Tie-down clamps
by ewilhelm on August 4, 2005

Table of Contents
intro: Tie-down clamps .................................................. 2
step 1: Cut out pieces .................................................. 2
step 2: Connect pieces .................................................. 3
step 3: Square edges .................................................... 3
step 4: Make/find rollers ............................................... 4
step 5: Drill and install rods ........................................... 4
Advertisements .......................................................... 5

http://www.instructables.com/id/Tie-down-clamps/
**intro**: **Tie-down clamps**

Often, I can't find a clamp big enough to hold a project together while glue is drying or while I drive in some screws. Tie-downs are a good alternative, but can damage the edges of wood projects.

Additionally, there's often a great deal of friction when the webbing goes around a corner leading to uneven tension.

To fix this I made myself some tie-down clamps.

They are blocks of wood with rollers on the end. If you use cheap pine, they won't dent nicer hardwood when you clamp down on it.

---

**step 1**: **Cut out pieces**

I made these 15 inches long with 1.25 inch spacers from a 2x4 using a miter saw.
step 2: Connect pieces
The hand drill was in use at another project, so I made the connections with biscuits and glue.

step 3: Square edges
Square the edges with a miter saw, and sand smooth the surface you will place against your work.
step 4: Make/find rollers
I've used skateboard wheels, plain bearings, and hardwood dowels. They all work about the same. A hardwood dowel piece is probably the easiest, especially if you have a lathe (link to ifabricate description of a lathe).

step 5: Drill and install rods
Drill holes for the rods such that the rollers will not touch the ground. In my first set, the skateboard wheels extend beyond the 2x4. This is problematic because the clamps roll when you put a work piece on top of them.

I tried nails and bolts for the rods. Bolts are a bit easier.