Replacement of the waterproofing membrane to keep water where it belongs

Introduction
When landing at Ottawa Macdonald-Cartier International Airport, the element dominating the view in the Canadian Capital is water. Water also plays a major role in the founding of the city. Originating from the Algonquin word adawe which means “to trade”, Ottawa owes its location to the junction of the Ottawa, Rideau and Gatineau rivers. When the airport built a new passenger terminal in 2003, the interior designer respected the city’s history and used water features to relate to the history. The award winning water feature at the airport creates a calm atmosphere which is highly popular with travelers from all over the world.

Challenge
Waterproofing the water feature presented several challenges. The membrane had to seamlessly cover different substrates such as steel, wood and metal on a 19 foot vertical rise surface. In addition to the complex structure, esthetic aspects called for a coating that would not require repairs and matched the theme of the fountain. The airport remained in full service so odor was a concern during application. The fountain is in a central location in the airport, bordering the baggage area and the secure area of the terminal.

Solution
The architect Coolearth in Toronto specializes in sustainable design and opted for the odor-free cold-applied Kemperol 2K-PUR membrane. The fleece reinforced
waterproofing system fully encapsulates the complex shapes and substrates and avoids future water penetration behind the membrane. A visit to a major fountain/pool project in New York City finally convinced the architect as well as the possibility to provide the material in custom-made anthracite to meet design criteria.

**Contractor profile**

Simlua Contractors Limited was incorporated in 1973, as a commercial/industrial roofing and sheet metal contracting firm in its originating city of Sudbury, Ontario. From the time of its incorporation the company grew in size and capabilities, establishing itself as one of the leading low slope roofing contractors in Northern Ontario.

In 1993 the Simlua organization decided to expand its market geographically and opened a branch operation in Ottawa. Since that time the company has quickly established a reputation for delivering high quality, customer oriented service. Simlua worked on the airport initially back when it was first renovated so the airport was familiar to them.

**State-of-the art waterproofing and roofing systems**

Kemper System membranes are designed for optimal performance. Its two-part resin-fleece technology creates a seamless, monolithic waterproofing membrane that can be adapted to protect almost any architectural element. From plazas, terraces, planters and fountains to industrial roofing, historic restoration and complicated gutterways and flashings, Kemper System membranes provide limitless solutions for waterproofing, roofing and surfacing applications.

**Kemper System – over 50 years of experience in cold liquid-applied resins**

Kemper System is a leading manufacturer of liquid-applied waterproofing and roofing systems for high profile applications. Kemper System fleece-reinforced, cold-applied resin membranes reliably protect the most renowned buildings such as the Empire State Building, the Freedom Tower, Fenway Park, Madison Square Garden, Fallingwater and Woodruff High Museum of Art. Building owners and the property managers base their trust on a proven performance of over 50 years. Kemper System focuses on sustainable products with renewable resources and solvent-free applications.