



# CALHOUN

SUPERSTRUCTURE



*“Driven by Innovative Engineering”*



Since 1992 when we drove the final bolt and hauled the cover up over that first Calhoun Super Structure, this has to be one of the most exciting times for us, for the Calhoun company, and for the entire Calhoun team.

We're poised and ready for real growth, with innovations that will give us a distinct competitive edge in the fabric building market place in Canada and the United States.

Calhoun has come a long way from its beginnings as a tarp-cover business on our parents' beef farm in the agricultural community near Chesley, Ontario. But from the beginning, we've committed ourselves to making the Super Structure the best it can be by giving our customers the strongest, most reliable product at a price that's competitive or better than any one else's.

After all, our family name is on every building our company sells. And when the wind whipped up at night in Bruce County, we were able to sleep soundly, knowing the Calhoun Super Structure would stand up to the worst nature could throw at it.

In the years since, we've continued to invest in new techniques; to find, or develop, stronger, more durable materials; and to employ the soundest engineering available. We've built a team of hardworking dealer/partners who have helped drive our success.

# Benefits of Fabric Buildings

## What makes fabric a smart choice over steel or other traditional materials?

- \* Natural light creates a better work environment, saves electricity and means fewer bulb changes
- \* Fewer supports and hoop design provide increased storage space
- \* Increased air movement provides healthier environment and better storage
- \* Outperforms steel in caustic environments
- \* Lower costs
- \* Faster installation
- \* Portability
- \* Fast and easy repair
- \* Versatility



## Free, bright, natural light

When you step inside a fabric building, you immediately see and feel the difference from traditional structures. To begin with, you can see. Natural light pours in through the material. During the day, you often won't even need electric light.

## Virtually unlimited uses

These advantages lend themselves exceptionally to such uses as dairy barns, hay storage, equipment storage, salt storage, airplane hangars and temporary buildings. And the unique, additional advantages Calhoun builds into the Super Structure makes them preferable in every case.

## Dairy barns

- \* Natural light saves energy and hassle
- \* Large airspace above livestock, and good, clean airflow
- \* Ventilation options include curtain ventilation, roof ventilation and mechanical ventilation
- \* End options and customizable layout allow for versatility in locating feed alley, scrape alley, bedding pack
- \* Easily and quickly expandable as your needs change
- \* Inexpensive alternative to traditional structures

## Hay storage

- \* No cross cabling or collar ties allows storage up to the roof
- \* Steel structure more rugged than wood - decreases risk of damage during loading or unloading
- \* Easily expandable if your crop or operation expands
- \* Natural airflow keeps hay fresh and dry
- \* More durable than hay covers, and easier to access bales
- \* Inexpensive alternative to traditional structures

## Equipment storage

- \* Increased width and height allows for storage of large combines and other equipment
- \* Inexpensive for cost-effective protection
- \* Easily expanded for additional equipment

## Salt storage

- \* Hot-dipped galvanized structure withstands caustic environment
- \* Large open space for increased storage, and access by augers
- \* Roof quickly and inexpensively replaceable - in a few hours
- \* Inexpensive

## Airplane hangars

- \* Large open space and easy access
- \* Natural light makes aircraft repair and maintenance easier
- \* Inexpensive

## Temporary buildings

- \* Portable
- \* Resale potential with overall depreciation similar to a vehicle
- \* New owner can add brand new cover for "like-new" appearance

# CC Series

Engineered laminated posts allows for greater penetration of pressure treatment and eliminates weakness such as a knot in the post. Available in 32', 42', 52', & 62' widths which are 2' wider than most of the competition; very important, especially when storing bales. Buildings can be placed on 8', 10' or 12' centres depending on the conditions of the building location, such as snow load and wind. Buildings are designed for wood posts, steel legs or concrete walls.

Ends and sidewalls can be customized to suit your needs. Our trusses and other critical parts are hot-dipped galvanized (HDG), inside & out, welds & all; nothing is exposed. Galvanization is self annealing, which means if scratched it will seal itself to protect the steel. HDG is extremely important in corrosive environments such as barns, manure storage & fertilizer storage.



# CC Series

One of the great features of a Calhoun Super Structures Ltd. fabric covered structure is the natural lighting and sound dampening qualities.

Not only will you reduce electrical lighting costs but the sound dampening abilities allows for a quieter and safer manufacturing facility.

A brighter and warmer feeling work area, in your Calhoun Super Structures Ltd. manufacturing building, also adds to the comfort of your employees.



# HT Series

Available in widths of 65', 70' and 80'. They are built on engineered steel legs or concrete walls. Economical clear span structure to fit your budget. Ends and sidewalls can be customized to suit your needs. Buildings can be placed on 8', 10' or 12' centres depending on the conditions of the building location, such as snow load and wind. Our trusses and other critical parts are hot-dipped galvanized (HDG), inside and out, welds and all; nothing is exposed. Galvanization is self annealing, which means if scratched it will seal itself to protect the steel. HDG is extremely important in corrosive environments such as barns, manure storage & fertilizer storage.



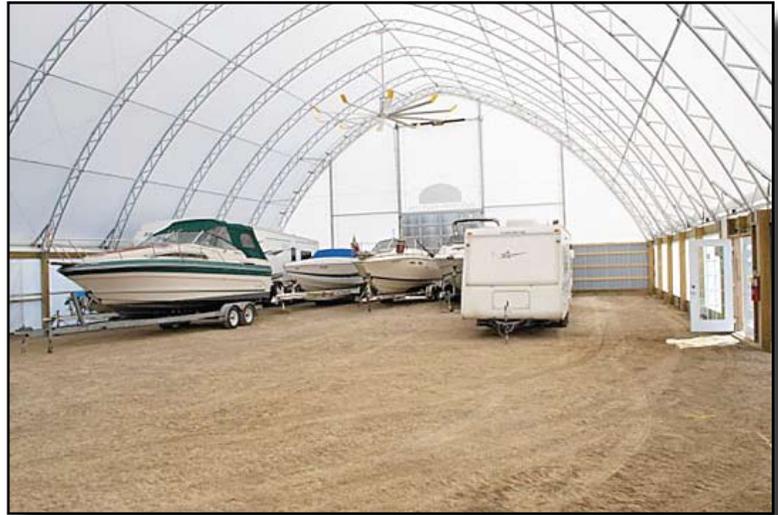
# HT Series

A Calhoun Super Structure is ideal for any of your equipment storage applications. The natural light and sound dampening qualities allows you to work in a bright and quiet environment when performing repairs or maintenance on any of your equipment.

As well security issues can be addressed through the use of: secure man and overhead doors, steel, wood or concrete side curtains and walls.

Fabric Structures for Equipment Storage

Any of these options can be utilized to meet any of your security needs. That is the beauty of a Calhoun Super Structures Ltd. structural design.



# VP Series

Free span traditional peak building available in widths from 65' to 160'. Individual panels of fabric between each truss make cover replacement easier and less expensive. Trusses are on 12' centers with 14' sidewalls. Open ridge for ventilation and eave option available. Engineered to be clad in steel, if preferred. Our trusses and other critical parts are hot-dipped galvanized (HDG), inside & out, welds & all; nothing is exposed. Galvanization is self annealing, which means if scratched it will seal itself to protect the steel. HDG is extremely important in corrosive environments such as barns, manure storage & fertilizer storage.



# VP Series

When it comes to having a profitable dairy business, cattle comfort is the most important factor when determining profits.

To maximize your cattle's comfort our fabric is designed to allow the maximum amount of natural light into your dairy barn. Natural light has been shown to dramatically increase milk production in cattle versus artificial lighting.

Another problem with traditional barn structures is their poor ventilation. One benefit of our fabric structures is that they reduce the temperature fluctuations inside your dairy operation.

With the addition of side wall curtains to allow adequate air flow and ridge vents you will be able to properly ventilate your facility for much less cost than traditional dairy barns.

In addition to their low purchase price Calhoun Super Structures are extremely easy to build on and extend. This makes expansion a breeze.

Contact Calhoun Structures Ltd. today to learn more about how our structures can improve the health and production of your cattle and calves.



# The Hot-Dipped Galvanizing Process

Unique hot-dipped galvanizing process means Super Structures last much longer.

Next to stainless steel, hot-dipped galvanizing (HDG) is the best protection against rust, bar-none. Studies have proven it time and time again. In one study, researchers immersed three types of steel in highly caustic swine manure for eight years. Coated tubing completely disintegrated. Stainless steel lost nothing to corrosion. And HDG steel performed nearly as well as stainless steel, with 99.4 percent integrity.

## The Hot-Dipped Galvanizing Process

Calhoun searched extensively for a supplier who could hot-dip galvanize complete trusses, while leaving a smooth surface that won't snag or tear the cover.

### *Here's how it works.*

#### **Surface preparation**

Galvanizing involves bonding zinc to steel, and surface preparation is extremely important. If it's not done right, the zinc won't adhere to the steel, and sections will be left uncoated. The steel undergoes three stages of preparation

#### **Caustic cleaning**

A hot alkali solution removes organic contaminants such as dirt, paint markings, grease and oil from the metal surface. Epoxies, vinyls, asphalt, or welding slag must be removed before galvanizing by grit-blasting, sand-blasting or other mechanical means.

#### **Acid pickling**

Scale and rust are removed from the steel surface by pickling in a dilute solution of hot sulphuric acid or ambient temperature hydrochloric acid.

#### **Fluxing**

Fluxing removes oxides and prevents further oxides from forming on the surface of the metal prior to galvanizing. The steel or iron is dipped in an aqueous solution of zinc ammonium chloride. The material is then dried prior to immersion in molten zinc.

#### **Galvanizing**

Each welded truss is completely immersed in a bath consisting of a minimum of 98 percent pure molten zinc at a temperature of about 840° F (449° C). The zinc metal then reacts with the iron on the steel surface to form a zinc/iron inter-metallic alloy.

The trusses are then withdrawn slowly from the galvanizing bath, and the excess zinc is removed by draining and vibrating.

Because the galvanizing process involves total immersion, all surfaces are coated - providing protection for both the outside and the inside of the steel tubing used in the trusses.

#### **Inspection**

After the trusses have dried, the galvanizer closely scrutinizes the coating thickness and appearance. Through a battery of physical and laboratory tests, they determine thickness, uniformity, adherence and appearance.

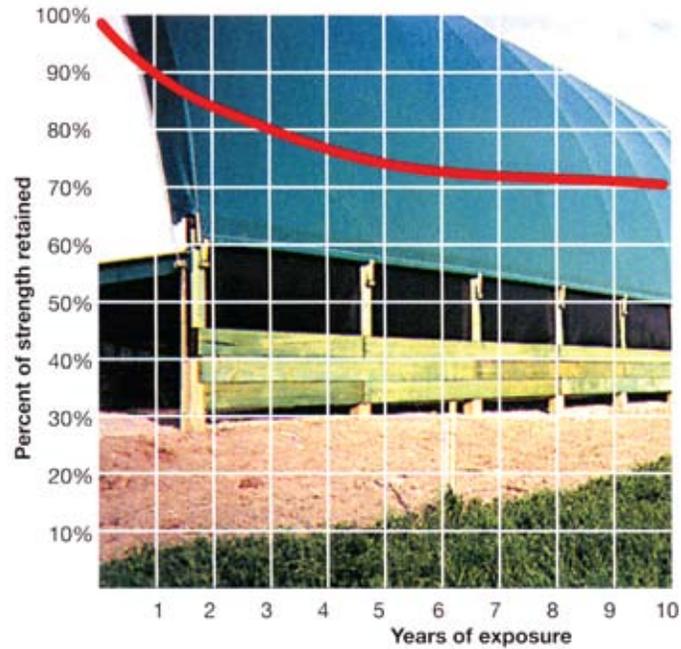
Every Calhoun Super Structure truss is galvanized according to long-established, well-accepted and approved standards of ASTM, the Canadian Standards Association (CSA), and the American Association of State Highway and Transportation Officials (AASHTO). These standards cover everything from minimum required coating thicknesses for various categories of galvanized items to the composition of the zinc metal used in the process.



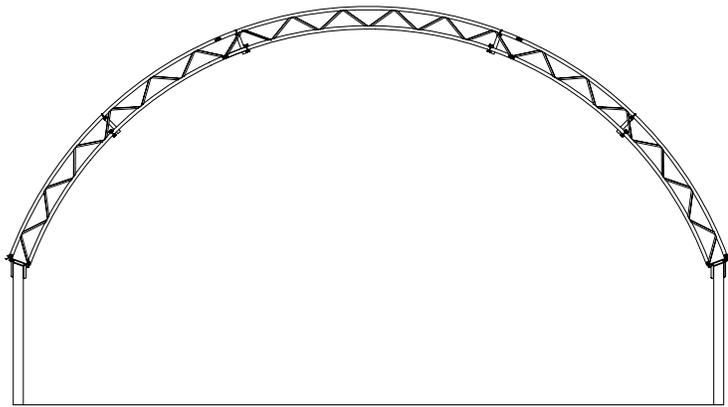
# FABRENE®

## UV Resistant

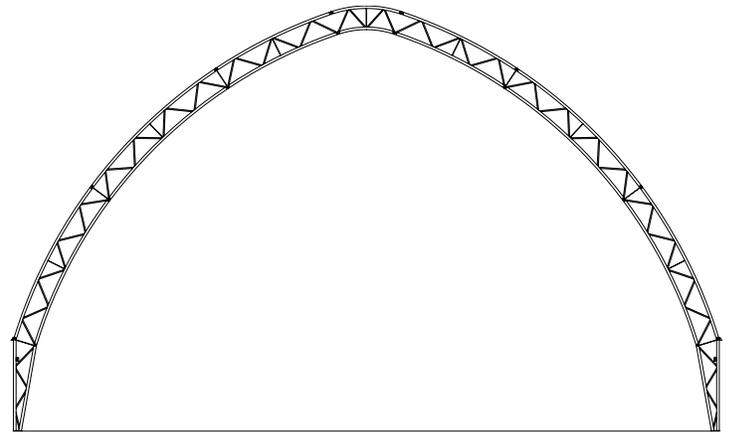
Fabrene shelter fabric withstands years of exposure to extremes of climate. Its resistance to prolonged sunlight is well documented.



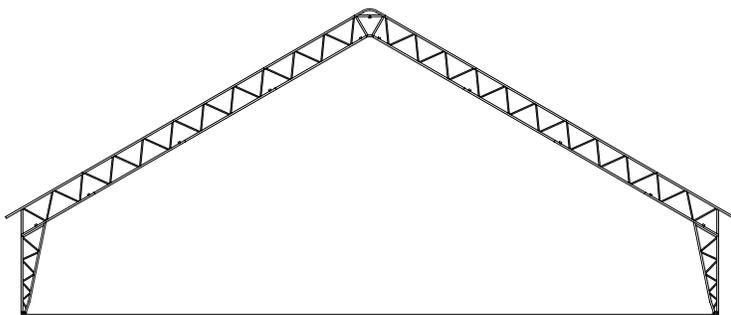
Fabric Colours



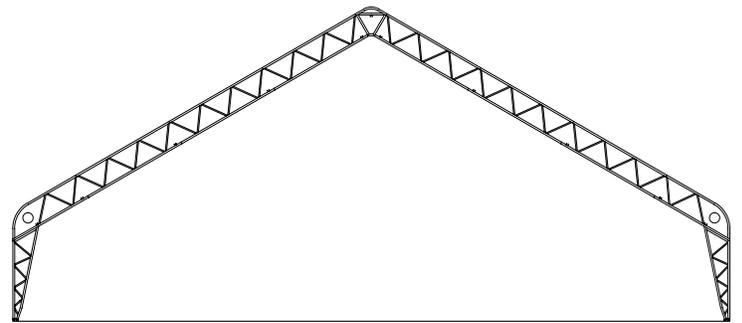
**CC PROFILE**



**HT PROFILE**



**VP EAVE**



**VP ROUNDED**

***Quality, Value & Service***

Quality materials, modern engineering and Calhoun's team of professional builders will create excellent value in a building that will serve you for many years.



3702 Bruce Rd. #10, Box 220,  
Tara, Ontario N0H 2N0

**519.934.3037 • 1.800.265.3994 • Fax: 519.934.2359**  
info@calhoun.ca • www.calhounsuperstructure.com