Dura-Craft, Inc.

P.O. Box 438 · Newberg, Oregon 97132 (503) 538-3136

### ASSEMBLY INSTRUCTION

# SM-700 SOUTHERN MANSION MINIATURE HOUSE KIT

FINISHED SIZE 21" x 55" x 27" SCALE : 1" : 1'



A: I was around back in those days and have made that house and others that use the same 'stacked-molding and connectors' technique, and I offer these suggestions.

Paint everything (that will be painted\*) one-coat, and sand down to the wood before beginning construction. The quality of the final paint job is 100% dependent on the quality of the sanding after the first coat, and it is impossible to do a good sanding job after assembly. \*do not paint the outside of the roofs, the foundation parts until they are pre-assembled, the insides of the connector's grooves or the lips and grooves of the clapboard pieces (if paint gets on them here and there, it's no big deal, but as a global intention, that's not where you want the wood sealed). Do not paint inside the window parts' grooves. Painting the second coat is a back-and-forth process of painting and assembly. In most cases it is best to assemble and then paint the assembly from a strength point of view. Glue won't stick to a second-coated part very well, so things that require strength should either be painted after assembly, or should be marked and scraped for gluing to get the second-coat of paint out of the way for some glue contact inside the joint (where the scraping will be invisible). I often mark a joint, paint to just cover the mark, and then glue so the paint is perfect (with the transition hidden in the joint - a level of perfection impossible to achieve with masking for paint color separation) and the glue is wood-to-wood. So, test ahead and make decisions along the way when to do the painting.

The wall sections WILL expand and shrink seasonally with changes in humidity. You can either accommodate that or resolve to be at peace when the walls split or separate as they shrink. The two techniques I have used to accommodate that movement are: 1) Glue the walls together thoroughly, but glue them into the connectors only at the bottom 2". Glue the windows into the cutouts only at the bottom 1". When the walls are glued to the floors, only glue the walls at the bottoms, not at the tops. This allows the walls to shrink away from the top which is partly hidden by the nosing. On the inside, gluing a strip of ¼ x ½ to the ceiling on the inside of each wall (but not to the wall), and to the connectors at each end to reinforce the joint at the top without interfering with the wall's ability to shrink away. The downside of this technique is that the next higher floor is only connected at the tops of the connectors and by the Dividers. If the house is to be moved around much it makes it vulnerable to breakage.

#### Or (preferred):

2) When you paint the clapboard sections, paint the tongue of each piece thoroughly as you paint the rest of each piece. Paint the clapboard pieces with two coats sanded between coats or more if needed (don't paint the ends). Glue the wall sections together with small amounts of non-structural glue like Quick-Grip or Magna-Tac, and glue them into the Connectors with a fully structural glue (like Aleene's Original Tacky Glue (in the bronze bottle)). Glue the tops and the bottoms to the floors (scraping for a good joint or mark&paint as explained above). The downside of this technique is that as the walls shrink each section will separate at the tongueand-groove, and this separation will be visible, suggesting to the owner that they ought to fill the "cracks" on the inside to make them smooth. That fill will literally tear the house apart and it will *collapse*. To prevent that, interior finishing (painting, wallpapering) should be done on card stock and loosely glued to the insides of the walls, so down the road no-one will try to 'fix' the walls. The other

#### PLEASE READ

"THANK YOU for buying a DURA-CRAFT, INC. product.". We bring to you QUALITY and DEPENDABILITY in dollhouse kits. We make every effort to bring you our products in perfect condition but if you find any missing, defective parts, or damaged parts by improper assembly we will send you replacement parts at NO COST TO YOU. Simply fill out the parts form provided in the kit or call us describing the sheet number, part name and number of part or parts you need. Please refer to parts list and drawings in the assembly instructions.

### YOU WILL FIND IT IS FASTER & EASIER TO CON-TACT US FOR ASSEMBLY ASSISTANCE OR PARTS SERVICE DIRECTLY RATHER THAN THE STORE FROM WHICH YOU PURCHASED IT.

The stores do not carry spare parts and most often call us anyway so you can speed up the process contacting us first.

Should you need more immediate assistance or you require an answer to a question concerning kit instructions you can call us at (503) 538-3136 during normal business hours. Parts inquires or requests are handled the day they are received so that parts are on their way to you immediately. You can direct your written requests to:

CUSTOMER SERVICE DURA-CRAFT, INC. P.O. Box 459 Newberg, OR 97132

Phone (503) 538-3136 Fax (503) 538-3132

# NOTICE:

Some people like to fill in the gaps at the top of the interior walls, between wall tops and the underside of roof pieces. You may also want to fill the gaps where the front gables meet the main roof. If you feel these refinements are necessary, we recommend the use of Red

Devil one time spackling compound or a similar foam based spackle. Heavier, putty style spackles are more difficult to apply with good results in this particular

#### A Beautiful, Authentic Shake Roof

Using the variables of width and color to achieve an exciting result.

Building a perfect shake roof requires an understanding of the methods used by roofers in the real world. Shakes are not uniform in width or color, so you need to apply them with these natural variables in mind. At Dura-Craft, Inc., we have gone to some trouble to ensure that you receive a suitable variety of widths and colors. If you create your dollhouse roof with care, it will have a truly authentic, real world look.

Take a look at the illustration below. The first thing you will notice is the appearance of randomness. This is exactly how professional roofers arrange shakes. While making your dollhouse roof, you should keep a

constant eye toward mixing up the way your shakes are applied.

Even more important, the spaces between shakes are arranged so that no space lines up with a space in the row below it.

If you approach your dollhouse roof in the manner shown, you will make the best use of the shakes that Dura-Craft, Inc. has supplied for you, and you will have a dollhouse roof that you can be proud of.

You should not attempt to sort out shakes of a particular size or color in an effort to make a uniform roof. You will lose the wonderful authenticity of the Dura-Craft, Inc. roofing method, and you will run out of shakes long before your roof is complete.

Dura-Craft, Inc. • PO Box 459 • Newberg, OR 97132

SM-700 SOUTHERN MANSION

Congratulations on selecting a miniature house kit manufactured by Dura-Craft, Inc., the leader in the industry.

All pine parts used in our kits are manufactured from the finest kiln dried Ponderosa Pine. We pride ourselves on our high quality and workmanship. Each piece is graded and sorted at several different stages to ensure that you receive the finest quality.

The houses manufactured by Dura-Craft are not modeled after any specific existing houses. Rather they are composites of several different houses, to give you what we feel is a true and accurate representation of the houses of their style and era.

A Dura-Craft miniature house is a complete kit. This means that you do not have to purchase separately items such as siding, window glass, and split cedar shakes, which are a basic part of a house. Your finished house will be ready for painting, wallpapering, and decorating. Dura-Craft does not sell the materials for decorating; however, they should be available through the store where you bought your kit.

Your finished house will be of heirloom quality, of which you will be justly proud, if ample time and care are used in its construction and finishing.

#### **GENERAL INSTRUCTIONS**

There are several construction tips that will help you avoid some problems when you build your miniature house.

An important thing to keep in mind about the kit parts: First, they are made of wood. Wood shrinks and expands according to the humidity. We have found that the siding is most sensitive to dimension changes due to humidity. All siding used in Dura-Craft miniature houses is made from the finest kiln dried Ponderosa Pine. However, as a result of changes in siding dimensions brought on by humidity changes, when a wall is assembled with a water base glue, some swelling will occur. Wall panels should be left in a warm dry room at least 48 hours before corner posts are attached. This will prevent walls from cracking. At no time should the house be placed in a cold damp area.

If there is a minor cracking problem, there is a simple solution. A thick bead of white glue should be run into the gap. Wipe off any excess glue and allow to dry. If necessary, repeat this step until the gap is filled. When the house is painted, there will be no evidence of the gap. We recommend a good quality OIL base paint be applied on any

siding to be painted.

Your Dura-Craft miniature house has been designed so that you can assemble it with a minimum of difficulty. Some steps require that careful attention be paid to using the correct part.

The kit has been packaged in a way that should assure that all parts are present. The major parts such as siding are easily identified. Other parts will be identified as you go along checking the parts.

There are several steps that must be followed to make the assembly of your house easier. The first is to read through the instructions carefully to get a feeling for the assembly process. Next, using the parts list and parts drawings, check the parts and group them according to the categories used on the parts list. As you do this, you will become familiar with the parts. Also, if any parts are missing or damaged, they can be replaced by Dura-Craft quickly, so that your assembly process will not be held up. Please refer to the missing parts and broken parts order form.

**NOTE:** For shortages or broken parts write directly to Dura-Craft write directly to Dura-Craft, Inc. for replacement, using the form on the last page of this manual.

Sub-Assembly No. 1 Wall Panels

1. Prepare your tools and materials. You will need the following items to complete this sub-assembly:

> framing square ruler or tape measure pencil several large books to use as weights a dispenser of white wood-working glue 100 grade (medium) sandpaper a roll of waxed paper masking tape

 Locate the parts. You will be using all the siding parts:

> 1-2, 16 pcs. 1-3, 16 pcs. 1-4, 22 pcs. 1-5, 22 pcs. 1-6, 6 pcs. 1-11, 12 pcs. 1-13, 2 pcs. 1-17, 21 pcs. 1-18, 1 pc. 1-19, 4 pcs.

- Prepare the parts for assembly.
   Finish sand the wood surfaces to remove splinters and rough spots.
- Pre-assemble the wall panels without glue. Lay the pieces flat side down, as shown in figure 1. The tongue is on the top edge of each board.
- 5. Use the framing square to ensure that the ends of the wall panels are properly aligned. Measure the width of the door and window openings very carefully and make light pencil marks at the top and bottom of each opening. The proper widths of the door and window openings are given on figure 1.
- 6. Prepare an area for gluing. You will need a hard, flat surface, at least three by four feet in size. Select a location where the wall panels will not have to be disturbed for several hours after gluing. Tape waxed paper over the entire surface.

- 7. Use the following gluing technique for the wall panels: Apply a thin bead of glue to the tongue, then seat it in the groove. Immediately wipe off any surplus glue that squeeze: out, using a damp--but not wet-cloth. Assemble the panels flat side down on the waxed paper.
- 8. Begin with the front main wall (figure 1-B), and assemble the lower half of the wall, up through the first 31-inch piece (part no. 1-13). Make sure all parts are arranged in the correct sequence relative to the pencil marks for the door and window openings.
- 9. Make sure that all the joints are tight, and that the edges of the wall are square and flush. Place weights on the assembly. Allow at least half an hour for the glue to set before continuing assembly of this wall.

IMPORTANT: If you must leave the wall panels incomplete for more than two or three hours during this phase of the construction, stand them on edge to allow air to circulate around both sides. This will minimize the likelihood of warping.

- 10. Assemble the lower halves of the left and right main walls, up through the second 14-inch pieces (part no. 1-2). Again, be sure all parts are arranged in the correct sequence, with all edges square.
- 11. Be sure all the joints are tight, then carefully place weights on the wall assemblies. Allow at least half an hour for the glue to set before continuing assembly of these walls.
- 12. Assemble the four walls for the wings (figures 1-D, 1-E, 1-F & 1-G). Check the edges to ensure that they are square and flush. Be sure all the joints are tight.
- 13. Carefully place weights on the assemblies. Allow one hour for the glue to set, then stand the panels upright to allow air to reach both sides. Allow 24 hours for the glue to thoroughly dry.

- 14. If half an hour has passed since you completed step 9, you may now complete the assembly of the front wall. Be sure all parts are arranged in the correct sequence (figure 1-B) and that the joints are tight.
- 15. Place weights on the entire front wall assembly. Allow an hour for the glue to set, then stand the panels upright to allow air to reach both sides. Let the glue dry for 24 hours.
- 16. If half an hour has passed since you completed step 11, you may now complete assembly of the left and right main walls. Be sure all parts are arranged in the correct sequence (figures 1-A & 1-C) and that the joints are all tight.
- 17. Weight the assemblies down, and allow an hour for the glue to set, then stand the panels up to allow air to reach both sides. Allow 24 hours for the glue to throughly dry.











Sub-Assembly No. 2 Gable Ends

 Prepare your tools and materials. You will need the following items to complete this sub-assembly:

a dispenser of white woodworking glue

- h pint of sanding sealer
- 1 inch paint brush
- thinner
- a roll of waxed paper
- a sharp utility knife
- a yardstick
- a pencil
- Locate the parts. You will need the following parts:

4-13, wing gables, 2 pcs. 4-57, main gables, 2 pcs. 5-17, shakes (plain) 5-18, shakes (fancy)

- 3. Brush a thin coat of sanding sealer onto the rough side of each of the gables. Allow the sealer to dry.
- Use the utility knife or a plane to carefully shave the tongue from the top piece of the siding on each of the end walls (figures 1-A, 1-C, 1-D & 1-G).

1-3

1-3

1-3

1-5

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-3"-

1-3

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1-5

1-5

1-5

- 5. Spread out waxed paper on a flat surface. Apply glue to the top edges of the main end wall panels, then lay the panels face up on the waxed paper.
- 8. Lay the main gables (part no. 4-57) in position as shown in figure 2, rough side facing up. The gable must extend ½ inch beyond the rear edge of the wall panel. Allow the glue to set before proceeding with step 10.
- 9. Lay the wing gables (part no. 4-13) in position as shown in figure 3, rough side facing up. Be sure the eaves overhang equally. Allow the glue to set before proceeding with step 10.
- 10. Measure 12 inches up from the bottom of each of the gable ends, and draw a line parallel with the bottom edge. Now draw lines at one-inch intervals the rest of the way up the gables, as shown in figure 4.
- 11. Using the first line as a guide, glue a row of plain shakes (part no. 5-17) over the joints between the gables and the wall panels, as shown in figure 5. Apply the glue heavily under the shakes. Allow it to dry before proceeding.
- 12. Glue the fancy shakes (part no. 5-18) onto the gable ends in the overlapping pattern shown in figure 6. Let the shakes hang over the edges of the gables until the glue has dried.
- 13. After the glue has throughly dried, turn the wall panel face-down, and use the utility knife to trim the shakes flush with the gable ends. Start at the lower corners and cut toward the peak of the roof to minimize the chances of splitting the shakes.







Sub-Assembly No. 3 Floor Supports and Gable End Supports

 Prepare your tools and materials. You will need the following items to complete this sub-assembly:

> a dispenser of white woodworking glue utility knife or coping saw yardstick pencil 100 grade (medium) sandpaper

2. Locate the parts. You will need the following parts and sub-assemblies:

5-46, floor support stock
5-63, wing gable end support,
6 pcs.
5-64, main gable end support,
4 pcs.
wall panel sub-assemblies (all)

- 3. Lay the main end wall panels (1-A and 1-C) face up on the table. Lay wall panel 1-D face-up on top of wall panel 1-A, and wall panel 1-G on 1-C, as shown in figure 7.
- 4. Align the bottom and rear edges of the stacked wall panels, then carefully draw a pencil line on the main end wall panel, using the front slope of the wing gable as a ruler. (Refer to figure 7). Clearly mark where the peak of the wing gable lies on the main end wall.
- 5. Lay wall panel 1-B face up along with wall panels 1-A and 1-C. Measure exactly 9 5/8 inches up from the bottoms of wall panels 1-A and 1-C, and draw lines across the panels at that point. On wall panel 1-B, draw a line 19 3/8 inches up from the bottom.
- Cut the floor support stock (part no. 5-46) into pieces of the following lengths:

3 pieces 30½ inches long for wall panel 1-B 4 pieces 13½ inches long for wall panels 1-A & 1-C 6 pieces 10½ inches long for wall panels 1-A, 1-C, 1-D, 1-E, 1-F & 1-G

It is critical that these pieces be no longer than specified, or they may interfere with the installation of the corner posts later in the assembly.

- 7. Glue the three floor support pieces onto the wall panels, as shown in figure 8, with their upper edges on the lines drawn in step 5. On wall panel 1-B, there should be a quarter inch space between the ends of the floor support and the edges of the panel. On wall panels 1-A and 1-C, there should be a quarter inch space at the rear edge, and a 3½ inch space at the front (refer to figure 8).
- 8. On wall panels 1-A and 1-C, glue the wing gable supports (part no. 5-63) in place along the bottom of the lines drawn in step 4 (refer to figure 8). The tip of the gable support should be at the mark showing the peak of the wing roof. Allow the glue to dry before moving the panels.

- 9. When the glue from the preceding steps is dry, lay all the wall panels face down. Measure exactly 9 5/8 inches up from the bottom, and draw a pencil line across each panel at that point. Draw another line 19 3/8 inches up from the bottom on each of the main wall panels.
- 10. Glue the floor supports onto the wall panels, as shown in figure 9, so their upper edges are on the previously drawn lines. Center the floor supports from side to side, so there is a quarter inch space between the end of the floor support and the edge of the wall panel.
- 11. On wall panels 1-A and 1-C, glue the gable end supports (part no. 5-64) in place as shown in figure 9, flush with the edges of the gables.
- Glue the wing gable end supports (part no. 5-63) onto wall panels
   1-D and 1-G as shown in figure 9.



Sub-Assembly No. 4 Standard Windows

 Prepare your tools and materials. You will need the following items to complete this sub-assembly:

> a dispenser of white woodworking glue a tube of model airplane cement a utility knife 100 grade (medium) sandpaper ruler or tape measure pencil waxed paper

 Locate the parts. You will be using the following parts:

6-20 Windows, 6pcs
2-5, top and bottom window casings, 24 pcs.
2-6, shutters, 12 pcs.
2-7, decorative emblems, 24 pcs.
2-22, side window casings, 12 pcs.
2-29, inside window trim, 12 pcs.
2-30, top and bottom window frames, 12 pcs.
5-49, window dividers

- 3. Using the model airplane cement, glue the top and bottom window frames (part no. 2-30) to the top and bottom edges of the windows. Be sure the window is fully seated in the groove and centered from side to side as shown in figure 10.
- 4. Using model airplane cement, glue the window side casings (part no. 2-22) to the sides of the windows. Make sure that the side casings contact the top and bottom frames at all four corners. Lay the assembly face down until the glue dries.
- 5. After the glue from the preceding steps has dried, place the windows face down on a sheet of waxed paper. Use white woodworking glue to attach the shutters (part no. 2-6) on each side of the windows. Allow adequate drying time before proceeding.
- Check to make sure the tops and bottoms of the shutters are flush with the window casings. Sand them if necessary to make them flush.

- Glue the top and bottom window casings (part no. 2-5) in place as shown in figure 11. Allow time for the glue to dry.
- Turn the window assemblies face up and glue the decorative emblems (part no. 2-7) in place.
- 9. The window dividers (part no. 5-49) may be installed in any pattern to create whatever style of window you desire. Cut the window dividers to the required length and glue them to the outside of the windows with model airplane cement.
- 10. Lay the wall panels face up on the table. Apply glue to the backs of the window casings and shutters, then install the window assemblies in the wall panels. Make sure they are positioned squarely in the openings.
- 11. After the glue has dried, turn the wall panels over. Glue the inside window trim (part no. 2-29) in place as shown in figure 12. It should be flush with the side window casings (part no. 2-22) and should cover the gap between the casing and the wall panel.
- 12. After the glue on the trim pieces has set, install the top and bottom window casings (part no. 2-5) as shown in figure 12. The ends should overhang evenly left and right.



Sub-Assembly No. 5 Bay Windows

 Prepare your tools and materials. You will need the following items to complete this sub-assembly;

> a dispenser of white woodworking glue a tube of model airplane cement a utility knife masking tape ruler or tape measure

 Locate the parts. You will be using the following parts and sub-assemblies:

6-21, windows, 4pcs
6-22, windows, 8pcs
2-29, inside window trim, 8 pcs.
2-34, bay window bottom, 4 pcs.
2-35, bay window top, 4 pcs.
2-36, bay window side casing, 8 pcs.
2-37, bay window front casing,
8 pcs.
5-49, window divider stock
5-69, bay window top & bottom
inside trim, 8 pcs.
Wall panels 1-B, 1-E, & 1-F

- 3. Using the model airplane cement, glue the bay window front casings (part no. 2-37) on the sides of the large window pane. (figure 13). Be sure the ends of the casings are flush with the edges of the plastic.
- 4. Using the model airplane cement, glue the smaller window panes into the bay window front casings. Be sure the tops and bottoms of the window panes are flush with the ends of the casings.
- 5. Making sure they are properly oriented, with the grooved side facing out, install the bay window side casings (part no. 2-36) on the side panes (figure 13). Use model airplane cement, and be sure the ends are flush with the panes.
- 6. Lay the wall panel sub-assemblies face up on the table. Apply white woodworking glue to the bay window side casings, then install the window assemblies in the wall panels. Make sure they are positioned squarely in the openings. Allow the glue to dry before proceeding.

- 7. Apply glue to the bottom ends of the bay window casings and to the back edge of the bay window bottom (part no. 2-34). Position the bay window bottom under the window assembly, against the wall panel and centered from side to side (figure 13). Tape the part in place until the glue dries.
- Apply glue to the top ends of the bay window casings and to the back edge of the bay window top (part no. 2-35). Position the bay window top over the window assembly, against the wall panel and centered from side to side. Tape it in place until the glue dries.
- 9. Cut pieces of window divider stock (part no. 5-49) to fit at the top and bottom of each pane in the bay window, as shown in figure 13. Glue them in place with model airplane cement at the top and bottom of each pane, inside and outside.
- 10. When the glue from step 9 is dry, lay the wall panel face down and install the inside window trim (part no. 2-29) on each side of the bay windows. It should be flush with the window side casings (part no. 2-36) and should cover the joint between the casing and the wall panel.
- After the glue from step 10 has set, install the top and bottom trim (part no. 5-69). The ends should extend slightly past the side trim, by an equal amount on each side.
- 12. Turn the wall panel face up and install the remaining window dividers (part no. 5-49). They may be installed in any pattern to create whatever style of window you desire (figure 13). Cut the window dividers to the required lengths, and glue them to the outside of the windows with model airplane cement.



Sub-Assembly No. 6 Door frames

 No tools are required for this subassembly. You will need a dispenser of white woodworking glue and the following parts and sub-assemblies:

2-5, door top casing, 11 pcs.
2-7, decorative emblem, 4 pcs.
2-23, door side casing, 12 pcs.
5-65, front door scroll, 1 pc.
5-66, front door outside trim,
2 pcs.
Wall panels 1-A, 1-B & 1-C

- 2. Glue the door side casings (part no. 2-23) in each of the door openings. On the ground floor, the casings should be positioned flush with the bottom edge of the wall. In the second floor doorways, the casings should be butted against the bottoms of the openings. Be sure all casings are pushed all the way into place (refer to figure 14).
- Lay the wall panels face down, and install the door top casings (part no. 2-5) over the doorways. They should be centered from side to side and seated on the side casings.
- 4. When the glue from the preceding steps is dry, turn the wall panels face up, and install the door side casings (part no. 2-5) over all the doorways except the main front door. They should be centered from side to side and seated on the side casings.
- 5. On the main front doorway, glue the outside trim pieces (part no. 5-66) along the door side casings, as shown in figure 15. Be sure they are flush at the ends.
- Glue the front door scroll (part no. 5-65) over the doorway, centered from side to side and seated against the tops of the door side casings.
- Glue the decorative emblems (part no. 2-7) onto the front door outside trim panels, as shown in figure 15.



Sub-Assembly No. 7 Balcony

 Prepare your tools and materials. You will need the following itmes to complete this sub-assembly:

> a dispenser of white woodworking glue masking tape coping saw ruler pencil a small square

- Locate the parts. You will be using the following parts and sub-assemblies:
  - 5-70, bannister stock 5-71, balcony, 1 pc. 5-97, balcony support, 1 pc. 6-2, bannister post, 42 pcs. wall panel 1-B
- Cut two 11 3/4 inch pieces of bannister stock (part no. 5-70) and four 4 3/8 inch pieces,
- 4. Lay out the cut bannister pieces and make pencil marks next to the grooves, every half inch. These mark the locations for the bannister posts.

- 5. Apply glue to the ends of the bannister posts (part no. 6-2) and install them in the bannisters, as shown in figure 16. Line up the posts with the pencil marks. Be sure the ends of the assemblies are square. Allow plenty of time for the glue to dry before moving the assemblies.
- Glue the balcony support (part no. 5-97) onto the bottom of the balcony (part no. 5-71) as shown in figure 17. Be sure it is flush with the rear edge of the balcony, and centered from side to side.
- 7. Prefit the bannister assemblies around the perimeter of the balcony, as shown in figure 18. Trim the ends as necessary to ensure a proper fit.
- 8. Glue the bannister assemblies in place on the balcony. Tape them in place as required. The rear edges must be square with the back of the balcony as shown in figure 18. Allow the glue to throughly dry.
- 9. Lay wall panel 1-B face up on the table. Make a pencil mark at the bottom of the balcony door opening to show the exact center of the doorway. Make a similiar mark at the back of the balcony assembly to show its centerline.
- 10. Apply a heavy coat of glue to the rear edges of the balcony, the balcony support and the ends of the bannisters. Position the balcony assembly at the bottom of the door opening with the center marks lines up with one another. Allow the glue to dry.







Sub-Assembly No. 8 Stairways and railings

 Prepare your tools and materials. You will need the following items to complete this sub-assembly:

> a dispenser of white woodworking glue a roll of waxed paper a ruler a pencil

 Locate the parts. You will need the following parts:

> 5-70, bannister stock 6-2, bannister posts, 61 pcs. 6-13, stairway base, 2 pcs. 6-14, steps, 26 pcs.

- Lay the stairway base (part no. 6-13) rough side up, and spread glue evenly over the entire surface.
- Position the bottom step (part no. 6-14) so the angle-cut side seats in the glue at one end of the stairway base, as shown in figure 20.
- 5. Apply glue to the bottom (the smallest side) of the next step, as shown in figure 20, then lay it in place. It should be in full contact with the stairway base and the bottom step.
- Install the remaining steps in succession, following the same procedure, spacing them evenly to fill the full length of the stairway base. Be sure all the edges are flush. Allow the glue to set.
- Cut ten 3½ inch pieces of bannister stock (part no. 5-70). Lay them out and make pencil marks every half inch, next to the grooves. These mark the locations for the bannister posts. SM-700 PAGE 8

- 8. Apply glue to the ends of the bannister posts (part no. 6-2) and install them in the bannisters, as shown in figure 21, to make five assemblies. Line up the posts with the pencil marks. Be sure the ends of the assemblies are square!
- 9. Stand the stairway assembly on edge on a sheet of waxed paper, as shown in figure 22.
- 10. Apply glue to the lower half-inch of the bannister posts, and lay them in position against the steps. Refer to figure 22.
- 11. Cut two 12 inch pieces of bannister stock (part no. 5-70). After the glue from step 10 has dried, lift the assembly off the waxed paper. Apply a dab of glue to the end of each post, then install the bannister piece. Its lower end should be flush with the bottom post, and the upper end should overhang about an inch.



Sub-Assembly No. 9 House Base

 Prepare your tools and materials. You will need the following itmes to complete this sub-assembly.

> a dispenser of white woodworking glue a roll of waxed paper masking tape

- Locate the parts. You will need the following parts:
  - 3-14, base 10½" x 27½", 4 pcs. 3-15, base edge 1 3/4" x 27½", 4 pcs. 3-16, base crossmember, 1 3/4" x 20½", 3 pcs.
- 3. Prepare an area for gluing. You will need a hard, flat surface at least 25 by 52 inches in size. Select a location where the assembly will not have to be disturbed for twelve hours after gluing. Tape waxed paper over the entire surface.
- Glue the four base pieces (part no. 3-14) together, as shown in figure 23. Apply the glue heavily to the mating surfaces, then press them together firmly.
- After the glue from step 4 has set, glue the base edge pieces (part no. 3-15) in place, as shown in figure 23. Tape them in position, if necessary.
- When the glue from step 5 has set, glue the crossmembers (part no. 3-16) in place as shown in figure 23.



#### Final Assembly Part 1 Walls, Floors and Base

 Prepare your tools and materials. You will need the following items to complete this phase:

> a dispenser of white woodworking glue a pencil "T" pins or straight pins string several large rubber bands a framing square masking tape coping saw one pint of contact cement a one-inch natural fiber paint brush scissors a 3/32 inch diameter nail set (optional) h pint of sanding sealer thinner polyurethane varnish (satin finish) 100 grade (medium) sandpaper steel wool

- Locate the parts. You will need the following parts and completed sub-assemblies:
  - 4-47, second and third floors, 2 pcs.
    4-48, wing second floor, 2 pcs.
    5-1, rear corner posts, 2 pcs.
    5-2, front corner posts, 2 pcs.
    5-3, universal molding stock
    5-59, floor rear trim, 2 pcs.
    5-61, wing floor rear trim, 2 pcs.
    5-73, wing rear & side corner posts, 4 pcs.
    5-74, wing front corner posts, 2 pcs.
    hardwood flooring kit
    wall panel sub-assemblies (all)
    base sub-assembly
- 3. Check through the instructions for sub-assemblies 1 through 9 to verify that all steps involving the wall panels and base have been completed.
- Install the rear corner posts (part no. 5-1) on the rear edges of the main end wall panels (1-A and 1-C). Be sure the panels are fully seated in the grooves.
- Trim the top edge of the main front wall panel (1-B) flush with the floor supports installed earlier. This can be done with a knife or a plane.

- 6. Assemble wall panels 1-A, 1-B and 1-C by applying glue to the grooves in the front corner posts (part no. 5-2). Stand the panels up, and fit them into the grooves in the corner posts. Tape the corners, making sure that the wall panels are fully seated in the corner posts. Be sure the corners are square!
- 7. Fit the second floor panel (part no. 4-47) into the wall structure, smooth side up, with the stairwell opening to the left of center as you look at the back of the house. Cut notches at the corners of the floor panels to provide clearance for the corner posts.
- Apply a bead of glue along the top of the floor supports for the second floor. Lay the second floor panel in place and press it into the glue.
- 9. Tie strings around the house as shown in figure 24. Use rubber bands to keep the string tight. This will keep the floor tight against the walls. Stick pins into the wall panels at floor level to wedge the floor down against the floor supports.
- 10. While the glue from steps 7 through 10 dries, assemble the wing structures as shown in figure 25. Begin by gluing the wing rear corner posts (part no. 5-73) onto the rear edges of wall panels 1-D and 1-G. Be sure the wall panels are fully seated in the grooves, and that the posts are flush with the bottoms of the walls. Tape the corner posts in place.
- 11. Glue the wing side corner posts (part no. 5-73) to the right hand edge of wall panel 1-E and the left hand edge of wall panel 1-F (refer to figure 25). Tape the corner posts in place, as in step 11.

- 12. Assemble the wing walls with the wing front corner posts (part no. 5-74). Apply glue to the grooves in the corner posts, then stand the panels up and fit them into the grooves. Tape the corners, making sure the wall panels are fully seated in the corner posts. Be sure the corners are square.
- 13. Fit the wing second floor panels (part no. 4-48) into the wing structures, smooth side up. Cut notches at the corners of the floor panels to provide clearance for the corner posts.
- Apply a bead of glue along the top of the floor supports on the wing walls. Lay the floor panels in place and press them into the glue.
- Stick pins into the wing wall panels at floor level to wedge the floor down against the floor supports.
- 16. When the glue from steps 7 through 10 is dry, remove the string and rubber bands. Fit the third floor panel (part no. 4-47) into the wall structure, smooth side up, with the stairwell opening directly over the one on the second floor. Cut notches at the corners of the panel to provide clearance for the corner posts.
- 17. Apply a bead of glue along the top of the floor supports for the third floor. Lay the third floor panel in place and press it into the glue. Remove any excess glue that squeezes onto the floor support that is attached to the outside of the front wall panel.
- 18. Glue the wing floor rear trim pieces (part no. 5-61) across the rear edges of the wing floor panels.
- Glue the main floor rear trim pieces (part no. 5-59) across the rear edges of the second and third floor panels.
- 20. When the glue from the preceding steps is dry, attach the wing assemblies to the main house structure. Apply glue to the corner posts on the ends of the wing front wall panels and to the tops of the floor supports on the outside of the main end wall panels. Position the

wings against the main house structure, and secure them in place by tying string and rubber bands around the entire house. Be sure that the rear corner posts on the wings are straight in a line with those of the main house structure.

- 21. When the glue is dry, position the house on the base, centered from side to side, with the rear corner posts flush with the back edge of the base.
- 22. Mark the location of the house on the base with a pencil line around the inside and outside of the walls. Lift the house off the base.
- 23. NOTE: The hardwood flooring kit contains enough hardwood strips to cover one floor of the house. This material may also be applied to doors, stairways, or used as wall paneling. If you do not plan to apply the hardwood to the floor, skip steps 24 through 28.
- 24. Brush contact cement onto the base inside the pencil line that marks the location of the walls, and on one side of the hardwood strips. Follow the instructions provided with the contact cement.
- 25. WARNING: Contact cement is extremely volatile and flammable. The working area must be well ventilated. Keep well away from flame or sparks!
- 26. Start laying hardwood strips at the front of the house and work toward the rear. Cut the strips with scissors. Offset the joints as shown in figure 26.
- 27. After the hardwood strips are in place, burnish them down by rubbing them firmly with a small wood block.
- 28. To achieve a pegged appearance, if desired, punch the ends of each strip, as shown in figure 26, using a 3/32 inch diameter nail set.

Sand the flooring smooth and remove any traces of contact cement that would interfere with the positioning of the house on the base.

- 29. Apply a bead of white woodworking glue between the two lines drawn in step 23. Carefully place the house into the bead of glue. Be careful to avoid getting any glue on the unfinished hardwood flooring! Lay weights on the upper floors to hold the house in position. Proceed immediately with step 30.
- 30. Before the glue from step 29 dries, cut pieces of universal molding (part no. 5-3) to fit around the base of the walls on the inside and the outside of the house.
- 31. When the base molding glue is dry, finish the hardwood flooring with two or three coats of satin sheen polyurethane varnish. Sand lightly between coats.



Final Assembly Part 2 Soffit, Columns and Porch Steps

 Prepare your tools and materials. You will need the following items to complete this phase:

> a dispenser of white woodworking glue a dozen 6d finishing nails (approx. 1½") hammer masking tape waxed paper tape measure or yardstick pencil coping saw utility knife

- Locate the parts. You will need the following parts:
  - 4-55, soffit panel, 1 pc.
    5-3, universal molding stock
    5-67, column supports, 8 pcs.
    5-68, columns, 4 pcs.
    5-98, fillet molding
    6-12, decorative gussets, 2 pcs.
    6-15, porch step (lower) 1 pc.
    6-16, porch step (upper) 1 pc.
- Glue and nail the column supports (part no. 5-67) onto the ends of the columns (part no. 5-68). Be sure the column ends are centered on the column supports as shown in figure 28.
- 4. Fit the soffit panel to the house structure. Cut notches at the rear corners to provide clearance for the corner posts, so the panel will fit tightly against the third floor panel.
- Glue the fillet molding (part no. 5-98) in place flush with the front edge of the soffit panel, as shown in figure 29, centered from side to side.
- 6. When the glue from step 5 is dry, measure across the front edge of the panel, and make a mark at the center. Measure 4 15/16 inches each way from the centerline and make pencil marks. Then measure 9 7/8 inches outward from those marks and make two more marks (refer to figure 29). These will mark the centerlines of the columns.

- 7. Apply glue to the top of the main front wall and the floor support. Position the soffit panel on the top of the front wall, butted against the third floor panel. Apply a spot of glue to the front corners where the panel comes in contact with the gable supports. Tape the soffit to the gables and gable supports. It may be helpful to stand one or two of the columns under the front edge of the soffit until the glue dries.
- 8. Cut and install pieces of universal molding (part no. 5-3) where the third floor and soffit meet the end walls.
- 9. Measure across the front edge of the base, and make a mark at the center. Measure 4 15/16 inches each way from the centerline and make pencil marks, then measure 9 7/8 inches outward from these marks and make two more marks to correspond with the marks on the edge of the soffit. (Refer to step 6).
- 10. When the glue from the preceding steps is dry, apply glue to the ends of the column assemblies, and position them so they are centered on the marks made in steps 6 and 9. The two inner columns should be glued to the front edge of the balcony, as shown in figure 30, and all the columns should be in a straight line.
- 11. Slip a sheet of waxed paper under the base, directly in front of the doorway. Glue the porch steps (part no.'s 6-15 & 6-16) against the front edge of the base, centered in front of the doorway.
- 12. Glue the ends of the decorative gussets (part no. 6-12) and tape them in place under the balcony, connecting the balcony to the columns (refer to figure 31).









Final Assembly Part 3 Roof

 Prepare your tools and materials. You will need the following items to complete this phase:

> a dispenser of white woodworking glue yardstick pencil framing square utility knife masking tape

2. Locate the parts. You will need the following parts:

4-51, main roof front panel, 1 pc.
4-52, wing roof front panel, 2 pcs.
4-53, main roof rear panels, 2 pcs.
4-54, wing roof rear panels, 2 pcs.
4-56, cupalo roof panels, 2 pcs.
5-17, shakes (plain)
5-19, universal shake trim stock
5-26, chimney, 1 pc.
5-28, chimney top, 1 pc.
5-60, main roof ridge cap, 1 pc.
5-62, wing roof ridge cap, 2 pcs.
5-72, cupalo front, 1 pc.

- 3. Lay the main roof front panel (part no. 4-51) rough side up on the table, and measure from end to end to find the center. Use the square to draw a centerline across the panel. Measure 1 inch in from the lower edge and draw a line to mark the location of the cupalo front (refer to figure 32).
- 4. Lay out all the roof panels (part no.'s 4-51, 4-52, 4-53, 4-54, & 4-56) as shown in figure 32, rough side up. Carefully measure and draw guide lines for the shakes. The first line goes 1½ inches in from the edge, and the rest are 1 inch apart.
- 5. Measure across the cupalo front (part no. 5-72) and make a mark at the centerline. Glue the cupalo front onto the main roof front panel, with its centerline lined up with the roof centerline. The front edge of the cupalo front should be on the line one inch in from the edge of the panel.
- 6. Glue the cupalo roof panels (part no. 4-56) in place, so the ridge joint is on the roof panel centerline, and the front corners touch the edge of the main roof panel.
- 7. Trim the tops of the corner posts on the main house structure as required to ensure that the roof panels will fit flat against the gable supports.
- 8. Apply glue to the wing gable supports, and install the wing roof panels (part no. 4-52). Be sure the top edges of the panels are positioned exactly at the peaks of the gables. Tape the panels in place.

- 9. When the glue on the cupalo is dry, install the main roof front panel assembly. Apply glue to the gable supports and fillet molding, then lay the roof panel in position with the top edge aligned with the peaks of the gables. Tape the assembly in place.
- 10. After the glue from steps 8 and 9 has dried, install the rear roof panels. Tape them to the front panels at the roof ridge while the glue dries.
- 11. Glue the chimney (part no. 5-26) to the main roof front panel, as shown in figure 33, then glue the chimney top (part no. 5-28) in place on it.
- 12. When the glue from step 10 has dried, remove the tape and install the ridge caps (part no.'s 5-60 & 5-62).
- 13. Apply the shakes (part no. 5-17) over the entire roof. Start at the bottom of each panel and work toward the ridge. Align the top edges of each course of shakes with the pencil lines drawn earlier. Stagger the rows of shakes as done on the gable ends (refer to figure 6).
- 14. When the glue from the preceding steps is dry, cut and install the universal shake trim (part no. 5-19) on the ends of the main roof panel, the front edges of the cupalo, and the ends of the wing roof panels.



FIG. 32



Final Assembly Part 4 Partitions

 Prepare your tools and materials. You will need the following items to complete this phase:

> a dispenser of white woodworking glue coping saw ruler pencil a small square

 Locate the parts. You will need the following parts:

4-35, room partitions, 3 pcs.
4-58, attic partition, 1 pc.
5-41, partition trim, 6 pcs.
5-96, attic partition trim, 1 pc.

- Glue two pieces of partition trim (part no. 5-41) on opposite edges of each of the room partitions (part no. 4-35) as shown in figure 34.
- Glue the attic partition trim (part no. 5-96) onto the rear edge of the attic partition (part no. 4-58). Cut the top end of the trim piece to the same angle as the partition.
- 5. Figure 35 shows the proper locations of the room partitions. Measure and mark the locations on the floors and ceilings to ensure that the partitions are installed vertically and straight.

6. Apply glue to the tops and bottoms of the partitions for the lower two floors, and install them in the positions marked. Use the square to verify that the walls are exactly vertical.



Final Assembly Part 5 Doors and Stairways

 Prepare your tools and materials. You will need the following items to complete this phase:

> a dispenser of white woodworking glue masking tape 100 grade (medium) sandpaper a sharp utility knife

- Locate the parts. You will need the following parts and completed subassemblies:
  - 2-5, door top casing, 4 pcs. 2-7, decorative emblems, 12 pcs. 2-26, door, 2 pcs. 5-3, universal molding stock hinge pins, (brads), 4 pcs. door knobs (map pins), 2 pcs. stairway sub-assemblies, 2 pcs. 3½ inch railing sub-assemblies, 5 pcs.
- Review the instructions for sub-assembly no. 8 and verify that all steps have been completed.
- 4. Prefit the stairway sub-assemblies into the house. If the partition trim prevents the stairway from fitting tightly against the partition, cut a notch out of the side of the stairway to provide the necessary clearance. Sand off any glue or other protrusions that interfere with the fit of the stairways.
- 5. Apply glue to the edge of the stairway assembly that attaches to the partition, and across the top and bottom of the assembly where it contacts the stairwell and floor,
- Place the stairway assembly in position, taking care to keep glue from getting on the hardwood floor except where the stairway attaches.
- 7. Install the second stairway assembly using the same procedure described above. Allow the glue to set before proceeding with step 8.
- 8. Once the stairway glue has set, install the second and third floor stair railing sub-assemblies as shown in figure 36.
- 9. Lay out the decorative emblems (part no. 2-7) on the doors (part no. 2-26) in a pattern that creates an effect you like. (The standard pattern is shown in figure 37). Glue them in place.
- Cut four pieces of universal molding (part no. 5-3) to fit in the tops and bottoms of the two doorways.

- 11. If the glue is dry from step 9, use sandpaper to round off the hinged edge of the door, as shown in the detail circle on figure 37.
- Drive a hinge pin through each of the four pieces of universal molding, 5/16 inch from one end.
- 13. Hold the piece of universal molding with the hinge pin through it so that the hinge pin goes into the door ½ inch from the rounded edge, as shown in figure 37. Install the four pieces on the tops and bottoms of both doors in this manner.
- 14. Install the door knob pins as shown in figure 37.
- 15. At the top and bottom of each door, insert several paper shims between the door and the universal molding. This will ensure that the door will have proper clearance for opening and closing.
- 16. Apply glue to the universal molding pieces, then insert the door assembly into the door opening. Be sure the door has adequate clearance at the sides.
- 17. After the glue has dried, remove the paper shims.
- 18. Cut pieces of universal molding stock (part no. 5-3) and install it as base molding along the room partitions and around the second floor walls.





CONGRATULATIONS! Your Dura-Craft miniature house is now fully assembled.

a second for the second

## SM-700 PARTS LIST

1-2	Siding,	14" long	16 pcs.
1-3	Siding,	82" long	16 pcs.
1-4	Siding,	3" long	22 pcs.
1-5	Siding,	2 3/4" long	22 pcs.
1-6	Siding,	5½" long	6 pcs.
1-11	Siding,	2" long	12 pcs.
1-13	Siding,	31" long	2 pcs.
1-17	Siding,	11" long	21 pcs.
1-18	Siding,	9" long	1 pc.
1-19	Siding,	4" long	4 pcs.
		a second and a second	



2-5 Top & Bottom Window Casing, 27 pcs. Top Door Casing



2-6 Shutters





2-7 Decorative Emblems 36 pcs.



2-22 Window Side Casings

12 pcs.



2-23 Door Side Casings

12 pcs.









4-48 Wing Floor





1/8' SM-700 Page 19

10%





6-13 Stairway Base 2 pcs.



6-14 Step 26 pcs.



6-15 Porch Bottom Step





6-16	Porch	Top	Step
		1992	

1 pc.

3/4"

1217TH		."
	-+ + ++	

6-17	DOOR KNOB	2 PCS.
6-18	HINGE PINS (1/2 INCH BRADS)	4 PCS.
6-19	HARDWOOD FLOORING	1 PKG.
6-20	WINDOW PANE 2 3/16 x 4 7/16	6 PCS.
6-21	BAY WINDOW FRONT PANE 3% x 4%	4 PCS.
6-22	BAY WINDOW SIDE PANE 1 7/8 x 4 3/4	8 PCS



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