

Thank you for purchasing a **Multi Shelter Solutions** structure to solve your shelter requirements. Our goal is to supply simple and cost effective shelters. There are many variations and versatile uses for our structures. We take pride in customizing the shelter solutions for your unique application. As such, it would be impossible to cover all variations in this Guide, but we have tried to give a general overview as best as we can. Please refer to your individual parts list, and any verbal cautions or instructions given at time of purchase.

Basic Warranty

- **Structures:** All materials and workmanship are guaranteed **for ONE year from date of delivery** to be free from defect. Our experience for the last 30 years has been that if something is wrong it will show up in the first few months. We are not responsible for orders left sitting outside past this timeline.
- **Coverings:** All materials have a pro-rated warranty from **date of delivery** to be free from defect and deterioration by the sun.

12 mil White <i>Tarp</i>	6 years	12 mil Green <i>Tarp</i>	4 years
6 mil Clear <i>Plastic</i>	4 years	6 mil White <i>Plastic</i>	4 years
8mm Polycarbonate	10 years		

Warranty Requirements: Potential warranty claims will be treated as an order until such time as the faulty product (or sample piece) has been returned and approved for credit by MSS or their suppliers. If the faulty product or sample has not been submitted within 30 days, payment is due in full. A refund can be issued at a later date if the requirements are met and approved.

Samples of faulty plastic MUST include the date code. Payment will be due in full if the product has been damaged by something listed under “exclusions”. You have 30 days to report shortages or the order is considered complete. If there are any parts with damage, they must be reported prior to assembly.

Limit of Warranty: MSS is only responsible for the replacement of any defective material. The warranty does not cover labour, freight costs, or disposal expenses.

Warranty Exclusions:

- Structures not assembled or maintained as per instructions
- “Acts of God” including but not limited to Violent Winds (ie: Tornadoes), Heavy Snows (esp. when very wet)
- Covers found to have been in contact with chemicals
- Covers not fastened properly
- Unpaid products or products not returned for credit



Building Permits & Code

The subject of building codes and permits has numerous pitfalls if it is not handled properly. The buildings designed, manufactured and sold by MULTI SHELTER SOLUTIONS (MSS) are classified and intended as **temporary, low human occupancy agricultural buildings**. The section of the Farm Building Code that governs these buildings specifies that they must be heated. It only specifies that there must be sufficient heat capacity for snow melting, but does not specify the source of heat. You can find more information on our website as well. We do not know specifics of each municipalities building code requirements.

Engineered Drawings & Customer Responsibility

It’s an ongoing process to get an engineer’s certification on many of the variations that MSS makes. If an “engineer stamped drawing” is required, then there will be a limited range of structure choices.

This does not imply that the others are inferior choices.

PLEASE NOTE: if the building department requires an original, rather than a generic stamp, there will be an additional charge that will be passed on directly to the customer.

It is the customer’s responsibility to verify the permit requirements for the particular building he or she wishes to construct. It is also the customer’s responsibility to adhere to the specifications of the engineered structure drawing as they pertain to the construction.

PLEASE NOTE: Any italicized words in this document are words that are listed in the glossary.

We have developed the Assembly Guide as well as the online supplemental material to provide you with a clear understanding of what you're getting and how it goes together. There are more videos and photos online. There are many variations and uses for our structures and while we have endeavored to make this guide as comprehensive as possible, we are not able to cover each specific application.

**Please refer to your individual parts list and verbal instructions given at time of purchase.
We suggest you review the entirety of the Guide and call us if you have any questions
BEFORE YOU START.**

Assembly Checklist

Familiarize yourself with the parts of your structure before moving forward
Items marked with * are optional and may not be included in every package
Have your parts list handy to reference as you go through this guide

- Hoops/Arches/Ribs** – the main skeleton of your structure, two per set, 1"x2" or 1"x3" rectangular tubing spaced between 2' and 6' apart, depending on your application
- Ridge** – the top pieces of your structure with stubs welded along for fastening the hoops, there will be a "starter" piece that you will flip around to connect with the rest of the line of ridge pieces
- Anchoring** – either base brackets OR anchor posts, will be paired with each hoop to fasten it to a wall or beam OR into the ground, check your quantity required
- Purlins** – horizontal bar (shorter than the wind braces), fits between each set of hoops, round pipe with both ends flattened with a hole, quantity dependent on length of structure
- Wirelock** – includes two parts, thin zig zagged wire that will attach into an aluminum track to fasten your cover to the building
- *Wind Braces** – fewer quantity and longer than the purlins, round pipe with both ends flattened with a hole, quantity determined by small diagram on wind brace page
- *Cross-Ties** – the same material as the wind braces but even longer, used to attach the two sides of the structure together when extra stability is required (for larger buildings)
- *Inflator Fan** – includes two parts, the hose and the squirrel cage blower fan, it will come assembled together for you, used to be able to blow air between two layers of plastic
- *Roll up Sides** – two parts – the roll up pipe with handle and the aluminum strip

IMPORTANT

Safety is job #1. Make sure you have the required tools and that they are in good working order.

See our videos online for further explanation as noted in the guide.

If it does not fit easily, in most cases there may be a simple solution.

Altering the structure without calling voids the warranty.

Shipping damage must be reported prior to assembly commencing.

Please remember that smaller buildings will have smaller & fewer parts than shown

STEP ONE: Your shelter site should be fairly level and well drained. Moderate lengthwise slope is acceptable. Replacement of the top soil with gravel in a non-growing application will increase drainage and minimize weeds. Building in line with the prevailing wind will create less wind action and stress on the building.

Site Requirements

- Condensation and excessive moisture can be relieved with good drainage
- Putting down ground cover is an inexpensive way of eliminating grass and weeds while allowing drainage
 - This is not suggested for heavy foot traffic or where there is machinery movement

It is critical that this structure be mounted or installed level from side to side.

Failure to do this will result in snow shedding one side more quickly than the other, creating lateral stress. Moderate end to end slope is not a concern for structural integrity.

If land slope or the cost of leveling the site is extreme, there are ways of correcting it.

Options include:

- Building a taller wall or doubling up on the base beam
- Supplying longer *anchor posts* for one side
- In a worst case, supplying different left & right hoops



When significant excavation has been done, **the anchoring system MUST be set into concrete.**

If your property has a significant amount of large rocks, give us a call on how to best work around that for your application.



measure and lay out the base (base bracket installation shown) and prepare scaffolding

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Orientation

We suggest where possible to line up the building with the prevailing winds (end facing into the wind). This way there is significantly less wind action on the building and stress on the cover. If a snow load on the building does occur, it will be much more uniform. Facing north/south will give you slightly better light levels.

Squaring up the Building (using the 3,4,5 rule)

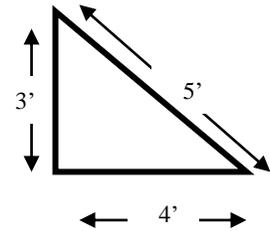
This is easier when using a calculator. This example is for a 20'x48' building.

Multiply the width of the building by itself (ie: 20' wide is $20 \times 20 = 400$)

Multiply the length of the building by itself (ie: 48' long is $48 \times 48 = 2304$)

Add these two numbers together ($400 + 2304 = 2704$) and square root it ($\sqrt{\quad}$)

In this example, you get 52, which is the diagonal measurement in feet if a 20'x48' is square



The alternative method is to mark the 4 corner posts and make 2 diagonal measurements. If these measurements are equal then the building is square.

If the front line is more important to you, then you adjust the back corners to make it square.

If the side line is more important to you, then you adjust the opposite front corner.

After you mark the 4 corner posts, the 2 diagonal measurements must be equal if the building is square.

If additional structures are planned for the future, you should ensure that the building is square to the property first, and then secondly square to itself. This will prevent a “staggered” look to the buildings in the future.

