

polyiso continuous insulation

PROJECT PROFILE

TSX-8510

Exposed Interior Use

KORNEGAY FAMILY FARMS

Mount Olive, North Carolina



Project Description

Kornegay Family Farms, once a 60-acre sweet potato farm in the 1960s, is over 5,000 acres today. This fourth-generation farm grows more than just sweet potatoes; it also produces cotton, tobacco, wheat, soybeans, and peanuts.

Goal

Kornegay Family Farms harvests sweet potatoes in the fall for Kornegay Family Produce's year-round program, so they needed a storage facility to house the sweet potatoes throughout the other seasons.

Challenge

Proper storage conditions are critical to the sweet potato curing process and longevity. The storage facility must stay cool but not too cold as they could freeze and dry to prevent mildew/fungus from spreading.

Solution

The general contractor, Steelcraft Construction, chose Rmax TSX-8510 polyiso continuous insulation because of its high thermal performance, moisture vapor control, water-resistive barrier, and air barrier. All of which create the proper conditions and climate control for year-round storage.



Steel Stud Wall Construction

TSX-8510 // Exposed Interior Use & Quick Clip // Insulation Attachment System

Assembly Details // Wall, Ceiling & Roof

1.50" TSX-8510 installed from floor to ceiling between the wall structure and wall metal sheeting. TSX-8510 is held in place with fasteners and exterior metal is applied by fasteners. 1.50" Quick Clip attachment system was used on the vertical seams and the horizontal seams are spliced at wall structures.

3.00" TSX-8510 installed between roof structure and roof metal sheeting. 3.00" Quick Clip attachment system was used on the vertical seams and the horizontal seams are spliced at roof structure. All seams are taped and sealed before the roof sheeting installation.



Kornegay Family Farms & Produce
Mount Olive, North Carolina

Continuous Insulation for Exposed Interior Use

TSX-8510 is an energy-efficient thermal insulation board composed of a closed-cell polyiso foam core bonded to glass fiber reinforced aluminum facers on both sides. The exposed side of the board has a white modified acrylic coating. It is designed for use without a thermal barrier (up to 4.5" on walls or 12" on ceilings).

Benefits of Rmax Polyiso Continuous Insulation

- **Energy Efficiency**
 - High R-value per inch compared to other insulation products
 - Installed continuously optimizing thermal performance
- **Air Barrier & Water-Resistive Barrier (WRB)**
 - Replaces the need for other air barrier & WRB products
 - Properly taped or sealed insulation joints
 - create an air barrier system preventing air leaks
 - acts as a WRB resisting water intrusion & moisture migration
- **Fire Performance**
 - Inherent fire resistance due to unique chemical bonds
 - Thermoset material doesn't melt/drip when exposed to flame
 - Versatile insulation for NFPA 285-compliant wall assemblies
- **Labor, Time & Material Savings**
 - Replaces the need for other air barrier and WRB products
 - Meets requirements with thinner assemblies & shorter fasteners
 - Lightweight, easy to cut and handle
- **Environment & Sustainable**
 - Contains blowing agents with zero ODP & low GWP
 - Intertek Certified Clean Air Gold
 - ensuring our polyiso insulation products maintain a minimum level of Volatile Organic Compounds (VOC) emissions

General Contractor / Installer

Steelcraft Construction
Kenley, North Carolina
www.steelcraftconstruction.com

Farmer

Donnelle Kornegay Farms
Princeton, North Carolina
www.kornegayfamilyproduce.com

Distributor

Bay Insulation Systems of Raleigh, NC



Project Location

Mount Olive, North Carolina

Project Size

30,000 sq. ft.

Insulation Used

3" TSX-8510 (roof)
1.5" TSX-8510 (wall)

Project Status

Completion // May 2022