

# Thermal Energy Storage Tank Insulation System

## **PROJECT DETAILS**

Client: Chicago Bridge and Iron (CB&I)

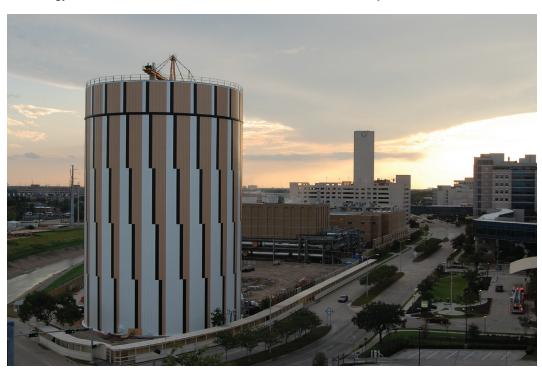
Location: Houston, Texas, USA

Completion Date: September 2009

**Contract Scope:** Design, Manufacturing, Installation

Applications: Tank Insulation for Thermal Energy Storage Tank (TES)

Technology: Trac-Loc Vertical Lock-Seam Tank Insulation System



## **KEY CHALLENGES**

Chicago Bridge and Iron (CB&I) constructed the tallest thermal energy storage (TES) tank in the world for The Texas Medical Center Central Heating and Cooling Services Corporation (TECO). The tank is 100 feet in diameter and an impressive 150 feet tall, used to provide water for numerous buildings in the Houston, TX downtown medical district. Safety, cosmetic appearance and a tight deadline were key challenges to this project.

## **SOLUTION**

Pentair Thermal Management's Tracer Turnkey Solutions team secured the contract to manufacture and install the Trac-Loc standing seam tank insulation panel system. Our Tracer Turnkey Solutions team, with over 25 years of tank insulation experience, was up to the challenge to insulate a tank of this height and magnitude. Standing 150 feet tall in the heart of Houston, not only was safety a concern, but the final cosmetic appearance was equally as important. The Tracer Turnkey Solutions team per the customer's architectural design, successfully fabricated and constructed the unique pattern that blended the tank with its surroundings. Even with the additional safety practice to only work when the wind was less than 10 MPH, the construction crew was able to complete the project in a safe and timely manner.













Customized colored panels create a unique appearance for the tank

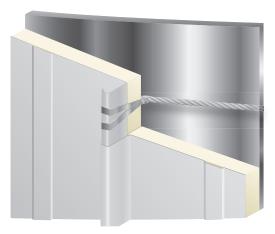
### **PRODUCTS**

Utilizing the Trac-Loc advanced vertical interlocking panel system, the Tracer Turnkey Solutions team coordinated the installation of the various colored panels spanning the tank sidewall, creating the unique appearance of the tank. Since Trac-Loc panels are prefabricated at the our warehouse detailed planning, coordinating, and organizing of the 12 shipments to site was necessary to maintain the schedule requirements of this project. With experience and creativity, and the ability to perform the installation of the Trac-Loc panels without the use of scaffolding, the Tracer Turnkey Solutions team saved the customer time and money by reducing the schedule duration significantly. The result is a superior insulation system that also enhanced the appearance of the surrounding location.

### **BENEFITS**

- The Trac-Loc system is a vertical double-locking standing seam insulation panel system that delivers structurally superior, maintenance free, and lower insulation cost than conventional tank
- Trac-Loc panels are fabricated by laminating insulation material to a preformed metal jacket. Jacket materials come in a wide range of colors and they conform to industry standards.







For over 25 years, Pentair Thermal Management has been widely regarded as the premier provider of turnkey heat-tracing services and engineered product solutions in the industrial marketplace.



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