

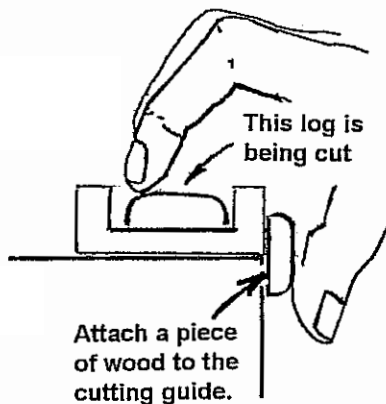
**Parts List:**

- 100 feet of Red Cedar Log material, various lengths
- 1) Base Floor with wood grain printing: 11<sup>1</sup>/<sub>4</sub>" x 17"
  - 1) Door Threshold <sup>3</sup>/<sub>8</sub> x <sup>5</sup>/<sub>8</sub> x 3<sup>1</sup>/<sub>2</sub>"
  - 2) Ladder Side stock <sup>3</sup>/<sub>16</sub> x <sup>3</sup>/<sub>16</sub> - 11<sup>1</sup>/<sub>2</sub>"
  - 2) Ladder Rung stock <sup>3</sup>/<sub>32</sub> x <sup>1</sup>/<sub>4</sub> - 11<sup>1</sup>/<sub>2</sub>"
  - 1) Saw Guide  
pack <sup>3</sup>/<sub>4</sub>" Brads

**Supplies you will need:**

- Fine-toothed saw (X-Acto razor saw or hack saw)
- Ruler or tape measure • Pencil • Hammer • Masking Tape (high tack)
- #32 or #63 rubber bands (at least 22 needed) • Waxed Paper
- 'Tacky' Glue (like Aleene's Original) • Sand Paper (#80, #120, and #220)
- Weights (such as several quarts of pure Vermont Maple Syrup) ☺

This instruction was originally written and printed on 11 x 17 paper. Pages in this '8<sup>1</sup>/<sub>2</sub> x 11' version have been taken directly from the original column by column and separated to fit this size paper; the page numbering reflects the original. That's why you will see "1A, 1B, and 1C" ... the three columns on page 1 of the original. If you print this set of instructions choose "no print scaling" in the printer dialog box so the layout diagrams will be as close as possible to the correct sizes.



**Read the instructions** all the way through before you begin so you'll always know where you're headed.

**Measuring:** Because measuring is easy and materials are limited, always check your measurements.

**If you are using a ruler,** don't trust the end to be at 0", check by marking a length, then measure it again starting at the 1" mark (example: 0" to 4" should be exactly the same as 1" to 5").

Always mark parts with a V by laying the pencil against the ruler's mark, and flicking the pencil out at an angle, then starting again with the pencil at the ruler's mark and flicking out at a different angle. When you cut, the inside edge of the blade touches the bottom of the V and the kerf (the material that is taken away by the blade) is outside the piece. Do Not mark several parts on the same stick: always measure and cut, measure & cut; so the parts won't be undersized by the width of the saw blade (the kerf).

**Cutting:** See the cutting list (pg 5); it is organized in cutting order: Cut longer pieces first so the offcuts can be used for smaller pieces. Save all those stubby ends...it saves time and work to glue them on as "nubs" (see step 23), then cut them after the glue dries. Use an ultra-fine-toothed saw.

**Glue a piece of wood on the edge of the cutting guide** to make it easier to hold. Line up the cut with the slots in the cutting guide and start the cut by drawing the saw toward you. Make sure the cut is on the outside edge of the mark, and that the saw blade is straight up-and-down. Saw with light smooth strokes.

Do your cutting on a workbench or on a piece of waste plywood.

**Gluing:**

**If you are going to stain the logs,** do it before gluing. Oil stain takes several days to dry enough to be glued.

Squeeze the glue bottle a little to get some of the air out before you turn the glue over, then glue won't dribble out when you don't want it to.

**Put a thin continuous line of glue** in the center of the log-edge. You can spread it with your finger and smooth it toward the center. The right amount of glue does not make a mess when it is squeezed to the next log, but still fills the joint.

Put the glue on both sides of the shorter logs in a lay-up rather than on the longer log, so there won't be any glue in the overhang: glue in the overhang will interfere with interlocking the corners (step #16), Clean up any drips and squeezings before they dry.

**Taping:** Use 'high tack' masking tape (not 'painter's tape') <sup>3</sup>/<sub>4</sub>" or 1" wide. **Stretch the tape** as you lay it down to squeeze the parts. Weight taped parts to keep them flat.

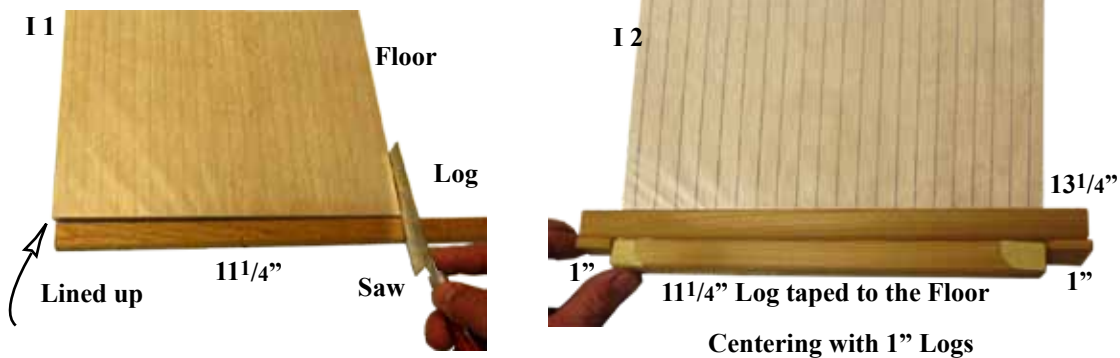
**Cover the Floor** or layout diagram with waxed paper to protect it from extra glue.

**Do not let tape touch the printed surface of the floor unless it is 'finished'** (see [www.realgoodtoys.help](http://www.realgoodtoys.help) for finishing slideshows)

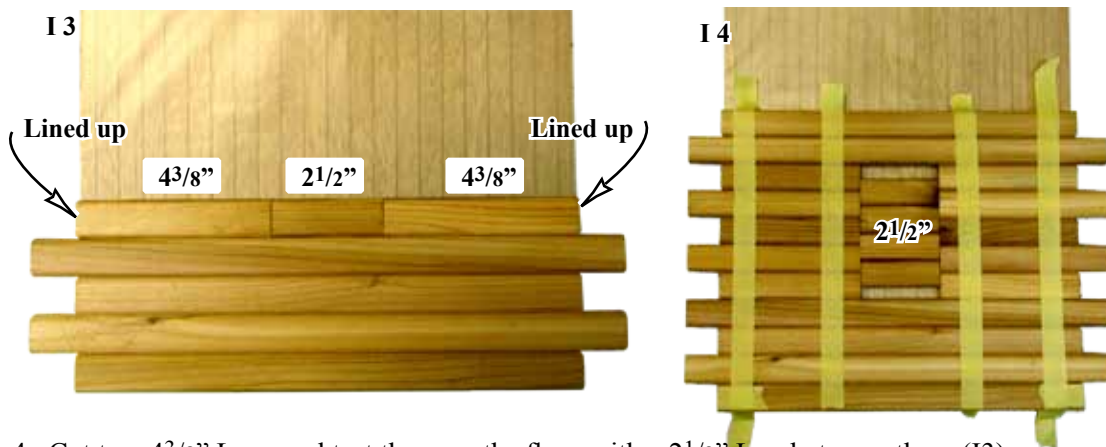
## Order of Operations

1B

1. Follow Cutting List #1 (page 5), use the straightest logs for the 20", 19", and 17" logs. The 15" logs will be re-cut after assembling the cabin (they are spacers for the Back) so they don't have to be as perfect.
2. Cut the 11<sup>1</sup>/<sub>4</sub>" logs following the Floor to make the length exact (I1). Continue cutting logs in order on the list but only cut 1" logs as you generate scrap shorter than 2" (the next larger log). You only need 2 of the 1" logs at the moment, so the rest can wait until you have scrap that can't be cut into something longer. Stop when you get to the 4<sup>3</sup>/<sub>8</sub>" Logs on the cutting list, and wait until you can test them in the Side layout (I3).

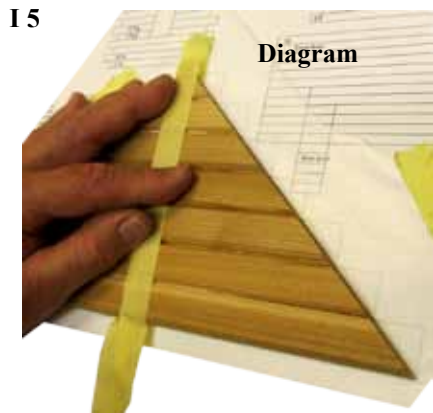


3. Cover the Floor with Waxed Paper with no lumps or wrinkles.. Glue together the 11<sup>1</sup>/<sub>4</sub>" and 13<sup>1</sup>/<sub>4</sub>" logs. The 11<sup>1</sup>/<sub>4</sub>" Logs match the edges of the Floor exactly, and the 13<sup>1</sup>/<sub>4</sub>" logs are centered using 1" Logs on each end as guides (I2).

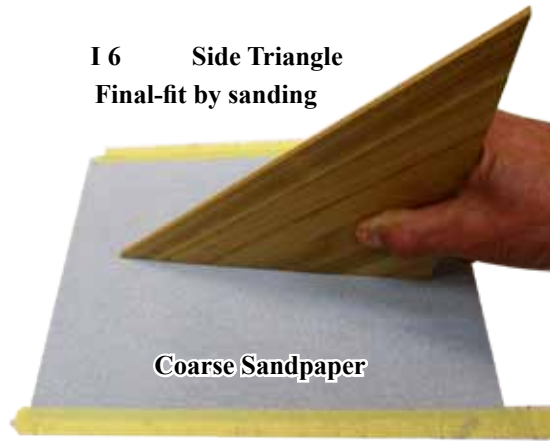


4. Cut two 4<sup>3</sup>/<sub>8</sub>" Logs and test them on the floor with a 2<sup>1</sup>/<sub>2</sub>" Log between them (I3). Adjust the 4<sup>3</sup>/<sub>8</sub>" Logs' length so they line up with the edges of the Floor exactly. Cut the rest of the 4<sup>3</sup>/<sub>8</sub>" Logs this length. Place the 2<sup>1</sup>/<sub>2</sub>" Logs as shown (I4) to space the 4<sup>3</sup>/<sub>8</sub>" Logs and to locate the 5<sup>3</sup>/<sub>8</sub>" Logs at the same time. Finish gluing and taping the wall, stretching the tape to make the glue-joints tight. Re-check the ends of the 11<sup>1</sup>/<sub>4</sub>" and the 4<sup>3</sup>/<sub>8</sub>" Logs to make sure they still line up with the edges of the Floor. Weight the wall layout so it dries flat and let the glue dry.

5. Cut and assemble the Side Triangle Logs following the page 5 Layout Diagram (I5). Tape a piece of waxed paper over the diagram and tape the logs together right on the diagram. Line up the edges carefully. Let dry then final-fit the edges with a piece of coarse sandpaper taped to the table (I6) which removes material quickly, so a little too long can be fixed but too much is very tedious and being short of the line can't be fixed.

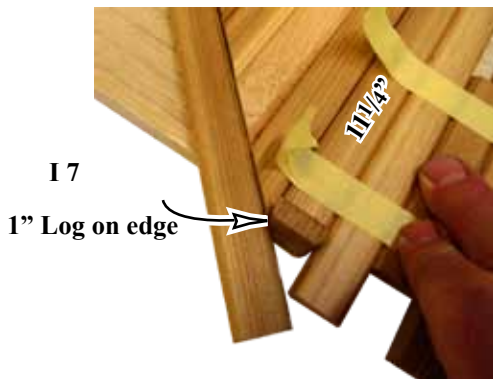


**I 5**  
**Lay out the Triangle Logs on the Diagram**



**I 6** Side Triangle  
**Final-fit by sanding**

6. Glue, tape, and weight the Triangles to the Sides. Put a 1" Log on edge against each end of the highest 1 1/4 log (I7). Lay a straight log along the roof line to center the Triangle on the Side (I8). Tape firmly, add weights to hold it flat, let the glue dry.



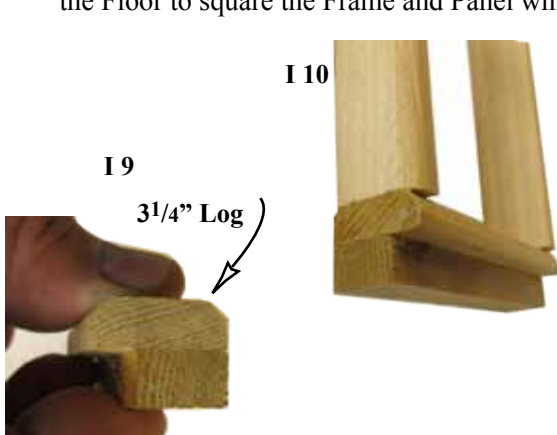
**I 8**

7. Assemble the other Side Set.

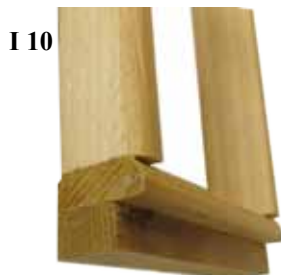
8. Refresh the waxed paper on the Floor.

Cut parts for the Front and Door following Cutting List #2 (page 5) and the Layout Diagram. Glue the Threshold to a 3 1/4" Log (I9). Let dry.

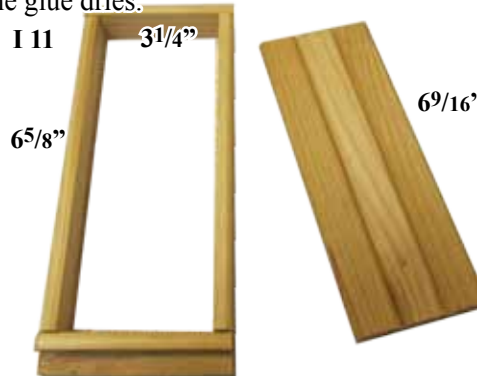
Assemble the Door Panel and Door Frame (tape or rubber band). Line up the edges with the Floor to square the Frame and Panel while the glue dries.



**I 9**

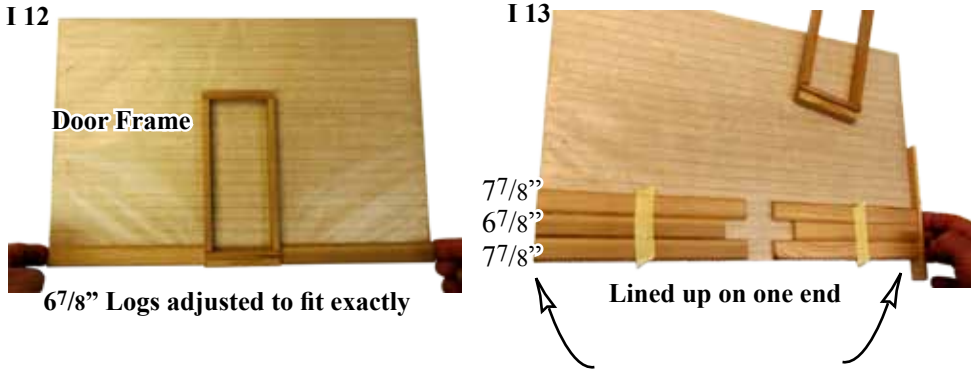


**I 10**



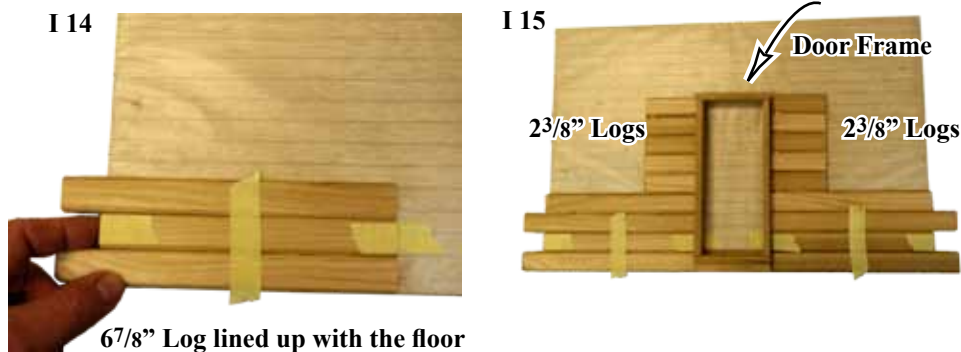
**I 11**

9. Lay the Door Frame on the Floor. Cut two  $6\frac{7}{8}$ " Logs and test them on the floor with the Door Frame between them (I12). Adjust the  $6\frac{7}{8}$ " Logs' length so they line up with the edges of the Floor exactly. Cut the other  $6\frac{7}{8}$ " Logs this length. Glue together two Logs  $7\frac{7}{8}$  and one  $6\frac{7}{8}$ , lined up on the end (I13). Make two sets.



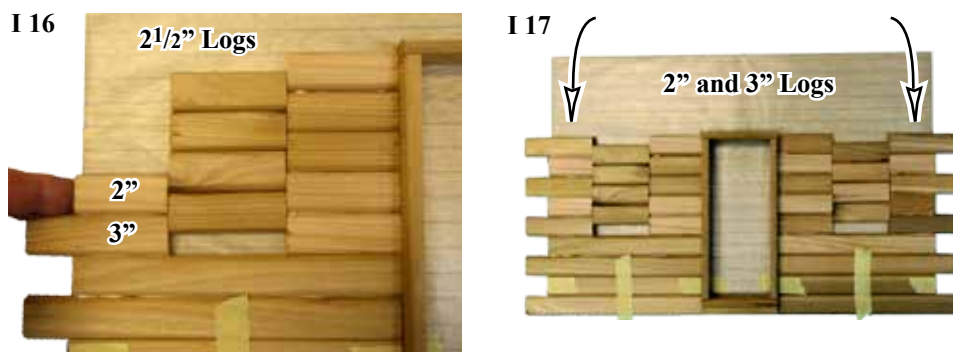
The Floor is protected with waxed paper.

10. Tape the sets to the Floor (I 14), lined up at the bottom and at the end of the  $6\frac{7}{8}$ " Log. Add another  $6\frac{7}{8}$ " Log and glue in the  $2\frac{3}{8}$ " Logs (I15).

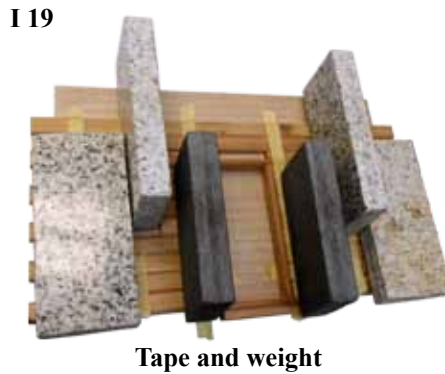
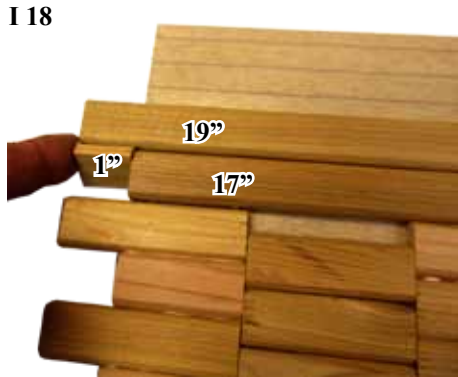


Confirm your layouts with the Layout Diagram (pg. 5)

11. Without glue, set  $2\frac{1}{2}$ " Logs in place to space the window openings (I16). Glue a 3" Log, then test a 2" Log - adjust the 2" Log to line up with the Floor exactly. Cut the rest of the 2" Logs this length. Glue in the 2" and 3" Logs (I17).



12. Glue in a 17" and a 19" Log. The 17" log lines up with the floor on each end. The 19" Log is centered with 1" Logs as spacers (I18). Tape and weight the Front assembly. Check and adjust the Logs that are supposed to line up with the edge of the Floor. Let the glue dry.



Tape and weight

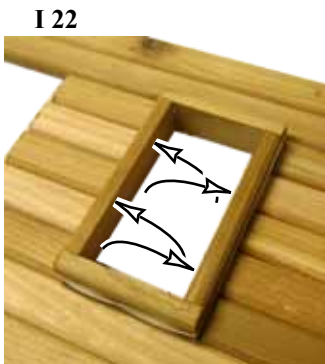
Let the glue dry

13. Tape a 19" Log to the Floor, lined up at the bottom and centered with 1" Logs. Glue in 1" and 2" Logs. Set 15" logs in as spacers (without glue). Tape and weight; adjust the ends to line up with the Floor. Let the glue dry.

The Floor is protected with waxed paper.



14. Glue and tape or rubber band together 4 Window Frames. Set them in the window holes to hold them square. Push the window sides outward so it fills the hole (I22). Pin the Door top and bottom. Drive a brad in the bottom touching the back of the Threshold and 1/2" from the end. Match that position with a brad in the top frame (I23). Find the door position which will put the brad into the center (I24). Drive the brads - use a screwdriver or nail set for the brad that's touching the Threshold (I25).



15. Clean, scrape, and sand the inside surfaces of the walls.  
 Make a sanding stick by taping medium grit sandpaper around a log. Sand the top and bottom of each log that sticks out for clearance in the interlock (I27). Sand square (straight) with the wall only... do not shape the log ends yet.



**Sanding Stick**



**Interlock the walls**

16. Stand the walls up and interlock them at the corners (I28). Take it slow and don't force the corners, more sanding may be necessary. Gently work the corners all the way in. Angle the wall set to expose the logs' ends in the joint. Put a dot of glue on each log end where they 'opened' (I29), then angle the wall set the other way so the opposite corners open - put a dot on these logs' ends too. Straighten and tighten. Continue to "*let the glue dry*" (step 19) without stopping.



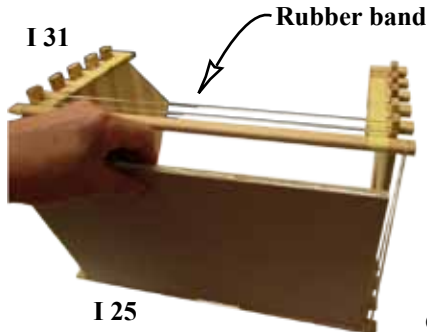
**I 29**



**I 30**

**Test the Floor - mark the door**

17. Stretch a rubber band from the bottom 'sticking out' log in each wall to the bottom "sticking out" log on the far wall; this tightens up the cabin at the base. Test the Floor in the cabin. Mark the door on the Floor's edge and don't put glue there (I30). Glue the floor into the cabin from the bottom, printed side up (I31). Tape the walls tightly to the floor (I32). Stand the house up and press the Floor down to the bottom.



**I 31**

**Rubber band**

**I 25**

**Glue in the Floor**

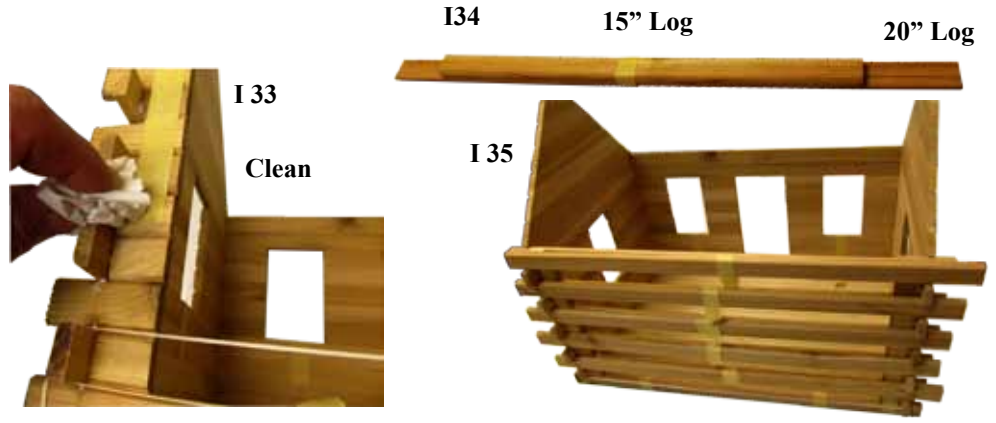


**I 32**

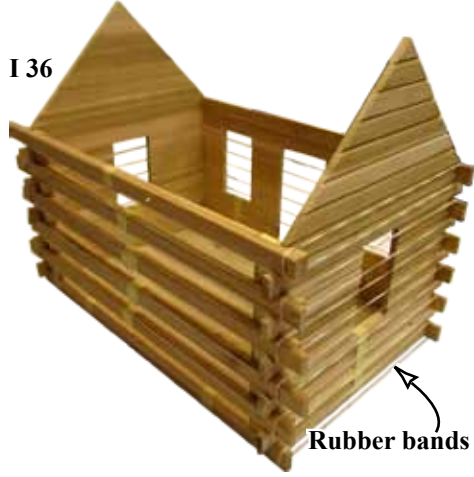
**Run the tape under the rubber band**

**Continue to the next steps without letting the glue dry**

18. Clean up the glue squeezings, particularly on the 2” logs in the Back set (I33). Without glue, tape a 15” log to the inside of a 20” Log, approx. centered (I34) - this is a Back Spacer Set (make 5). Set a Back Spacer Set between each 2” Log course in the Back (I35).



19. Tighten up the Wall sets and clean up glue squeezings. Put a rubber band around each Front Log that sticks out to the corresponding Back Log that sticks out (going around the Back Spacers), and around each log that sticks out from one Side to the other (I36).



Tighten the walls again and **clean up the glue squeezings**. **Note: Don't put off cleaning the squeezings. A damp QTip or twisted napkin now is easy - carving glue globs later is hard.** Inspect the inside too to see if the walls are tight.

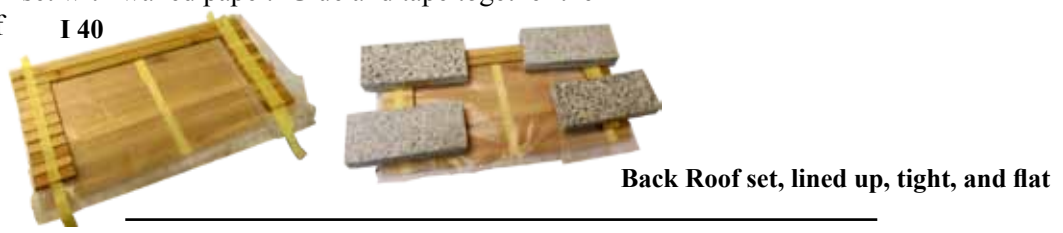
**Let the glue dry**

Keep saving the 20” and 17” Logs. Return the 15” logs to the “logs to be cut” pile. Cut the ‘**Cutting List #3**’ logs (page 5).

20. Glue and tape together the Front Roof set using (12) 20” logs. Line up the edges carefully using a framing square (if you have one) or this page to square the set. Each band of tape is 3 times around tightening more each time.



21. Cover the Front Roof set with waxed paper. Glue and tape together the Back Roof Set on top of the Front Roof Set, and lined up carefully at the top and sides.



22. Glue the Shutters to the Window Frames (I42).



I 42

23. Cut and attach (or attach then cut) the Nubs. Let the glue dry, then cut, file, and sand the ends so they are smooth and clean (I45).



Nubs

Let the glue dry



I 44



I 45

Soften the Nub's corners

Finish smoothing the Nubs



24. Glue the Door into the opening, using glue on only the middle 4 Logs (I47). The walls will grow and shrink as humidity changes, and too much glue will fight that movement. Let the Logs move naturally and only glue to 4 on each side.



I 47  
Glue in the Door



25. Glue the Windows into the openings. Lift the frames to the top of the opening leaving the clearance at the bottom. Glue to the logs on the sides only, not the top or bottom so that there is space for things to move with humidity changes (I48).



I 48

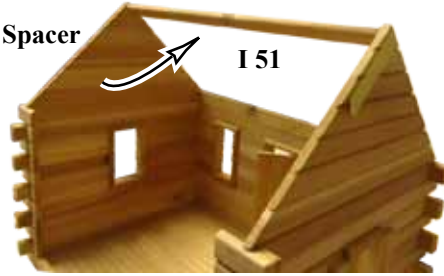


26. Clean, scrape, and sand the inside surfaces of the Roofs. Tape a 17" log between the sidewalls' peaks as a temporary spacer. (tape to the front slope only). Glue the Back Roof to the cabin, lined up at the peaks and at the cutout in back. Let the glue dry, then take out the spacer.

I 50  
Clean up the inside



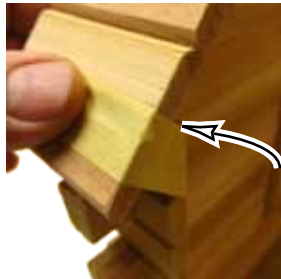
Temporary Spacer



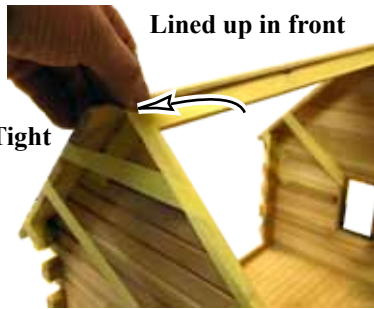
I 51



I 52



Back cutouts line up



Lined up in front

Tight

Let the glue dry

27. Glue and tape the Front Roof to the cabin, lined up with the Back Roof at the top and sides.



I 54

Glued tight to the Sides  
Inspect on the inside.



I 55

Lots of tape

Let the glue dry

28. Glue in the Loft Supports (I56); let the glue dry. Glue in the loft logs - glue them individually to the Loft Supports but not to each other.



I 56 Loft Support

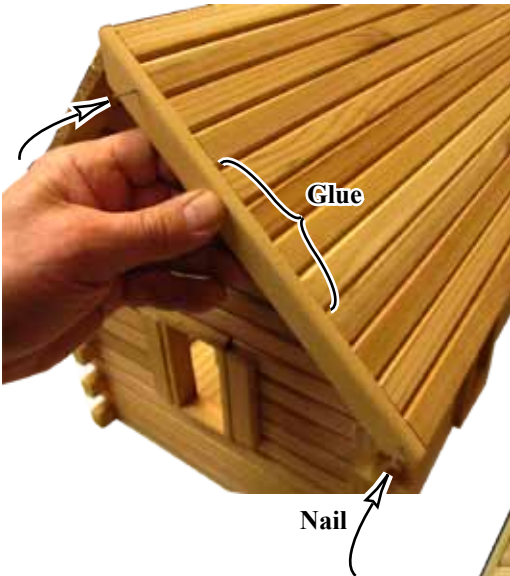


Loft Logs: temporary bracing

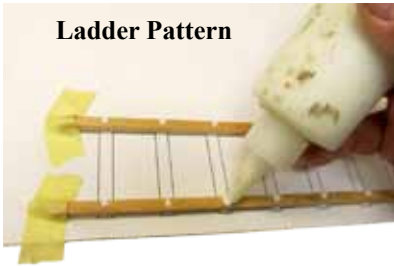
I 58 Loft



29. Cut the Roof Trim following the pattern on page 5. Glue the trim to a few of the logs in the middle of the Roof, and nail it to the Roof on each end.

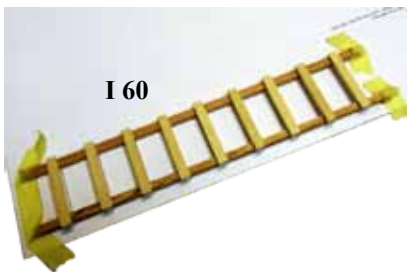


30. Cut and glue together the ladder following the Pattern.

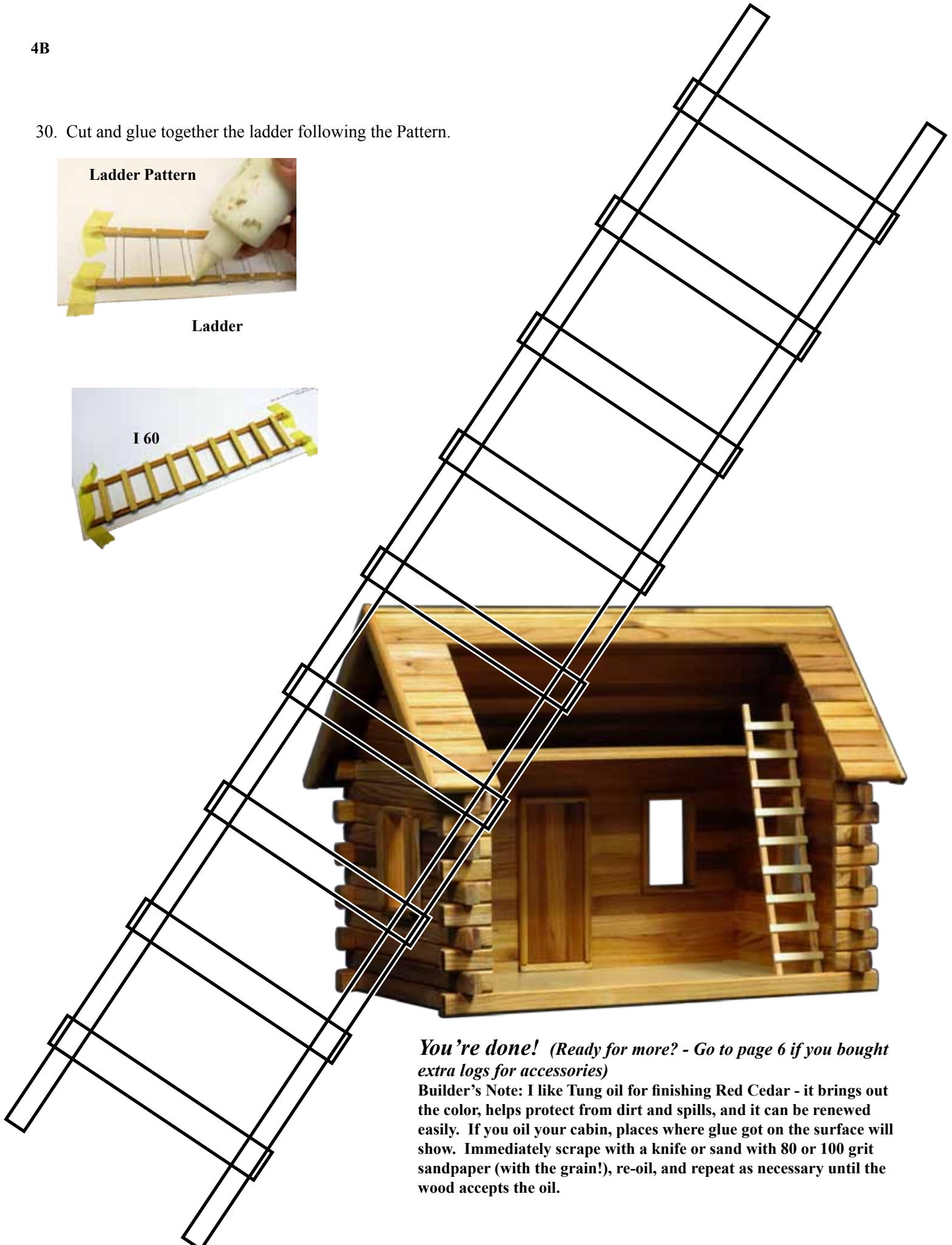


Ladder Pattern

Ladder



160



***You're done!*** (Ready for more? - Go to page 6 if you bought extra logs for accessories)

**Builder's Note:** I like Tung oil for finishing Red Cedar - it brings out the color, helps protect from dirt and spills, and it can be renewed easily. If you oil your cabin, places where glue got on the surface will show. Immediately scrape with a knife or sand with 80 or 100 grit sandpaper (with the grain!), re-oil, and repeat as necessary until the wood accepts the oil.

**Generally good practices when cutting logs:**

Select the straightest logs for the longest parts  
 Cut parts from longest to shortest (cut the angled parts in a group so you can nest the 45° cuts)  
 Keep offcuts sorted by length and find the shortest offcut possible to make the next part in the list.  
 Don't throw away anything until you've made the "Nubs"

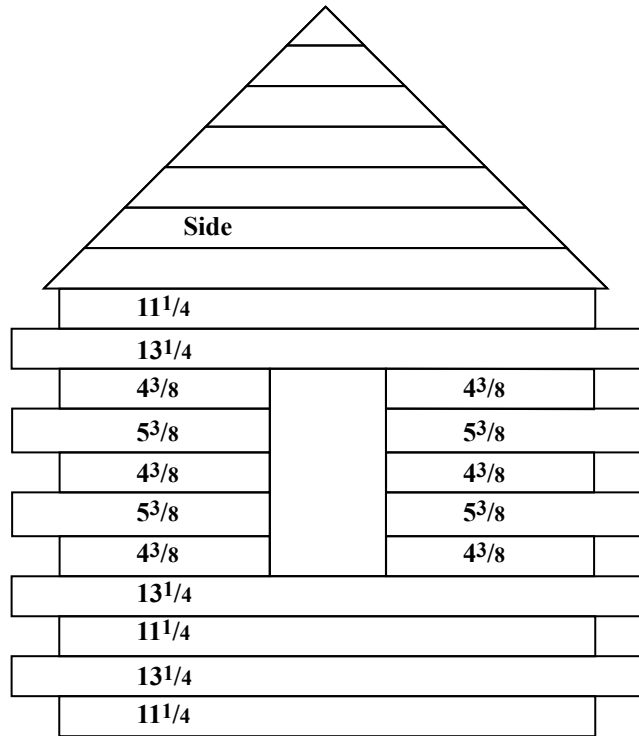
Knots are acceptable and desirable in Log Cabins, but try to avoid sawing right thru them. There is enough material and a little extra to make all the parts below, but if your goal is less-rustic, you may need to purchase additional logs at

[www.realgoodtoys.com](http://www.realgoodtoys.com)

**Cutting List #1** (cut and assemble the sides):

- 14 20" **Roofs**
- 2 19" **Front & Back**
- 8 17" **Front, Loft & assembly aid (fit to floor)**
- 5 15" (these are assembly aids and will be re-cut in list #3)
- 6 11 1/4" **Side (fit to the floor)**
- 6 13 1/4" **Side**
- 8 5 3/8" **Side**
- 8 2 1/2" **Window**
- 10 1" (cut as you have scrap shorter than 2")
- 12 4 3/8" **Side (test, then cut)**
- 2 11 3/4" \*45°\45° (test, then cut)
- 2 10 1/16" \*45°\45° (test, then cut)
- 2 8 3/8" \*45°\45° (test, then cut)
- 2 6 11/16" \*45°\45° (test, then cut)
- 2 5" \*45°\45° (test, then cut)
- 2 3 5/16" \*45°\45° (test, then cut)
- 2 1 5/8" \*45°\45° (test, then cut)

Follow the Triangle Pattern (below)



**Cutting List #2** (cut and assemble the Fronts)

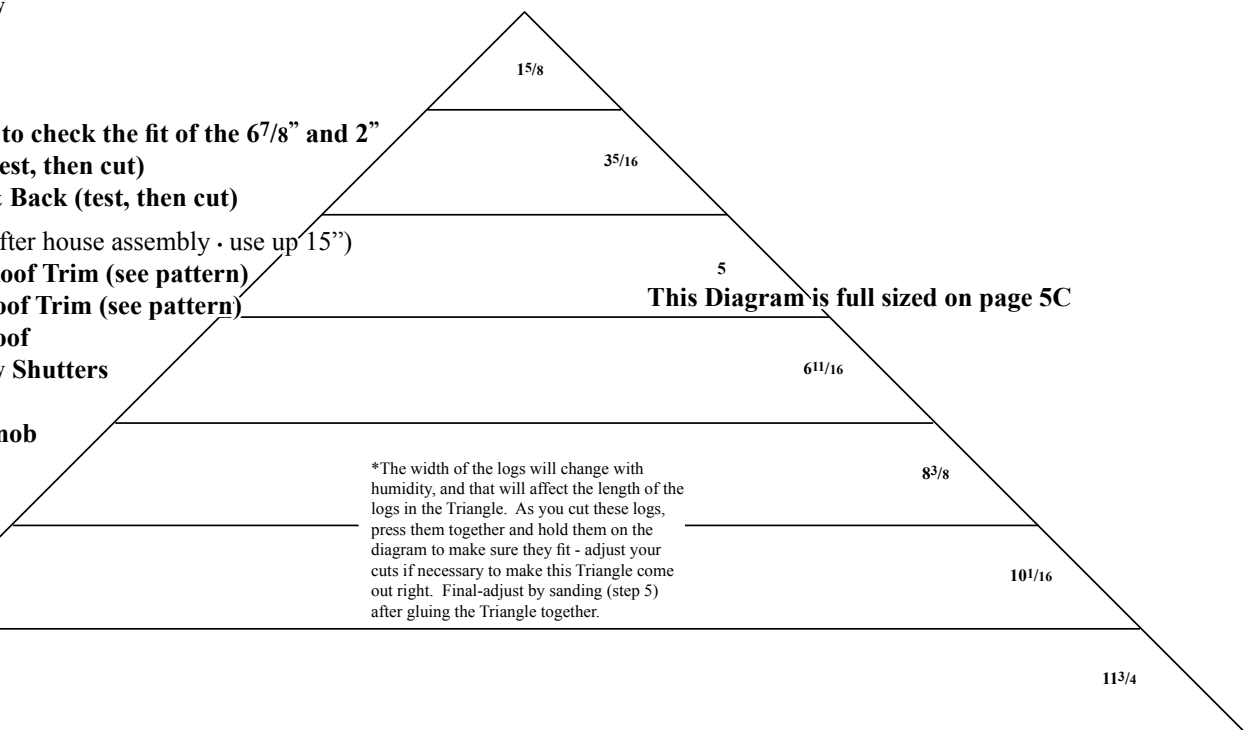
- 4 7 7/8" **Front**
- 2 6 5/8" **Door (a little short is OK, a little long is not)**
- 3 6 9/16" **Door (1/16" shorter than the part above)**
- 2 5 7/8" **Loft Support**
- 8 3 9/16" **Window**
- 2 3 1/4" **Door**
- 6 3" **Front**
- 10 2 3/8" **Front**
- Wait for wall layout to check the fit of the 6 7/8" and 2"
- 4 6 7/8" **Front (test, then cut)**
- 14 2" **Front & Back (test, then cut)**

**Cutting List #3** (cut after house assembly - use up 15")

- 2 10 3/16" **Front Roof Trim (see pattern)**
- 2 9 3/4" **Back Roof Trim (see pattern)**
- 18 2 1/2" **Back Roof**
- 8 3 9/16" **Window Shutters**
- 44 1 1/16" **Nubs**
- 1 1/4" **Door Knob**

**Ladder Rungs**

- 9 1/4 x 3/32 - 2 1/8"



\*The width of the logs will change with humidity, and that will affect the length of the logs in the Triangle. As you cut these logs, press them together and hold them on the diagram to make sure they fit - adjust your cuts if necessary to make this Triangle come out right. Final-adjust by sanding (step 5) after gluing the Triangle together.

<b>19</b>		<b>Front</b>	
17			
3	2 <sup>3/8</sup>	2 <sup>3/8</sup>	3
2	2 <sup>3/8</sup>	2 <sup>3/8</sup>	2
3	2 <sup>3/8</sup>	2 <sup>3/8</sup>	3
2	2 <sup>3/8</sup>	2 <sup>3/8</sup>	2
3	2 <sup>3/8</sup>	2 <sup>3/8</sup>	3
6 <sup>7/8</sup>		6 <sup>7/8</sup>	
7 <sup>7/8</sup>		7 <sup>7/8</sup>	
6 <sup>7/8</sup>		6 <sup>7/8</sup>	
7 <sup>7/8</sup>		7 <sup>7/8</sup>	

2	2
1	1
2	2
1	1
2	2
1	1
2	2
1	1
2	2
1	1
<b>19</b>	
<b>Back</b>	

<b>20</b>
<b>Front Roof</b>

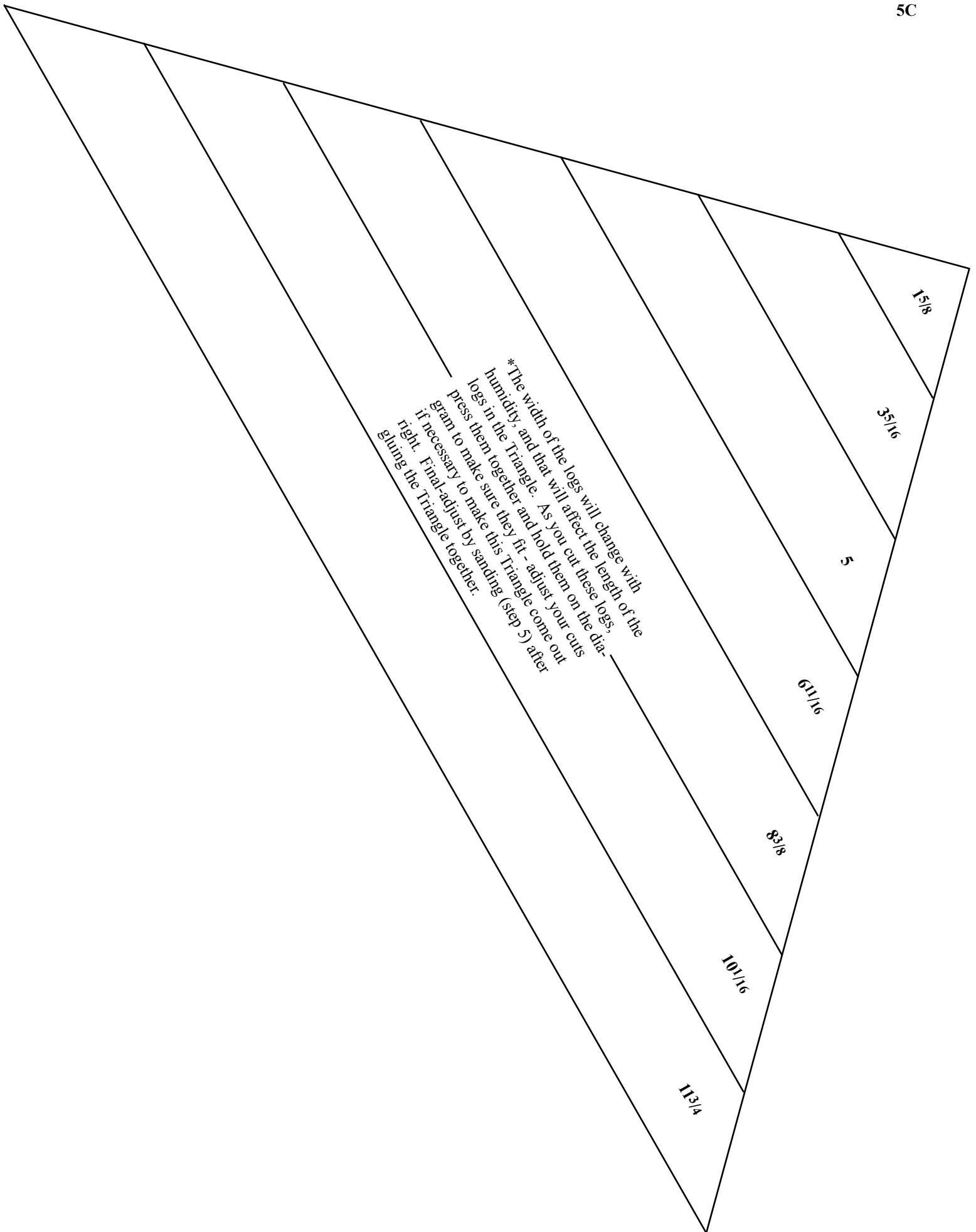
20	
20	
	2 <sup>1/2</sup>
	2 <sup>1/2</sup>
	2 <sup>1/2</sup>
	2 <sup>1/2</sup>
	2 <sup>1/2</sup>
	2 <sup>1/2</sup>
<b>Back Roof</b>	2 <sup>1/2</sup>
2 <sup>1/2</sup>	2 <sup>1/2</sup>
2 <sup>1/2</sup>	2 <sup>1/2</sup>
2 <sup>1/2</sup>	2 <sup>1/2</sup>

Back Roof Trim  
- make left and right set

93/4

Front Roof Trim  
- make left and right set

10<sup>3/16</sup>



**Options for your *Lakeside Retreat* (available at [www.realgoodtoys.com](http://www.realgoodtoys.com)):**

CK555 - One pound of *Extra Red Cedar Logs* (approximately 25") is more than enough for all the Log Furniture shown on this page.

HOC 350 Hand Split Octagonal Cedar Shingles

Dye 1 Reddish Brown Shingle (or log) Dye

Dye 3 Dark Grey Shingle (or log) Dye

AL 82 Aleene's Tacky Glue (It's what we use to build this product)

5408-10 Double-Cut coarse hand file (every *builder* should have one)

**Bed:**

2 5<sup>3</sup>/<sub>4</sub>"

3 2<sup>3</sup>/<sub>4</sub>"

2 2<sup>1</sup>/<sub>4</sub>"

8 2"



**Bed:** Glue together the Bed Frame from 2 and 5<sup>3</sup>/<sub>4</sub> Logs lined up on the ends and with the 2" logs spaced evenly. Glue the 2" Logs to the 5<sup>3</sup>/<sub>4</sub> Logs, but not to each other.



**Attach the Legs spaced 1-log-width from the floor.**



**Attach the Headboard to the top of the longer legs.**



CK555 Extra Red Cedar Logs for furniture, fixtures, and fun.

**Shelf:**

- 2 7"
- 5 3"



Mark the uprights at 1<sup>3</sup>/<sub>8</sub>" intervals:  
1<sup>3</sup>/<sub>8</sub>", 2<sup>3</sup>/<sub>4</sub>", 4<sup>1</sup>/<sub>8</sub>", 5<sup>1</sup>/<sub>2</sub>", from the top.



Transfer the marks to the other upright.



Line up the tops of the shelves with the marks.

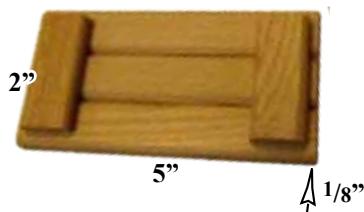
Glue and rubberband together.



Stand upright in the corner so it dries square.

**Table:**

- 3 5"
- 1 3<sup>1</sup>/<sub>2</sub>"
- 6 2"



Glue 2" crosspieces to the 5" table top Logs, spaced about 1/8" from the ends. Do not glue the 5" Logs to each other.



Assemble 2 Leg sets using 2" Logs.



Glue the 3<sup>1</sup>/<sub>2</sub>" Stringer to the Leg Sets. Let the glue dry.



Glue the Legs/Stringer to the Crosspieces. Let the glue dry.





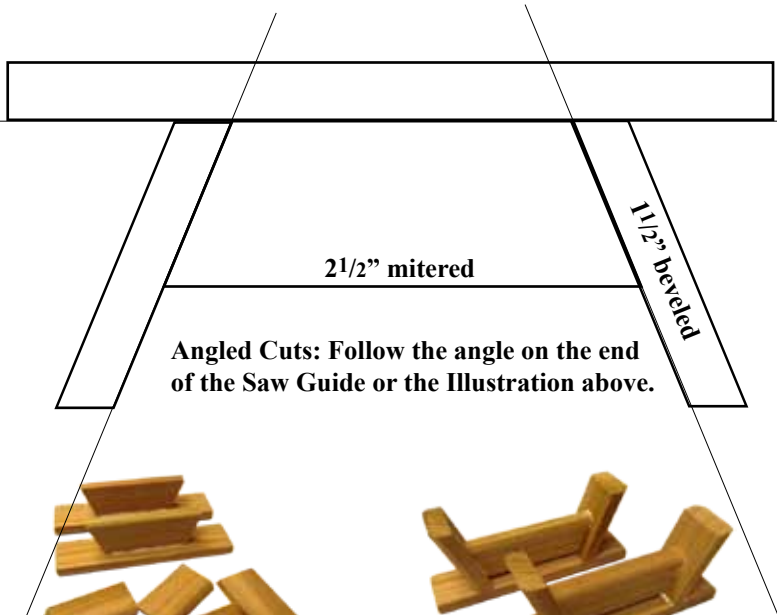
- Bench (2):**  
 2 4"  
 2 2 1/2" mitered  
 4 1 1/2" beveled



Miter



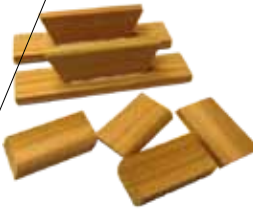
Bevels



2 1/2" mitered

1 1/2" beveled

Angled Cuts: Follow the angle on the end of the Saw Guide or the Illustration above.



- Chest:**
- |              |   |   |
|--------------|---|---|
| <b>Sides</b> |   | <b>Ends: 1 1/2"</b>   |
| 4 3"         |  |  |
| 2 2 15/16"   |  |   |
| 4 1 1/2"     |   |   |

Lid: 2 15/16"

Bottom: 3"

Assemble 1 lid, 1 bottom, and 2 ends. Let the glue dry.



Sand rounded corners on the Lid.



Glue 2 sides 3" to the bottom; glue and rubber-band the ends to the sides/bottom. Let dry.



Drill (1/16") or heat the pin red-hot 2 or 3 times to start the hole...



... that will keep the wood from splitting.



6 playing cards to space the lid.



Locate the pin 1/8 x 1/8 from the corner. A cut-off of a paper clip makes a great pin.

Other furniture to consider: A kitchen counter with shelves above and below, maybe with a dry sink or pitcher pump; a dresser with false drawer fronts; a bedside stand. Consider outside fixtures too... a well with a roof, a shave-horse, an Adirondack chair... Pioneer cabins even had chimneys made of logs and mud. But why stop there? Two or three packs of CK555 Logs will give you enough for a small side shed, chicken coup or corral. The items pictured above weigh less than 1/2 pound so even one pack will give you extra material to play with.

**Be creative and have fun!**