

EASY-TO-BUILD STRAP CLAMP

You can easily build a clamp out of a few scrap pieces of wood to secure your logs for cutting tenons.

This clamp can be adjusted for any size or shape log. You can either clamp or screw it down to your work bench or saw horses.

The basic construction is simple and consists of only three pieces of scrap wood, glue, a few screws and a ratchet tie down available at any hardware store. You can make it any size you need.

1. **Base:** Use a 2x4 or 2x6 so that it does not bend or flex when tightening. If you will be clamping only small branches, a 1" thick board will do.
2. **Stop Block:** The height of the stop block should not be greater than the height of the log, and the top should be rounded off.
3. **Brace:** The brace is used both to support the stop block when pressure is applied, and is where the ratchet is mounted. By mounting the ratchet on the brace you are lessening the friction on the strap so that it doesn't fray after prolonged use. The strap should clear the brace for direct contact with the the log for maximum clamping.

Cut the three pieces of scrap wood to whatever size you need your clamp to be.

Glue and screw the Stop Block to the Brace, and then glue and screw them to the base from the bottom. You may want to drill pilot holes first to be sure the wood doesn't split.



Use a ratchet strap that is easy to work. I like a sturdy ratchet with rubber grips. Some of the small ratchets are too flimsy, bend, are difficult to operate, and don't last long. The small strap that is already attached to the ratchet can be removed completely. Cut the hook end off of the long strap. Burn and melt both ends of the long strap so that they don't fray.



Mount one end of the long strap to the other end of the Base with screws, or you can secure the strap with a small piece of wood for added strength as shown.

To attach the ratchet clamp onto the Brace, open it up completely and screw it onto the brace through the existing holes in the clamp. Use washers if necessary. Be sure that you put the ratchet far enough to the top so that it can be fully opened to release the strap. Shorten the strap if necessary and melt the end again to avoid fraying.



Secure the clamp to your workbench or sawhorse. Feed the strap through the ratchet, add log, tighten, and cut your tenon.



To support the other end of your log while cutting the tenon you can either make another clamp and secure it that way, or simply cut a support block similar to what is shown.

If you have any questions, send me an email at: sandy@rusticwoodworking.com

