# SUNSHINE GARDENHOUSE

greenhouses for gardeners

Mt. Rainier 8' x 12' Assembly Instructions Model GKP812



Sunshine GardenHouse<sup>™</sup>

PO Box 2068 Longview, WA 98632 Toll Free: 888.590-8657 www.gardenhouse.com Revised 04/13 mh

# Before you begin, make sure your area is level.

An 8' x 12' **level work space** is needed for assembly to ensure that your GardenHouse is squarely-built and that the panels join tightly. However, due to wood inconsistencies and the natural moisture in redwood, some adjustments may be necessary to fit redwood panels. You may need to loosen brackets slightly for better fit. Use a flattened shipping box for a working surface to protect against scratching.

The Standard Building Code states that "a greenhouse with wood frame construction shall be located not less than 5 feet from an adjoining structure or property line" (Section 502, Greenhouses). Your local building code may vary, so check with local building officials.

All major components of the kit are panelized so that you and a helper can assemble the GardenHouse in a day or two. A second person is essential to position the panels.

The GardenHouse kit comes in seven boxes. Before you begin, please verify the contents or your boxes using our parts inventory list.

# **Tools Required**

- Screw gun or variable-speed drill with Phillips drive bit.
- 6-foot stepladder.
- 16-foot tape measure.
- Quick Grip Clamp as seen in photos.

• Optional: 3-5 tubes (10.1 oz. each) of silicone-based clear caulk. Use this to seal joints, to provide additional protection against wind-driven rain or very cold climates. This type of caulk adheres well to redwood and the glazing panels.

Always wear the appropriate safety equipment, and follow the manufacturer's instructions when using the power tools.

Redwood is naturally resistant to moisture and insect damage, and will fade to a silver gray over time unless treated. If you seal or paint the wood, use a waterbased product. Acetone or Ketone products may damage the glazing.

If your GardenHouse will be subject to regular or occasional strong winds, we recommend you anchor your GardenHouse while building. For some locations, our anchor kits will be effective.

Note: You may notice some curl in the plastic lumber base prior to erecting your GardenHouse. It may have shifted within the carton and a temperature change can temporarily cause it to take a new shape. Laying the base on a warm flat surface will allow it to become straight as its "memory" returns. Once your GardenHouse is assembled, the base will remain straight.

## Sunshine GardenHouse<sup>™</sup>

PO Box 2068, Longview, WA 98632

# **Congratulations!**

You've completed your Sunshine GardenHouse.

We are very interested to hear about your GardenHouse experience. Please send us your owner's registration form so that we can keep you updated on any special information.

# **Optional Bench Kit**

Get the optimum use from your GardenHouse with the specially designed GKP816 Bench kit. Made of cleargrade, dried redwood to match your GardenHouse, it easily attaches to the house frame.

## Addendum:

Use the quick grip clamp to pull the panels together tightly.



E-mail or Fax Your Comments:

sunshinegardenhouse@gmail.com fax 503-210-0308





**Door & Vent Wind Stops - Box #3** Attach the stops around the door and base vents as shown.



**Door Hardware - Box #4** Attach the door pull and barrel bolt.







**Pre-Assembly - 12-foot Lengths From Box #4 & 6:** Attach side base parts using 1-1/4" screws. Match parts "A" together and parts "B" together.

**From Box #4 & 5:** Attach **side wall top plate** parts using 1-1/4" screws. Match parts "A" and parts "B".



## Roof Truss - Box #5

Lay out two **rafters** and a **truss** as shown above (A). Attach one rafter to the truss through the connector using two 1-1/4'' screw as shown in (**B**).

Then use a 2-1/2'' screw through the pre-drilled hole in the rafter. Turn the assembly over and repeat on the other side.

Repeat this procedure to make a total of five roof trusses.



#### Base - Box #4 & 6

Use 1-1/4" screws to attach the two side wall bases, front wall base and back wall base to each other. All part labels face ourside on the base.





Keeper Pin Piston Cylinder Bracket

Sunshine GardenHouse"

Place the piston of the cylinder through the housing (the threaded bolt) and into the "T" with the "T" pointing away from the cylinder. Remove the plastic in the "T".

12

Align the hole in the "T" with the outermost hole in the piston and push the keeper pin through both.

Screw the cylinder into the housing so threads are about equal on both sides of the housing.

Follow the same procedure for the other roof vent operator.

Position the base vent operators at the center of the back wall vents.

Attach the same way as the roof vent operators.

Note: Occassional lubrication of the pistons in your automatic vent operators will keep them working freely. Just a drop of light oil (such as "3-in-1") spread over the piston is all that is needed.

And if the temperature in your GardenHouse drops below freezing (generally because of lack of winter use), it's a good idea to remove the black cylinder with the piston and take it to a warmer location so the paraffin in the unit won't freeze. Remember to reinstall them in the spring.

PO Box 2068, Longview, WA 98632



Use the **stub block** (**located in Box #4**) when installing each corner connector so space is left for the corner posts.

#### Back Wall - Box #3

Place the two back wall panels on the back wall base with the panel connectors facing inside. Slide the corner posts into their corners.

Do not drive screws into the taped connector holes. Screws in the taped holes will create unwanted space between the panels.

Drive 1-1/4'' screws into the **untaped** connector holes at the base.

#### Sunshine GardenHouse<sup>™</sup>



Check that the base is square by measuring from corner to corner in both diagonal directions. If the measurements are not equal, push on the longer dimension until they are equal.



From the inside of the GardenHouse, secure the unvented panels using 2-1/2" screws through the three **pre-drilled** holes in the ridge.



## Automatic Vent Operators - Box #4

Suggestion: Installing the black cylinder into the operator arms is easier if you refrigerate the cylinder for an hour (**don't freeze**) before attaching. You can easily push the piston into the black cylinder when the paraffin has contracted in the colder temperature.



Position a vent operator near the center of a roof vent along side a truss with one bracket on the vent frame bottom and one on the adjacent roof panel blocking. Attach the two brackets using four 1-1/4" screws.

PO Box 2068, Longview, WA 98632





**Front Wall - Box #6** Place the **front wall panels** on the fro

Place the **front wall panels** on the front wall base with the panel connectors facing inside. Drive 1-1/4'' screws into the **untaped** connector holes at the base.



**Side Wall Top Plates - Box #4 & 5** With a helper, attach the **side wall top plates** between the front wall and back wall using 1-1/4" screws.

Stagger the 8' top plate above, where the 4' is located at base. See joint location diagram.

Drive screws into the **untaped** holes only.

Sagging is normal and expected when installing the side wall top plate. Installing the sidewalls will remove the sag.





**Top Back & Front Panels - Box #5** With a helper, attach the top back and front panels with the ridge connector facing in, using 1-1/4'' screws.



**Roof Panels - Vented Side (cont.)** Attach vent flashing to the top edge of the **vented roof panels** using roofing nails provided through the four holes.

With a helper, lift a vented roof panel above the ridge and let it slide down until the metal angles rest on the ridge. Slide the panel against the front roof panel and secure it using 2-1/2" screws through the five **pre-drilled** holes along the sides and one in the center.

Position the other vented roof panel against the first one and attach it the same way.

Align the panels along the roof line.

Drive 2-1/2" screws through pre-drilled holes at the roof line joint.

Note: Prop open front door before installing top panel; it makes it easier.





Back Wall Stud - Box #3

To position the back wall stud at the center of the wall and centered on its connectors, use the "**spacer**" (**Box #5**) at the top and bottom of a back wall panel.

Attach the stud through the connectors using 3/4'' screws.

Attach the **back 2' roof panel** the same as you did the front 2' roof panel. It will overhang the back wall 3/4''.

**Roof Panels - Unvented Side - Box #2** With a helper, lift the **front 4' roof panel** above the ridge and let it slide down until the ridge flashing rest on the ridge of the other side of the roof.

Position the panel to overhang the front wall 3/4". Secure the panel with 2-1/2" screws through the six **pre-drilled** holes along the sides and one in the center.

Repeat this procedure for the **center roof panel** and the **back roof panel**. The back panel will overhang the back wall 3/4''.





Attach the top of the panel from the inside using one 2-1/2" screw through the pre-drilled hole. See page 14 for addendum tip. Then attach the sides using four 2-1/2" screws through the pre-drilled holes.

Repeat for the second back vent panel.

Note: If the top plates and ridge do not appear level now, check the building for squareness and adjust as needed. Roof panels will not fit properly if the building is not square and level.

## Roof Panels - Vented Side - Box #2 & 7

Suggestion: It is generally preferable to locate the roof vents on the side of the roof away from the prevailing summer wind, so rising warm air is drawn out as wind moves over the GardenHouse. As hot air is exhausted at the roof, cooler air is drawn in through the lower vents on the back wall.



The vented side of the roof must be attached before the unvented side.

From the side of the GardenHouse, lift the **front 2' panel** above the ridge near the front wall and let is slide down until the metal angles rest on the ridge.

Position the panel to overhang the front wall 3/4''. Secure the panel with 2-1/2'' screws through the five predrilled holes.









the front of each connector.)

pencil on the inside of the top plate at

Position a roof truss at the center mark on the top plate. Align the front edge of the truss with the mark and attach it from the inside using 3/4'' screws through the **untaped holes only**.



Rest the **ridge front** on to the front wall and center truss. With the ridge flush with the front wall, attach it through the connectors using 1-1/4" screws.

Slide the **ridge back** into the center truss connector and resting on the back wall. With the ridge flush with the back wall, attach through the connectors using 1-1/4" screws.

Sunshine GardenHouse"

PO Box 2068, Longview, WA 98632

PO Box 2068, Longview, WA 98632





## Roof - (cont.)

Seat the remaining four trusses fully into the connectors. Attach them to the ridge using 1-1/4'' screws, and to the side wall top plates using 3/4'' screws through the **untaped** holes.

The sag in the ridge and top plates is natural for now.

## Side Walls - Box #1 & 5

All side wall panels are identical. Position a side wall with the connectors on the inside and the metal angle on the top.

Drive 2-1/2" screws into the two **pre-drilled** holes at the corner.

Drive 1-1/4" screws through connectors on the outside, lifting any sag from the top plate.

Position the second side wall panel at the edge of the first panel. Drive 2-1/2" screws halfway into two **pre-drilled** holes along this joint.

Position a third panel, driving 2-1/2" screws halfway into two **pre-drilled** holes at the corner. See page 14 addendum for helpful tip for joining all panels.







Swing the "halfway connected" second and third panels inward and press them together into alignment with the base.

Use four 2-1/2" screws to attach them through the **pre-drilled** holes along this joint. Finish driving all the "halfway" screws in completely.

Fasten the center connectors on the outside of the wall with 1-1/4'' screws.

Repeat this procedure for the other sidewall panels.



# **Back Vent Panels - Box #3** Ask a helper to slide a back vent panel snugly up into position so the vent swings our freely at the base.