

## Plaza restoration at the Lakeshore Terrace Condos, Chicago, IL



### Odor-free waterproofing system stops deterioration of structure

#### Introduction of the building

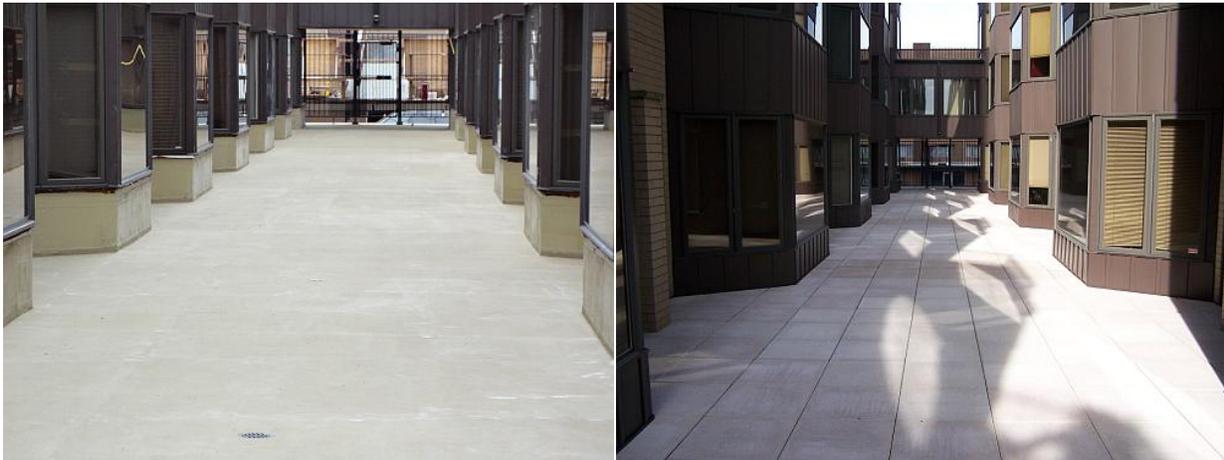
The building complex at 5747 Sheridan Road in north of Chicago comprises 18 residential units which line up – 9 units on each side – in a row house configuration around a central courtyard. In this way, the architecture not only provides space to socialize but also opens the view to beautiful Lake Michigan. The lower level has a central vehicular service drive which provides access to the private residential two-car garages.

#### Challenge

Over the years, water infiltration into the garage led to the deterioration of the structural steel column/girder system. When the original waterproofing system started to fail, a first attempt to stop the leaks was undertaken by applying another membrane over the concrete wearing course. This repair entrapped moisture and further damaged the structure.

## **Solution**

The architect recommended to completely remove the old assembly and to start with a clean concrete substrate surface. In the first step, the contractor, Knickerbocker Roofing & Paving Co. Inc., Harvey, IL, removed all residues from the substrate and applied solvent-free epoxy Kempertec primer to prepare and seal the surface. Silica sand was broadcast into the wet primer to achieve not only a chemical but also a mechanical bond between primer and waterproofing membrane. The following day, as the second step, the details and vertical flashings were done before in the third step, the odor-free waterproofing system Kemperol 2K-PUR was applied edge to edge over the primed surface. To work efficiently within the confined area, the courtyard was divided into 3 sections and the crew installed the system in each section in three steps: priming, flashings and field membrane. The apartments were occupied during the installation of the waterproofing system. Pavers were installed in decorative patterns to meet aesthetic requirements and to make the “plaza” a place to live.



To avoid odor-issues, the architect had decided in favor of a solvent-free and odor-free resin system, combining safety aspects with a state-of-the-art technology. A 30 year NDL warranty finally convinced the owners to opt for a more expensive but reliable and long-term solution. Only shortly after completion of the job, Mother Nature tested the new assembly with a 5” rain storm. For the first time in a long time, the parking garages stayed dry.

## **Contractor profile**

Knickerbocker Roofing & Paving Co. Inc., Harvey, IL, is a family-owned business with a history of more than 100 years. From the smallest leak to a complete vegetated roofing system, Knickerbocker Roofing & Paving offers quality products installed by skilled tradesmen and women. As a company of substance and tradition, Knickerbocker Roofing & Paving strives to maintain a leadership role in the roofing, sheet metal and waterproofing industries by delivering workmanship and service that consistently meets or exceeds their clients' expectations.

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

Kemper System membranes are designed for optimal performance. Our 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, Falling Water and Woodruff High Museum of Art. Building Owners and 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.

Specifier: Kellermeyer Godfryt Hart (KGH), Rosemont, IL  
Contractor: Knickerbocker Roofing & Paving Co. Inc., Harvey, IL  
Year of completion: 2011  
Surface size: 3,400 sq. ft.  
Project No. : 11-113