

ROBERT STREET PARKING RAMP & SKYWAY

The Twin Cities in Minnesota are reported to have the world's largest network of skyways, such as the one spanning Robert Street in downtown St. Paul that has withstood the test of time for more than 15 years with its original coating system from Tnemec. "Skywalks are a very challenging design," coating consultant Randy Bartz acknowledged. "In addition to having numerous edges and corners, there are flat surfaces that collect the snow, ice, and road salts that are kicked up from the street. So it's a very corrosive environment."

During construction of the Robert Street municipal parking ramp and skyway in 1995, a tan coat of Series 52 Tneme-Crete, a decorative, modified epoxy, was spray-applied to exterior concrete on the stair tower to protect it against driving rain and freeze-thaw conditions. A white coat of Series 55 Tneme-Crete, an epoxy, was applied to interior concrete in the stair tower and underneath the parking ramp.

Handrails inside the stair tower and steel used for the skyway were prepared by the fabricator in accordance with SSPC-SP 6/NACE No. 3 Commercial Blast Cleaning and shop-primed with Series 66 Hi-Build Epoxoline, a polyamide epoxy. A forest green topcoat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane, was field-applied to the handrails. A dark brown topcoat of Endura-Shield was spray-applied to protect the skyway from abrasion, wet conditions, corrosive fumes, and exterior weathering.

Long-term performance is important for skyway coating systems, which can be difficult to replace given their proximity to surrounding buildings, downtown traffic, and windows overlooking the street below. "Recoating a skyway requires shutting down traffic lanes underneath the structure while contractors blast the steel and spray-apply a new coating," Bartz explained. "By extending the maintenance cycle, the disruption to traffic and public inconvenience is minimized."

Individually, Minneapolis and St. Paul are credited with having the largest network of skyways outside of Canada, although the combination of the two cities' networks is believed to make up the largest system in the world.

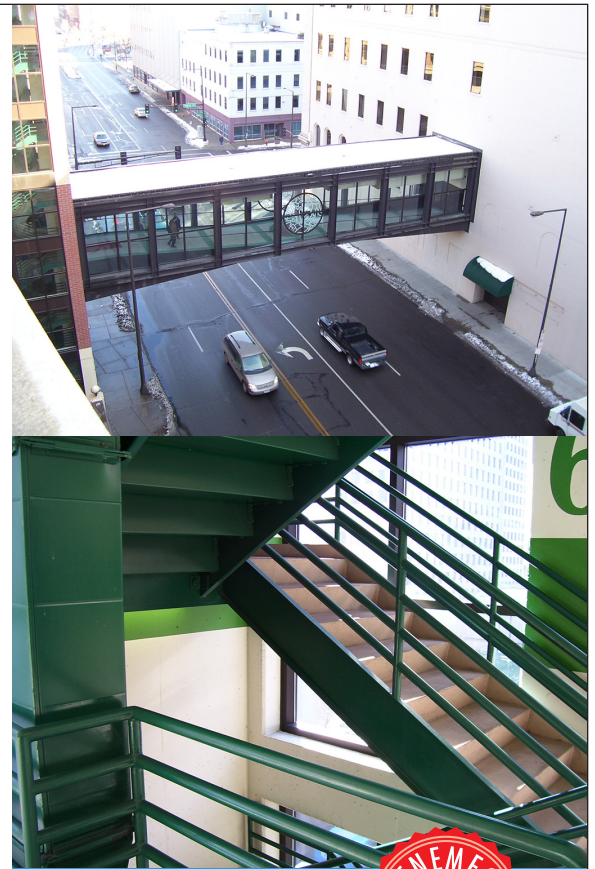
FEATURED PRODUCTS

Series 52 Tneme-Crete

Series 55 Tneme-Crete

Series 66 Hi-Build Epoxoline

Series 73 Endura-Shield



PROJECT INFORMATION

Project Location

St. Paul, Minnesota

Project Completion Date

January 1995

Owner

City of St. Paul, Minnesota

Architect

Collaborative Design - Minneapolis, Minnesota

Series 73 Endura-Shield in forest green protects the handrails at the Robert Street Parking Ramp & Skyway in St. Paul, Minnesota, from various exposures.

