

# CGB GRABER

## CASE STUDY

 **BULK STORAGE**  
APPLICATIONS



**CGB ENTERPRISES** CGB Enterprises is a global grain and transportation company that serves the agriculture industry. When business growth led to the expansion of their Naples, Illinois, facility, they needed a building solution that would accommodate both bulk salt and bagged product for distribution to corporate and individual clients.

“One of the first considerations for storage is if the product is weather-sensitive,” said Dave Walker, project manager at Consolidated Terminals and Logistics, a division of CGB. “This particular product is a feed that cannot get wet.” CGB ultimately chose a fabric structure on a rigid steel frame by Legacy Building Solutions. The building is 150 feet long, with two separated interior sections – one 60 feet wide that is used for bagging and sorting product, and one 40 feet wide that stores pallets of bagged feed and agricultural salt.

### OWNER

**Consolidated Grain + Barge**

### LOCATION

**Naples, IL**

### MARKET SECTOR

**Bulk Storage**

### APPLICATION

**Fertilizer Storage**

### SIZE

**100 ft x 150 ft (15,000 sq ft)**

### SPECIAL FEATURES

**Offset peak, hot dip galvanized steel members**

### CONSTRUCTION

**Graber Construction**

### INSTALLATION

**Legacy in-house crews**





The fabric structure had advantages in addition to design flexibility. “Anytime we’re doing any type of fertilizer product we avoid steel,” said Walker. “The building will have a lot of indirect contact with fertilizer and dust, and you want to use fabric because of the longer lifespan when dealing with corrosive materials.” Once corrosion starts, it allows leaks and moisture into the building – damaging the feed and saleable goods inside the building, ultimately causing lost profit. All aspects of the building – including the frame, cladding and secondary supports – are designed to withstand constant exposure to corrosive elements.

The finished building uses Legacy’s exclusive ExxoTec™ Elite 27 oz. PVC fabric on the walls and roof. The fabric has non-corrosive properties and a lifespan of up to 30 years in the corrosive fertilizer environment. The structure also relies on corrosion-resistant solid steel bracing rods as secondary support, rather than the cables used in many buildings.

All building frames and secondary supports are hot dip galvanized steel I-beams. Unlike the open web trusses used for many fabric structures, the steel beams have no hollow interior spaces where corrosion may start undetected. Hot dip galvanizing applies a uniform layer of protective zinc to the building frame, ultimately extending the life of the steel.

“Longevity is always critical,” said Brandon Schafer, project manager at Graber Construction. Based on the specifications provided by CGB, Graber recommended Legacy to design and install the

fertilizer building. “You definitely get what you pay for. Legacy isn’t the only player in the fabric building industry, but they are one of the top players for quality.”

Crew members have noticed other advantages to the building as well. “It’s even tougher than I expected,” said Harold Maltby, Terminal Manager at CGB. “We’ve had some 30-40 mile per hour winds, and inside the building you don’t even know the wind is blowing. And the natural light inside has turned out to be a big benefit.” The ExxoTec Elite fabric used on the building has 12% translucency, which allows daylight into the building – saving on electricity costs and creating a bright, pleasant environment in all corners of the building.

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Located on sandy soil in close proximity to the Illinois River, the structure has a cast-in-place concrete foundation and two-foot stem walls along the perimeter – allowing product piles to stretch to the edges of the structure.

The new building has a capacity of 500 tons, and is expected to turn product over several times per year. Adding this capacity allowed CGB to expand their bagging operation and secure additional at least one additional contract.