

# #9900 Conervatory Kit

by Houseworks Ltd.

Step-by-step assembly instructions ©2019 Houseworks Ltd

# KIT PARTS:

Floor (MDF) Front wall panel (with door) Left wall panel Right wall panel Side wall cap (2) Triangular roof truss assembly (2) Ridge beam Center front rafter Side supports (2, notched) Front support (notched) Ridge cap Hip ridge cap (2) Ridge junction block Roof trim strips, long (7, with beveled end) Roof trim strips, short (4, with angled end) Finials for top and corners (3) Acrylic panels for roof (3) Acrylic panes for windows (8)

# SUPPLIES NEEDED:

Masking tape White glue (such as Weldbond) Emery board or other small, rigid sanding tool Gel-formula CA glue (super glue) Clear household tape, at least 1/2" wide Pencil Craft knife Metal ruler



The Conservatory is designed to be used as an addition to an existing house or as a standalone structure with an open back or your own added back panel. Two kits may be joined back-to-back for a larger structure. The front and side walls are preassembled panels; the roof structure is intended to remain removeable for easy access to the interior.

### **GENERAL INSTRUCTIONS**

- Read all the instructions before you begin.
- · Choose a work surface that is clean, dry and protected from glue spills.
- Make sure all parts are in the kit.
- Do a dry fit, using masking tape to hold parts in place, to make sure everything fits together correctly before permanent assembly.

## **PREPARATION:**

On the front panel, open the doors (held by small pieces of clear tape) and carefully slide the acrylic glazing panels upward, they will push a small filler piece out of the top of the door so you can remove the acrylic. Gently remove the grid panel (also held with clear tape). Put these six pieces (fillers, acrylic and grid for two doors) aside. Re-tape the doors closed for safe handling. Remove the windows and set them aside with their acrylic panes.

A conservatory is traditionally painted white or green. Yours may be whatever you like, including stained or aged wood, but if you want any type of lower wall treatment (such as brick, stone or stucco) in the panels below the windows it is best to plan for that now. The easiest way is to cut pieces of cardstock or other material to fit the panels. Apply whatever finish you like to the insert pieces and then attach them after the other finishing is done. This method is recommended for the interior panels as well, if you plan to add wallpaper or other treatment. (To avoid curling, also paint the back side of the insert pieces.) If you will stain or chemically age the wood (not using paint), do that now, before assembly. If you plan to paint, do it after assembly.

You may need to lightly sand the window openings to remove stray wood fibers. Try not to round or distort any edges.

#### ROOF ASSEMBLY PART 1 (dry fit):

Fit one end of the ridge beam into the notch at the apex of a roof truss. Position the beam flush with the face of the truss and tape securely. Fit the other end of the beam into the other truss and tape.

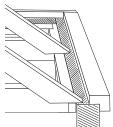
Place a side support flat on your work surface. Fit the first truss into the center notch; the sloped ends of the truss will hang over the side support. Fit the second truss into the wider-notched end of the side support. Tape these connections securely from underneath, not on top. Repeat for the second side support. Fit the front support into the open end of the roof assembly; tape from underneath. Fit the notched end of the center front rafter into the center notch of the front support and the angled/tapered end to the face of the truss/beam joint. Tape securely and set aside.

#### WALL ASSEMBLY:

The side walls fit into slots at each end of the front wall. They are designed for a precise fit; work carefully, stand the structure upright and tape the corner securely (through the window openings) when the parts are together. Tape the side wall cap pieces in place; the short side of the rabbet sits on top of the wall.

Fit the floor into position inside the walls and tape from underneath.

Fit the roof assembly into the top of the assembled walls (slope toward the front). Only the overhanging tips of the truss assemblies will rest on the "shelf" at the top of the walls. The support framework fits inside and flush at the top of the walls.



When you are sure everything fits properly, remove the tape and reassemble with glue.

DO NOT glue the roof assembly to the assembled walls; it is intended to remain removeable. You may fit the roof into position to assure good fit while the glue dries but be sure it does not contact any wet glue. Use masking tape to hold parts secure and square while the glue dries.

#### **ROOF ASSEMBLY PART 2:**

While the glue is drying, you can assemble the acrylic roof panels. Do not remove the protective paper yet. Arrange the parts on your smooth, flat work surface so they go together properly. Place the triangle piece with its base (long side) nearest you. Place the left and right pieces so that their angled sides adjoin the triangle piece (they will not meet in the middle). Fit the pieces closely together and flush at the pointed ends. Place a couple of short pieces of masking tape across the joints. Flip this assembly to the other side.

Measure and draw a line parallel and  $\frac{1}{4}$ " away from all the inner edges of all three pieces. Using a craft knife and ruler, cut just the paper layer along the pencil lines; peel off the narrow strip of protective paper. Wipe with a soft rag to clean the exposed acrylic. Apply a length of clear household tape to create hinges where the side pieces join the front triangle. (Work carefully to make it as clean and bubble-free as possible; this will be the inside, so it will be visible.) Trim the ends carefully at the edges of the acrylic. If your tape is more than  $\frac{1}{2}$ " wide, use the knife and ruler to cut along the pencil lines again, so the extra width will come away when the paper is removed.

To make the center join, leave one long side flat on the work surface and lift the other sides to bring the center together. Put a couple of short masking tape pieces across the joint from the outside. Apply clear tape to this seam as before; it will be hidden so you do not have to be quite as careful. Rest this piece in place on the roof assembly and remove the strips of masking tape. Apply dots of gel-formula super glue in the seams from the top; you will need much less glue than you think.

#### **BEGINNING TO FINISH:**

Let everything dry completely. Remove the acrylic roof shell and the roof structure. Remove any tape holding the doors closed. Paint all the wooden parts (if that is your chosen finish), being very careful that:

 the window and door grids do not get paint-clogged corners, the windows will still fit into their openings, and the acrylic panes will still fit into the windows,

- the doors will continue to operate (paint the door grids but do not paint the filler strips), and
- the roof is able to be removed and replaced.

Some areas may need to be sanded once the paint is dry. (A quality spray paint in your chosen color and finish, applied in light coats, may be a good option for the intricate details of this kit.)

Also paint the three finials and other wooden pieces that have not yet been installed; remember that the undersides of the roof trim pieces may be visible through the acrylic.

See \*Note below.

#### FINAL ROOF ASSEMBLY:

Put the roof structure in place and rest the acrylic shell on it for support. Position the trim pieces where they will go (refer to photo) in this order: ridge junction block (solid end to front); hip ridge trim (pointed ends to front corners), ridge cap, short ridge trim strips, long ridge trim strips (beveled end facing up and away from the ridge). Note that most trims continue the vertical lines of the structure; the others are centered between them.

Mark the protective paper where the trims will go and score with the craft knife to remove the paper only in those areas.

Most water-based glues (white, wood, tacky, etc.) do not stick well to acrylic because the surface is too slick. Many solvent-based glues (anything with a strong odor) will stick well, but some can cause a cloudy appearance on the acrylic (which may not become visible until some time has passed). A good solution for this problem is to scratch or roughen the surface of the acrylic where you will be applying glue so that a water-based glue will have a better surface to stick to. You can do this by lightly sanding the exposed areas with a coarse grit or by making scratches with the craft knife.

Next, clean the scratched areas, remove the remaining protective paper from the acrylic and glue the trim pieces in place, following the order above.

Now that you can see where the acrylic roof shell will contact the rafters (rear, center and center front), roughen the underside in these areas (use masking tape to protect adjacent areas). Remove the roof structure from the main structure (so it is not accidentally glued in place) and glue the shell to the roof structure. Glue the finials to the ridge block and front corners.

Once the trims have been glued to the roof structure, it may be best to place/remove the roof by sliding, rather than lifting.

\*Note: You may reassemble the doors, install the acrylic window panes and whatever decorative panels you choose at any time after the paint is dry.

To install the acrylic window panes, peel the protective film from one side and be sure it is clean. On the window, apply tiny dots of gel-formula super glue at the corners and a few of the grid intersections. Aim for pinhead-size dots, evenly spaced near the bottom, top and center. Less is more; if you get too much glue in a spot, wipe it away and try again. Fit the pane in place and hold it for up to a minute before moving on. Remove the remaining protective film and clean the panes as a last step. Glue the windows in place.

Display your conservatory as a stand-alone structure or place on a larger platform that allows more room for decorating.