

## Marché Adonis supermarket flooring renovation — Montreal, QC, Canada

### Project overview

When a rugged flooring system was needed for a local supermarket's meat/fish counter and freezer areas, the specifying engineers turned to MAPEI's *Mapefloor* system for a solution.



### Project information

<b>Project category:</b>	Commercial – Cementitious and Resin Flooring
<b>Year of construction:</b>	2019
<b>Year of MAPEI involvement:</b>	2019
<b>MAPEI coordinator:</b>	Alain Pomerleau
<b>Project owner:</b>	Metro
<b>Project Manager:</b>	Yves Fallu (Equation engineer)
<b>Installer:</b>	Protecsol
<b>Contractor:</b>	Vergo
<b>Architect:</b>	BLH Architects

### MAPEI products used

- *Mapefloor*™ CPU/SB
- *Mapefloor* CPU/COVE
- *Mapefloor* CPU/HD
- *Mapefloor* CPU/TC
- *Primer SN*™



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## Avoiding thermal shock with new freezer floors

A popular supermarket (Super C) was being remodeled into another wildly popular supermarket (Marché Adonis), and a new floor was being installed around the soon-to-be-busy meat and fish counter. The specifications called for a very rugged flooring system to meet the area's very specific demands.

"The area in question was divided into three main sections: meat, fish and meat smoking," explained Alain Pomerleau, MAPEI Inc.'s coordinator on this project. "The meat section consisted of the public area, the area in the back where they cut the meat, and the freezer. The fish section also consisted of a public area, an area in back where they cut the meat, and a freezer. The meat-smoking section consisted of a big room with smokers."

The specifying engineer wanted a flooring system that was food-safe and would retain its color pigment to avoid fading. And the flooring needed the ability to resist thermal shock, because the flooring along with the -4°F (-18°C) freezers would be powerwashed with 284°F (140°C) hot water on a daily basis. Thermal shock could occur when the hot water hits the rigid floor coating, causing it to expand at different rates in different areas. This sudden expansion could cause cracks — which is not desirable for any floor, especially not for a brand-new, food-safe, slip-resistant floor.

"The owners [Metro] were familiar with our *Mapefloor CPU* system," Pomerleau said. "They knew that the system has the color pigments throughout so that it will not fade, that it is flexible and can accept different-sized aggregate, but especially that it was resistant to thermal shock. They asked us to help with the meat and fish areas, including the freezer sections."

### MAPEI products on the jobsite

A five-man team from ProtecSol was charged with installing 6,000 sq. ft. (557 m<sup>2</sup>) of flooring, with Pomerleau on site and providing guidance. "We had three weeks to apply the systems in all three sections," Pomerleau explained. "And we had to schedule around other trades. Fortunately, although it was a remodel, the concrete slab was new and so the flooring was in excellent condition."

Working room by room, first the crew used a Blastrac machine to prep the surface to a concrete surface profile (CSP) of #5 — medium shotblast. They then vacuumed the surface clean. "In the cove area only, we applied *Primer SN* to enhance the cove's bond," Pomerleau stated. *Primer SN* is a two-component, fillerized, epoxy primer designed to enhance bonding. He continued, "We also trowel-applied *Mapefloor CPU/HD*, a heavy-duty, polyurethane/cement-based screed, in a thickness of 1/4" [6 mm] around the drains. *Mapefloor CPU/HD* has a high level of chemical resistance, so it is perfect for use around drains."

Next, they trowel-applied *Mapefloor CPU/SB* — a high-strength, self-leveling, polyurethane/cement-based screed — to the main area of the floor. "We trowel-applied a 3/16" to 1/4" [4.5 to 6 mm] application of the *SB* in red for the meat and meat-smoking areas, and in blue for the fish area," Pomerleau said. Mesh aggregate was then hand-broadcast to the point of refusal into the wet coating. He explained, "We used a #32 mesh in the fish and meat areas, and a #70 mesh in the meat-smoking area because that section would not have the same amount of grease and liquids spilled onto it as would be in the other two areas." The sections were then left to cure overnight.

The next day, the crew returned and swept all of the refused mesh from the floor. Then, it was time to apply the *Mapefloor CPU/TC* topcoat. This polyurethane/cement-based coating is designed for use as a topcoat. It is highly resistant to chemicals including acids, base solutions, oils, grease, saline solutions and hydrocarbons. "We roller-applied the *TC* at a thickness of 15 mils WFT [wet film thickness]," Pomerleau stated.

With that, the floor was finished. And more importantly, the owners were happy. "Marché Adonis is a very popular supermarket here in Quebec and it is great that the *Mapefloor CPU* system protects their freezer floors," Pomerleau said. The next time they face a shocking situation with their floors, MAPEI will be ready!

