHT** large-and-heavy-tile mortar.

Interior walls

Interior walls composed of gypsum board presented a challenge for adhesion. Therefore, the walls were first coated with **ECO Prim Grip** low-VOC, resin-based primer. With its bond-promoting silica aggregates suspended in a dispersion, **ECO Prim Grip** enhances the performance and adhesion of mortars to existing ceramics and difficult-to-bond-to substrates. Large-format tile was then applied using **MAPEI Ultralite Mortar**, which is excellent for large-and-heavy-tile and non-sag applications.

Floor for event area

For the flooring installation within the event area, surface preparation was key as the concrete slab was found to be overly smooth in places. To start with, **Planipatch** polymer-modified, cement-based patching compound was mixed with **Planipatch Plus** acrylic latex additive to form the **Planipatch Plus** system. This system was used as an embossing leveler or as a patch to fill voids before the direct glue-down installation of the sports-floor

coverings. **Ultrabond G19** adhesive was chosen for installing the coverings due to its ability to adhere aggressively to difficult-to-bond substrates and hold up under severe stresses to the flooring.

Showers and steam rooms

Showers and steam rooms called for extra attention to ensure a high level of waterproofing. **Mapelastíc AquaDefense** premium waterproofing and crack-isolation membrane was applied along with **Kerabond T / Keralastíc System**, a high-performance, two-part mortar system. Because of its excellent stain and chemical resistance, **Kerapoxý** was used for grouting these high-moisture areas.

Building exterior

The exterior-wall specifications called for a good waterproofing barrier and large-format tiles. Construction crews started with **Mapelastíc 315** trowel-applied, flexible, fiber-mesh-reinforced waterproofing and crack-isolation membrane, which exceeds ANSI A118.10 requirements for waterproofing. As with the interior shower and steam room walls, installers went with **Kerabond T / Keralastíc System** for setting the large-format tiles in order to achieve durability against the elements. **Mapesil T** professional-grade, 100%-silicone sealant was also used on the outside walls.

Interior and exterior grout

For the project's largest product application, 76,000 sq. ft. (7 061 m²) of **Ultracolor Plus FA** rapid-setting grout was applied throughout, including over most of the interior tile floor as well as the bulk of the interior and exterior walls. **Ultracolor Plus FA** was chosen for its stain-resistance properties and ease of maintenance. (In areas calling for porcelain tile, crew members instead used **MAPEI Flexcolor CQ** professional-grade, ready-to-use specialty grout that is designed for precision installations of porcelain, ceramic and natural-stone tiles.)

The end result is truly an accomplishment. MAPEI's innovative sports flooring, waterproofing, and tile and stone installation products helped bring the city of Moncton a new point of pride. As a concert venue, international industry magazine *Pollstar* recognized the Avenir Centre as a nominee in 2018 for “Best New Concert Venue.” As a sports facility, the Wildcats inaugurated the indoor hockey rink (and likewise the Magic with the basketball court) in 2018 with visions of winning seasons to come. With MAPEI products in nearly every part of its construction, the Avenir Centre is clearly poised for a bright, event-filled future.



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