

Bent Wood iPod Stand

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Intro: Bent wood ipod stand

The ipod/iphone is great by itself, but I wanted to be able to look at it while using my hands. The stand is made using a bent wood laminating technique I developed 15 years ago, when gorilla glue first came out.

This instructable is mostly about the wood gluing and clamping process. One you try it you will be able to use the method to make many beautiful projects.

I plan on making specific instructables of more projects I have done like lamps, fishing nets, tables, music stands etc. Don't be limited by straight wood- think out of the box into bent and twisted laminations.



Image Notes

1. The stand is made from 6 strips of ash, 3/4" wide and 10 inches long x 1/16" thick

Step 1: New way to clamp bent wood laminations

Thin wet wood bends much better than dry wood. Thin wet wood can be easily bent into extreme shapes like springs and iphone stands. To keep the shape and make the piece as strong as necessary we laminate 2 or more pieces together. The problem is clamping. In the past it has been very difficult to clamp the a few thin strips together perfectly in the right shape. The woodbending book says to make two sided forms - difficult. Making 3d two sided clamping forms is impossible. A new glue-gorilla, stretch wrap, and an easy way to cut thin wood strips make my method possible.

We clamp the thin wood pieces flat with stretch wrap, then bend. Because urethane glue is slippery when wet, the thin pieces will slide over each other as they are bent. They stay stacked, and by using urethane Gorilla glue (sets up because of the water in the wood), you have about ten minutes to bend into the shape you want. Simple forms can be used to keep the wood bent properly. My largest project was a pair of wedding arches over 20 feet long- 2" x 3/4". I was able to make these by myself in two days. The smallest was a wood ring.

Strips as thin as 1/32" can be used, up to 1/4" thickness. Any wood can be used. Ash may be the best because it is both strong and bendable. Pine also works well, but only when wet. Most woods will bend when cut thin. You just cannot have any knots. If you don't have a tablesaw to cut the strips, you can buy 3/16" lath strips at home depot. You will probably have to sand these before gluing. If you want thinner pieces they are available from veneer suppliers or you can make your own if you have a band saw, or table saw with a fence feeder.

Here is how it is done. The video is worth more than all these words

<http://www.youtube.com/watch?v=beDN6XOKVPE>



1. Two of the bent laminations were glued sideways to make the wide piece. All three actually have the same bend.

Step 2: Freehand wood bending

When gorilla glue first came out I realized it made laminating wood pieces much easier to do. The urethane gorilla glue sets up because of water in the wood- making glue up of wet wood possible. Wet wood bends much better than dry, especially when the wood is very thin. The Gorilla Glue also is slippery when wet and takes about 10 minutes to start setting up.

Stretch wrap makes a great clamp for laminations up to about 2" wide.

The wood is wrapped when flat and then the package of wood and glue is bent into shape. It can be held in the right shape in many ways. You don't need to clamp the whole piece, just enough to keep it from moving for 3 hours. A simple two dimensional clamping jig is a piece of plywood with screws placed where you want the bends to be. A stack of thin pieces wrapped in stretch wrap will take a very nice shape with very little support or clamping. You can also do three dimensional pieces like springs (wrap around a tube).

Remember, whatever you can bend one strip of wood to do, you can put a few of them together and keep that shape using the stretch wrap and gorilla goo.

Gorilla glue works outside so your project can be patio furniture, or a barbeque lamp. If you can dream it, you can make it. If you don't have access to the wood veneers, let me know and I will publish sources.



Image Notes

1. Wood springs add a special touch to your projects, and are very easy to make, but normally have to be made with very thin wood.

Step 3: Buying-cutting thin strips

You can buy thin veneers like those use on the i-pod stand at a lumber yard. They are edge banding. Get the kind without glue.

Longer, wider pieces are found at woodworking/ cabinet supply houses and on the web. let me know if you cannot find them.

You can cut your own if you have a band saw or table saw. The band saw leaves a lot of sanding to do.

The easy fast way to cut perfect veneers is to cut them between the fence and blade, using a fence feeder and a zero clearance throat plate.

A \$20 7 1/4" blade will give you a glue line cut if you use a feeder wheel an inch from the blade.

The alternative cutting method requires moving the fence many times, cutting the thin pieces on the left side of the blade, but is the way to rip thin pieces if you do not have a fence feeder.

I suggest using a 7 1/4" thin kerf blade to save wood and sawdust.



Step 4: Gluing and clamping video

Spread the glue and clamp the wood with stretch wrap. It is kind of like wrapping the wood with a giant rubber band that becomes a baggie keeping the glue off of any forms.

The glue has to be spread correctly as shown in the video. A tool with small notches like a hack saw blade works fine. Only one side needs to be glued, and not the top piece.

***Urethane Gorilla glue will turn your hands black for days- use the gloves. It does not come off easy like superglue.

The glue will start foaming after a few minutes, but as long as the wrapping is done by then, you will still have time to bend the wood.

The strips have to slide on themselves when bending, so the slippery glue works great in this application.

The edges of the wood will need to be sanded, so keep the pack lined up to reduce the sanding necessary. Just sand the poly off with the glue. The glue sands very easily, like balsa wood, and dries clear.

I finished with spray laquer, glued the two pieces together with a couple dabs of thick super glue and was done.

