

Client

A. Schonbek & Company, Inc.
Plattsburgh, NY



Reroofing An Existing Standing Seam Metal Roof

Existing Roof

33,000 SF Standing Seam Metal Roof System

Proven Performance Since 1950

Problem

Founded in 1870, A. Schonbek & Company is the largest manufacturer of crystal chandeliers in North America. With the Schonbek name synonymous with quality, their clientele includes some of the most well known facilities in the world.

After too many harsh upstate New York winters, their standing seam metal roof was experiencing increased leaks, particularly around their many stack and curb penetrations, and at a tie-in to an adjacent roof. Excessive heat loss was also a concern, due to the ineffectiveness of the fiberglass insulation on the underside of their roof deck.



Solution

Heat-Welded TPO Single-Ply Roof System.

Application

After an in-depth analysis, including a careful inspection of all flashing details and pull-tests to determine the holding power of fasteners into the metal panels, S. D. Carruthers recommended a mechanically attached, reinforced TPO single-ply roof system.

Expanded polystyrene insulation was first loose-laid between the metal panel ribs, and overlaid with an additional layer of polyisocyanurate, fastened to the underlying metal panels. Rolls of white, scrim-reinforced, TPO membrane were then mechanically fastened, and seamed together with an automatic hot-air welding machine.

For pipe penetrations and curbs, a hand-held hot-air welder was used, providing the added protection of heat-welded seams throughout. At the eave line of the roof, wood blocking was installed and a new 24-gauge, TPO coated metal drip edge was installed.

Results

With proper coordination between the owner and Carruthers' project manager, installation proceeded smoothly and efficiently with no disruption to the owner's operations. Most importantly, the new TPO roofing system solved the nagging leaks they had been experiencing. In addition, the increased insulation, in combination with a highly reflective white membrane, is now contributing to annual energy savings through reduced heating and air conditioning costs.

BEFORE & AFTER



Old standing-seam metal roof



Crew positioning TPO membrane over new insulation



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