



The E1640 Conservatory is optimized for the JM1600 Series Houses, and can be assembled to fit on the Left or on the Right. Images in this instruction are for a Right orientation (as shown above). The E1640 Conservatory is ideal for other 1" scale houses too, but may require customization.

Measure and identify the parts: Label them with sticky notes using the names from the parts list, and check them off the parts list so you know you have everything. *Taking the time now to identify and organize the parts also makes them familiar so you will understand what the instructions intend as you read ahead.*

- Plan ahead so you know where you are going
- Read ahead so you know how to get there
- Paint ahead so parts will be ready when you need them

E1640 Conservatory Parts:

1	16E40	Front	(3/8)	117/8	133/4,	cutouts, grooves
1	E16-41	Side	(3/8)	117/8	13,	cutouts, grooves
1	E16-42	Side Extension	(3/8)	117/8	3/8,	grooves
1	E16-43	Deck (Upper Floor)	(3/8)	131/2	131/2	E-Slot
1	E16-44	Base Floor	(1/4)	131/2	131/2	E-Slot
1	E16-45	Facia, Front	(1/4)	3/4	14	
1	E16-46	Facia, Side	(1/4)	3/4	133/4	
1	E16-47	Liner	(1/8)	133/8	111/4	
6	E16-48	Block Trim	(1/8)	1/2	31/4	
2	E16-49	Foundation, Front/Back	(1/2)	11/4	133/4,	grooves
2	E16-50	Foundation, Side	(1/2)	11/4	123/4	
2	E16-51	Found/Lift, F/B	(1/2)	133/4	1/2	grooves
2	E16-52	Found/Lift, Side	(1/2)	123/4	1/2	
1	E16-20	Top Step Backer	(1/4)	71/4	1/2	
1	J0738	Front Step, Bottom	(3/4)	211/16	93/4	
1	J0739	Front Step, Top	(3/4)	17/16	71/4	dado
1	E16-53	Ledge, Front	(5/8)	5/8	143/8	
1	E16-54	Ledge, Side	(5/8)	5/8	133/4	
1	E16-55	Nosing, Left	(1/2 nosing)	147/8	45°	
1	E16-56	Nosing, Right	(1/2 nosing)	147/8	45°	
1	E16-25	Door Pad	1/8	31/2	3/4	

Review the techniques on the first few pages of your dollhouse instructions (a copy of which can be found at www.realgoodtoys.com - scroll down to "assembly instructions" at the bottom of the Home Page).

Pay particular attention to these sections:

- Square the corners of window and door cutouts
- Glue selection
- Taking things apart
- Painting (Sanding!)
- Getting the best from your masking tape
- A flat work surface is essential!

Supplies you will need (see www.realgoodtoys.help *Supplies*):

- Paint: Interior semi-gloss latex paint... Everything gets at least one coat before assembly - get the paint now.
- Paintbrushes 1" or 2" foam brushes for painting
- Sandpaper: 320 grit, several sheets
- Glue: Aleene's *Original* Tacky Glue for the assembly 'High Adhesion' Masking tape: 3/4" or 1"

Window Trim

2	E16-58	Ext Wind Frame	(1/4 x 3/8 dado)	45°/45°	111/2
6	E16-59	Ext Wind Frame	(1/4 x 3/8 dado)	45°/45°	8
4	E16-60	Ext Wind Frame	(1/4 x 3/8 dado)	45°/45°	31/8
2	E16-61	Int Wind Frame	(5/32 x 3/8)	45°/45°	111/2
2	E16-62	Int Wind Frame	(5/32 x 3/8)	45°/45°	8
6	E16-63	Middle Frame	(1/8 x 3/8)	71/4	
2	E16-57	Stripwood	(3/32 x 7/16)	101/2	
6	E16-64	Railing (U3032B)	315/16+		
7	E16-65	Newel	23/4		

- 1 1011 Door w/trim
- 6 U-2016 Window w/trim

Stucco

Not suitable for children under 13 years of age
California 93120 compliant for formaldehyde phase 2

See www.realgoodtoys.help for builder's support

Overview of the Build:

Details of each step will be expanded along the way, but lots of builders like to see how it all fits together before they start.

Identify and label all of the parts

Square the corners of window and door cutouts

Pre-assemble the Foundation

Paint everything one coat

Option: Faux-wood floor finish on the floor

Sand everything until the paint is smooth, transparent, and some of the wood is showing through

Decide on the order of painting/assembly*

Build the Extension body walls and floors

*Second-coat as decided

Wiring? Run the wiring now^{see www.realgoodtoys.help}

Attach the Foundation

Attach the Ledge, Nosing, Facia, and Block Trim

Assemble, paint, and attach the Front Steps

Assemble the Balcony

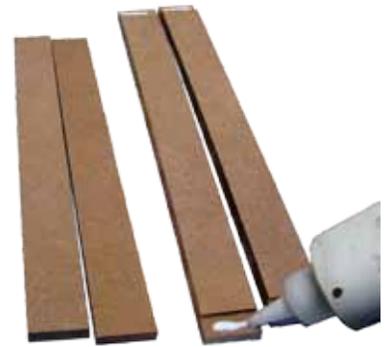
1. Pre-Assembly

Glue and tape together the Foundation set.

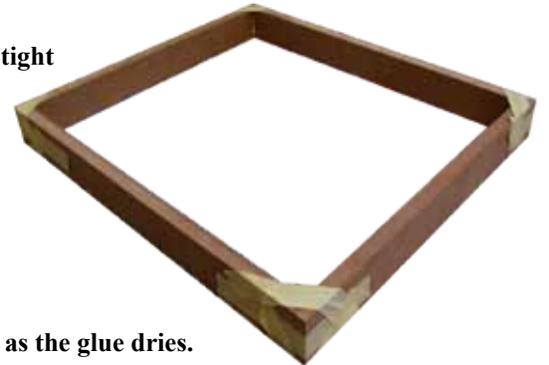
“Foundation Lift” parts extend the Foundation height to accommodate houses with 1³/₄” tall Foundations (not needed with 1600 series houses). Use these parts to customize your Extension Foundation if that is how it will be used. (see page 8)

Without glue, put the Foundation set on a Floor, lined up on 3 edges, to confirm the foundation is square as the glue dries. Tape or weight... let the glue dry.

a. Put glue in the grooves



b. Tape the joints tight



c. Square and flat as the glue dries.



Temporary use of the floor

Now is a great time for all the first-coat painting.

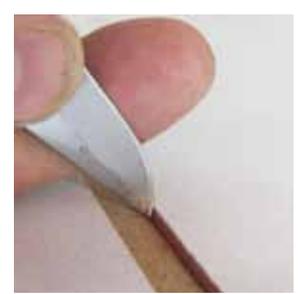
Paint the parts the first coat. The first coat mostly soaks into the wood, filling and reinforcing the grain so the sanding step clips off the fibers and leaves the surface smooth. Resist sanding before painting - it will leave the surface fuzzy and make a smooth finish harder to achieve. The quality of your final finish is dependent on the quality of the sanding after the first coat. Do not go back to re-paint just because the paint has soaked in. Just a bit of paint left on the surface tells you you have put on enough to saturate the grain, which is the right amount. More paint than that will only make sanding harder.

Glue doesn't stick to paint. Avoid painting edges, grooves, and areas that will be glued.

Sand everything. Sand until the paint is smooth and “soft” feeling, transparent, and some of the wood is showing through.

Clean the edges and grooves before assembly. A little paint always builds-out the corner of an edge or groove and will make assembly harder and the glue joint less strong. Test the Floors in their grooves to see that they fit well.

Cleaning a groove with a Cabinet Scraper



Cleaning a groove with a knife

Assemble the Conservatory Body

Continue to step 10 without stopping.

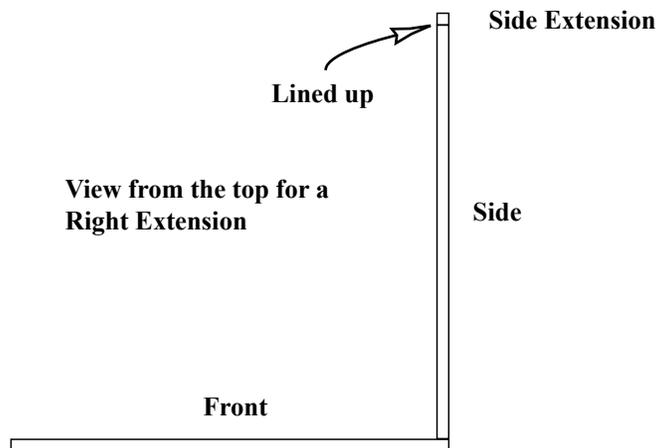
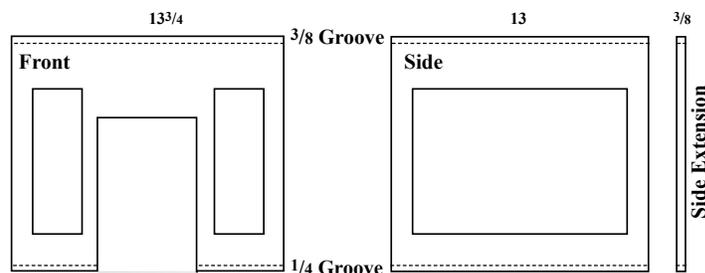
1. A. Determine whether this will be a left or a right Extension (reference to “left” or “right” are as viewed from the front of the house). Photos in this instruction set are for a Right Extension, but it can be reversed and built on either side.

B. Stand the Front and the Side on the workbench with the narrower groove on the bottom; the Side sits behind the Front. Place the Side Extension at the back edge of the Side. **Note: The thickness of the Front and the width of the Side Extension add $\frac{3}{8}$ ” to each edge of the Side and keep the Side’s window cutout centered on the assembled Conservatory. It is a separate piece so the Conservatory can be reversed.**

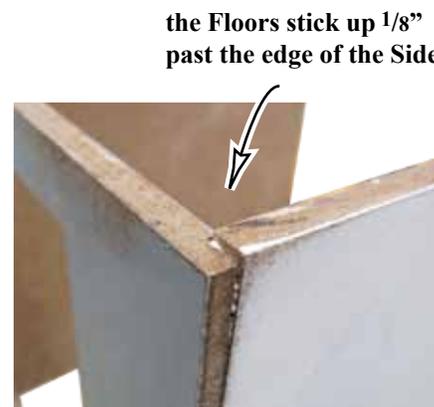
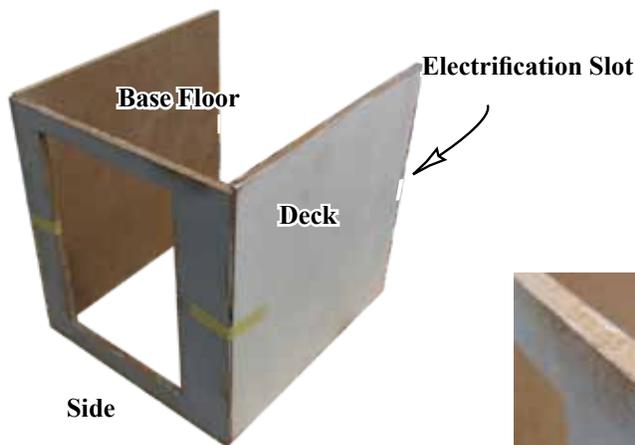
C. Glue and tape the Side Extension to the Side. Take care to keep the inside surface lined up and smooth and that the grooves line up. Clean up excess glue.

2. Spread glue in the grooves of the Side. Stand the Side on its back edge on a flat worksurface.

3. Stand the Deck (Upper Floor) and Base Floor along with the Side. Press the Floors into their grooves. The Floors stick up $\frac{1}{8}$ ” past the front edge of the Side (this $\frac{1}{8}$ ” will fit into the grooves of the Front).

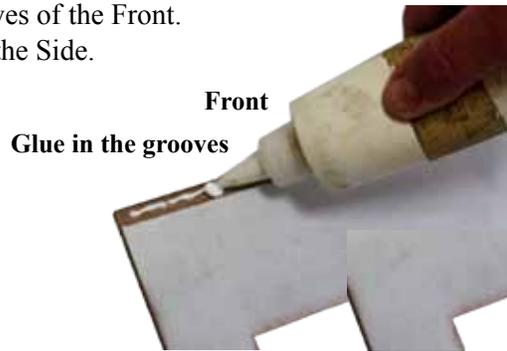


Wiring? The Electrification slots can go in any direction, so choose the position that best fits your plan. I often put a door into the Conservatory 1” from the back edge (like the main house Dividers), so the central position of the E-Slot works well on the side that will have a Liner (against the house Side). But if you plan on a central door, a different direction will work better for you. If you are not wiring, any direction (not toward the back) will leave the E-slot easy for your interior finishing to go right over.



4. Tape the Floors to the Side. Press each Floor to fit to the top of its groove.

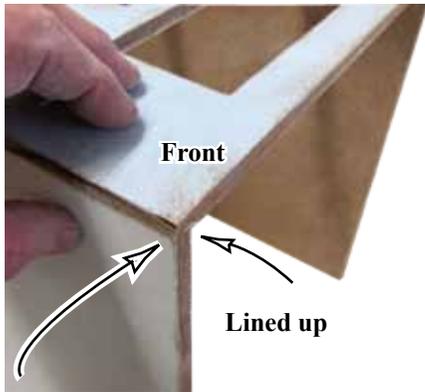
5. Spread glue in the grooves of the Front. Spread glue on the front edge of the Side.



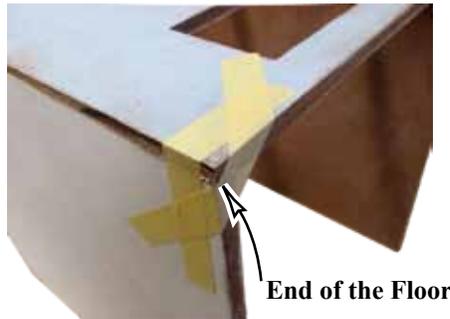
Glue on the front edge of the Side



6. Set the Front onto the Extension Body with the Floors in the grooves. Line up the free ends of the floors with the edge of the Front. Press the Floors all the way into their grooves.



Press to the top of the groove

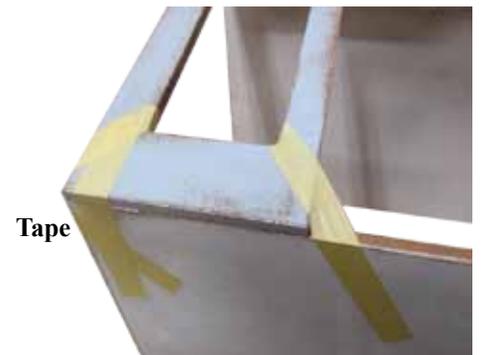
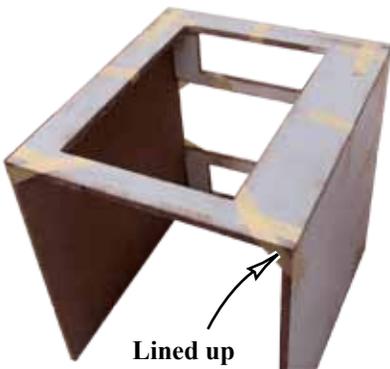
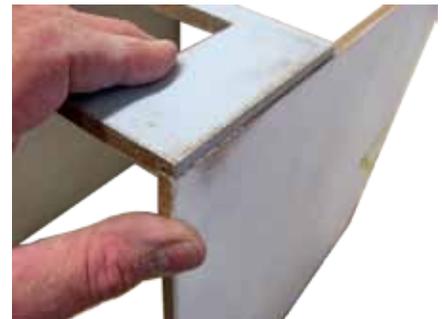


Tape is strong and stiff when it goes in two directions around a corner.



7. Tape the Base Floor to the Front. Tape around the end *and* down the Front (two directions!) so the tapes will reinforce each other and the Base will be held to the top of the groove.

8. Tape the Front to the Upper Floor, lined up on the end.



Continue to step 10 without stopping

9. Inspect the fit of the Floors in the grooves.
 Add weight or tape around a block as necessary to hold the Floors tight in the grooves while the glue dries.

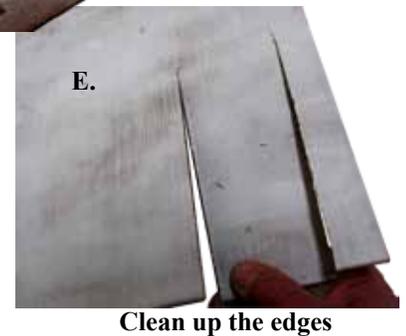
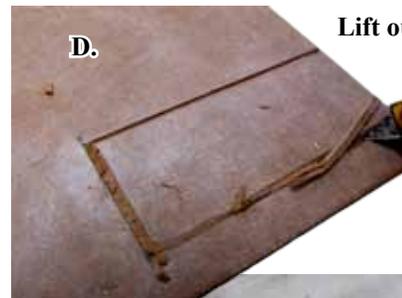
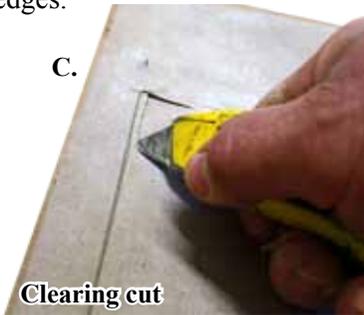


Continue to step 10

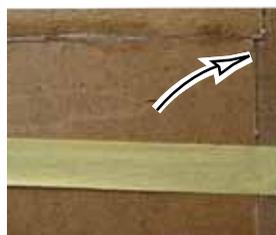
Temporary use of the Fascia to press the Floor



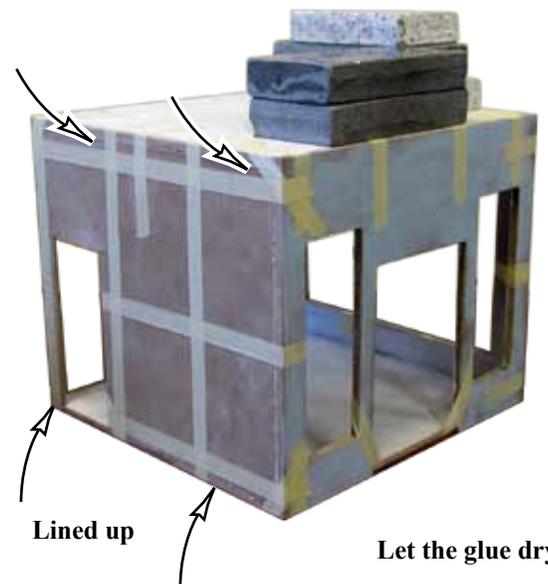
10. Prepare, then install the Liner.
 If you intend to cut a door into the house:
 A. lay out the cut that fits the door ($3\frac{1}{16} \times 7\frac{1}{16}$ fits the 1015 interior door).
 B. Make several gentle cuts with the blade straight up-and-down.
 C. Make a 'clearing cut' inside the straight cut with the blade angled to lift out a ribbon of material.
 D. Continue making straight cuts and clearing cuts until you are through.
 E. Take out the waste piece - clean up the edges.



Glue and tape the Liner between the Floors.



Tight to the Front



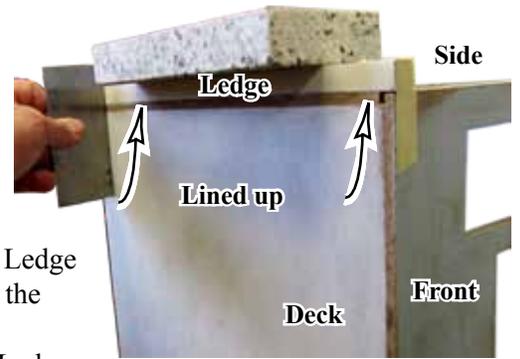
Lined up

Let the glue dry

- 11. Clean up glue excess and squeezings.
Take off the tape.



- 12. Glue, tape, and weight the Side Ledge to the Side, lined up at the top edge and at the front.
Let the glue dry, then repeat for the Front Ledge.



- 13. Front Window Frames:

A. Lay the Conservatory on its back. Set a window in each window hole in the front. Do not glue.

B. Lay out Exterior Window Frames around the window.

C. Glue and tape together the Window Frames. If the Windows and the Frames will be the same color, glue the Frames to the Windows (and second-coat the Windows and Frames after they are glued together); if they are going to be different colors, glue and tape together the Frames but do not glue them to the Windows.

Do not glue the Windows or Frames to the wall.

- 14. Side Window Frames:

Complete all of step 14 without letting the glue dry.

A. Set four windows in the Side's window hole. Do not glue.

B. Lay out the Window Frames around the windows.

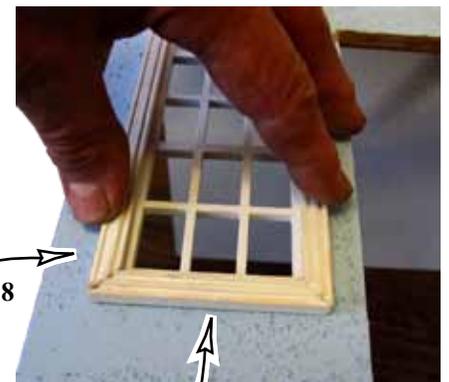
C. Glue and tape together the Window Frames.

D. Glue* the Frames to the Windows. Spread the outer windows to the limit of the cutout. Space the inner windows evenly.

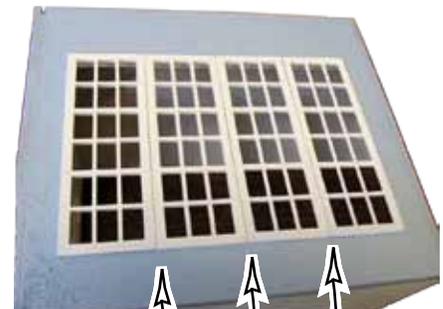
*If the Windows are going to be a different color from the frames in your painting scheme, delay the "glue" step, but do position the windows as stated so step 'E' will be correct.

E. Glue a Middle Frame to the Windows and Frame covering each seem between windows, lined up and spaced evenly. Adjust the outer Frame at the corners as necessary for a good fit with the Middle Frames.

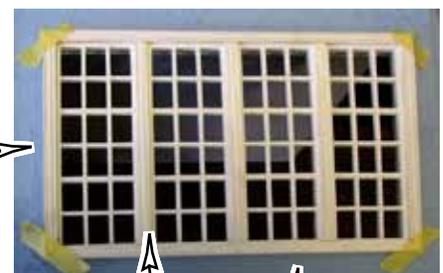
Do not glue the Windows or Frames to the wall.



Exterior Frame 3¹/₈



This is the outside



Middle Frame

Exterior Frame 11¹/₂

15. Stucco:

A. Mix about 1/3 of the Stucco Grit into 1/2 cup of wall color paint.

B. Paint the walls with the Windows, Door, Stripwood, Front Steps, and Facia in place; then, as you are painting, remove them and clean them. It is preferable to not have the thickness of the Stucco between these pieces and the wall, and this is the easiest way to prevent that. You will touch up or second-coat anything that is discolored by the Stucco paint.



Slap the brush for random peaks



... or apply in short swirls

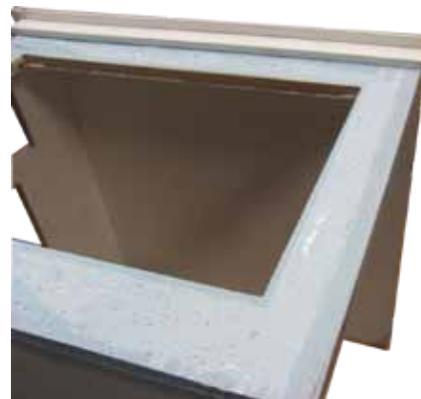


Stripwood on the front and back of the Side (see step 17 below).

Stucco and paint



Clean with a damp (not wet) towel



Facia touching the Ledge

16. Second-coat all the rest of the parts (see step 21).

Let the paint dry

17. Attach the Windows, Door, Nosing, Facia, and Stripwood.



Nosing

Facia

Nosing

Ledge

Block Trim (later)

Facia



Nosing

Facia

Stripwood

18. Glue and tape the Foundation to the House Foundation, lined up in back. This is where a very flat work surface is most critical.

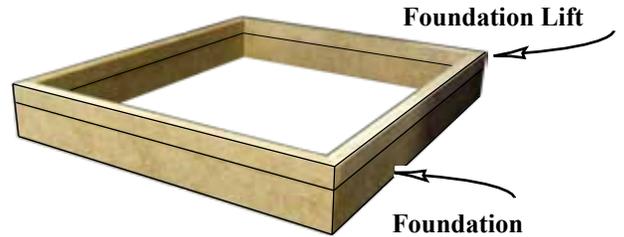
19. Attach the Conservatory body to the Foundation and House.

A. Set the Conservatory against the house lined up in back. Lightly trace the perimeter onto the House Side. Remove the Conservatory and scrape away a little paint in the area hidden by the Conservatory for the glue to grab. I primarily try to get a bit along each floor, but some scraping around the door (if you cut a door into the Conservatory) will make the glue joint there stronger too. Stay $1/16$ " or more away from the tracing so the scraping will remain hidden.

B. Glue and tape the Conservatory to the House and Foundation. Use plenty of tape stretched all the way around the house for a tight fit. Put weight on the floors for down-pressure to the Foundation. Line up the Foundation with the Base Floor in back.

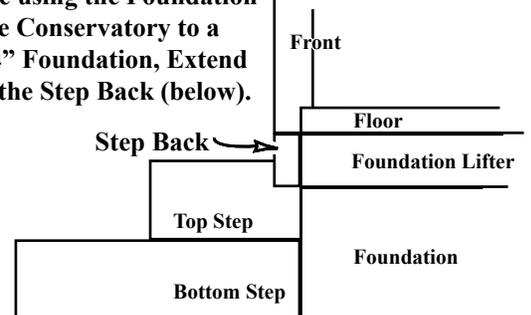
If the house interior is finished use paper-binder-clips along the back and thru the doorways for a tight fit with the Liner (don't tear house wallpaper with tape!).

"Foundation Lift" parts extend the Foundation height to match $1\frac{3}{4}$ " tall Foundations. Use the Foundation Lift to customize your Extension Foundation as part of your customization plan. An $1/8$ " Door Pad (supplied) under the door cutout or a $1/8$ " floor spacer (like cardboard or mat board) under applied hardwood flooring will make the tops of the floors match too, if that is desired.



20. Glue the Front Steps and Door in place, with the Front Steps centered under the Door.

Note: If you are using the Foundation Lifters to fit the Conservatory to a house with $1\frac{3}{4}$ " Foundation, Extend the Steps with the Step Back (below).



21. Glue together the Railings and Newels, one Front Set (4 posts) and one Side Set (3 Posts).

A. Lay each set on the worksurface against a straight-edge (the back of the foundation) with spacers (paper matches) under the railings so they line up with the centers of the Newels.

B. Mark and scrape a small bare spot where the Railing line up with the Newels. If the Rails and the Newels are going to be the same color I wait to second-coat these parts until after gluing them together to save the 'scrape for gluing' step.

C. Glue together the Newel and Rail sets. Keep them tight with weights while the glue dries.

Plan ahead for the Deck finish. Applied sheet flooring, tile, or stone finishes are good choices; if you choose to stucco finish the deck (also a good choice) fill any irregularities with 'light spackle' or similar non-shrinking filler, then apply the Stucco: follow the procedure you used when applying stucco to the walls, painting around the Newels and Rails, then cleaning them off.

22. Glue the Rail/Newel sets to the Conservatory, centered over the Facia.

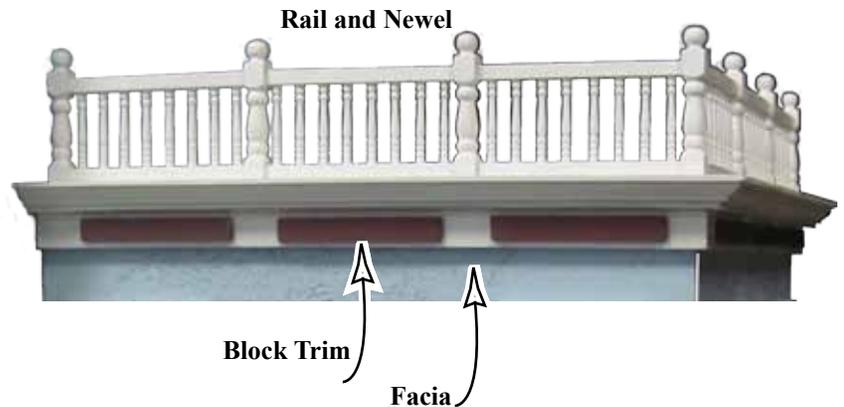
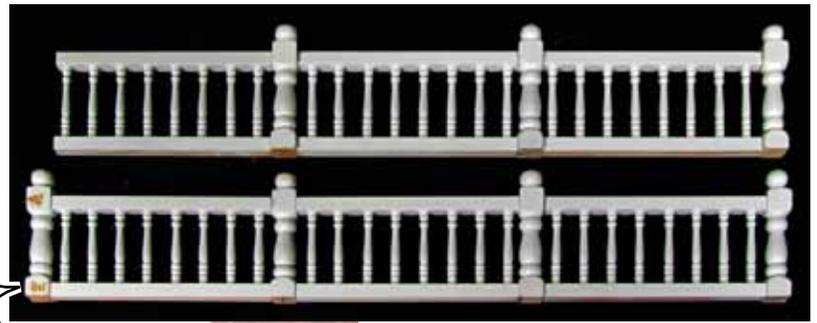
Glue and tape the Block Trim to the Facia, centered under each section of Rail.

23. Interior trim is installed after all other interior work and finishing is done.

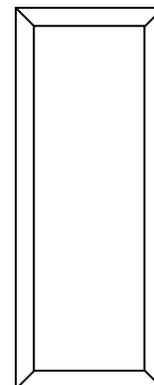
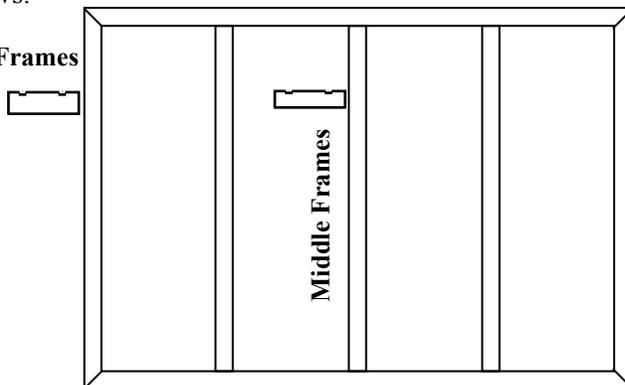
Glue together the Interior Window Frames with the Middle Frames temporarily in position (no glue). Glue together the Door Interior Frame.

Glue the Interior Frames to the windows, centered. Glue the Door Interior Frame to the Door, centered

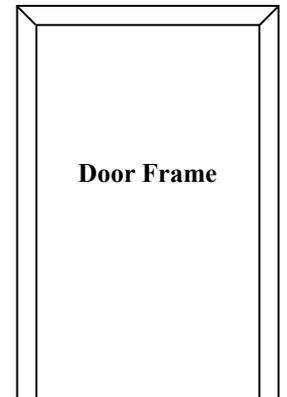
Glue the Middle Frames to the Windows and Frame perimeter, centered over the joint between the windows.



Interior Window Frames



Door Frame



Done!
Let the fun begin!

