

PROJECT PROFILE

AKRON COMPOST FACILITY

STAYFLEX™ Corrosion Control Systems

Owner: City of Akron
Akron, OH

Project Size: 315,000 square feet

PROJECT OVERVIEW:

The City of Akron was considering having the metal roof structure replaced due to significant corrosion that was caused by condensation, high humidity and strong chemical environment created by the compost process. The City engineers had a dilemma because replacement doesn't solve the long-term problem but neither does any traditional protective coatings/paints of which they were aware.

The STAYFLEX™ Corrosion Control System, which is widely used in the composting industry, was chosen due to its' 25+ year proven performance in corrosive and wet environments

STAYCELL™ 245-2.0 spray polyurethane foam insulation (R 6.5 per inch) was first applied at 1.5" to all roof decking, primary and secondary steel. Due to expansion, the STAYCELL™ fills all concealed spaces, metal-to-metal contact points and horizontal ledges where paints can't physically be applied. The STAYCELL™ foam insulation was then coated with 1/16" STAYFLEX™ 2505 thermal barrier coating to provide a durable, washable, seamless and fire retardant finish required by building codes for interior applications of polyurethane foam. The final installed product is a seamless, fully adhered, insulated structural composite assembly, having similar strength to high performance products such as fiberglass tanks, chemical piping and corrugated fiberglass (FRP) sheet.

KEY BENEFITS:

- Excellent air, moisture and chemical resistance of the STAYFLEX™ System provides superior long-term steel corrosion protection
- It's the only insulating corrosion control system providing payback through energy savings
- Never paint or replace steel again
- Compost production continued during application

