



Project Spotlight

KEYSTONE COOPERATIVE

Fertilizer Storage • 6,400 Square Feet • Tipton, Indiana



Keystone Cooperative's members and stakeholders were in need of a modern fertilizer storage and distribution hub that moves people, product, and equipment efficiently, frequently, and without any fuss. The new Tipton facility now keeps users out of the weather, cuts wait times, and supports smooth turnarounds during the busiest weeks. The convenient and code-compliant building flow reflects how Keystone professionally operates during farmers' busy treatment seasons.

The Challenge

Keystone's Tipton plant was ready for an upgrade from aging, outdoor tank operations to an indoor, code-ready space. The building had to sit tight to an existing collection of tanks, meet H-occupancy safety requirements, and be ready between growing seasons. Large equipment needed quick in-and-out access, and a reinforced floor slab had to provide compliant spill containment solutions.

Our Approach

We started with fertilizer flow top of mind. Two extra-wide, 35' endwall overhead doors create a straight, pass-through bay so that large sprayers and trucks pull in, load, and exit without jockeying. We engineered expansive 80' trusses to make a clear span for unrestricted interior space, then designed a sloped slab and a central containment trench sized for spill capacity and drive-over loads. A compact two-story office and mechanical room keeps controls close to operations yet out of traffic. We provided sealed structural prints, coordinated site sequencing around existing outdoor tanks, and aligned the schedule to Keystone's August-to-November construction window.

The Outcome

The new Tipton Keystone facility centralizes loading inside, speeds turnarounds, and protects product and people from variable Midwest weather. The white steel liner, LED-ready ceilings, and organized control mezzanine give the space a clean and professional feel that's durable, bright, and easy to maintain. Keystone's team and the co-op's farmers gained a reliable, repeatable facility pattern they can standardize in the future across the organization's 200+ locations.

"We focused on efficient movement and dependable containment. Clear spans, big pass-through doors, and a purpose-built reinforced and sloping slab mean crews and farmers can work faster and safer every single day."

Matthew Gerber

Owner, Meyer Building

Construction Techniques

Keystone's Tipton structure takes post-frame engineering to expansive spans with 80' commercial trusses, and a Perma-Column permanent foundation system keeps wood out of the ground. Inside, insulated walls and ceilings back a full steel-liner finish that stands up to chemicals, washdowns, and equipment traffic. The building's unique concrete package varies across spaces' use, with 12" reinforced concrete under tanks, 10" in drive lanes, and 6" in work areas—all sloping toward and integrating with a 24"x24" containment trench with drive-over grating.



Coordination and Project Management

Tight site and calendar constraints demand thoughtful and intentional action without room for excuses. We aligned permitting and construction with Keystone's off-season, staged materials where we could around the nearby fertilizer tanks, and held to our August-to-November build promise so Keystone could set tanks and install piping before spring. This timeline was crucial as it directly impacted Keystone's revenue and logistical efficiency. By completing the project in the off-season, Keystone avoided potential spring delays that could have disrupted their operational schedule and incurred additional costs. Regular status updates kept local plant leadership in sync on milestones, safety protocols, and inspections.



Project Impact

The cooperative's local members and stakeholders can now load fertilizer sprayers and trucks in indoor comfort out of the weather in a space that reflects Keystone's professional standards. The building's simple, repeatable layout shortens learning curves, reduces clutter, contains spillage, and supports safer workflows. Most importantly, the facility turns farmers' seasonal pinch point of fertilizer collection into a predictable, convenient, and efficient process.





PROJECT FEATURES

Size & Structure:

80'x80'x18' post-frame building with 3.25/12 roof pitch and 80' engineered trusses for an expansive clear span.

Foundation:

Perma-Column permanent foundation system and insulated grade beams at exterior walls keep wood out of the ground to extend the building's lifespan and reduce the risk of rot.

Roof & Walls:

Painted steel roofing, siding, gutters, and downspouts with stainless fasteners and contrasting wainscot for a clean, professional, and presentable exterior.

Ventilation:

18" vented overhangs and vented ridge cap for attic airflow.

Openings:

Two 35'x16' and one 10'x16' insulated Clopay 3720 overhead doors with electric operators for easy pass-through entry and exit. Four 3070 insulated steel walk doors with lites and ADA thresholds.

Interiors:

Walls' and ceilings' low-maintenance white steel liner panels over housewrap, 8" fiberglass insulation (R-25) in the walls, and 12" blown insulation (R-45) in the ceiling for a tightly sealed envelope.

Concrete & Containment:

12" reinforced slab in tank zone, 10" in drive lanes, and 6" in work areas. Poured containment trench with 24"x24" steel grates, cure-and-seal finish, and exterior aprons at doors.

Office & Controls:

12'x16' office with finished drywall walls and steel ceiling below a second-floor mechanical and electrical room.

Attic Access & Separation:

Three attic accesses and two code-compliant attic separation walls every 3,000 square feet.

Engineering & Permits:

Meyer Building filed for a fire-protection variance with the Department of Homeland Security's office and provided comprehensive engineering and sealed structural design prints to support state and local approvals. By effectively managing the complex permitting processes, we alleviated Keystone's administrative obligations and expedited the project's timeline.