

CALHOUN



FERTILIZER



OUR STRENGTH IS IN OUR STRUCTURE

calhounsuperstructure.com | 1-800-265-3994



140' x 300' VP SERIES

OUR STRENGTH IS IN OUR STRUCTURE

We design and engineer our structures site-specific to your unique location. Critical to the performance and reliability of your building. Essential to the longevity of your investment.



ENGINEERED TO LAST

Our highly trained engineers, designers, and detailers have spent years building the strongest and safest structures available for the fertilizer industry.



CORROSION RESISTANT

Calhoun's fabric buildings are built with hot-dip galvanized steel frames to resist rust and corrosion from caustic environments like fertilizer. Applied to both interior and exterior surfaces, our galvanization meets established industry standards to improve the longevity of your structure and reduce maintenance costs.



CLEAR SPAN INTERIOR

Calhoun's fabric structures provide clear span interiors, critical to your fertilizer operation. The height and free span interior of our fabric buildings have no interior columns, allowing tipping trucks to maneuver without interference.



SUPERIOR VENTILATION

Our fabric buildings provide cooler, drier environments to reduce the growth of mold and bacteria. We design and engineer our structures for maximum odor-control, functionality, and durability. Our structures create a ventilation system that eliminates moisture created through weather conditions, critical to keeping fertilizer materials dry.



SAFETY FIRST

Our completely engineered, naturally lit structures keep your employees safe while they work. Whatever your fertilizer operation, you can rest assured your commodities are protected.

WE UNDERSTAND FABRIC

Calhoun uses both HDPE fabric and PVC fabric, in either non-fire resistant (Non-FR) or fire resistant (FR), providing you with different fabric cover options relative to your specific needs.

Our fabric is produced to withstand harsh weather conditions and treated

with ultraviolet stabilizers to protect it from the sun's UV rays. This prevents the fabric membranes from weakening or breaking down, adding years to life for your fabric cover.

With a Calhoun fabric cover, you also select from a variety of colors

for greater aesthetic appeal and customization.

We also offer two fabric cover installation options depending on the size and budget of your structure: Keder Panel System or Bag Cover System. Contact Calhoun to find out more.

HOT DIP GALVANIZATION

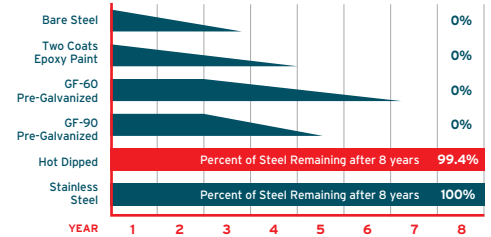
The framework for a properly engineered fabric structure is treated to a hot dip galvanized mixture that increases the zinc coating to 3.9 mm inside and out.

The dipping process covers the framing materials down to the smallest crevices that go unnoticed by many assemblers. This step helps to maximize structural integrity and creates a tough barrier against corrosive materials. After the metallurgical process, the overall strength increases from 300-500/psi to 3600/psi.

A common misconception is that all fabricated galvanized steel has an interior coating. Most actually have a zinc rich paint applied during the manufacturing process. All pieces of our steel are welded and then hot dip galvanized before fabrication, and we build using open web trusses.

Calhoun specifically aerates the corners of our welds so the zinc can fully penetrate the steel during the hot dip galvanization process. Aerating the corners of the welds ensures our open web trusses are 100% protected from corrosion, inside and out, and

won't ever corrode or buckle from within. Additional strength like this allows the structure to withstand high winds, temperature fluctuations, and heavy rain or snow falls.



Steel Plates were attached to wood and submersed in swine manure. The plates were weighed at intervals to determine the amount of corrosion.



140' x 300' VP SERIES



65' x 100' HT SERIES



42' x 80' CG SERIES

APPLICATIONS

Fertilizer Production Facility

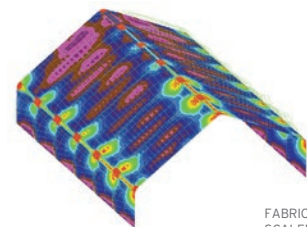
Fertilizer Storage

rain, wind, and seismic conditions at the building site. This technique allows Calhoun to deliver the strongest building for your unique location.

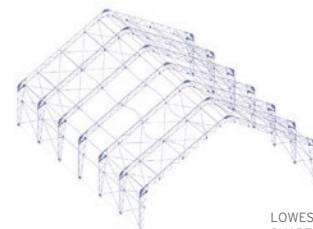
This process provides for a detailed and precise assessment of reaction loads that will in turn allow for an optimized foundation design.

Calhoun is the only manufacturer in the industry who includes the negative effects that fabric places on the strength and durability of the building, and then engineer the structure to ensure all snow, wind, and seismic conditions are exceeded.

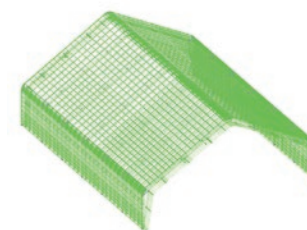
Our unique engineering procedures result in an optimal use of materials and ensures a reliable structure, going beyond industry standards.



FABRIC STRESSES AND SCALED DISPLACEMENT



LOWEST MODE BUCKLED SHAPE FOR USE IN STABILITY CHECKS



ENVELOPE LOADING D+CL+WIND PARALLEL+IP CONDITION

3D FINITE NONLINEAR ANALYSIS

Calhoun is unique in that we have developed a proprietary engineering process that models the true shape of fabric under load. All Calhoun buildings are engineered using a site-specific 3D Non-Linear Finite Element Analysis which considers the snow,



DESIGN | CUSTOM-ENGINEERING | SITE-SPECIFIC ANALYSIS |
MANUFACTURING | INSTALLATION | PROJECT MANAGEMENT |
REPAIRS & RECOVERS | ADD-ON'S & EXTENSIONS



65' x 100' HT SERIES



140' x 300' VP SERIES



100' x 160' VP SERIES



120' x 288' VP SERIES

NEED A RECOVER?

Whether you have an existing Calhoun fabric structure or another brand of fabric structure, Calhoun has the expertise, materials, and tools necessary to recover your fabric building.

No matter the level of damage, repair, building application, size, or brand, Calhoun offers full-service fabric structure recovers in-house, and installation through our extensive dealer network.

Call us today or click here to get a free quote!

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