

GETTING STARTED - TENON CUTTING

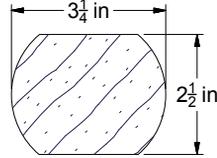
Log Prep

1. Acquire Logs

Logs can be acquired from a variety of sources, including: local land owners, tree service companies, home improvement/hardware stores, DNR or Forestry Department, and K&A Log Furniture.

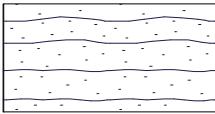
Tip
 While no logs are perfectly straight, we recommend finding logs that are as straight-as-possible to make fit-up and assembly easier.

Note: Some designs call for a landscape timber. The correct size is shown to the right.

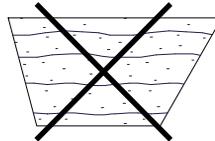


2. Cut Logs/Wood to Length

Use a saw to cut the logs to the lengths shown in the desired design. Take care to cut the end of the logs square/perpendicular to the log body.



CORRECT
Ends of log square



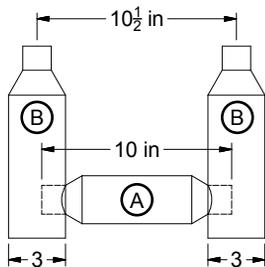
WRONG
Ends of log not square

Note: The log lengths in this manual are sized for **one diameter** of log. If you choose a different diameter log than the one listed in the Parts List, you must account for the change by: cutting cross-member logs (logs with tenons on **both ends**) shorter, or longer (see three examples below).

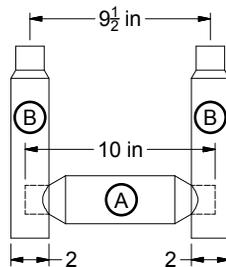
Parts List

Item	Qty	Part Name	Size
A	1	Log-A	Ø2-½" X 10" Long
B	2	Log-B	Ø3" X 10" Long

Tip
 It is easier to trim a log shorter than to add to a log. When in doubt, cut cross-member logs (logs with tenons on **both ends**) a little longer than the plan calls for (+1 inch). You can trim the excess off later after dry fit-up.

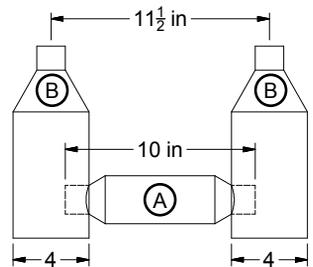


Ø3" Log-B
Spacing is correct at 10-½"



Ø2" Log-B
Spacing is incorrect at 9-½"

Remedy: Log-A must be re-cut at 11" long



Ø4" Log-B
Spacing is incorrect at 11-½"

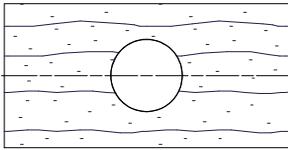
Remedy: Log-A must be shortened to 9" long

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Log Prep (cont.)

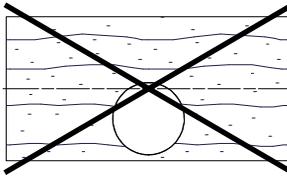
3. Drill Holes (mortise)

Drill holes in the locations shown for the desired design. Always drill the holes in the center of log unless otherwise stated.



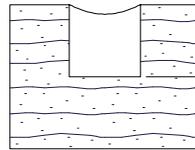
CORRECT

Hole in center of log



WRONG

Hole not in center of log



Hole Depth

$\frac{1}{2} \times \text{Log Diameter}$

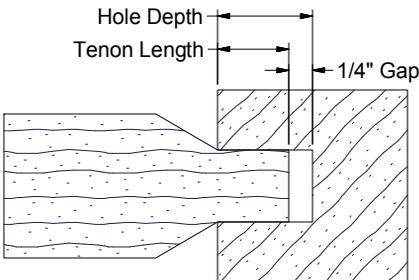
$\frac{1}{2} \times \text{Log Dia}$

Note: Hole depth should be about $\frac{1}{2} \times \text{Log Diameter}$.

e.g. Hole depth for a $\varnothing 3''$ diameter log should be $\frac{1}{2} \times \varnothing 3'' = 1\frac{1}{2}''$ hole depth

4. Cut Tenons

Use a $\frac{1}{2}''$, Single-speed Drill and a Tenon Cutter to cut tenons in the locations shown for the desired design.



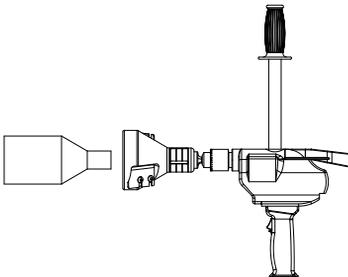
Tip

If the log is larger than the Tenon Cutter will accept, taper down the end of the log with a Draw Knife.

Note: Tenon length should be (Hole Depth) - $\frac{1}{4}''$.

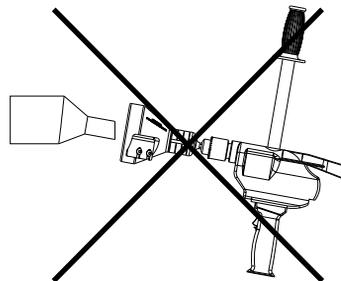
e.g. Tenon length for a $1\frac{1}{2}''$ deep hole should be $(1\frac{1}{2}'' - \frac{1}{4}'' = 1\frac{1}{4}''$ tenon length

IMPORTANT: Cutting a straight tenon is critical to reduce assembly problems.



CORRECT

Drill in-line with log



WRONG

Drill not in-line with log (crooked)