



Indiana Tube Corporation

180,000-square-foot metal building complex solves leaky roof woes

Case Study: Re-cover with Johns Manville PVC with DuPont Elvaloy KEE secures long-term roof performance



Description: Indiana Tube Corporation is a major supplier of refrigeration condensers and small-diameter, single-wall low-carbon steel tubes, for use by OEMs worldwide in a wide range of industries from automotive, appliance and refrigeration to off-road vehicles and heavy equipment. Its manufacturing, storage, warehousing and office spaces are located in a complex of metal buildings, the first built in 1973. Today, the entire operation is housed in seven adjacent metal structures.

Challenges: Much of the roof was wide open; however, some sections had numerous pipes, vents, stacks and other penetrations – many no longer in use but all with a leak or two. “Once the roof started to go, we had some significant problems,” said Jeff Raber at Indiana Tube. “There were sections where the water just poured in every time it rained. Plus, we needed to cut out and replace part of the roof over the steel cleaning and plating area, a high-humidity environment in the plant.”

Solution: The problem and project were referred to Preferred Construction Services in nearby Henderson. “We are involved with projects of this nature all the time, said Dave Coudret. “Replacing metal panels on Indiana Tube’s roof was out of the question. The leaks were compounded by rooftop drainage issues between buildings. We recommended filling them with insulation, installing new retrofit roof drains and adding crickets for positive drainage. Re-covering the facility with a JM single ply PVC system was a win-win, adding insulation to the building and providing a long-term roofing solution.” DuPont’s Elvaloy KEE is an advanced thermoplastic, solid-phase polymer with tough, yet flexible, properties. It is the workhorse that ensures plasticizer retention – critical to having a pliable and durable membrane in the most extreme environments and over the long term.

Preferred utilized the RhinoBond fastening system to secure the roof. “On the first phase we used a 6.5-foot-wide membrane, but on the second and all subsequent phases we were able to use the 10-foot-wide PVC membrane, which improved our productivity rate considerably,” continued Coudret. “RhinoBond allows the insulation to be attached to the purlins; the membrane can then be rolled out in any direction and secured with the welding tool, which joins the underside of the membrane to the plate. Our client is assured of a strong bond across their JM PVC system and a watertight roof for the long term.”

Location:
Evansville, Indiana

Building Representative:
Indiana Tube Corporation
Jeff Raber,
Maintenance Manager

Contractor:
Preferred Construction Services, Inc.
Dave Coudret, President
JM Peak Advantage® Summit Club® Contractor

Roofing System Solution: SP6RR
10-Year Peak Advantage® Guarantee

Invinsa® Roof Board
JM PVC 60 mil Membrane
With DuPont™ Elvaloy® KEE
OMG RhinoBond® Fastening System

* RhinoBond is a registered trademark of OMG, Inc.

