

8x12 Cedar Greenhouse Assembly Manual

Made with North American Western Red Cedar

www.CedarShedAndGardenKits.com info@CedarShedAndGardenKits.com

Thanks for your interest in the 8x12 Greenhouse ~ John and Pat

Delivery is Free from the Factory to your Home, Farm, Ranch or Business

Please review this Assembly Manual and the Spec Sheet thoroughly before ordering. We want you to become familiar with all of the tools required and where and when assistants may be necessary. More than anything we want this to be successful and FUN!

Standing just over 8 ft. tall at the peak and eight ft. wide, there is plenty of room for growing and relaxing. The unit comes with over 22 lineal ft. of cedar shelving providing you with many options on how to organize your plants, dirt and tools.

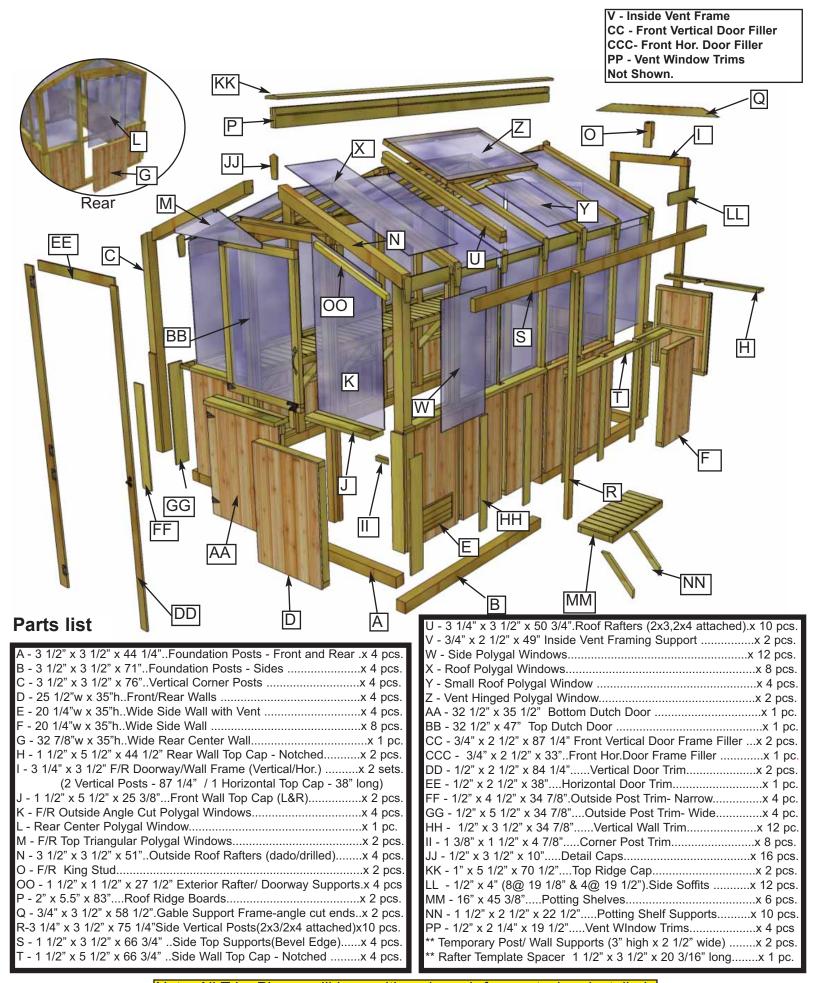


Plenty of room to grow your plants in our 8x12 DIY Greenhouse. Easy to assemble and made with Western Red Cedar, known for its beauty, strength, and durability. Plants like tomatoes and peppers can be planted early in the greenhouse and later moved out to your garden so you can get an early jump on your growing season.

Customer agrees to hold OLT Manufacture and Shed and Garden Kits LLC, Authorized Dealer, free of any liability for improper installation, maintenance and repair.

In the event of missing or broken pieces, please call the Customer Support Line within 30 days of the delivery of your kit. You'll find the number in your Assembly Manual that comes with the kit. It is our commitment to you to deliver replacement parts, free of charge, within 10 business days of your notification. Replacement parts will not be provided free of charge after the 30 day grace period.

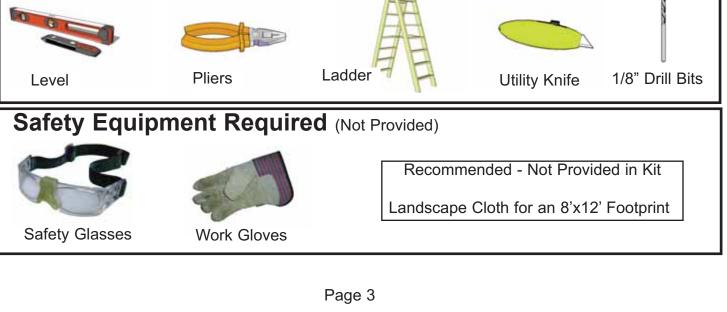
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Note: All Trim Pieces will be positioned rough face out when installed.

8x12 GREENHOUSE HARDWARE SHE Hardware Kit (Provided) 3/4" Black 3" x 200 1 1/2" 2" 2" Finishing x 100 2" Square Drive Bit 200000000 x 10 1 1/4" 3/4" 6" Lag Screw x 8 Silver Black Drop 3/8" Washer x 8 Pull Handle Latch Tee Hinge x4 **Heat Activated Hinge** with Hardware x2 Caulking x 4 Silver Barrel Bolt Tools Required (Not Provided)





Selecting a Location for Your Greenhouse

Walk around your property and make notes of the following: sunny spots slope of the land light blocking trees and high buildings.

Don't hide your greenhouse away in a dark corner of the garden. Make it an attractive feature.

Ensure it has easy access to it and around it, to enable essential glass cleaning and general maintenance.

Place the Greenhouse on a level piece of land with good drainage. Take into account existing paths and utilities such as electricity and water.

Having a water supply at hand avoids carrying heavy watering cans from the tap to the plant.

Choosing a Foundation & Flooring Material

Dirt - A dirt floor is the most inexpensive flooring option but it will be messy! Water will be absorbed easily and you can benefit from the natural heat.

Sand & Gravel - A sand and small gravel floor is also an inexpensive foundation option. Provides excellent drainage and easy to keep clean.

Concrete - When considering using a concrete floor, seek out a professional to pour the concrete and be sure to add water drains. Concrete floors also are great for holding heat and easy to clean and maintain. The downside of having a concrete foundation is that it is permanent and more costly.

Brick/Stone - Brick or stone floors are also a good option providing you leave adequate spacing between the bricks/stones to will allow water to drain and absorb into the ground. Bricks and stones also hold heat and are a good choice if cold weather is going to be an issue for your greenhouse.

After you have decided on the proper greenhouse foundation/flooring, it's important to take your time and install it properly. Be sure to remove any sod, grass, weeds, etc.. Always start with a packed and leveled dirt floor. By building your foundation as square and solid as possible, your greenhouse should bring years of enjoyment to you.

Cleaning and Maintanance an Outdoor Living Today Greenhouse

Polygal - polycarbonate sheets— Simple cleaning will give longer and better service life. Rinse sheet with water. Use warm soapy (mild liquid dish soap) water to clean sheets. If any dirt remains, gently wipe off with a soft cloth. Apply final rinse and dry with soft cloth to prevent water spotting.

DO NOT use sponges, squeegees, brushes or sharp instruments as they may damage the UV protective coating.

Western Red Cedar Wood- Can be left to naturally weather to a silvery grey color or you can apply an exterior wood finish to keep the look of the original wood color. If choosing a finish, let the wood acclimatize under cover for two weeks and seal according to the paint manufacturer's specifications.

Types of Finishes:

Opaque Coatings & Semi-Transparent Stains. Opaque Coatings provide the most surface protection against weathering but will conceal the wood's natural characteristics. Semi-Transparent Stains may be latex or oil-based and will show the woods natural characteristics better. Semi's generally have a shorter service life of between 2-4 years.

We recommend applying any sealants to individual pieces first before assembly and letting them dry to the paint manufacturer's directions.

Dirt is the most benign cause of discoloration and not usually a problem. A periodic cleaning with a mild detergent solution will usually restore the surface finish. Mildew is a common cause of discoloration of paint, solid-colour stains and natural finishes. Restaining does not solve a mildew problem. When it is time to refinish, clean off the mildew with a commercial mildew-remover then refinish with a coating that contains an effective mildewcide.

We recommend using a Sand & Gravel Foundation and Floor System because it is simple and cost effective to complete. Basic instructions are

A. Foundation highlighted below.

Material List:

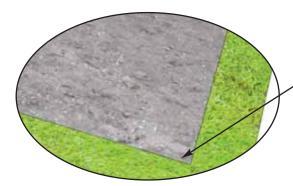
One Cubic Yard of Sand- to cover 9'x13' - 2" deep. Landscape Cloth - to cover 8'x12' footprint. 4x4 Cedar Foundation Framing - Included in Kit (Parts A & B). Two Cubic Yards of Gravel (small) - to cover 8'x12' - 4" deep. 4 Tie Down Kits or 16 pcs -12" long Rebar - Optional.

Instructions:

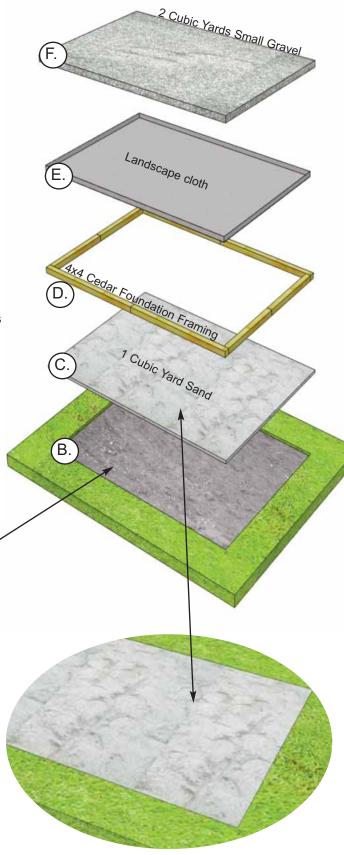
The first step to building a greenhouse is constructing a foundation, but before you begin you should have a level site prepared.

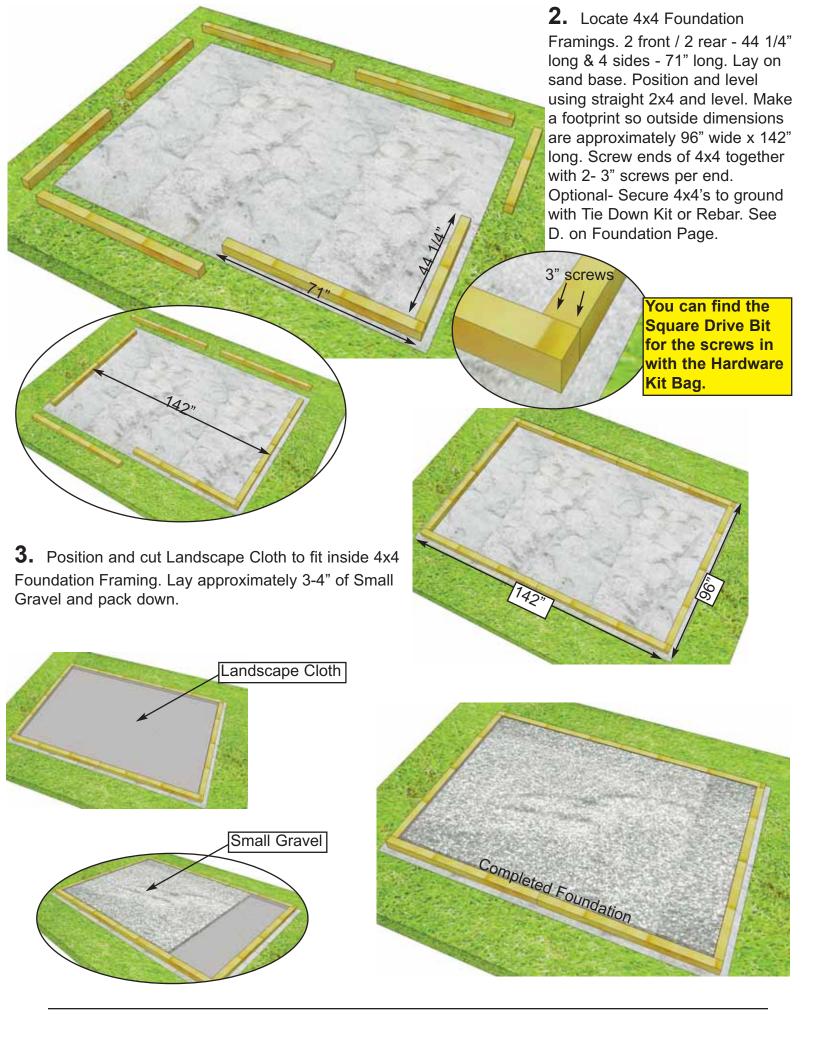
- A. Choose appropriate site.
- **B.** Excavate 9'x13' area to a depth of 2-3" and level dirt base.
- C. Lay Sand approximately 2" deep on base. Pack and level.
- **D.** Position 4x4 Cedar Foundation Framing on level sand base. Angle screw 4x4's together with 3" long screws (included). Make sure your 4x4 footprint is square. To do this, use your tape measure, and take two diagonal measurements of the base (One from the front left corner to the back right corner and the other from the front right corner to the back left corner). The base needs to be adjusted until the two measurements are the same. Optional- Secure 4x4's to the ground with Tie Down Kit or drill and hammer 16 -12" long Rebar pieces through 4x4's into the ground...
- E. Lay Landscape Clothe and cut excess fabric around the edges. Make sure you use a ground cover (also called weed barrier) that is made for landscaping and not black plastic or a tarp. Ground cover will allow water to drain through the fabric while keeping weeds from growing in your greenhouse.

F. Pack approximately 4" deep of small Gravel to complete foundation and floor.

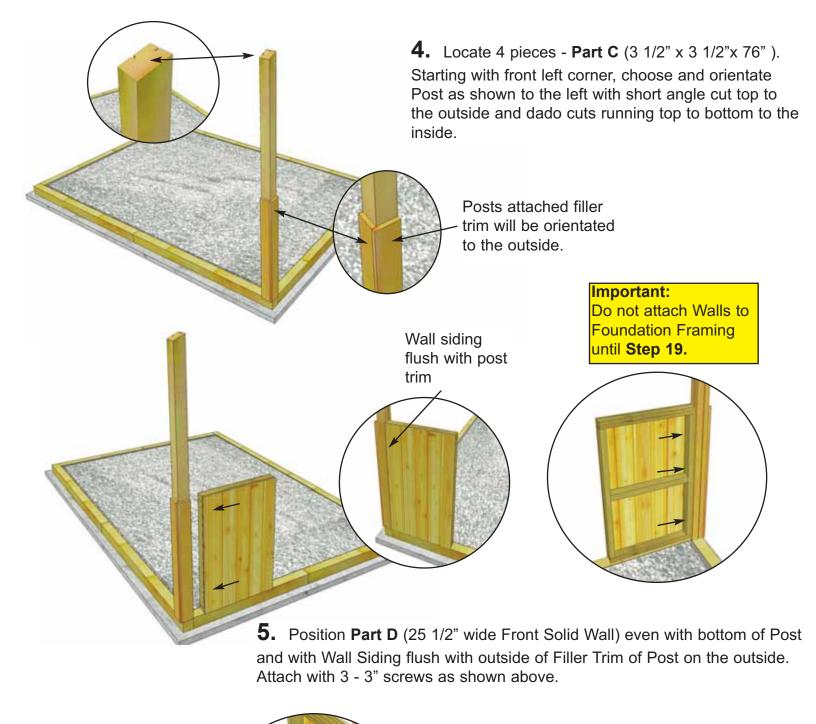


1. Excavate a site that is approximately 9'x13' - 2" deep. Level dirt base using a straight 2x4 piece of lumber and level. Make sure to leave enough space to allow for easy access around the Greenhouse once the unit is assembled. Lay approximately 2" of sand in base, pack and level.

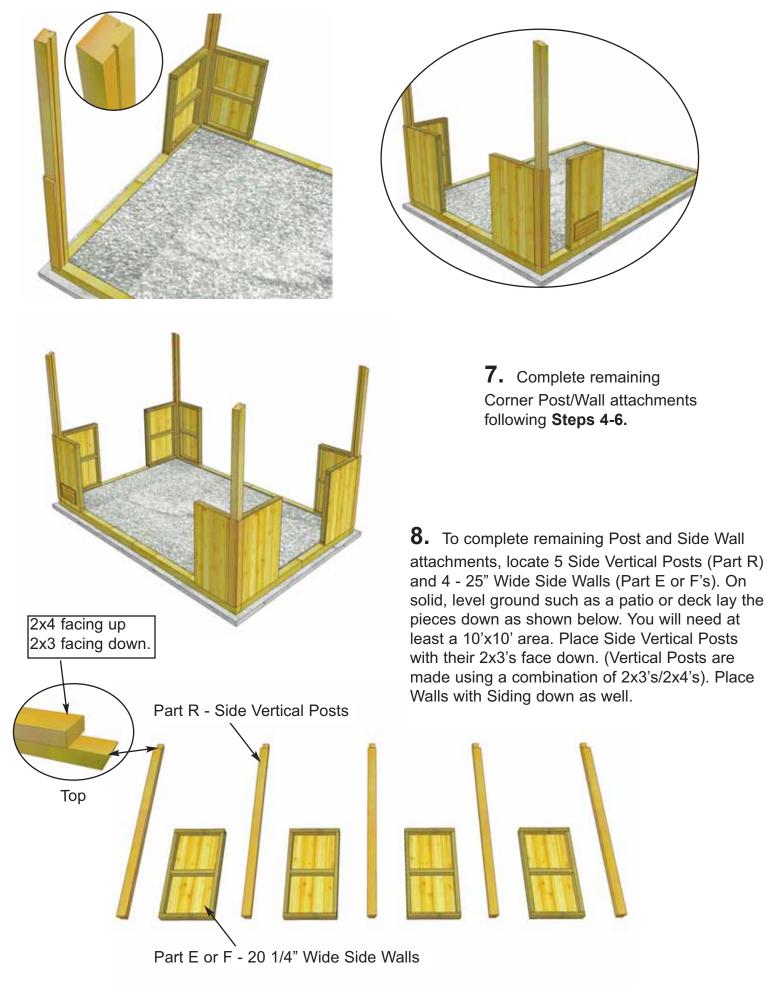


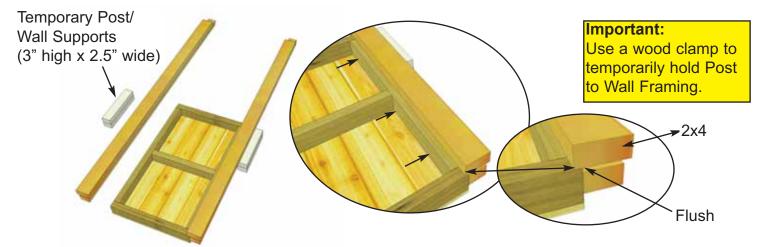


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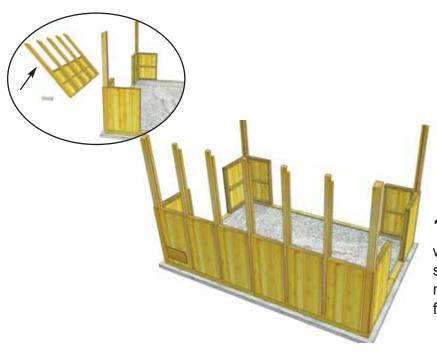


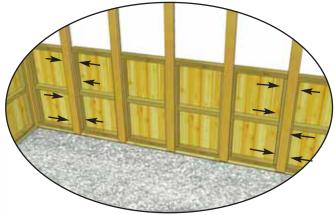


9. Position Post R against Wall Framing as shown above. Make sure Post is flush with bottom of wall framing. Locate Temporary Post/Wall Supports (3" high) and place underneath 2x4 edge and touching 2x3 as shown above. Clamp and attach Post to wall framing with 3 - 3". Do both sides.

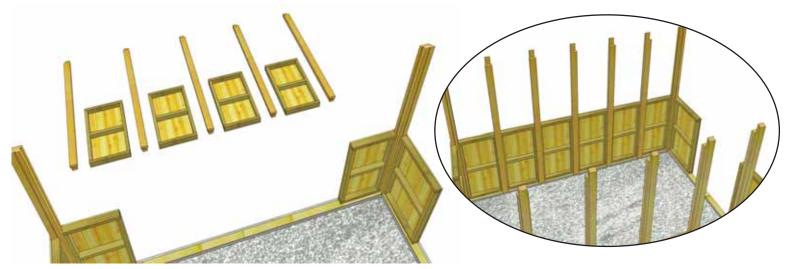


10. Repeat **Step 9** until four 20 1/4" wide Side Walls are attached.

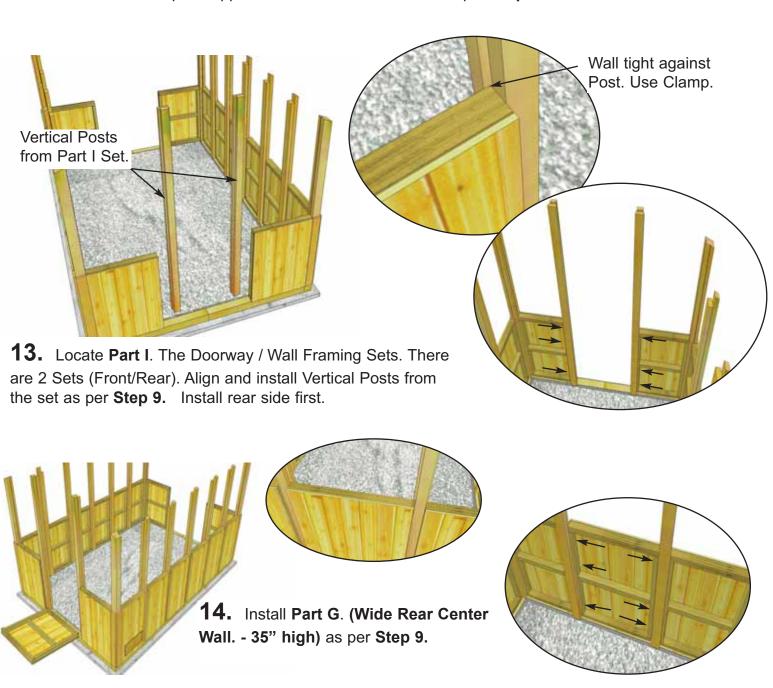




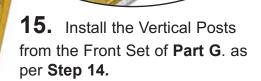
11. With a helper, carefully lift up completed wall section and place between corner wall/post sections. Align and attach as per **Step 9**. Be mindful that corner Side Wall bottom framing is flush with bottom of Side Vertical Post.



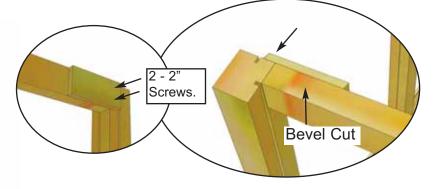
12. Complete opposite Side Wall attachments as per **Steps 9-11**.



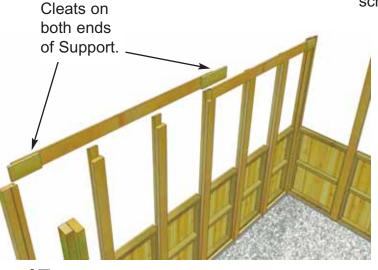


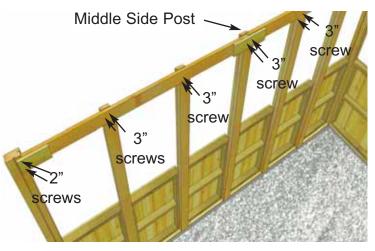




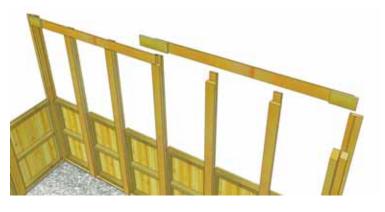


16. Locate Part S - Side Top Supports with a Bevel Edge. There are 2 pieces per side. Starting with Support with only one Cleat on the end, position on top of Side Wall Posts. Align Cleat end tight against Corner Post and attach with with 2 - 2" screws as shown above.



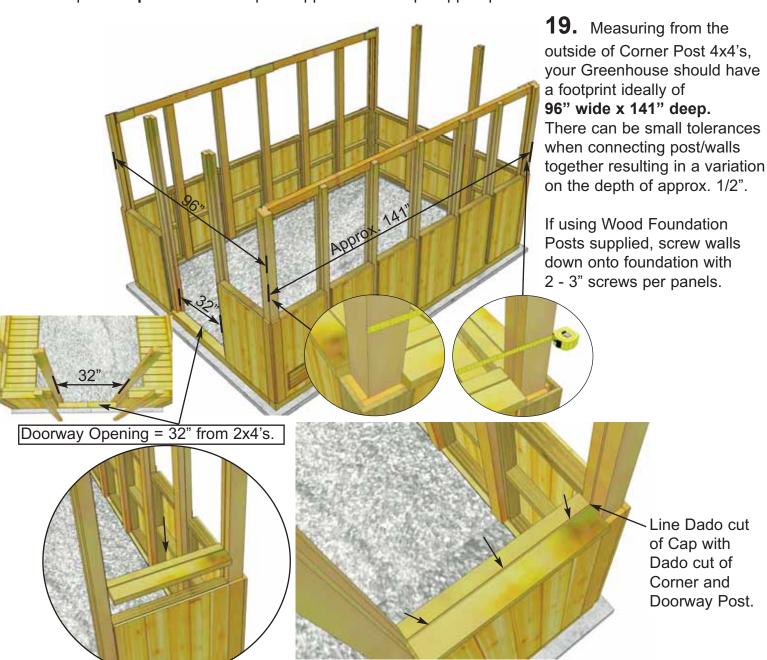


17. Position and attach Side Top Support with Cleats on both ends as per **Step 16**. Attach Corner Post(s) End first with 2 - 2". Align Supports equally on middle Side Post and attach with 2 - 3" screws. Attach remaining interior Posts with 2 - 3" screw as shown above.





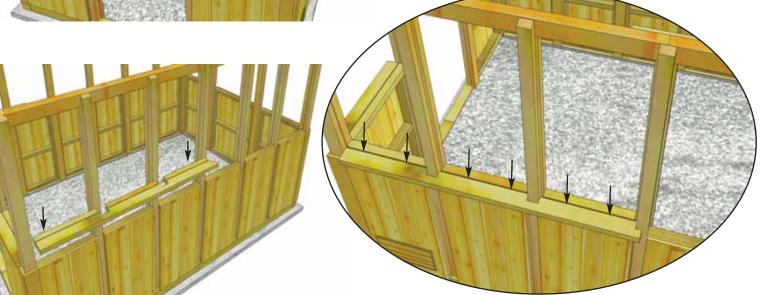
18. Repeat Steps 16-17 to complete opposite Side Top Support pieces.



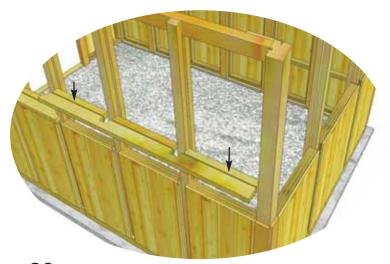
20. Locate Part J - Front Wall Top Cap - 1 1/2" x 5 1/2" x 25 3/8" - Right Side. Position on top of Front Wall so dado cut of Cap lines up with dado cut of Corner and Doorway Post. Note - the cap has a slight bevel cut that will be facing to the outside to direct water away from the Greenhouse. Attach with 3 - 3" screws in dado cut line on slight angle. Sink screw head below wood so Polygal window sits down in the dado cut.



21. Repeat **Step 20** to attach Left Side Front Wall Top Cap.

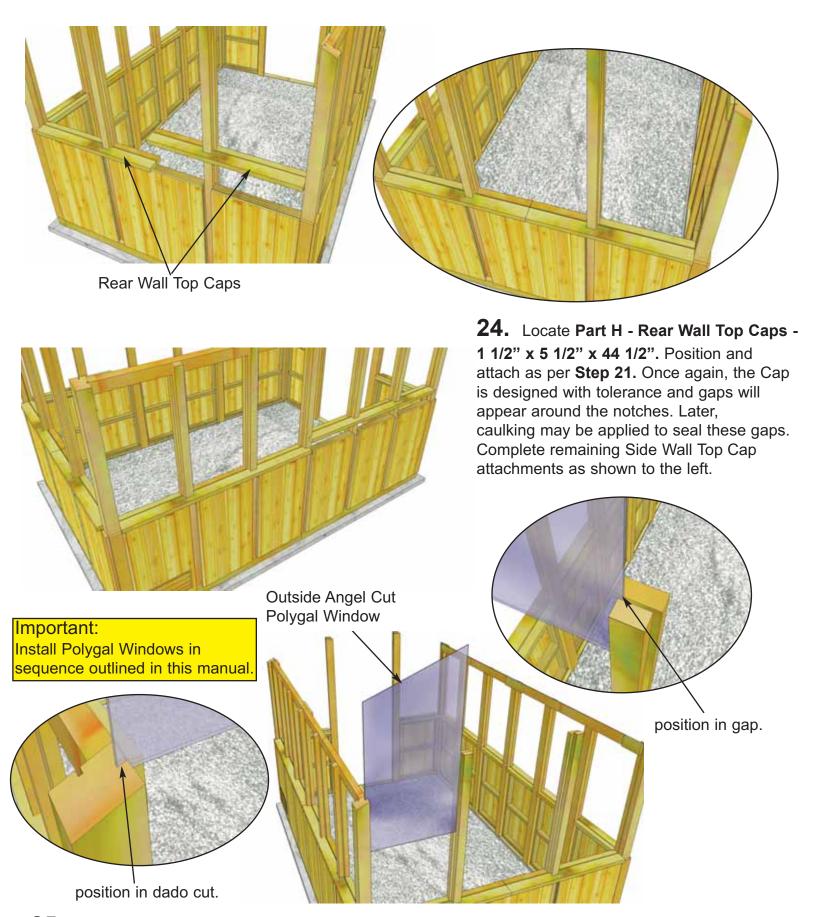


22. Locate Part T - Side Wall Top Caps - 1 1/2" x 5 1/2" x 66 3/4". Position and attach as per Step 21. The Cap is designed with tolerance and gaps will appear around the notches. Later, caulking may be applied to seal these gaps.

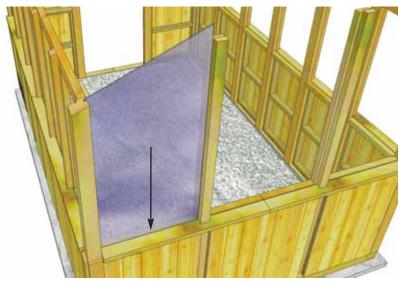


23. Complete Side Wall Top Cap on one side. Depending on your footprint measurement, a gap of 1/8" to 1/2" could result where Caps meet in the middle. You may use caulking later to seal the gap.

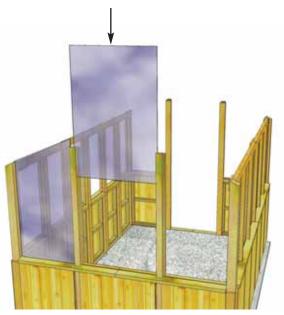


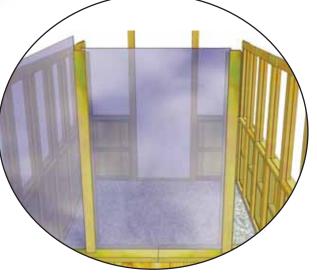


25. Locate Part K - Outside Angle Cut Polygal Windows - 26 1/2" wide. Peel protective plastic layer off first sheet noting correct side out. On a step ladder, lift window up and position in the top Corner Post dado cut and in the gap of the Doorway Post. Slide down.



26. Slide **Window** down into the dado cut of the Top Cap.

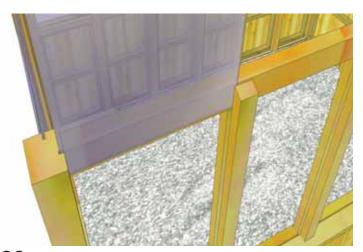




27. Locate Part L - Rear Center Polygal Window - 33 3/4" wide. Once again, peel protective plastic layer off first and note correct side out. On a step ladder, lift window up and position between gap of Doorway Posts. Slide down and position as per **Step 26**.



28. Locate a second Part K - Outside Angle Cut Polygal Window - 26 1/2" wide. Position as per Step 25-26.

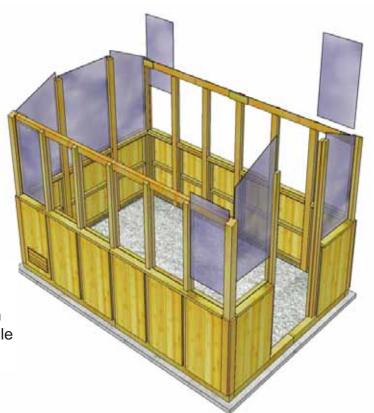


29. Locate Part W - Side Polygal Windows - 21" wide x 37" long.
Position as per Step 25-26.



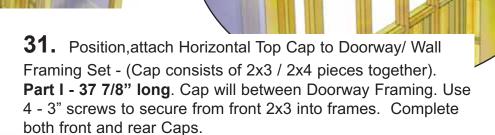
30. Make sure the **Window** Slides down into the dado cut of the Top Cap.

Position remaining corner Polygal windows as shown to the right. (3 outside Side Windows and 2 front Angle Cut Windows.)

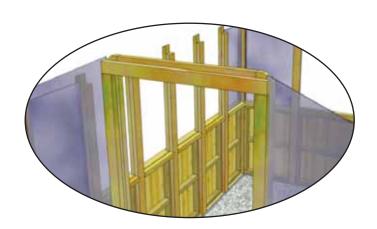


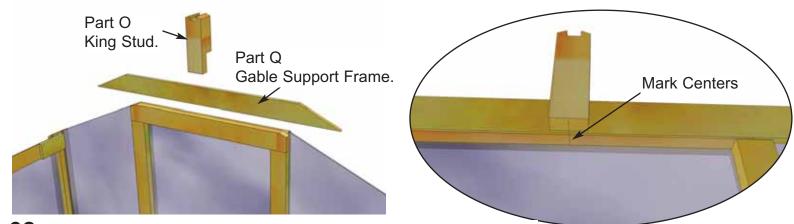
2x3 / 2x4 Top Cap. Align 2x3 to outside.

2x4 of top cap will sit between doorway framing. Screw 2x3 to frames.



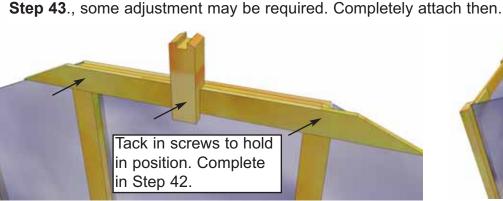


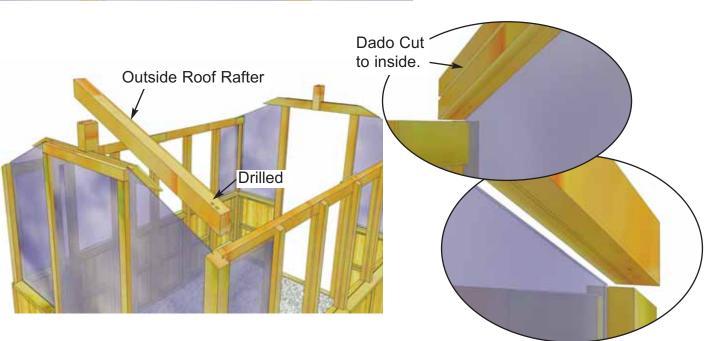




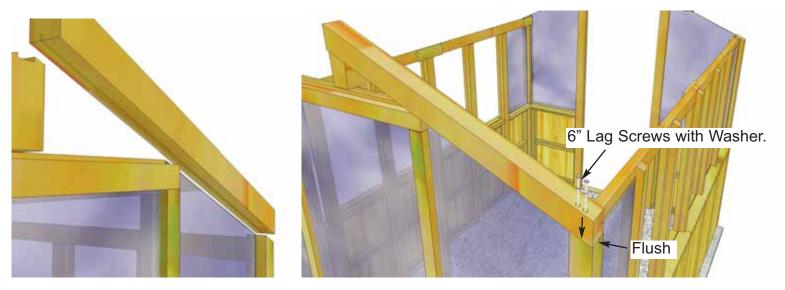
32. Locate Parts O & Q - King Stud and Gable Support Frame.

Using a tape measure, mark centers on bottoms of Horizontal Top Cap / King Stud / Gable Support Frame. Center Gable Support on Cap and tack together only with 2 - 2" screws. Center King Stud on Support Frame and tack also with 1 - 3" screws. Complete both front and back pieces. In

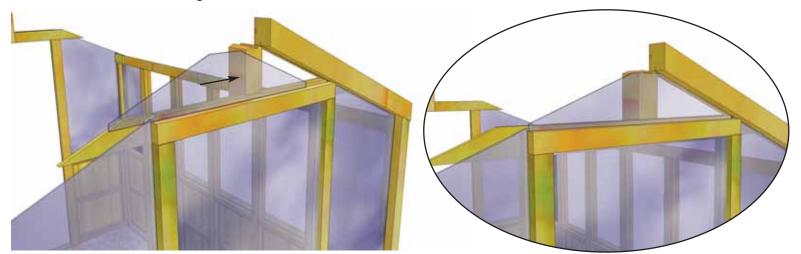




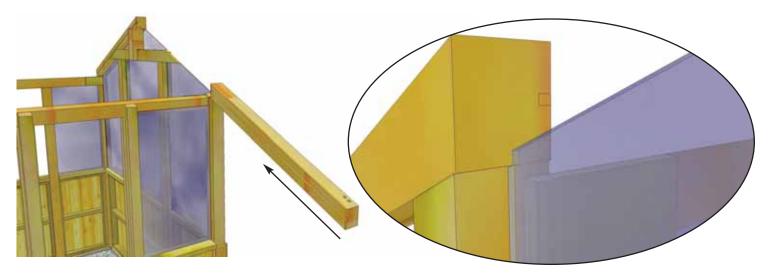
33. Locate Part N - Outside Roof Rafters - 3 1/2" x 3 1/2" x 51". There are Left and Right Rafters. Starting with a Right Rafter as configured above, lift up and position on Post.



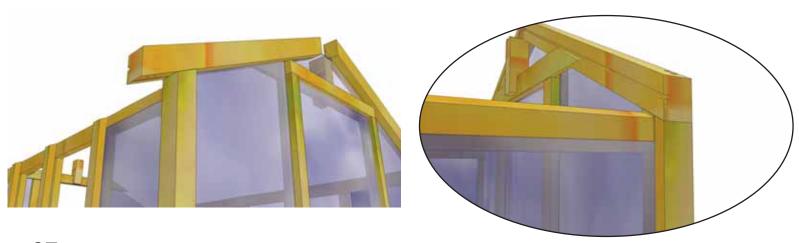
34. Position Rafter so end is flush with Corner Post and Outside Polygal Angle Cut Window slides into dado cut of Rafter. When orientated correctly, start 2 - 6" Lag Screws with 3/8" Washer with a hammer and tighten with 9/16" socket.



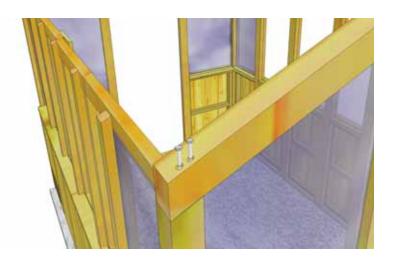
35. Locate **Part M - Top Triangular Polygal Windows**. Slide Window in Top Cap gap and into dado cut of Rafter.

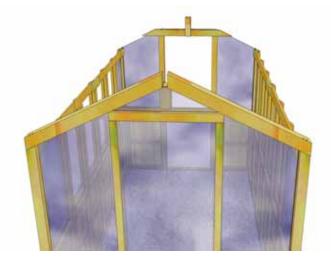


36. Locate Left Side Rafter and orientate as shown above. Once Outside Polygal Angle Cut Window is sitting in dado cut of rafter, carefully slide Rafter up.



37. Carefully Slide Rafter up until end of Rafter is flush with Post as shown above. Make sure Angle Cut Window and Triangular Window stays in dado cut of Rafter.

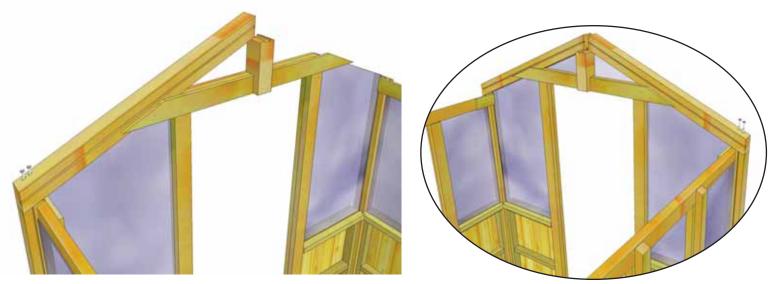




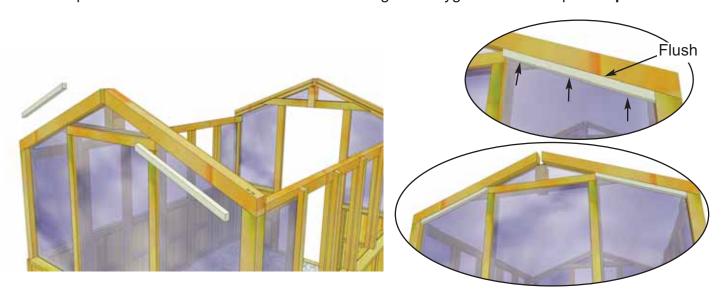
38. When Rafter is orientated correctly, start 2 - 6" Lag Screws with Washers with a hammer and tighten with 9/16" socket. From the inside, attach Gable Support Frame to Rafters with 4 - 1 1/4" screws. See illustration below.



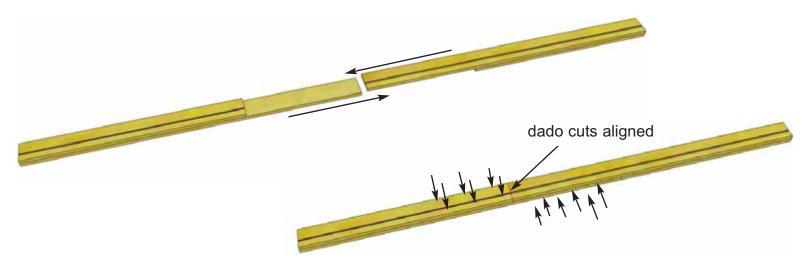
Rear Wall shown with Rafters, King Stud and Gable Support Frame configured correctly.



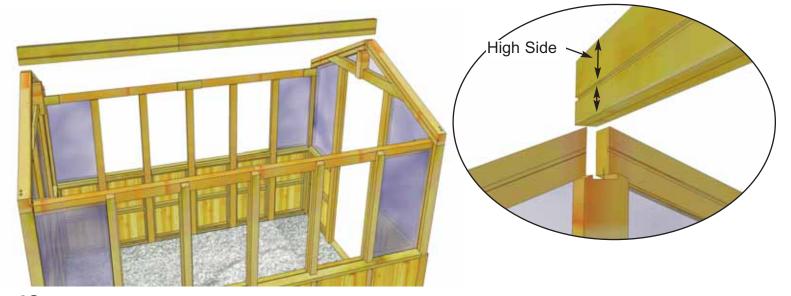
39. Complete Front Outside Roof Rafters and Triangular Polygal Window as per **Steps 33 - 38**.



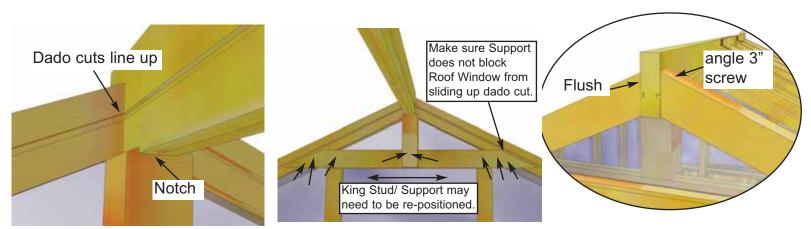
40. Attach **Part OO - Exterior Rafter / Doorway Supports - 1 1/2" x 1 1/2" x 27 1/2"** underneath and flush with Outside Rafters. Use 3 - 3" screws per piece to secure. Complete front and rear pieces.



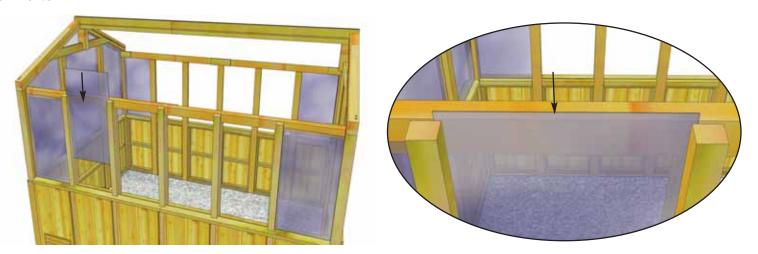
41. Locate **Part P - Roof Ridge Boards - 2" x 5 1/2" x 83".** There are 2 pieces that need to be fastened together. Aligning dado cuts and attach with 6 - 2" screws per side.



42. Before installing completed Ridge Board, note that dado cut is off center. Orientate Ridge Board with high side to top before lifting. See illustration above.



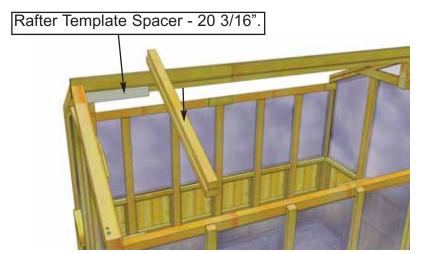
43. Drop Ridge Board into King Stud notch. Dado cut of Ridge Board should line up with dado cut of Rafters. From outside, Ridge Board ends should be flush with outside of Rafters. King Stud / Gable Support Frame may need to re-positioned in order to accommodate the Ridge Board correctly. If so, undo tacked in screws and position to fit. Complete securing using 6 - 2" in Support and 2 - 3" screws in King Stud. Secure Rafters to Ridge Board by angle screwing from Rafter into Ridge Board as shown above with 2 - 3" screws per Rafter.



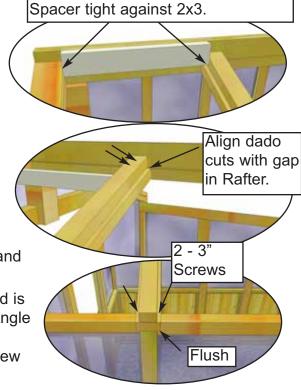
44. Install remaining Part W - Side Polygal Windows - 21" wide. Position as per Step 25-26. Correctly orientate Polygal Windows as per instructions on the Window's protective sheathing.



45. Once all Side Windows are installed. Caulk Window / Wall Top Cap seam. Work around the entire Greenhouse. Gaps in Wall Top Caps can also be caulked at this time. No need to caulk sides or top at this time.



46. Locate Part U - Roof Rafters - 3 1/4" x 3 1/2" x 50 3/4" and Rafter Template Spacer - 20 3/16". With Spacer aligned tight against outside Rafter, position Rafter so dado cut of Ridge Board is aligned with gap in Rafter and tight against 2x3 edge of Rafter. Angle Screw to Ridge Board with 2 - 3" Screws. At bottom, align with Spacer. Rafter end should sit flush with outside of Side Post. Screw Rafter to Side Top Plate Support with 2 - 3" screws.

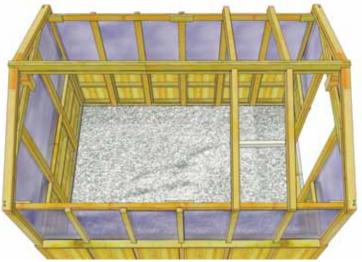


Spacer tight against Outside Rafter

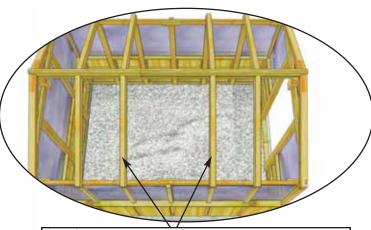




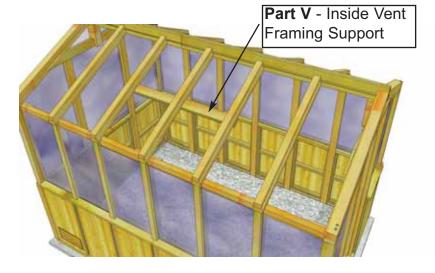
47. Install second **Part U - Roof Rafter using Rafter Template Spacer.** Align Spacer tight against Rafter's 2x3 edge. Position Rafter so dado cut of Ridge Board is aligned with gap in Rafter and tight against 2x3 edge of new Rafter. Attach as per **Step 46**.

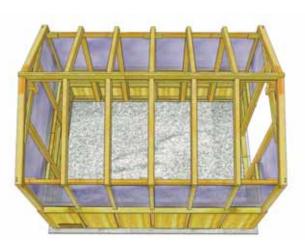


48. Install Rafters as illustrated above and to the right as per **Steps 46 & 47.**

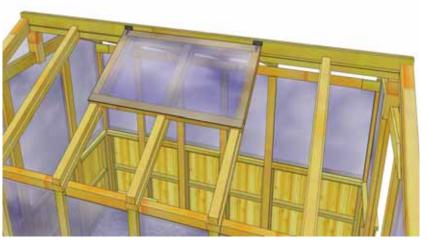


Confirm correct Rafter location by placing Part Z - Vent Hinged Window or Part V - Inside Vent Framing Support on Rafters. Window must open and shut freely. Rafters may need slight adjustments.

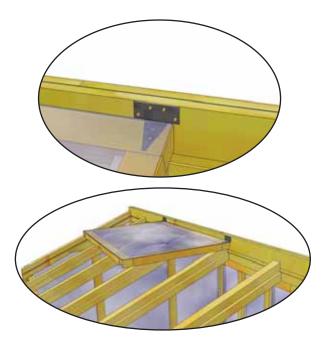




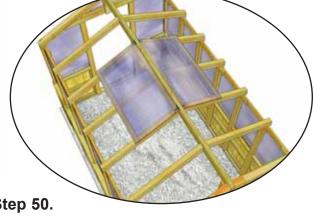
49. Install Center Rafters to complete Rafter section as illustrated above and to the right as per **Steps 46 & 47.** Confirm Center Rafter location using **Part Z** or **V**. Adjust if necessary.



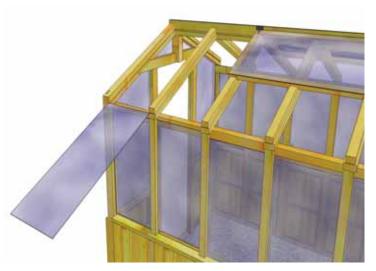
50. Standing on a ladder from the inside, position and attach **Part Z - Vent Hinged Window** to Ridge Board. Prior to attaching, confirm Window can move up and down freely. Attach with 3/4" Black screws.

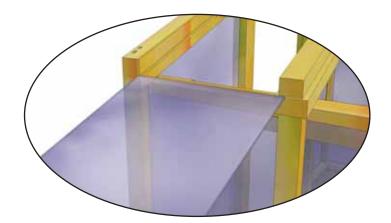




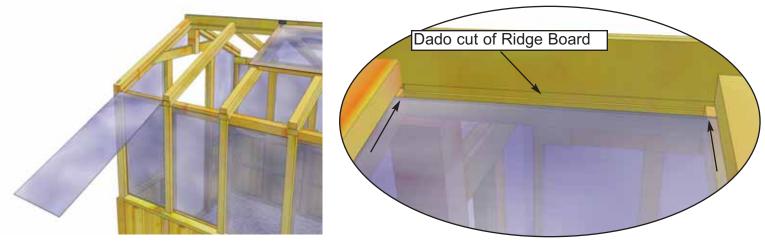


51. Attach second **Vent Hinged Window** as per **Step 50**.

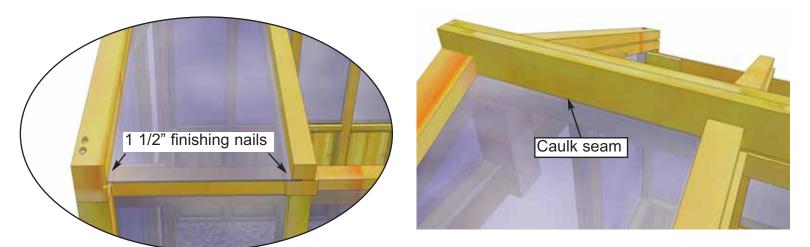




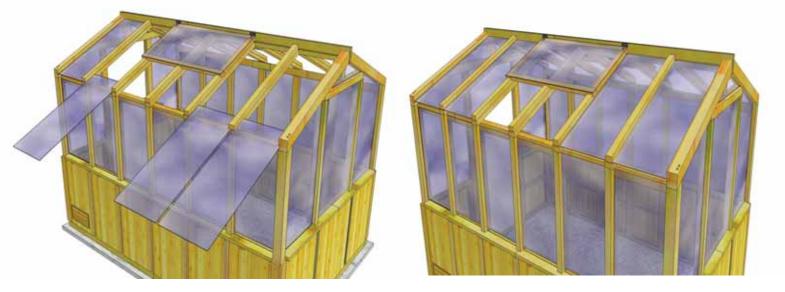
52. Locate Part X - Roof Polygal Windows - 21" wide x 51" long. Peel protective plastic layer off first sheet noting correct side out. Fit Window in dado of Outside Rafter and gap of inside Rafter as shown above.



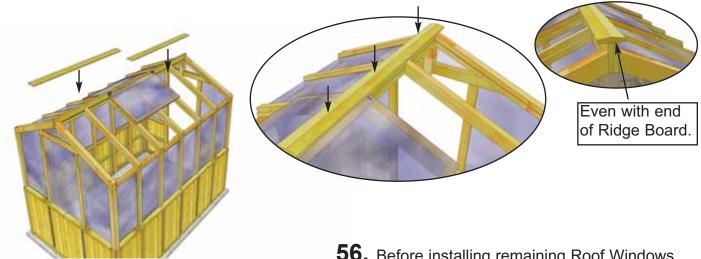
53. Slide Roof Window up dado cut and gap of Rafters until it slides completely into dado cut of Ridge Board.

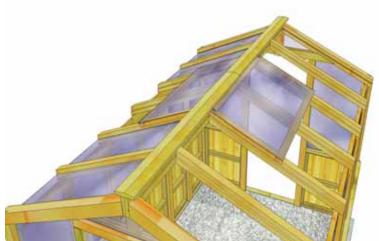


54. With Window in position, use 2 - 1 1/2" finishing nails to secure. Window should be slightly recessed or flush from end of Rafter and back approximately 1/4" from end of Outside Rafter. Standing on ladder from inside the Greenhouse, caulk the Ridge Board / Window Seam.



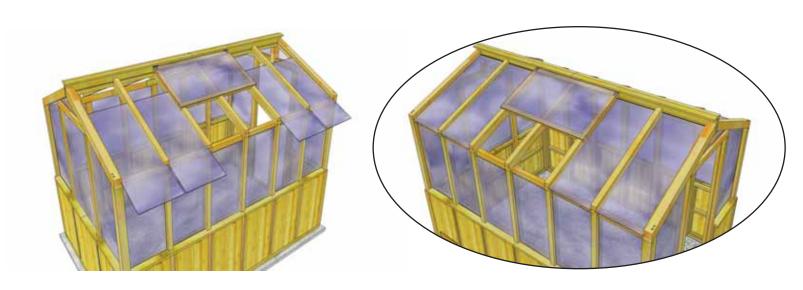
55. Install 3 additional Roof Polygal Windows as shown above following **Steps 52-54.**





56. Before installing remaining Roof Windows, attach Part K - Top Ridge Caps - 1" x 5 1/2" x 70" to top of Ridge Board. On a ladder, position 1 Cap evenly on Ridge Board and flush with the outside. Attach with 3 - 3" screws as illustrated above. Attach 2nd Cap.

Work from the inside on a step ladder to attach.



57. Install remaining Roof Polygal Windows as per **Steps 52-54.**





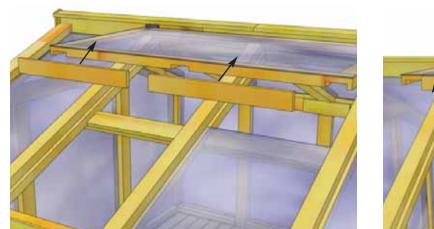
58. Locate and attach Part V - Inside Vent Framing Supports - 3/4" x 2 1/2" x 49" with 6 - 2" screws. Position parallel with Hinged Window. Before attaching, See **Step 59** first. Positon support so hinge positions correctly.

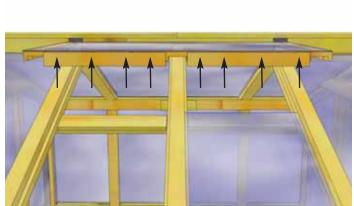


59. Complete both Supports. Locate both **Heat Activated Hinges. Part V** will be marked for correct location for Hinge. Heat Activated Hinge will require a basic assembly. Follow Manufacturer's directions. Attach with Manufacturer's Hardware supplied. **Phillips Head Driver will be required.**

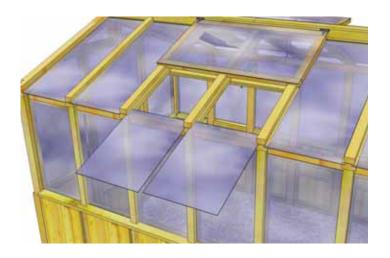


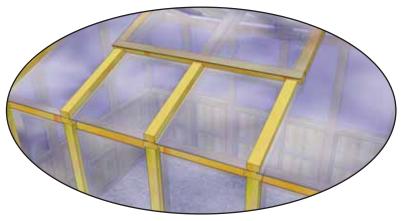
Important- Heat Activated Hinges will open only after the Greenhouse reached an inside temperature of approximately 75 degrees Fahrenheit. Make sure Hinged Windows open easily and do not stick. We recommend purchasing a thermometer once the Greenhouse is complete. Please monitor Heat Activated Hinges to confirm they open and are functioning correctly. **Warning:** Extreme Cold can damage Heat Hinge, in colder climates uninstall Heat Hinge during the winter months and store somewhere at 10-15°C such as in a cool basement.



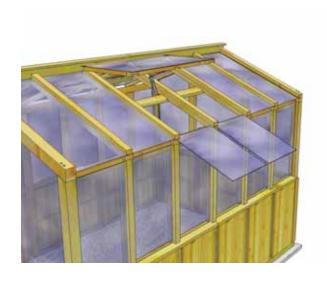


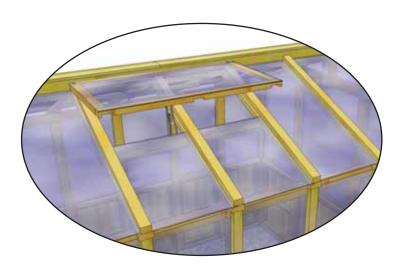
60. Locate Part PP - Vent Window Trims and Part Y - Small Roof Polygal Windows - 21" wide x 24 1/2" long. On your ladder, slide one small polygal panel in place then attach Vent Window Trims to front of window to cover any gaps. Bottom edge of vent window trim should rest on polygal panels when window is closed. Attach with 4 - Finishing Nails per piece. Remove small polygal panel till **Step 61**. Complete opposite Side.





61. Locate **Part Y - Small Roof Polygal Windows - 21**" wide x 24 1/2" long. Peel protective plastic layer off noting correct side out. Fit Window in Rafter gaps and attach as per **Step 54**. Caulking not required. Complete all Small Roof Windows.

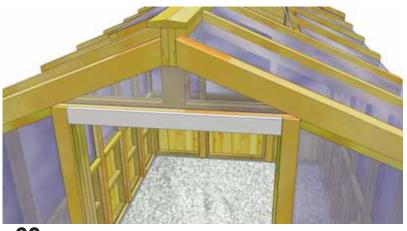


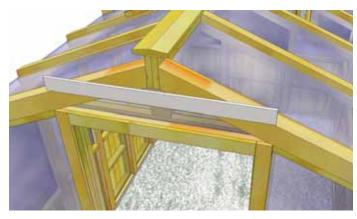




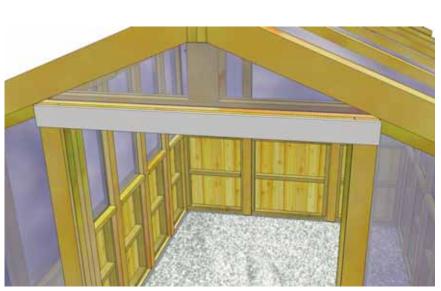


62. Locate Part CC & CCC - Vertical and Horizontal Door Filler Trim - 3/4" x 2 1/2" x 33" & 87 1/4" long. Position 3/4" Vertical Filler Trim on Doorway Framing and attach with 6 - 1 1/2" finishing nails. There are two pieces.



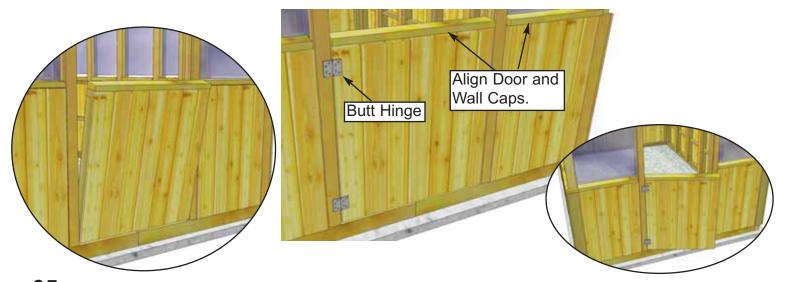


63. Position 3/4" Thick Horizontal Filler Trim above Doorway and attach with 4 - 1 1/2" finishing nails.



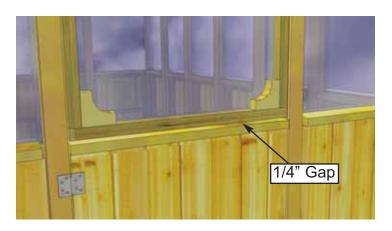


64. Locate Part DD & EE - Vertical & Horizontal and Vertical Door Trim - 1/2" x 2 1/2" x 38" & 84 1/4". Position 1/2" Thick Horizontal Trim over Horizontal Filler Trim and attach with 4 - 1 1/2" finishing nails. Position 1/2" Thick Vertical Trims over Filler Trims and attach with 6 - 1 1/2" finishing nails per piece.



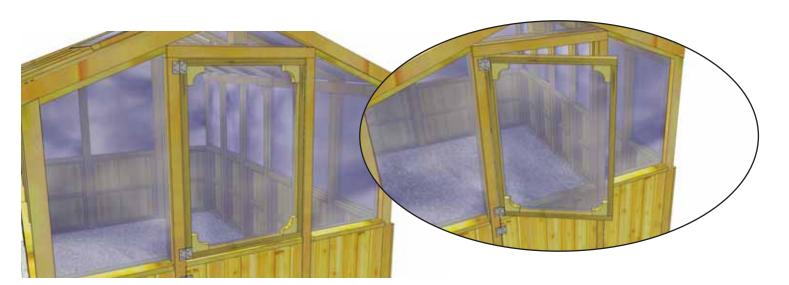
65. Locate Part AA - Bottom Dutch Door - 32 1/2" x 35 1/2", 2 - Black Butt Hinges and 12 - 2" Black Screws. On ground, attach Hinges to Door first using 2" Black Screws. Align/shim Door and attach to Door Trim with 2" Black Screws. Confirm Door swings correctly before attaching all screws.





66. Locate Part BB - Top Dutch Door - 32 1/2" x 47", 2 - Black Butt Hinges and

12 - 2" Black Screws. On ground, attach Hinges to Door first using 2" Black Screws. Align/shim 1/4" from Bottom Door and attach to Door Trim with 2" Black Screws. Confirm Door swings correctly before attaching all screws.



67. Attach **Door Handle and Exterior Black Drop Latch**

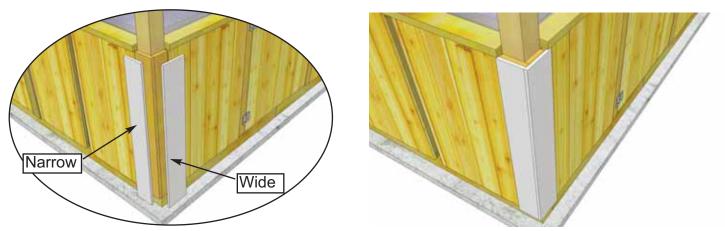
to door. Handle is positioned on top door at a 30° angle with the larger end on the bottom.

Drop Latch is positioned on bottom door. Attach Black Drop Latch as illustrated to the left with 3/4" Black Screws.

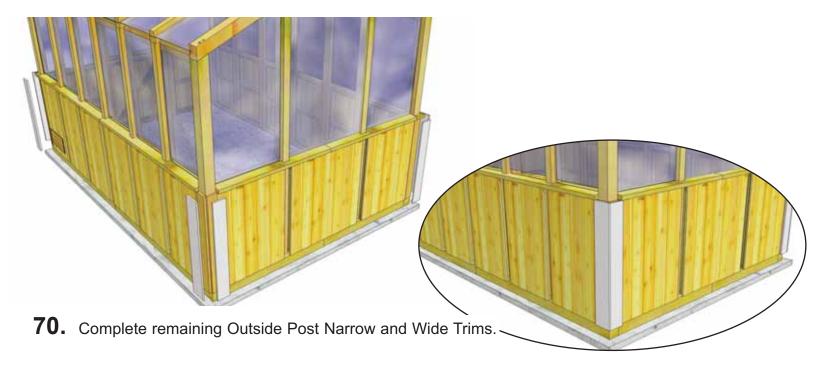
Female part of Drop Latch is positioned higher than male. Do a dry run first to position Drop Latch correctly before attaching.



68. Attach Interior Silver Barrel Bolt to inside of door as illustrated to the left. Use 3/4" silver screws to secure. Bolt is used to connect Top and Bottom Doors.

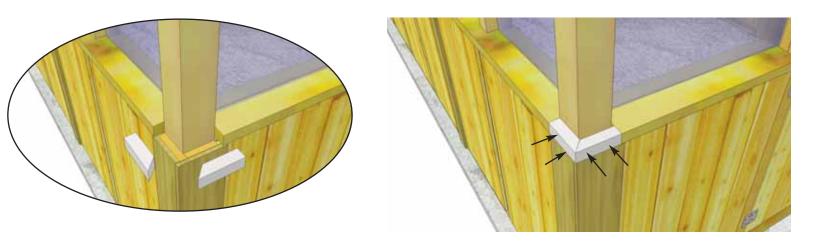


69. Locate Parts FF & GG - Outside Post Trim Narrow- 1/2" x 4 1/2" x 34 7/8" and Outside Post Trim Wide - 1/2" x 5 1/2" x 34 7/8". Position with Wide Trim capping the side when looking at the front. Align Trims so flush under Wall Top Caps and attach with 4 - 1 1/4" finishing nails per piece.

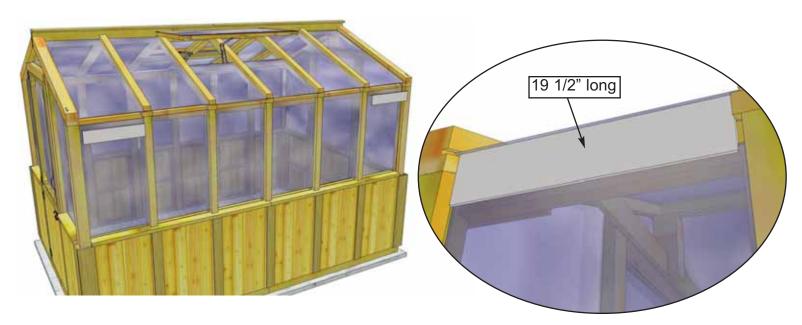




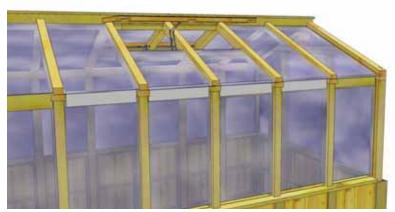
71. Locate Part HH -Vertical Wall Trim - 1/2" x 3 1/2" x 34 7/8". Position underneath Top Wall Cap where Walls attach to Posts. Center and attach with 4 - 1 1/2" finishing nails per piece.



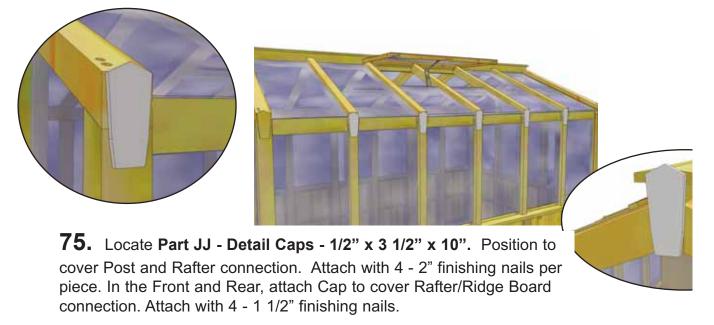
72. Locate Part II - Corner Post Trim - 1 3/8" x 1 1/2" x 4 7/8". Position around each Outside Corner Post. Attach with 2 - 2" finishing nails per piece.

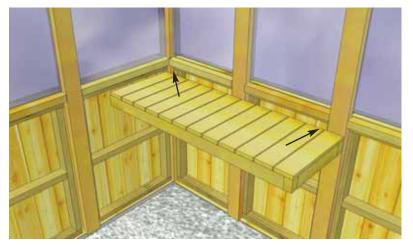


73. Locate **Part LL - Side Soffits - 1/2" x 4" x 19 1/2"(4) & 19 1/8"(8).** Position underneath Roof Window and between Outside and Side Post. Orientate Soffit with rough face out and lap siding down and to the inside to cap Side Window. Attach with 4 - 1 1/2" nails. Finish all corner Soffits now.



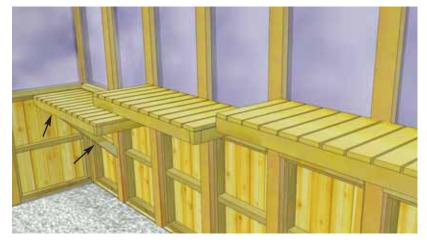
74. Position 19 1/8" Soffits underneath remaining Roof Window and attach as per **Step 73.**

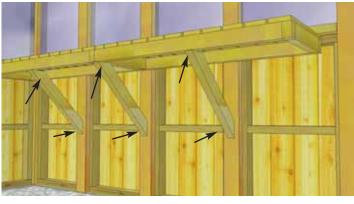






76. Locate Parts MM and NN - Potting Shelves - 16" x 45 3/8" and Potting Shelf Supports - 1 1/2" x 2 1/2". With helper holding Shelf just under the Top Wall Cap, screw to wall from underneath with 3 - 3" screws as shown above.





77. Position Potting Shelf Support against Post and under Shelf framing. Level Shelf and attach Support with 2 - 3" screws. Complete Shelving and Supports for side.





78. Complete all Shelving and Supports!

Note: The Greenhouse is shipped as an unfinished product. If exposed to the elements, the western red cedar lumber will weather to a silvery-gray color. If you prefer to keep the cedar lumber looking closer to the original color, we suggest that you treat the wood with a good oil base wood stain. You may also wish to paint rather than stain. In both cases we recommend that you consult with a paint and stain dealer in your area for their recommendations.



We value your feedback and would like to hear back from you on how well we are doing in the following areas:

- 1. Customer Service
- 2. On Time Shipping
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- 4. Quality of Materials
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- 6. Overall Satisfaction.

Please email John and Pat Motley info@CedarShedandGardenKits.com

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