## BUILDING WITH "THE NATURAL TAIL" AND DOUBLE-ROUND NATURAL HAND-PEELED LOGS.



This an example of mixing up the stack heights to achieve the look of a true full-scribe handcrafted log home. The biggest advantage to building like this is anybody with some building experience can put this together. The purpose of this document is to show you some of the tools and techniques we use in order to give you some ideas.

In the picture above we started with a 12 " stack height x 15 " average diameter double round log. The next log is a 10 " stack 13 " aver. dia. and then an 8 " stack 11" aver. dia. The pattern starts over with a 12" stack again putting the bigger tail on the opposite side which is why we are using an odd number ( 12 ", 10 ", 8 ", 12 ", 10 ", 8 ").

When using our natural tails which are left full round and in their natural shape you will get a verity of sizes and shapes. For example if you notice the tail on the second row which is a 10 " stack the tail has a flare or bell and is about the same size as the 12 " log tail. The third row has a bit of a smaller tail on the 8" stack row.

PLEASE NOTE! When buying our products and building with logs you must assume all responsibility for your safety and those around you. The tools and equipment for this type of construction can be dangerous, please be safe and enjoy the craft of building with logs.

## Getting started.

Here I will list some of the tools you will need to build with logs. You can purchase these at www.loghomestore.com, www. loghelp.com or your local chainsaw shop.

I like to use three or four chainsaws for different applications. One large Husqvarna 372 XP , one lighter medium duty Husqvarna 340 and one small Jonsered 2036. The large Husqvarna 372 XP with a 24 " bar that can cut large logs fast and straight and can rip if need be. The Husqvarna 340 with the longest carving bar available for making plunge cuts, notches and general cutting. The smallest saw I use with a shorter carving bar with a dime tip for precision cutting of electrical boxes and curved notches.


An electric chainsaw is useful for my cut-off jig that I made.


One important tool in log work is a good scribe.
A Scribe is used for transferring the contours of one shape onto another. It has two pencils and a level on it.

I have the Northwest scriber (pictured on the right) but recently a customer purchased the Veritas (pictured on the left) and it is just as good or better for less money. I found this for $\$ 94.95$ at Baileys online. http://www.baileysonline.com/itemdetail.asp?item=15770 I made my own pen holders out of some coated electrical clamps to hold the felt tip pens. The adapters that I paid extra for were cheap metal and broke after bending them to hold the pen right.


Other tools I use are a flap disc sanding/grinding wheel on a 4.5 " angle grinder, a quality 18 volt or bigger drill, a spray foam gun and a 24 " drawknife for cleaning and shaping the logs.



The notch on the bottom side was extended two inches past the foundation so that false stone can tuck under it.

Notice where the full round starts. This needs to be inside of the outside edge of the log going on top. That is what you will be scribing and cutting out of the next log so it will have to be in approximately $3 "-4$ " (the amount will depend on the curve of the next $\log$ ).

Next take a $12 "$ stack double round $\log$ and cut the end at a 45 degree point. I like to find the middle of the log at both ends and snap a line as a reference point and square off of the line. You can make a template out of a 12" wide piece of plywood and hold it on the center marks and trace the point. On double rounds I pull everything including plumbing/leveling, and squaring from the middle of the wall because of the natural surface.


Then set the butting log with the point so that it is setting level onto the log with the natural tail (the passing log) and check to see if the two outer points line up with each other. Sometimes you will have to adjust the angle on one side of the point that you just cut so that they line up especially when the log below has a flare and is wider on one side that the other. Then trace it on the log below and cut it out and fit if necessary.

NOTE: You could save a step by skipping putting the point on the end first. You would just set the joining log where you want it and eyeball straight down where the two surfaces will meet. Make a mark on both sides and use a framing square to make the point. It won't matter if it is not exactly square because you are tracing it.

This is the fit you are after. I put sill seal foam under the logs and bolt the first course to the foundation. If you are building on a subfloor you can extend the foundation bolts through the floor and bolt the log down. I also put spray foam in the joints and toe screw the two together with log screws.


Next set the next passing log with the natural tail up on equal size blocks about 3 or 4 inches high. Be sure and line it up right where you want it and remember to hold the tail in slightly like the first log.


Notice that the electrical wires get a hole drilled or cut up through the middle of the log.

If your blocks are holding the $\log$ up $4 "$ then you will need to set the pencils on the scriber at $4 "$ and plumb the two points. See the instructions for setting the scriber. Then carefully scribe around the tail making sure you hold the scribe level / plumb while you trace the logs.


Zoom into the pictures to see the two lines. The line on the top is what will get cut out. The line on the bottom is a reference line where the log will sit down. If you are going to put sill seal foam insulation between the logs as I like to do this will make a small gap in your final cut which I like about an $1 / 8 "-1 / 4$ " to squeeze a bead of quality log caulk into it so that it holds better. If you want to conceal your caulk or seal then set your scriber an $1 / 8^{\prime \prime}$ less than your blocks and it will be tight. Note: you can also put a sticky back foam seal between your logs.

Now you can turn the log over on some blocks and cut out the wood that you just marked. I stay away from the line and trace it out with the carving bar. I also under cut slightly so I do not get any hang-ups. You will need to measure how far in to cut and just go a little farther. If you are chinking your logs you won't have to be so careful. I like to finish sanding to the line with a flap disk sanding wheel on a $41 / 2$ " angle grinder.


Next I like to match the edges so I trace the log and drawknife the wood off and round it some. You can also use a sander / grinder or chainsaw. I like to finish it up with the drawknife because it closes the pores in the wood and the stain matches better.


I like to touch-up the miters with a sander/grinder so that the edges meet.


