

Concrete and wood coffee table

DIY concrete and wood coffee table 36" long.

 Difficulty **Medium**

 Duration **8 hour(s)**

 Categories **Furniture**

 Cost **50 USD (\$)**

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Introduction

I found these 36" long in a DIY retail store, 1 1/4" square Fir balusters for \$1.80 each. They're smooth, straight and have a nice grain so I decided to try and figure out how to make something with them. This DIY concrete and wood coffee table is the result. Even though the wood bottom looks quite intricate it's actually really easy to make. Just a few cross cuts with a circular saw is all that's needed to create the base. The assembly is done with finish screws. I casted white concrete into a melamine form to make the table top. It's as smooth and hard as stone but weighs about 100 lbs.



Materials

- White concrete
- 36" long 1 1/4" square Fir Balusters
- 3/4" Melamin board
- Scrap 2x4s or 2x2s
- 2 1/4" Trim Head Square Drive Screws

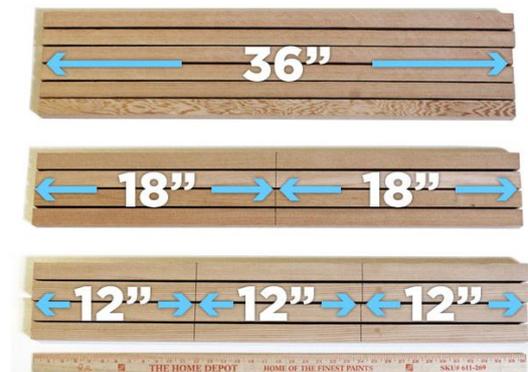
Tools

- Cordless Drill
- Circular Saw
- Impact Driver

i You can do this project with just a cordless drill, but having an impact driver to go along with it makes the project go much faster. A driver drill combo is great when you have to pre-drill holes for screws. This eliminates the need to constantly switch out bits.

Step 1 - Cut balusters

Use a circular saw to cut four balusters into 12" length pieces and another four balusters into 18" length pieces.



Step 2 - Sand down the rough edges

A few passes of sand paper are all that it takes to clean up the edges of the cut balusters.



Step 3 - Build the form for the concrete table top

The top should be 18" by 36" but use the balusters you cut and a right angle square to layout the top. Use scrap 2x4s or 2x2s as braces for screwing the melamine together.



Step 4 - Seal and clean the form

Use latex or silicone caulk to seal the form. Once the caulking is dry, wipe the form to remove dust and dirt before pouring in the concrete.

Step 5 - Mix and pour the concrete

It's easy to work with the white concrete mix and has no large pieces of aggregate. This mix is easier to work with but sets up faster so you'll need to work quickly. I used about 1 ½ bags and didn't use any reinforcement. The top came out about 2" thick and is quite strong.



Step 6 - Pack down the concrete and vibrate the form

Make sure the wet concrete is pack down into every corner and vibrate the form with a hammer.



Step 7 - Let the concrete cure

Let the concrete cure for at least 48 hours before removing the form. The manufacturer suggests covering the concrete to control moisture but I didn't and it came out just fine.



Step 8 - Remove the form

Unscrew the formwork and scrap off any of the caulk that is stuck to the concrete.



Step 9 - Build the Base

I used 1 screw in each side of each baluster. Even though each joint by itself isn't strong the resulting framework is quite sturdy. To keep the balusters from splitting drill pilot holes before screwing.

Step 10 - Put on the top

The concrete top is quite heavy and doesn't slide but I put a couple screws up through the wood and into the concrete about 3/8" anyway.



Notes and references

- This project is also available on my blog
- Watch the video tutorial of this standing desk on my Youtube channel