NEBRASKA FERTILIZER STORAGE



CASE STUDY



NEBRASKA FARMERS rely on a steady supply of fertilizer to keep crops healthy and increase yields. Serving local farmers by providing high-quality dry fertilizer blends has led to steady growth for a local fertilizer supplier.

When two wooden storage sheds were no longer sufficient to meet a growing demand for their product, the crew began researching options for a new fertilizer storage building. "We looked at every type of building - wood, steel, different fabric buildings," said Chuck Peterson, General Manager. "We chose Legacy Building Solutions because they were able to give us the size and storage capacity we needed at a reasonable price."





Bulk Storage

APPLICATION

Fertilizer Storage



200' x 280' (56,000 sq ft)

SPECIAL FEATURES

Precast concrete panels, passive ventilation system

Legacy in-house crews



Legacy partnered with the customer from the very beginning of the project, starting with the design phase. Safety and clearspan storage space were key requirements for the project. "The design process was very easy," said Peterson. "I told Legacy what I wanted, there were about five calls back and forth and we had the design and blueprints we wanted."

The new building measures 200 feet wide by 280 feet long, for a total of 56,000 square feet of unobstructed storage space. Multiple products will be housed in the structure, with pre-cast concrete walls used to create flexible storage bays. In addition to the column-free area of the building the sidewalls are straight and tall for increased square footage. "The tall sidewalls absolutely benefited me," said Peterson. "I can bring trucks in on all sides of the building."

As an added safety feature, there are no overhead systems in the building – allowing all loading, unloading and work to be completed from the ground floor. "There's no need for anyone to be more than three feet off the ground, and there's nothing hanging down for a fully extended payloader to run into," said Peterson. The natural light of a fabric building also keeps employees on the ground – with just two light fixtures installed for nighttime work, there is no need to climb to roof level and constantly change bulbs.

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With the new building used year-round, ventilation and comfort was another important consideration. "The building surprises you. In the winter it feels warmer and there's no wind, and in the summer it feels cooler. It's more comfortable inside the building almost all the time," said Peterson. The passive ventilation system — including endwall vents, mesh soffits at eave height, and rooftop exhaust vents — also keep the environment inside the building comfortable and safe. "I've literally never been inside a fertilizer shed that was vented this well," said Peterson. "Even during the summer, we don't have the slimy floors from humidity inside."

"The number one thing that always comes to up, is what's the best bang for the buck," said Peterson. With future expansions already in discussion, the Nebraska fertilizer company is well positioned for current and future business needs. "This building I believe will last for a couple generations."