# Tips & Tricks from MSS

Please note many of these apply for all types of our structures, not just greenhouses

MultiShelterSolutions.com
multisheltersolutions@gmail.com
1-866-838-6729

# Table of Contents

## Plastic Tips

Decreasing Dripping, Tightening Covers, What to do about Wrinkles, When to Replace & More...

## Ventilation Tips

Minimizing Disease, Heat Heads up, Thermostats, Air Activity, Winter Ventilation & More..

## Anchoring Tips

Corner Anchors & Angles, Soil Excavation, Shifting, Concrete, Holiding Power, Drainage & More...

## Location Tips

Water, Weeds, Wind, Slope, Shadows & More...

## Weather Tips

Problem Prevention, Performance, Control, Checks & More...

MultiShelterSolutions.com 1-866-838-6729 multisheltersolutions@gmail.com

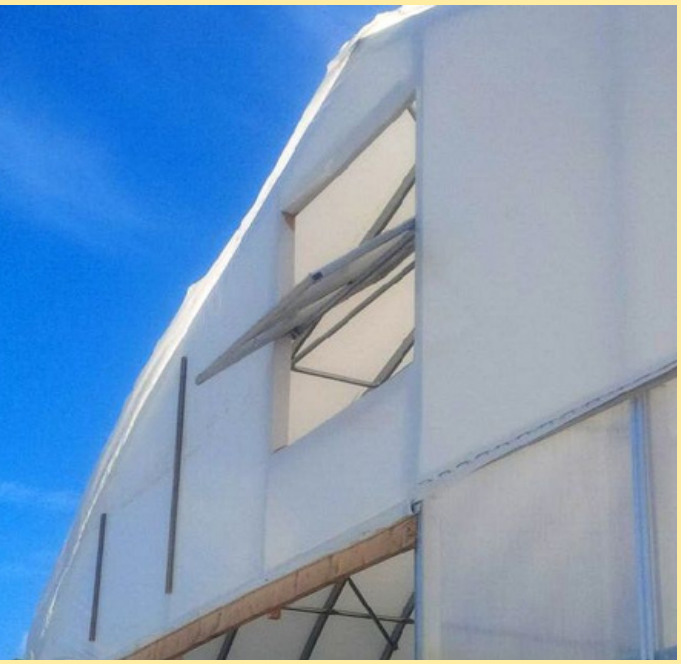
# Plastic Tips

- It is important that the inside layer is tight, this will minimize dripping
- Covers must be tightened end to end first before tightening from side to side
- When there are wrinkles, you always pull at 90 degrees to the wrinkle
- Dead air between layers of plastic creates heat efficiency, 4” space is ideal
- Some covers magnify sun intensity and should be avoided for some crops

- If you are putting plastic on late in the season, you will need to retighten by mid spring,
- Throwing some temporary straps over excessively loose plastic will minimize excessive wear.
- Some covers may still be structurally sound but should be replaced due to reduced light transmission

MultiShelterSolutions.com 1-866-838-6729 multisheltersolutions@gmail.com

# Ventilation Tips



- It is important to realize that moving air is not the same as ventilation but still critically important.
- Proper ventilation will minimize the disease triggers which can be present.
- You must be aware of the heat threshold which will stunt or kill a plant, each plant is different
- Winter ventilation may cost heat but with a healthier environment, plants grow better

**Ventilation = air changes and is different depending on the season**

- With mechanical ventilation, never blow into the prevailing wind, this reduces output by 50%
- Air intake must be sized properly to create turbulence rather then flow
- The ventilation system must be able to react quickly when sun goes behind a cloud.
- A thermostat should never be more than 15’ from the air intake to be able to react to incoming cold.

MultiShelterSolutions.com 1-866-838-6729 multisheltersolutions@gmail.com

# Anchoring Tips

As Norm says, **"There's no such thing as too many anchors!"**

- There should always be proportionally more anchors at the corners since there is more load
- Anchors should be used in opposing angles to magnify their holding capacity.
- Soil that is wet or recently excavated will have significantly reduced holding power.
- The 12” strip along the side of a building is subjected to 10x – 15x the water. Ensure adequate drainage.
- If an anchor is harder to get into the ground, it usually has more holding power.
- Anchor posts need to have sufficient holding power to prevent a structure from settling.
- This can be an issue with heavy snow on the building before the ground is frozen.
- Anchor posts need to prevent lateral shift. This is especially reduced when an anchor is raised up.
- Lateral stresses are uneven and magnified when wind comes across a building (side to side)
- Beware of using concrete for anchors which does not go below frost line. Excessive heaving is a concern.

MultiShelterSolutions.com 1-866-838-6729 multisheltersolutions@gmail.com

# Location Tips

- Do not put your building in a spot that “is not good for anything else” Buildings magnify environmental flaws.
- Beware of areas with high water table. Excessive structure moisture will be an ongoing issue.
- Areas with excessive weed issues should be treated before putting a building there.
- Buildings must be level from side to side. Uneven structures shed snow unevenly.
- Some end to end slope is acceptable
- Excessive levelling of the soil will increase costs and reduce holding power of the anchors
- Structures should face into the prevailing wind for more uniform wind load and minimize wind effect.
- The only good windbreak is a mature tree line (preferable evergreen)
- Having a structure near or behind another building is the opposite of a wind break due to swirling
- Be aware that shadows are longer in the winter. It may impact sun exposure at a time when there is less
- If you are considering moving a building, ensure that the next location has a similar topography.

MultiShelterSolutions.com 1-866-838-6729 multisheltersolutions@gmail.com

# Weather Tips

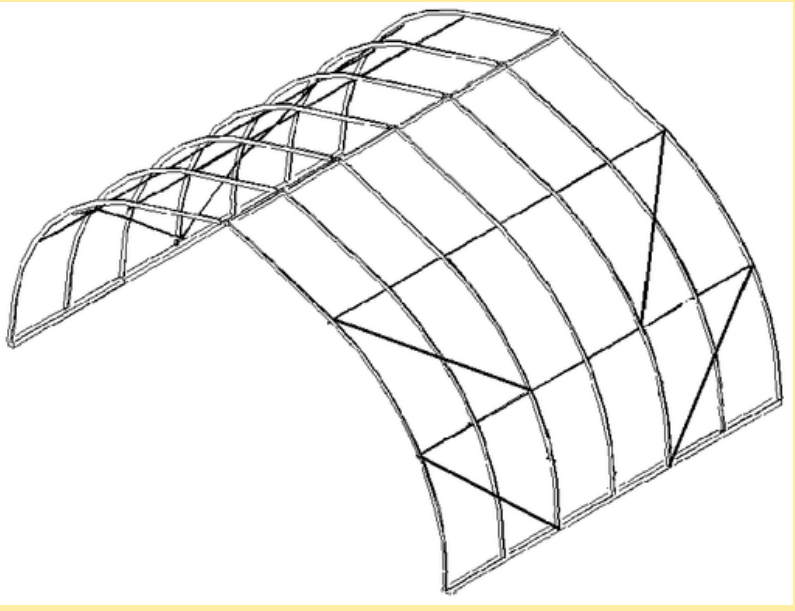
- With impending bad weather and before winter, do a walk around and visual check
- Do this with sufficient time to do any repairs that may be needed
- Ensure that there are no loose edges or spots in need of tape
- Keep detailed weather note with your performance records, study for patterns
- Weather is a variable you have no control over, your control is in being prepared
- When your structure has survived some intense weather, do a very careful check since it will take something less severe to do more damage the next time

MultiShelterSolutions.com 1-866-838-6729 multisheltersolutions@gmail.com

# Thank you for your interest and letting us share some key tools, tips & tricks with you to improve your experience!

## Please let us know if you have any questions along the way, we are happy to help

**Norm & the Multi Shelters Team**
**1-866-838-6729**
**multisheltersolutions@gmail.com**



It is really important to remember that no two properties / structures are alike or will perform alike. Caution must be exercised to not arbitrarily follow the advice and recommendations of another person without putting it into some kind of context.