

# Build a Knife Throwing Target

By: George Vondriska

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



This cedar end grain target is made from readily available 4 x 4s, and can be put together in a weekend. It's 3" x 20" x 29", large enough to provide plenty of throwing surface. It's also double sided. And, I love how it looks.



Two 4" x 4" x 8' posts will yield a target that is approximately 3" x 20" x 29". I chose cedar because the quality of cedar posts is typically higher than the quality of treated or fir 4 x 4s. Since cedar is naturally water resistant, and we'll use waterproof glue (See [Sources](#)), I can leave the target outside if I want to.

Bring the material into your shop and give it a few days to acclimate before starting the project. Construction lumber is often damp, and the project will go better if you allow the wood to dry in your shop before working with it.

## Prep the boards



Trim about 1/2" off one end of each post. This gives you a square end to start with.



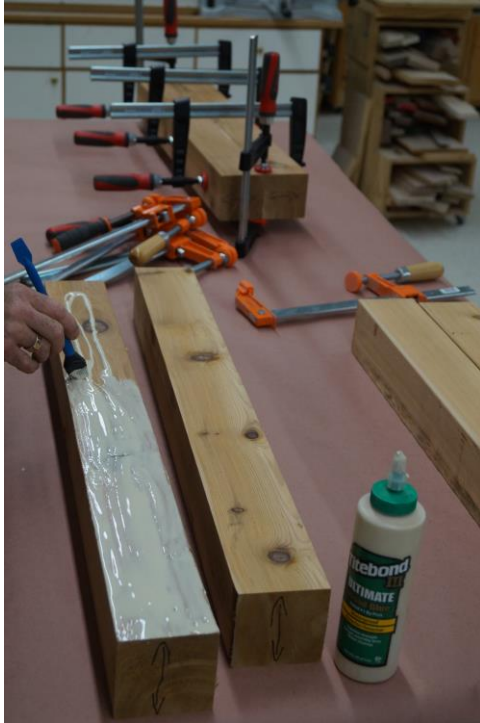
With the squared end against a stop block, cut the posts to 31-1/2". If you don't have a miter saw you can use a circular saw (making two passes) or handsaw. But keep the cuts square, or you'll spend lots of time sanding later.



Plane two opposite faces of each piece. Planing the surfaces will make them MUCH better for gluing. Plane them all to the same thickness. I don't think this project can be done without a planer.

## Gluing and clamping, part 1

We'll glue the slab up in stages so we can take advantage of using the planer to keep things flat.



Apply glue to the planed faces. Note the arrows on the end of each piece, reminding me of which surfaces were planed. Glue up three sub-assemblies, two boards in each sub-assembly. This keeps them narrow enough to fit through the planer

I used Titebond III glue (see [Sources](#)), which is waterproof. That will allow the target to live outside.



With the boards stacked, position a clamp so it bridges the seam. This helps keep the faces aligned.

Be sure to keep the end grain flush as you're clamping each pair.



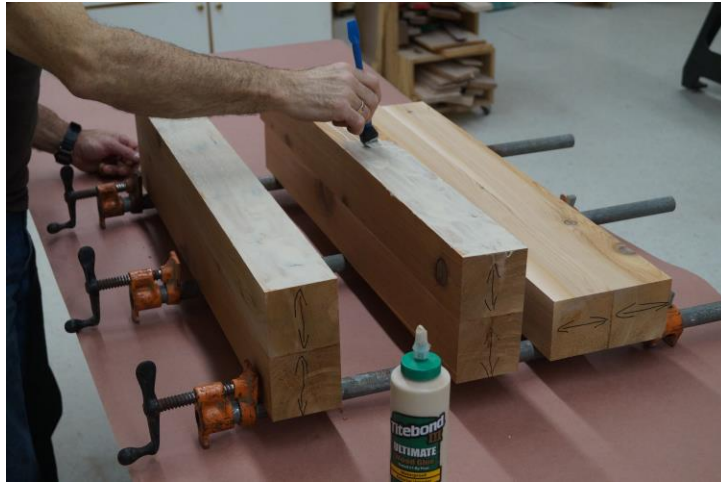
Next, apply clamps across the glue joint. Clean excess glue off the surface with a damp rag, and allow the glue to dry.

### **Flattening the glue up**

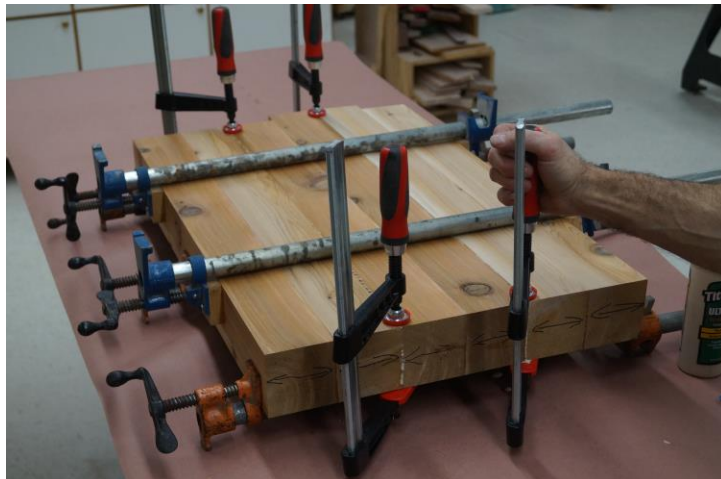


Plane both faces of each sub-assembly. Remove enough material to make the surfaces flat. Be sure you plane all three sub-assemblies to the same thickness.

## Glue up, phase 2



Apply glue to the remaining edges of each sub-assembly.



Bridge the seams with clamps, and then close the glue joints with pipe clamps. Make sure the end grain on one end is in perfect alignment. This end will ride against the table saw fence in the next step, so must be straight.

Be very careful to keep the faces aligned. The resulting glue up is too large for the planer, and we'll rely on it being flat for the next gluing step. Clean off excess glue using a damp rag.

## Crosscutting



Use a scraper (See [Sources](#)) to remove glue residue from the end grain on the table saw fence end of the slab.

Because of the thickness of the slabs it will take two passes to crosscut them on the table saw. If you don't have a table saw you could carefully mark out the cuts on both faces of the slab and make the cuts by doing two passes, one from each face, with a circular saw. If you use this method, be very careful with the lay out and cutting.



Set the height of the blade to just over half the thickness of the slab. Position the fence at 3".



Make a cut from one face with the end grain riding against the table saw fence.



Flip the slab over, and make another cut to complete the crosscut.

You'll get nine or ten crosscuts, depending on the width of your saw blade.



## Final glue up



Apply glue to the long grain faces, then rotate the pieces so the end grain is up.



Clamp with four clamps; two above and two below. This will help the slab stay flat. Wipe off excess glue with a damp rag. Allow the glue to dry.

## Sand it, hang it, start throwing!



After the glue is dry, sand the faces flat. I used an 80-grit belt on a belt sander. You don't need to get the faces table top smooth, just level out the highs and lows.

Placing the slab on a non-slip router pad (See [Sources](#)) will prevent it from sliding around on your workbench.



Add hooks and chain. I used 3-3/8" hooks (See [Sources](#)) located 2" in from the edge, centered on the thickness of the slab. I chose to hang the target vertically, but you could also hang it horizontally.



Add self-adhesive targets if you like. (See [Sources](#)). The slab is large enough to allow you to create multiple target areas. That way you won't chew up one part of the target too quickly.



Secure the target to a wall, start throwing, and enjoy!

## Tools used/Sources

- Miter saw (can substitute a circular saw and make double cuts)
  - [Festool Kapex](#)
- Planer
  - [DeWalt 734](#)
- Table saw
  - [SawStop 3 HP](#)
- Clamps
  - [Jorgensen pipe clamp ends, 3/4" pipe](#)
  - [Jorgensen 3712 HD 12" clamp](#)
- Exterior glue
  - [Titebond III](#)
- Glue brush
  - [Rockler silicone glue brush](#)
- Paint scraper for glue removal
  - [Hyde paint scraper](#)
- Belt sander
  - [Ridgid 3 x 18 sander](#)
- Router pad
  - [Big Horn Non-Slip Router Pad](#)
- Hooks
  - [3-3/8" Screw hook](#)
- George's favorite throwing knives
  - [Ruko G3121SB](#)
- Self-adhesive targets
  - [Birchwood Shoot N C 2" Targets](#)