No-Holes Poster/Quilt Hanger

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**TOOLS:**
- Countersink (1)
- Drill (1)
- File (1)
- Marker (1)
- Rotary saw blade (1)
- Table saw (1)
- Tape measure (1)
- Tubing cutter (1)
- Twist drill bit (1)
- Wire (36”)

**PARTS:**
- Tubing (2 x art width + 4”)
  *Tubing can be round or square. Square tubing will be much easier to slot on the table saw.*
- Screw (1)
  *< 3/16” diameter, < 1/2” long*
- Nuts (2)
- Washer (1)

**SUMMARY**

I’m a great admirer of Jørgen Møller’s Posterhänger design. It’s great for those in-between prints that are too valuable to put thumbtacks through, but not valuable enough to have framed. Plus it’s considerably cheaper than framing, and looks a lot better than thumbtacks. Plus, it’s easier on your walls, requiring only a single hole to hang a poster of any size. I own six of them myself.

But they’re not perfect. The black rubber end-caps are easy to lose and hard to replace, as
are the white plastic clamps that actually grip the poster and slide into the aluminum tubes. What's more, I have one poster which, due to whatever combination of size, weight, and thickness, a Posterhänger will not support. I came home three times to find it lying on the floor. The problem, I realized, was that the plastic clamps did not grip the poster hard enough, and it was slipping out.

It eventually occurred to me to replace the plastic clamps with binder clips with the wire handles removed, which have much greater gripping power owing to their spring steel construction. My balloon rapidly deflated, however, when I realized that even if I used the smallest binder clips available (3/4"), they would not fit into the aluminum tube that came with my Posterhänger. Using binder clips would require remaking the whole system. Too bad, so sad. Maybe someday, right?

Now fast forward to last week, when my Moms presented me with this nifty quilted portrait of, ah, myself. Normally I wouldn't hang pictures of me on my own walls, but hey, it's from my Moms, and I want to display it, preferably without damaging it in any way. Seemed like the perfect opportunity to try my hand at DIY posterhängering.

### Step 1 — Measure and mark tubing

- Measure two identical lengths of aluminum tubing, each of which is at least as long as the top (and, presumably, the bottom) of your art. I allowed an inch overage at each end, which still looks fine and leaves a little fudge room.
- Mark the midpoint of each section to locate the hole drilled in step 3.
Step 2 — Cut tubing to length

- I used a tubing cutter to cut the bulk tubing to length, but next time I will just use the table saw required for step 5. It's a lot faster and gives a neater cut.

Step 3 — Drill hole in each tube

- I was lucky to have a drill press and vee-block on hand, but they are not strictly necessary.
- Eyeball the centerline as well as you can, and drill a 3/16" hole through one wall of the tubing only.
Step 4 — Mount temporary cutting guides

- An assembly consisting of a screw, a nut, a washer, and another nut is used as a guide to keep the tubing from rotating while you're cutting the slot. Mounting it requires feeding the screw from inside the tubing, which I did with a piece of fine steel wire.
- Run the wire into the hole from the outside of the tube and push it through until it pokes out the end.
- Wind it five or six times around the threads of the screw, as shown, and pull it back through. Unwind and remove the wire.
- Tighten a nut down on the exposed screw threads. If you have trouble here, jam the screw sideways against the edge of the hole to hold it still while you start the nut.
- Add the washer, and finally a second nut to secure it. Finger-tight worked fine for me.
Step 5 — Cut slots

- Do not attempt to use a table saw unless you have been instructed, in person, on its safe use.
- Set the rip fence at 3/8", or whatever distance is appropriate to center the slot in the tubing.
- Raise the blade just enough to cut through the tubing wall, which was slightly more than 1/16" in my case.
- Use appropriate ear, eye, and hand protection when operating the saw.
- Feed the tubing into the saw, using a push stick, being careful to keep the guide washer rotated against the surface of the table throughout each cut.
Step 6 — Clean up cuts

- Remove the temporary guide hardware.
- Using the flat file, clean up both the interior and exterior edges of the slot, as well as the exterior circumference of the through cuts at each end of the tube.
- Use the round-tail file to clean up the interior circumferences at the tube ends.
- Use a countersink in a hand-drill to chamfer the mounting holes a bit.

Step 7 — Polish aluminum

- A quick rub-down with 150 grit sandpaper will produce a nice satin finish on the aluminum.
- If you're into it, you can spend as much time here as you like; use a series of finer-grade papers to take the finish all the way down to mirror-bright if you want!
Step 8 — Attach binder clips

- Attach a binder clip to the top and bottom edges of your poster, out at the corners.
- Remove the wire handles from the clips by compressing them, as shown.

Step 9 — Mount and hang art

- Slide the poster sideways into the slot, with the clips inside the tube. Make sure the mounting hole faces backward!
- Repeat for the bottom tube.
- The art hangs, from a single nail in the wall, on the hole in the center of the top tube. If the hole has been accurately centered, this system is self-leveling.

The original posterhänger design included rubber plugs to close the ends of the tubes. These are aesthetic and not necessary, in my opinion, but if you like them it should be easy to find black rubber stoppers that will fit the ends of the tubes nicely. You'll need a bit of extra length at each
end, of course, so you don't end up squishing the corners of your poster.

There is no particular reason why the tube has to be round. In fact, most hardware stores also carry a 3/4" square aluminum tubing along with the round, and using it could make this project a lot simpler. It’d be easier to drill the mounting hole on-center, for one, and more importantly, it’d no longer be necessary to install the temporary hardware required to keep the round tube from rotating during cutting.

Finally, since this entry first posted, a helpful commenter has pointed out that there is, in fact, one smaller standard size of binder clip than I thought. These "mini" binder clips are only 9/16" wide, and I have tested and verified that they do, in fact, fit into a standard posterhänger tube. So if you're having slipping problems or have lost the plastic clips that came with your posterhänger, "mini" binder clips will make an effective replacement.