



PROJECT PROFILE

Krahn Elementary School

Klein, Texas

Client:
Klein Independent School District
Klein, Texas

Approximate Construction Cost:
\$238,200.00

Year Completed:
September 2011

Services Provided:
Design, CA, & QAI Services

Contractor:
Skyline Construction
Humble, Texas



Krahn Elementary School was constructed in 1973 and consists of low-sloped roof areas over the main classroom areas and steep-sloped standing seam metal panel roofs located over the office, library, and cafeteria areas. The existing metal roofs consisted of standing seam metal roof panels over fiberglass blanket insulation over open framing of Z-shaped purlins encompassing approximately 29,000 square feet. The metal roofs sloped at 1-1/2-inch/foot from high eaves to low eaves. Corrosion of the metal panels and leaks were evident in the metal roofs. KISD retained the services of PCI to prepare specifications and drawings for providing a corrective solution to the roof problems; assist with bidding; and provide construction support and quality assurance inspection.

The scope of work developed by PCI consisted of installation of "fill" insulation on the metal panels between the standing seams; installation of a secondary layer of polyisocyanurate insulation that was secured to both the metal panels and the structural steel framing members. A fleece-backed 60-mil TPO single ply membrane was fully-adhered to the top layer of insulation. A grey-colored single-ply membrane was selected and extruded TPO profiles were hot-air welded to the surface of the membrane to provide an appearance of a standing seam metal roof. New sheet metal gutters, edge metal flashings, and coping were installed along the roof perimeters.

