





# **OUR STRENGTH IS IN OUR STRUCTURE**

calhounsuperstructure.com 1-800-265-3994



As a leader in the fabric structure industry, we have been in business for 30 years. We custom-engineer and manufacture fabric structures for any industry and application, and our proven and reliable engineering process has been the driving force from the very beginning. We were the first to use hot-dip galvanization as a standard with the critical importance of knowing that hot-dip galvanized steel structures last three times longer.

We were also the first to implement a true site-specific analysis design on every building. We understood from the very beginning that the site of your operation is unique, and a safe and reliable fabric building is paramount.

# **DEALER NETWORK**

Our strength is within our extensive dealer network with representation across North America to locally serve you.

Our dealers can help you design and build the right building solution to meet your unique needs.









### **ENGINEERED TO LAST**

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



## STRUCTURE PROTECTION

We protect our structures from rust and deterioration by using hot-dip galvanization on all structural components.



### SAFETY FIRST

Our completely engineered, naturally lit structures keep your employees safe while they work. Whether you are storing equipment, livestock, salt and sand, or fertilizer, you can rest assured your commodities are protected.



# **CLEAR SPAN INTERIOR**

Our free-span interiors reach up to 250 ft. wide and are easily extendable, maximizing your storage capacity and allowing your machinery and equipment to maneuver inside with ease.



#### 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 odorcontrol, functionality, and durability.



#### **CORROSION RESISTANT**

Applied to both interior and exterior surfaces, our hot-dip galvanized steel frames exceed established industry standards to improve the longevity of your structure and reduce maintenance costs.



#### FULLY CUSTOMIZABLE

With a variety of structure designs and configurations to choose from, we customengineer your fabric structure any way you like. Furthermore, you can incorporate a number of extra features such as HVAC systems or insulation for complete climate control.



#### QUICK RETURN ON INVESTMENT

Our structures boast low operational and maintenance costs in comparison to traditional buildings, while offering a large, secure, well-ventilated storage solution.



#### **BRIGHT & AIRY**

The natural light of Calhoun's fabric structures permeate the indoor facility, reducing energy costs while increasing the level of comfort and visibility. Skylights and solar panels can easily be added to the building to increase visibility and make them even more energy efficient.

# **HOT-DIP GALVANIZATION**

For steel frameworks used in fabric buildings, hot-dip galvanization is preferable to in-line galvanization since it coats the entire piece of steel inside and out. The hot-dip galvanized coating is 4x thicker than in-line galvanizing, and has a bonding strength 7x higher than zinc-based paint used on the inside of the in-line galvanized tubes. This increases the reliability of the steel framework of the fabric structure by adding an extra layer of corrosion-resistance. With the highest level of detailed engineering, you need quality components to match. Calhoun uses North American-sourced steel for all the truss components. All mill certs are reviewed by our engineering team to ensure they meet and exceed our strict specifications. All structural bolts are A325 hot dipped galvanized bolts that ensure strength. Our Calhoun manufacturing facility is certified CSA-A660 - a quality certification for steel building systems - and both AWS (American Welding Society) and CWB (Canadian Welding Bureau) certified.

Hot-dip galvanizing resists corrosion by providing barrier and cathodic protection, as well as through the development of the zinc patina. These three levels of corrosion protection provide galvanized steel with maintenancefree longevity for decades.



# HOT-DIP GALVANIZATION PROCESS















Degreasing

Rinsing

Pickling

Rinsing

Flux Solution

Drying

Zinc Bath

Cooling & Inspection

# OUR STRENGTH IS IN OUR ENGINEERING

#### 3D NON-LINEAR FINITE ELEMENT ANALYSIS

3D Non-linear Finite Element Analysis (FEA) software is a design tool that allows Calhoun's engineers to determine the stresses and displacements of our fabric structures in response to defined loads and constraints.

3D Non-Linear FEA has become the preferred method for determining the required size and configuration of structural components based on site-specific conditions. It is a more accurate and efficient method versus manual mathematical calculations and data sheets. Some fabric structure manufacturers use computations based on the simplified and idealized properties of each fabricated steel component, and apply traditional industry practices with reference to standardized load tables.

3D Non-Linear FEA ensures fabric structures are engineered to the highest possible standard as it simulates complex loading and the resulting relatively large displacements to validate the strength of a fabric structure. The end result is a process that can accurately determine the required structural capacity to meet site-specific demands and ensure a reliable structure.

- Validates the strength of your fabric structure
- Provides significant insight and design guidance to create better products
- Safety and reliability qualification
- Reduced lead time in manufacturing
- Enhanced product development and performance

# OUR STRENGTH IS IN OUR

# WE UNDERSTAND FABRIC

Calhoun is unique in that we have developed specialized analysis which models the shape of fabric under load. By accurately determining various environmental loads that are applied to your structure, we use a nonlinear analysis. Calhoun's approach ensures the optimal design of the steel framework is determined for your building.

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

Available colours:

Our Keder Panel System is a custommade aluminum extrusion mounted at each truss section. Calhoun's fabric panels are made to the exact bay spacing and installed through the aluminum keder channel. This process prevents the fabric from touching the structure's frame, creating a quieter environment and eliminating the risk of wear points on the cover.

Our Rubber Gasket Protection System is used between the aluminum keder track and hot-dip frame to prevent corrosion and wear. Calhoun is the only company that offers this level of detail and protection on their fabric covers.

#### **Key Features:**

- > Can exceed 150 mph winds
- Can exceed 300 lbs per square foot snow load
- > Up to 16% translucency on Non-FR fabric and 19% translucency on FR fabric
- > The first Membrane Structure Fabric in the world to achieve Cradle to Cradle (C2C) Bronze Level Certification, through one of our fabric partners, NovaShield.

For more information, visit our website.

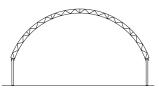
# OUR STRENGTH IS IN OUR **DESIGN**

Calhoun Super Structure offers one of the largest product series in the fabric structure industry, with custom-engineered fabric buildings up to 250' wide and for any length. Our fabric buildings are used in various industries for every application, and are engineered to last generations. Our extensive dealer network is local to our customers offering all aspects of project management from ideation to implementation. For more information, contact us to speak with a local representative.



Built to adapt.

AVAILABLE WIDTHS: 16', 22', 26', 32', 42', 52', 62', 72'





The Compression Coupler (CC) structure combines a coupler and gusset to allow for a longer transfer of pressure over the connecting cords. This design allows for greater design capacity over the competitor's flat plate gusset design that transfers pressure to the end of the tube only.

#### **STANDARD FEATURES**

- Hot-dip Galvanized Steel Frame (HDG)
- Hot-dip Galvanized Hardware
- 12 oz. High Density Polyethylene (HDPE)
- One-piece Cover (2 Covers are used on buildings over 100' long)

### **OPTIONS**

- Engineered Wood Post Foundation
- Steel Legs with Different Height Options: 2', 4', 6', 8' & 10'
- 2-5' Eave Bunker Covers
- Roof Vent Support Systems
- Individual Keder Panel System in Lieu of One-Piece Bag Cover
- PVC Cover
- Elite Fabric Upgrade

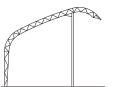
#### **FOUNDATION OPTIONS**

- Wood Posts
- I-Beam
- Concrete Pier
- Pre-cast Blocks & Walls
- Concrete Walls
- Helical Anchors
- Sea Containers

- Salt & Sand
- Hay Storage
- Sports & Recreation
- Livestock
- General Equipment Storage
- Waste & Recycling
- Personal Riding Arena
- Retail Facility



AVAILABLE WIDTHS: 20' & 30'





Calhoun's new Side Entry (SE) Series profiles are designed for easy access, fresh air-flow, and superior asset protection. This profile features an opening width up to 30' wide, and ranges in height from 10' to 35' tall, sloped roof, tall back eave, and optional leg height variances. Gable brackets are used in the design, making it more efficient to construct. This simple and convenient design is built to protect your most valuable assets while allowing uncomplicated, side entry access.

#### **STANDARD FEATURES**

- Hot-dip Galvanized Steel Frame (HDG)
- Hot-dip Galvanized Hardware
- 12 oz. High Density Polyethylene (HDPE)
- One-piece Bag Cover

#### **OPTIONS**

- Roof Vent Support Systems
- Individual Keder Panel System in Lieu of One-Piece Bag Cover
- PVC Fabric
- Elite Fabric Upgrade

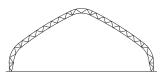
#### **FOUNDATION OPTIONS**

- I-Beam
- Concrete Pier
- Pre-cast Blocks & Walls
- Concrete Walls
- Helical Anchors
- Sea Containers

- Salt & Sand
- Fertilizer
- General Commercial Storage
- Manure Storage



AVAILABLE WIDTHS: 32', 42', 52' and 62'





Calhoun's new Gable (GB) Series profiles are for customers looking for that "all-in-one" fabric structure. With additional interior height combined with an aesthetically pleasing look at a cost-efficient price, the GB Series profile is built to meet every need. The standard 8' or 10' high side walls offer an efficient use of floor space, while the gable style truss arch provides greater clearance and a beautifully finished product.

#### **STANDARD FEATURES**

- Hot-dip Galvanized Steel Frame (HDG)
- Hot-dip Galvanized Hardware
- 12 oz. High Density Polyethylene (HDPE)
- One-piece Bag Cover
- 8' or 10' Leg Height

#### **OPTIONS**

- Steel Legs with Different Height Options: 2', 4', & 6'
- Roof Vent Support Systems
- Individual Keder Panel System in Lieu of One-Piece Bag Cover
- PVC Fabric
- Elite Fabric Upgrade

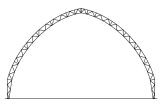
#### **FOUNDATION OPTIONS**

- Wood Posts (32', 42', 52' only)
- I-Beam
- Concrete Pier
- Pre-cast Blocks & Walls
- Concrete Walls
- Helical Anchors
- Sea Containers

- Salt & Sand
- Fertilizer
- Livestock
- Waste & Recycling
- Riding Arena
- Sports & Recreation Facility



AVAILABLE WIDTHS: 50', 60', 65', 72' & 82'





The High Top (HT) series uses the same unique compression coupler design as the CC series but uses larger top and bottom cords as well as a deeper truss depth. The HT series comes standard with Calhoun's individual Keder Panel System.

The design is ideal for customers looking for extra interior height. The extra height and free span space makes unloading large trucks easy and worry-free. The HT design handles very well in heavy snow load areas.

#### **STANDARD FEATURES**

- Hot-dip Galvanized Steel Frame (HDG)
- Hot-dip Galvanized Hardware
- 12 oz. High Density Polyethylene (HDPE)
- Individual Keder Panel System

#### **OPTIONS**

- Steel Legs with Different Height Options: 2', 4', 6', 8' & 10'
- 2-5' Eave Bunker Covers
- Roof Vent Support Systems
- PVC Cover
- Elite Fabric Upgrade

#### **FOUNDATION OPTIONS**

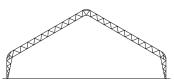
- I-Beam
- Concrete Pier
- Pre-cast Blocks & Walls
- Concrete Walls
- Helical Anchors
- Sea Containers

- Salt & Sand
- Fertilizer
- General Commercial Storage
- Manure Storage
- Personal Riding Arena
- Sports & Recreation



Built to suit your needs.

AVAILABLE WIDTHS: 40', 50', 60', 70', up to 250'





The Versatile Product design offers a distinctive, traditional look with 2' eaves (VPe) finished in wood or steel, or a rounded shoulder design (VPr) offering a more practical and economical alternative. Our proprietary J-purlin design found only in the VP Series provides unmatched stiffness and capacity that allows Calhoun to increase bay spacings while simultaneously reducing the quantity of purlin runs in the building - resulting in a more cost-efficient structure.

#### **STANDARD FEATURES**

- Hot-dip Galvanized Steel Frame (HDG)
- Hot-dip Galvanized Hardware
- 12 oz. High Density Polyethylene (HDPE)
- Individual Keder Panel System
- 14' leg height (up to 160' wide)
- 18' leg height (170' wide and up)

### **OPTIONS**

- Steel Legs with Customizable Height Options
- 4' Eave
- Roof Vent Support Systems
- PVC Cover
- Elite Fabric Upgrade

# **FOUNDATION OPTIONS**

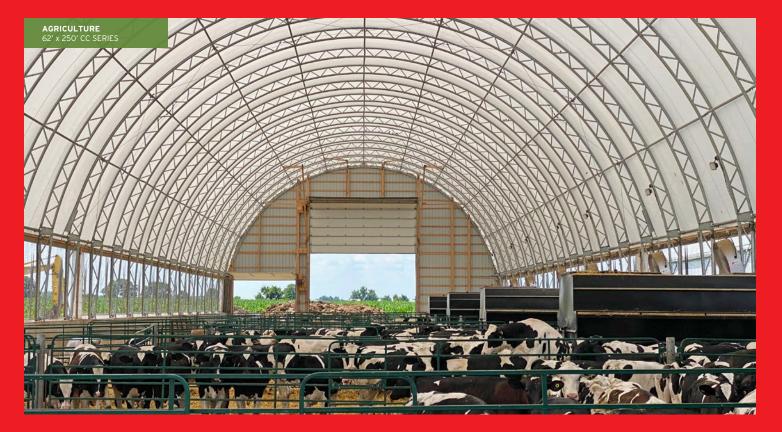
- I-Beam
- Concrete Pier
- Pre-cast Blocks & Walls
- Concrete Walls
- Helical Anchors
- Sea Containers

- Salt & Sand
- Fertilizer
- Livestock
- Waste & Recycling
- Riding Arena
- Sports & Recreation Facility











# FAQs

# What fabric cover installation options does Calhoun offer?

Calhoun Super Structure offers two fabric cover installation options depending on the size and budget of your structure.

Keder Panel System is a custom-made, individual strip of fabric mounted at each individual truss section. This system does not allow the fabric to touch the structure's frame and helps to create a quieter, more secure environment with no risk of wear points on the cover – adding years of life to your structure. Calhoun's Keder Panel system is standard on all buildings over 60' wide.

**Key Advantage:** Quick replacement of individual panels if damaged instead of having to remove the entire fabric cover

Bag Cover System is a large singlepiece fabric cover that is tensioned both laterally and horizontally over the entire structure. This process is done quickly and easily in one single step.

**Key Advantage:** Affordable and efficient installation

### Can you re-cover or service my existing fabric structure or Coverall building?

Yes. We re-cover or service any existing fabric structure whether a Calhoun structure or not, anywhere across North America. If you are in need of a repair or replacement cover on an existing Coverall structure or other, Calhoun is up for the job and ready to serve you. Contact us so that we may help you understand the value of your building and any engineering or maintenance implications.

#### What preparations do l need to do before building my Calhoun Super Structure?

The first thing we always recommend is to consult with your local building official on the rules and restrictions regarding your building permit. Knowing what is and isn't allowed for your area beforehand can save you time and effort later on. Let your local Calhoun dealer assist you throughout the process, from concept to completion.

# How long does it take to order and install my building?

Calhoun Super Structure fabric buildings can be ordered and installed much quicker than your traditional wood or steel building. For smaller structures, orders and installation can be deployed as quickly as two to three weeks if need to be. For larger structures, order and installation times may vary based on the scope of work, size, and customization. Your local Calhoun Super Structure dealer can give you a more precise idea on the amount of time your building will take based on your specific structure and needs.

# Can I expand, remove, or relocate my building?

Yes. While our fabric structures are designed as permanent buildings, expanding, removing, or re-locating your existing Calhoun Super Structure is easy. Our buildings are designed for quick expansion, and our versatility allows for easy relocation. This versatility is ideal for temporary projects or layout changes. Calhoun representatives will work with you to assist with changes to your building.

# What type of warranty comes with my building?

Calhoun Super Structure is proudly backed by our proprietary industry-leading 25-year warranty through our Elite FR and Non-FR fabric. For our standard FR and Non-FR fabric, we offer a 15-year warranty on every building kit including the steel framework. In most cases, our steel framework will last generations. To apply for warranty, you can complete and submit the online Warranty Application Form on our website, along with the specified number of photos, within 30 days of project completion. Your local dealer can assist you with this process.

# Can I insulate or climatecontrol my structure?

Yes. Most Calhoun Super Structure fabric buildings can be insulated and HVAC systems and ventilation can be added to the building frame.

# What kind of foundation do I need for my Calhoun Super Structure?

Calhoun Super Structure fabric buildings are designed to be built on many different types of foundations. We have installed our fabric buildings on wood posts, poured walls, demurrage blocks, pre-cast T-panels, grade beams, concrete piers, and shipping containers. Our team of representatives will work with you to determine the best foundation option for your structure.

# Do I need engineered stamped drawings for my fabric building?

In many cases, stamped plans are required for a building permit. Calhoun's team of highly-skilled engineers review and provide site-specific stamped plans for every building we produce.

Calhoun never compromises on quality. Whatever your industry, the site of your operation is unique and our customengineered structures maintain the highest level of safety, sophistication, and longevity.

Our stamped drawings provide you with proof that the correct loading for the fabric building location, site, and application were used to configure the structure. This is necessary to ensure proper design, obtain building permits, and insurance on the finished project.

# Can I customize my structure?

Yes. Calhoun designs, engineers, and manufactures your fabric structure to meet project-specific length, width, and height requirements which means that every structure is customized to fit your unique site location, application, and need.

We offer several end wall options, mount style options, fabric colors, and can build your fabric structure on different types of foundations. We customize our fabric buildings to meet your exact needs.

# Does Calhoun offer financing?

Calhoun Super Structure offers flexible financing plans through our exclusive partner. Whether you need a fabric structure for agricultural use or commercial, are in Canada or United States, are a start-up business or small-to-medium company, there is a fabric building price plan for you. For details, visit our website or contact your local dealer.

#### How long will the fabric cover last?

Both Non-Fire Resistant (Non-FR) and Fire-Resistant (FR) fabric covers should last approximately 15-25 years under normal weather conditions. Like shingles on a roof, weather and ultraviolet radiation eventually wear down the material. While some rips and tears can be repaired, loosefitting or worn fabric should be replaced. Fabric building owners may even want to recover fabric structures for aesthetic purposes to bring new life to pre-existing structures or to increase natural light.

# What happens if the fabric becomes damaged?

Calhoun's local representatives can repair most damage that may occur to a fabric cover. To begin the process, we may ask to see photos, or do a site-visit, to gage the level of damage at hand. We also take into consideration the type of fabric cover system your structure currently has - either a Bag Cover system or a Keder Panel system - to determine the cost and turnaround time for fabric cover repair or replacement.

#### Can I customize my structure?

Yes. Calhoun designs, engineers, and manufactures your fabric structure to meet project-specific length, width, and height requirements which means that every structure is customized to fit your unique site location, application, and need. We offer several end wall options, mount style options, fabric colors, and can build your fabric structure on different types of foundations. We customize our fabric buildings to meet your exact needs.



# **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.



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

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