

Frequently Asked Questions

(And Answers)

How do I know which greenhouse is best suited for me?

Many factors come into play in this part of the decision making process. Some important items to consider are:

- Code Requirements – Not all greenhouse frames are designed to meet all codes
- What type of crop are you growing? Will it be grown on the floor, benches, or supported from the greenhouse frame?
- What are you going to use this greenhouse for? Will you be growing or retailing?
- Who is going to do the construction? Will you and your staff be constructing or will you hire a contractor?
- What are your expansion plans?
- What kind of budget are you working with? Some specific items to consider are:
 - Basic frame, covering and equipment package
 - Site preparation
 - Plumbing
 - Electrical
 - Lighting
 - Concrete – concrete walks vs. complete concrete floors and piers
 - Labor to erect greenhouse
 - Water containment – is it required by your state?
 - ADA requirements – parking, accessibility, etc
 - Shade systems

Can the greenhouse be attached to an existing slab or stem-wall?

While this is possible, we have found that the most efficient and cost effective installations are made on a flat parcel of land without encumbrances such as concrete, trees, or rock. Attaching to a stem-wall or slab requires several additional steps including determination of the load bearing capacity of the wall or slab. If these structures have been in place a long time, the necessary information may not be available. Even if they were recently completed, there could be a problem if the capacity is not sufficient.

I want to attach the greenhouse to the shop building, is that a problem?

It could be. Your Stuppy representative should be told of your desire. We can then help you decide whether this would be a good idea and whether or not it is cost effective. Each and every conventional building is unique in many ways. Flashing and caulking are often complicated and expensive.

How far away from buildings, trees, and football stadium lights do I need to be?

Shade and lighting will definitely effect plant growth. These factors should be taken into consideration in planning the location of your greenhouse. Locating the greenhouse near an area with night lighting may limit the types of crops you can grow.

I want you to see the location, can you stop by?

Most definitely, in fact - unless there are unusual circumstances - we will insist on visiting the site.

What about future expansion?

Always advise your Territory Sales Manager of your long term expansion plans. If you have not given any thought about future expansion, please do so. Planning ahead could save money in labor and materials. It is recommended to do a plot layout for material and crop movement both in and out of the structure as expansion can be side to side or end to end. It is important to think that everything is meant to flow. One of the most common remarks we hear from growers is – “I wish I had built twice as much! I’m already out of space.”

Will there be any assistance after the sale?

Stuppy is renowned for superior customer service. In addition to visits by your Territory Sales Manager, your internal project manager and tech support will continue to be available in case any problems or questions may arise. To contact a member of your support team, we have toll-free phone and fax numbers, plus email to access Stuppy staff. In addition, you will receive a comprehensive service manual that will answer most questions about your new greenhouse.

Which is better: concrete slab, gravel, or sidewalks and gravel?

If the budget allows, we recommend a concrete slab. This provides maximum flexibility with minimum maintenance. We also recommend a pier footing for columns, which means that a slab could be added at a later date. However, if this is contemplated, provisions for door and equipment placement should be made with those plans in mind. If gravel is used, a 4" depth is recommended. ADA requirements state that you must have a slab work area.

How should we design the slab to drain the water?

A sample plan is included. A final design will depend on the final size of the house and your decisions concerning general drainage.

Why is a 10' sidewall better?

A higher sidewall provides more flexibility for equipment and accessories. From curtain systems to grow lighting, the additional space will allow for easier installation and will reduce conflicts. A house with a ten-foot sidewall height also allows for a better shopping environment for your customers because the temperature is typically lower inside a greenhouse with a higher sidewall.

Do building permits and codes apply to us?

Building officials are generally very concerned about the design of structures that are going to be used as retail greenhouse environments. Stuppy has designed all of our standard models to meet general code requirements for the region in which they are offered. On occasion, a specific locality or code official may impose additional requirements. Stuppy has been successful in meeting design upgrades in a most efficient manner. We suggest you discuss your requirements with your local code official. This added step eliminates the risk of your construction being shut down.

Do I need to contact any other state officials?

For example: In the state of Tennessee, you must have the approval of the fire marshal before construction can begin. This is a state law. They will need to approve your stamped engineered drawings before a permit will be issued. The best route would be to check with your local code officials.

How soon can I get the blue prints?

Specific prints for your structure will be submitted for approval; or made available before construction if submittals are not required. Your written purchase order must be received before construction blue prints will be sent.

How soon can you ship the greenhouse?

The short answer is two to six weeks after approvals. However, the long answer is much more complicated. Our experience is that the policies and practices of the institutions, boards, and even state agencies will require a series of submittals and approvals before a contract or purchase order can be issued. The availability of construction crews may also impact the delivery of the greenhouse. You can be assured that Stuppy will meet the delivery schedule best suited for your project.

Is freight included?

Prepaid freight is available under our payment terms. Someone must be available to sign for the shipments. We will cover the complete details of receiving your shipment and checking it in before anything is sent. Specific receiving procedures must be followed in cases of shortages or damages. Your staff should be made aware of these procedures.

Can we build the structure ourselves?

That, of course, depends on the level of expertise of the individuals or maintenance staff. It is also important to pay attention to the sections of this book regarding checking in and identifying parts. For example: A novice builder is more likely to use a 2" bolt instead of the 1-1/2" which means the 1-1/2" bolts left at the end will be too short for the intended purpose.

Can you show me how to set up watering?

We have sample layouts and will be happy to work with you to design a watering scheme for your selected greenhouse design.

Are all the mist table supplies included?

We do not supply any PVC or steel pipe.

How many water hose bibs do I need?

Our basic layout gives general recommendations. Adding more bibs is a matter of choice and budget.

Are ADA doors required?

Your local building code will determine this. Typically, at least one door is required to be handicap accessible. Doors equipped with emergency panic hardware are available. Most building codes require an emergency egress plan.

What kind of interior lighting do I need?

Our basic layout includes suggestions for basic lighting. If the greenhouse will be used to support night classes, additional lighting may be required. Lighting for plant growth enhancement would be additional and can be specified as an option.

Do we need to be hooked up to sewers?

Local building codes may require a hookup. Please check with your building department before making specific plans.

Your price is higher – why?

At Stuppy we try for “no surprises.” Our budget estimates included a complete itemized list. We can make suggestions on how to reduce your costs and what items can be eliminated or sourced elsewhere to create savings. When comparing two quotes, it is important to consider all factors. Remember that a low dollar total is not the most important thing – a complete greenhouse package is. Be sure to research your list of materials.

What do I need to do to activate an order?

A purchase order or contract for the full dollar amount must be received along with approved submittals and any additional paperwork required in your bid packet.

Are any special tools or equipment needed to construct or unload the greenhouse?

Having a forklift will make the unloading process much easier. These can be rented for reasonable amounts if you do not have one available on site.

Which is better – automatic controllers or thermostats?

A controller will cycle equipment automatically to provide desired temperature. It has a lockout feature to prevent heaters and fans from running at the same time. This is a common problem with thermostats. A thermostat is required for each piece of equipment. Plus, it costs more to run the electric wiring for thermostats. With new controllers you can access from your PC and monitor, change, or record settings and variances. There are many types of controllers that include “DIF.”

What does a horizontal airflow (HAF) fan do?

These fans are designed to circulate heat and air. They use fractional horsepower motors to save energy. Multiple fans are needed depending upon the size of the structure.

Why do I need air circulation?

Air circulation is needed to keep the heat from rising to the top of the structure in the winter and to keep the greenhouse from developing micro-climates where mold and fungus can develop.

What is the first stage of ventilation?

On spring and fall days when temperatures are cool outside, but sunshine pushes inside greenhouse temperature above set point, your controller will call for first stage of ventilation. A fan-jet with convection tube or a horizontal air flow fan with a two-speed exhaust fan and shutter sized for 800-1000 CFM. The grower preferred method is the HAF fan with a two-speed exhaust fan to reduce noise levels in the greenhouse.

What is the second stage of ventilation?

When the greenhouse temperature continues to rise and minimum ventilation is not sufficient, the controller will call for second stage ventilation. Second stage ventilation will open the rigid vent door (or shutters) and turn the two-speed fan from low to high. It will also turn on the second fan (or fans) and close the upper gable shutter so that the air coming into the greenhouse is moving through at crop level to cool the plants by transpiration.

What is the third stage of ventilation?

When the second stage of ventilation fails to hold temperature, the third stage will turn on the evaporative pad pump and turn off the HAF fans. Heat will rise and remain in the upper gable and cooler air will be moving through at crop level.

What kind of controller do I need?

There are various types of controllers on the market today. The size of the control you need will depend on the number and size of your structure(s), the equipment, and staging requirements. The best thing to do would be to consult with your territory salesman to discuss your needs and come to a decision together.

What utilities do I need at my greenhouse site?

A greenhouse requires sizable amounts of electricity and natural gas. Power and gas lines are expensive to run. A location with power and gas on site may be more valuable than one without utilities. Also, check for easement requirements to bring any nonexistent utilities to the proposed greenhouse site.

What kind of water supply do I need – quantity and quality?

Each year you will need up to 6 acre feet of water for every acre of greenhouse. Water sources included wells, ponds, or city utilities. Pumping water into holding tanks or ponds and then pumping from these large reservoirs at high demand times can use low-yielding wells. Not all water is suitable for irrigation purposes. Before using any water, have it tested by a commercial water testing lab that has experience in greenhouse water requirements. State and local health department water tests will not alert you to excessive sodium, iron, or pH problems that should be corrected before using the water for plant irrigation. Pond water may need to be chlorinated at the time of use to kill algae and root rot organisms.

Do I need electrical outlets?

Yes. Mist controller, watering controller and Step 50 controllers all require an outlet. It is always good to have a couple of extra covered outlets at bench height in case you want to move things around. Power service should allow for future expansion.