



# PROJECT PROFILE

## CHILTON MALTING, INC.

### STAYFLEX™ Corrosion Control Systems

Owner: Chilton Malting, Inc.  
Chilton, WI

Project Size: 11,000 square feet

#### KEY BENEFITS:

- Excellent air, moisture and chemical resistance of the STAYFLEX™ System provides superior long-term protection for concrete and steel substrates.
- It's the only insulating corrosion control system providing payback through energy savings
- Never paint or replace steel again
- The STAYFLEX™ System was installed during evenings and on weekends to minimize interference with plant operations

#### PROJECT OVERVIEW:

Chilton Malting, Inc. needed a long-term corrosion control coating system to prevent further deterioration of a barrel-shaped concrete deck and its supporting structural steel.

There were three critical design requirements, as follows:

1. The system must be self-supporting and be able reinforce the substrate
2. Have low permeability to effectively block passage of air, water, and chemical vapor through coating system to the substrate
3. Able to be installed quickly to minimize interference with production

The STAYFLEX™ Corrosion Control System was chosen because it was the only system that met all three design requirements.

The first step was to power-wash the entire ceiling area to remove any dirt, grease and peeling paint. Then, the contractor removed all de-bonded chunks of concrete and inserted pre-cut pieces of foam board stock above the upper flange of all supporting structural steel to eliminate any horizontal ledges. STAYCELL™ 245-2.0 spray polyurethane foam insulation was applied 3" to all concrete decking and structural steel. Due to expansion, the STAYCELL™ filled all concealed spaces, metal-to-concrete contact points and horizontal ledges where paints can't physically be applied. It 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.

