

# ULTIMATE GUIDE

TO PLANNING YOUR GREENHOUSE

## Part 1: First Steps To Buy A Greenhouse



**NEW:** COMPLETE  
PAGE 19'S EASY  
CHECKLIST AND  
SEND IT RIGHT TO  
OUR TEAM

# Planning For Your Greenhouse

If you are new to greenhouses and greenhouse gardening, this guide is for you!

Over the years, we have helped our customers through the early stages of planning their greenhouse. This guide includes everything you should consider before purchasing a greenhouse.



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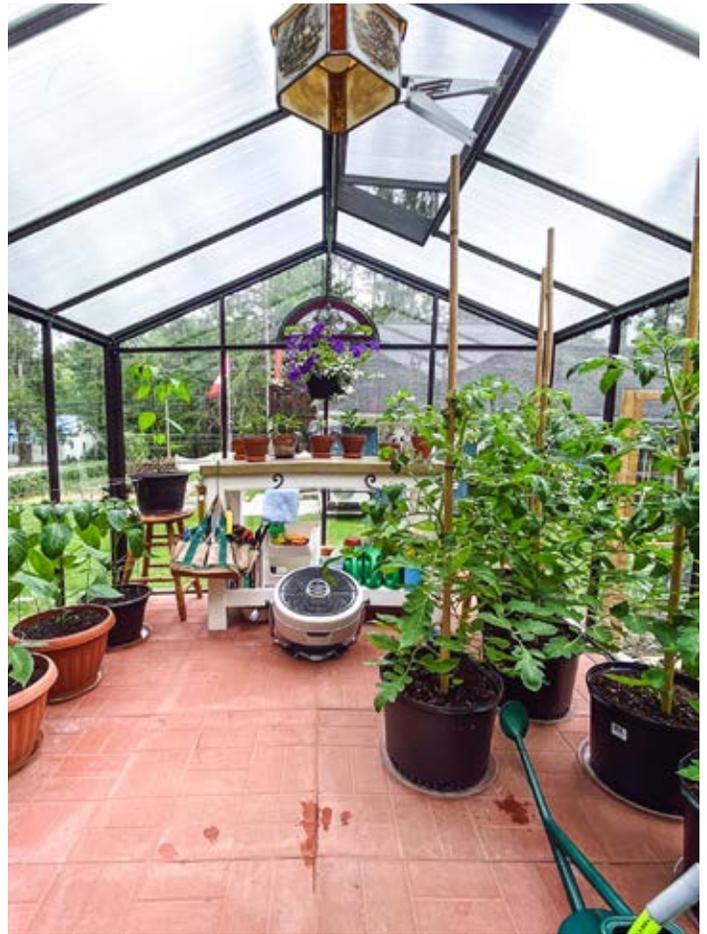
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# What to Think About First?

## Structure

Are you considering a freestanding or a building attached greenhouse? Freestanding allows you to find the best spot with the most sunlight. A building attached greenhouse offers easy access to utilities, uses up minimal yard space and the greenhouse will provide amazing solar gain for your home.



If you are interested in a home-attached greenhouse, you can find more information in our **“Planning Your Home-Attached Greenhouse” Guide** by scanning the QR code.



Freestanding Structures



Home-Attached Structure

## Greenhouse Design

BC Greenhouse Builders offers **7 DIY greenhouse kits (see opposite page)** within the Cross Country line in virtually any size that can be extended later and customized to suit your needs.

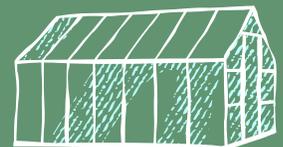
Our kits arrive with easy-to-follow instructions, and we have a Technical Support team on hand to help you if you have any questions about the installation.

While not exactly your average DIY furniture project, our greenhouses are designed so that the average homeowner can build it. A typical 8x12 greenhouse will take a weekend to install with 2 – 3 people.



## A Note About Sizing:

All our greenhouses are customizable, modular, and built in two-foot increments. Do you have a pre-built foundation?



Not a problem! We can easily manufacture your greenhouse to the exact sizing you need. We also offer a series of feature sizes such as 8x12 and 12x16 which are popular greenhouse sizes and offer extra savings.

**You can find a list of our value models on our website, [bcgreenhouses.com](http://bcgreenhouses.com).**

## Our Cross Country Greenhouse Line:



**Pacific Series:** Elegant, curved roof design and can incorporate genuine bent tempered glass or twinwall polycarbonate.



**Traditional Series:** Our most popular style since the 1950s. This greenhouse is low slope and perfect for heat retention.



**Cottage Series:** This Victorian-inspired greenhouse gives you a steeper slope – perfect for hanging extra baskets or having taller plants.



**Cape Cod Series:** This sophisticated style is ideal for high snow areas due to its steep roof pitch. A Cape Cod greenhouse can even accommodate young trees.

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## Our Limited Edition Models:



**The Parkside:** This stunner is an 8x10 black frame that includes decorative ridge cresting and decorative base panels that eliminates the need for a concrete foundation.



**The Sunhaven:** The strongest 8x8 greenhouse on the market today with unbreakable twinwall polycarbonate and 3 distinct colors to choose from.



**The Legacy:** A classic 8x8 with glass sidewalls, a functional polycarbonate roof and a brown frame giving you the best of both worlds.

# Greenhouse Glazing

Now that you have an idea about the structure of your greenhouse, it's time to think about glazing. Glazing is your glass or polycarbonate material that makes your greenhouse, well, a greenhouse! We offer 4 standard glazing options. Review our upgraded glazing options too!

## Single Glass

Single glass is one of our most popular glazing options. Single glass creates that classic greenhouse look and makes your greenhouse the centerpiece of your yard. Our single glass is tempered safety glass with a ½" overlap system for easy installation. Single glass is the best option for those looking to get the most light transmission into the greenhouse.



## Double Glass

Our double insulated glass option is a premium product which makes for a beautiful greenhouse or conservatory. Our standard double glass sealed units are typically 3mm/4mm panes similar to a typical double-paned window that incorporates a silicone seal around the edges to create weather resistance and even temperatures in the greenhouse.



## Fivewall Polycarbonate

Our fivewall polycarbonate is our most energy-efficient glazing available. It offers 50% more insulation than double glass and 80% more insulation than twinwall polycarbonate. Fivewall is ideal for gardeners in colder climates wanting to grow year-round, reduce heating

costs or those who grow specialty plants. Fivewall polycarbonate, while being our most insulating also has our lowest light transmission. You can expect your harvests to be delayed about 2 to 3 weeks due to the lower sun exposure.



## Twinwall Polycarbonate

Our twinwall polycarbonate is perfect for functional growing in most moderate climates. Twinwall offers great insulation value, toughness, and easy handling. It is very lightweight and virtually unbreakable.

*“Our polycarbonate options are not fully transparent like glass. You can see shapes and shadows through the walls, but it is not clear.”*



## Upgraded Glazing Options:



**6MM Full Sheet Glass:** One solid sheet of tempered safety glass in every greenhouse bay which is double the thickness of our standard 3mm Single Glass. Offering similar light transmission benefits comparable to standard 3mm, the 6mm option also adds additional strength. 6mm Full Sheet Glass also provides you with a beautifully seamless look that will elevate your greenhouse's appearance.



**High Performance LOW-E:** Maximizes the Insulating R-Value and reduces Relative Heat Gain to allow for a more comfortable space. The Low-E (low emissivity) coating on the inside of the glass reflects most UV and infrared while keeping a clear view through the glass. The Low-E coating also reflects infrared back towards the interior retaining more heat.



**6MM Laminated Glass:** One solid sheet of laminated safety glass in every greenhouse bay. Similar to car windshields, this safety glass will not shatter and will remain intact even when broken. This glass type may be required for greenhouse roofs where building codes require. This is common for applications over swimming pools, schools, and solariums. Available in single 6MM or Double Glass which is typically composed of an exterior tempered glass piece, an air gap with two layers of float/annealed 3mm glass and a laminated interlayer which blocks UV.



### Additional glazing notes:

Our continuous exterior capping system secures the glazing and maintains an airtight seal – there are no gaps or clips. Your greenhouse is designed to be weather-resistant and energy-efficient.

All glazing options can be intermixed in the same greenhouse. A lot of our customers opt for a polycarbonate roof with glass walls to help increase the insulation without losing that show stopping glass wall look.

Our 3mm single tempered glass is offered with a ½" overlap which makes the glass easier and safer for shipping and simpler to install.



# Selecting Your Site

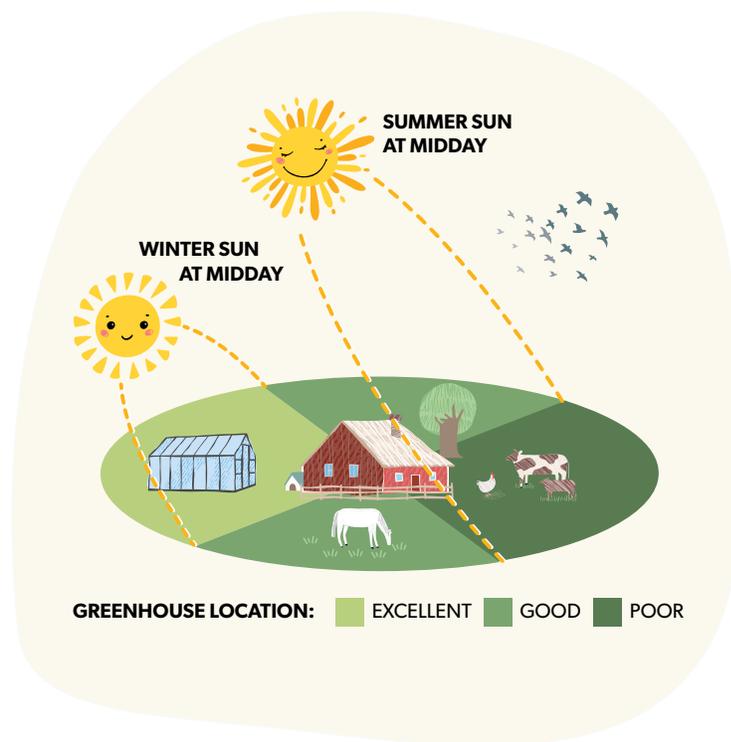
Early in the planning stages, thinking about ideal site selection is a great idea.

Here are things you should consider:

## Sun Exposure

We recommend that your greenhouse gets at least 6 hours of winter sunlight a day to obtain the best yield from your plants. Anything less, and we recommend supplementing with grow lights. To figure out what your day-to-day sun exposure is, visit [www.timeanddate.com/sun/](http://www.timeanddate.com/sun/) to determine the length of your day.

If possible, align the longest side of your greenhouse to face south. This will allow your greenhouse roof to attract the most amount of sunlight during the day. If you plan to extend your growing season with a cool temperature greenhouse, you will want to maximize your sun exposure and it's best to position the greenhouse east to west to help promote heat gain.



## Accessibility

The more easily accessible your greenhouse is, the more you will use it. Placing your greenhouse in a location that is close to utilities with a level walking path is a great idea. It's also important to think about the location when installing the greenhouse. Is it easy to load in the wooden crates, or drive in an excavator or wheelbarrow if you need it?



# Utilities and your Greenhouse

## Water Supply and Your Greenhouse



Carrying heavy watering cans is great for exercise but it's better to have a long-term plan for water in your greenhouse. Setting up a faucet or a sink ahead of your greenhouse arriving will make it easier to sterilize tools, water your plants and cool down the greenhouse when needed.

## Electricity and Your Greenhouse



Planning on using an electric heater or grow lights in your greenhouse? Colder climates and larger greenhouses may need a 220-volt heater in winter. This heater requires more voltage than a standard circuit provides. Connect with your electrician to see if you need additional power.





# Basics on Greenhouse Foundations

All our greenhouses require a level, solid foundation to ensure you can enjoy the greenhouse for years to come. Setting a plan for a greenhouse foundation is one of the bigger challenges our gardeners face and we are here to help you through your selection process.



**Wood frame foundations** are simple, tend to be inexpensive and the materials to build one can easily be found at your local hardware store. Building a wood foundation also means that it can be moved and could be considered a temporary structure to your municipality. A wood foundation will last 15 to 20 years in typical four-season weather conditions. Due to structural requirements and weight, we recommend wood foundations for glass greenhouses 12x16 and smaller and polycarbonate greenhouses 16x20 or smaller.

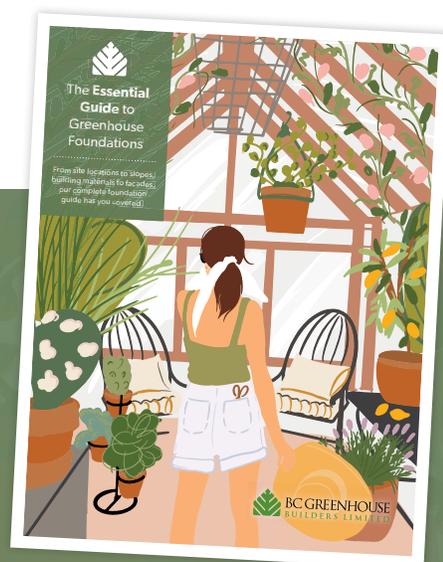
**A concrete slab or perimeter wall** provides a strong, stable foundation that will last for generations. A concrete foundation is required for any double glass greenhouse or any greenhouse over 12x20. Many of our customers opt for this style of foundation for its longevity and easy cleaning.



## Get the Foundation Guide

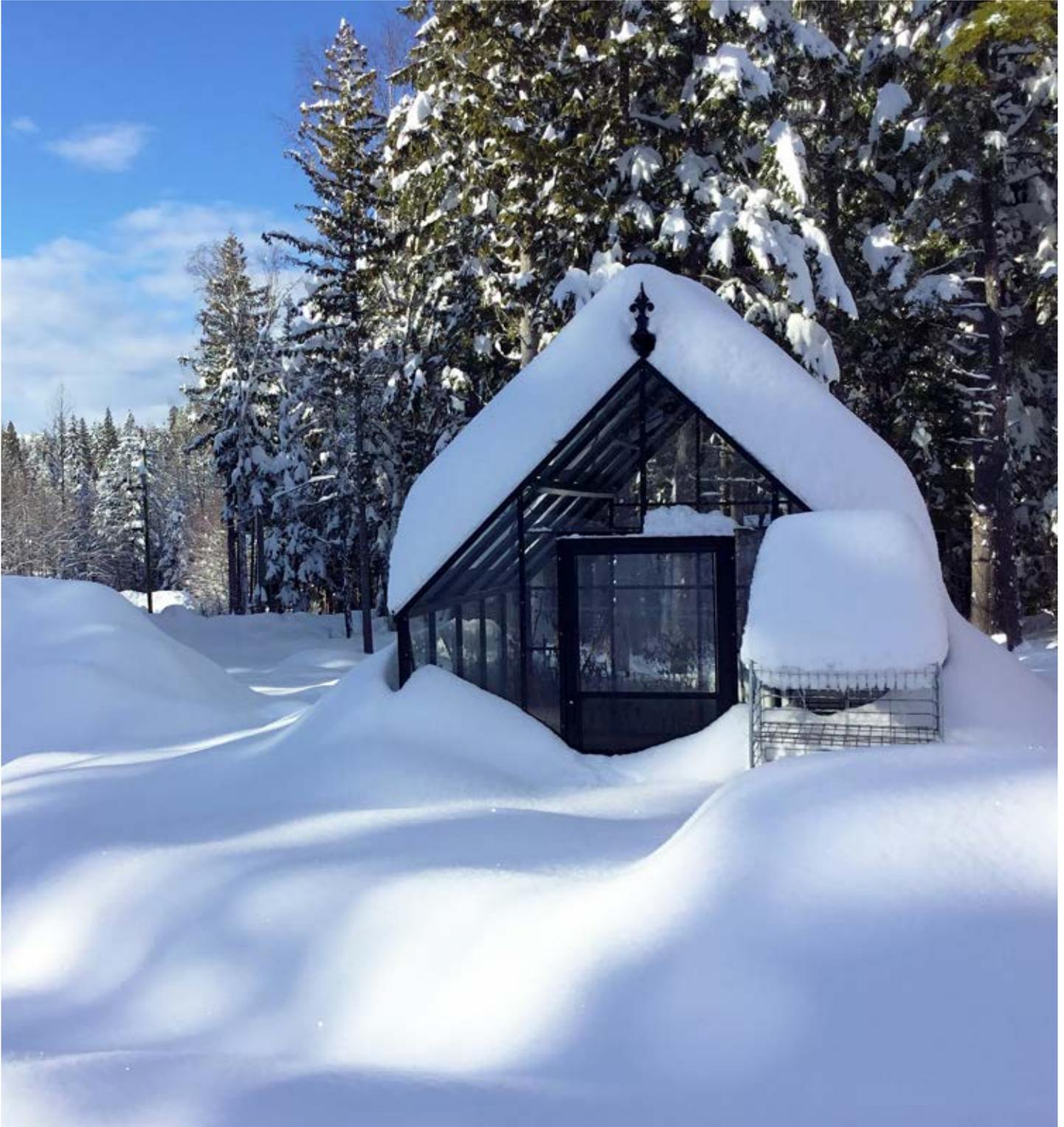
Did you know we have a guide devoted to helping you with your greenhouse foundation questions?

For expert tips and to learn the top seven things you should know before you break ground, check out "[The Essential Guide to Greenhouse Foundations.](#)"



# Year-Round or Extend Your Growing Season?

The most common reason people choose to buy a greenhouse is to extend their growing season. However, some want to grow their fruits and vegetables year-round. Our greenhouses are designed to withstand North American climates with strong frames, weather resistant gaskets and more.



Greenhouse gardening becomes such a passion for our customers. It starts with tasty summer tomatoes, then goes into trying to grow winter greens, to trying out a full cold weather crop! At that point, you have great options. You can choose supplemental lighting, adding heat or an evaporative cooler to control your greenhouse temperatures. We encourage you to think of it as a science experiment filled with trials and successes and a lifetime of enjoyment.



**Cool, Warm, or Hot House?** Generally, there are **three types** of greenhouse gardeners that create different growing environments depending on their needs.



**A Cool House:** If you live in a mild climate and want to winter over your plants, a cool house is probably your perfect fit. A greenhouse with single glass sidewalls and a twinwall polycarbonate roof allows for optimal growth in the spring and summer. This greenhouse would maintain a night temperature of 40 - 45 Fahrenheit (5 - 7 Celsius).

**A Warm House:** If you live in a cold climate but want to grow citrus trees, orchids, or foxgloves; a warm house might work well for you. One of our Cape Cod greenhouses with fivewall polycarbonate may be a great fit and will need very little additional heat. The night temperature would hover around 55 Fahrenheit (13 Celsius). The fivewall polycarbonate glazing allows for the best combination of light transmission and heat retention. The steep pitch roof of the Cape Cod would also shed snow easily.



**A Hot House:** Hot houses are designed with growing tropical plants in mind and would require a night temperature of 60 Fahrenheit (15.5 Celsius) and higher. In this case, we would recommend double glass to help with energy efficiency and adding supplemental heat sources to keep the temperature within a steady range. If you already live in a warmer climate, some of these options may not be needed.

# Permits and Your Greenhouse

From our experience here are some of the first things you should know about permits.

## How to know if you need a permit:

Securing a permit depends on many factors including the municipality's building codes. As you can guess, these codes vary from county to county and even city to city. Other factors include what foundation you choose, proximity to property lines, glazing and size of your greenhouse.

We have found that structures less than 120 square feet (10x12 and smaller) do not usually require a permit for a non-permanent structure. Many municipalities consider a wood foundation for a greenhouse to be temporary. Check with your planning department to confirm this is the case for your greenhouse.



## How foundations factor into permitting:

When choosing your foundation, permitting is something to keep in mind. Typically for larger, more complex greenhouses or home-attached greenhouse projects, a permit for your foundation might be required. You can find out more on permits and your foundation in **"The Essential Guide to Greenhouse Foundations"**.

## What to do before filing for a permit:

Before connecting with your city or county planner's office, it's a good idea to have a quote from your greenhouse expert and a foundation/greenhouse dimension sketch from us. **It also may be handy to have one of our catalogs, which you can [order for free on our website](#)**, to show our standard wind and snow loads (85 mph winds and 32 psf for snow as a minimum). These documents help the planning department to understand your greenhouse is a quality product, that is not going to degrade easily, fall over in a storm or look unsightly in the neighborhood.



**"Many municipalities consider a wooden greenhouse foundation to be temporary."**



# Additional Resources

## BC Greenhouse Builders Blog

Regularly updated with greenhouse tips and tricks including maintenance, growing advice and more.

→ [blog.bcgreenhouses.com](http://blog.bcgreenhouses.com)

## BC Greenhouse YouTube Channel

An assortment of how-to videos and expert tips right from our team!

→ [youtube.com/user/BCGreenhouseBuilders/videos](https://youtube.com/user/BCGreenhouseBuilders/videos)

## Donna Balzer

Garden expert, regular guest on CBC radio and host of internationally aired Bugs & Blooms on HGTV.

→ [www.donnabalzer.com](http://www.donnabalzer.com)



## Our 'Ultimate Guide to Planning Your Greenhouse' Series

Part 1 . . . First Steps to Buy a Greenhouse

Coming Soon:

Part 2 . . . Designing Your Greenhouse: Inside and Out

Part 3 . . . What to Expect When You are Expecting a Greenhouse

Part 4 . . . Staging Your Greenhouse: From Containers to Climate Control

Part 5 . . . Greenhouse Maintenance and Tips for Extreme Weather Events

Part 6 . . . Greenhouse Gardening from the Experts

## About Us

BC Greenhouse Builders is a family owned and operated greenhouse manufacturing business founded in 1951. Henry Heinen, a long-time company employee, purchased the company in 1972 along with his wife, Greta. With Henry's expertise in design and manufacturing, he successfully created the highest quality greenhouses that were unmatched in structural strength. The business continues to grow and expand into further markets with Rick Heinen now leading the charge. BC Greenhouse Builders offers an impressive variety of hobby and commercial greenhouses as well as spectacular estate greenhouses. The one constant in over 70 years in business is our commitment to customer service and a premium quality product.

Written by Angela Drake, Hannah Nicklas

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# BC Greenhouse Buying Checklist

## Type of greenhouse

- Freestanding    Lean-to    Gable-attached

Cape Cod

### Value Model

Cottage

The Legacy

Pacific

The Parkside

Traditional

The Sunhaven

## Glazing choice:

### Single Glass

3mm

6mm Full Sheet

6mm Laminated

### Double Glass

16mm

Low-E option

### Polycarbonate

Twinwall  
Polycarbonate

Fivewall  
Polycarbonate

Mixed Glazing (please describe below)

Q: How many seasons would you like to use your greenhouse?

A:

Q: Do you plan to use your greenhouse as a living or growing space?

A:

Q: How much snow does your area typically receive on an annual basis?

A:

Q: What are the typical wind speeds during a storm in your area?

A:

## What size?

Our Greenhouses typically are sized in 2' increments, but we can custom size to your needs.

(length x width in feet)

## What color?

White    Brown

Green    Black (additional charge may apply)

## What type of foundation do you plan to use?

Concrete

Wood

Other: Let your greenhouse expert know your plans so we can build the greenhouse to your needs.

## Do you plan to have a knee wall?

Yes    No    Still Deciding

If yes, how tall will it be in inches. (This information is needed to figure out your door drop.)

CLICK HERE



To submit this checklist digitally and right to our team, [click here](#).



 **BC GREENHOUSE**  
BUILDERS LIMITED

MANUFACTURERS OF



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