

Client: Frozen Seafood Importer
Project: New Freezer & Refrigerated Dock Addition
Location: Houston, TX
Project Type: Commercial Refrigeration System Installation
Status: Completed – 1/2025

Project Summary

Local Frozen Seafood Importer commissioned a major facility expansion to increase cold storage capacity and improve overall operational efficiency. The project involved the construction and refrigeration of a large-scale freezer storage compartment and an adjacent refrigerated dock. Key components included the installation of a central ammonia/CO₂ refrigeration system, underfloor warming infrastructure, and temperature control systems—all designed to meet the demanding requirements of modern cold chain operations.

Scope of Work

The scope covered complete mechanical and refrigeration installation for the new freezer and dock areas, incorporating advanced thermal systems, precision-engineered glycol heating, and OEM-certified commissioning.

Project Highlights

Refrigerated Space Construction

- Installed refrigeration equipment for:
 - One (1) 133' x 228' x 28' Freezer Storage Compartment
 - One (1) 56' x 81' x 28' Refrigerated Dock

Central Refrigeration System

- Supplied and installed one (1) Zero Zone Central Refrigeration System with electrical defrost using Ammonia/CO₂ refrigerants
- Included:
 - Ten (10) Indoor Electric Unit Coolers for the Freezer Storage
 - Four (4) Indoor Air Defrost Unit Coolers for the Dock Area

Remote Condenser Installation

- Installed one (1) Remote Adiabatic Condenser to support the central rack system for optimal heat rejection and energy efficiency

Piping & Controls

- Furnished and installed:
 - All refrigeration piping and insulation
 - Condensate drains with electric heat tracing as needed
 - Refrigeration temperature and safety control systems

Underfloor Warming System

- Provided labor and materials for a complete underfloor warming system for the freezer area
- Included:
 - Engineered system drawings
 - Full control integration for glycol pumps
 - Threshold heat at all freezer doors
 - Two (2) 8' and two (2) 3' thermal joints for door thresholds

Results & Benefits

The completion of this expansion project equips our client partner with:

- Significantly increased cold storage capacity for both freezer and dock operations
- A high-performance refrigeration system tailored for energy efficiency and reliability
- Seamless integration of safety, thermal, and underfloor heating systems for optimal functionality
- Long-term operational durability with manufacturer-certified system commissioning

This project ensures that our client is well-positioned to meet growing storage demands while maintaining temperature-sensitive product integrity and minimizing energy consumption.

