## Adirondack Chair



by Popular Mechanics

PopularMechanics.com
For more on Adirondack Chairs, see our original story.
there's actually no fancy joinery --everything's held together with deck screws. We used cedar for these pieces because it stands up well to the elements, and it's available in the required $3 / 4$ - and 1 -in. thicknesses. You could substitute pine if you plan to keep the chairs out of the weather.

Our version of the Adirondack chair has come a long way from the early types that had flat backs and seats-and, we've added a matching table. Don't be intimidated by the curved slats and number of pieces in this project.
Although there are a few angles and curves to cut,


## Step 1: Plans and Materials

QTY. SIZE DESCRIPTION
A. $21 \times 51 / 4 \times 333 / 4$ " cedar side rail
B. $11 \times 41 / 4 \times 231 / 4$ " cedar top back rail
C. $11 \times 31 / 2 \times 231 / 4$ " cedar bottom back rail
D. $93 / 4 \times 21 / 4 \times 231 / 4$ " cedar seat slat
E. $73 / 4 \times 31 / 4 \times 351 / 2^{\prime \prime}$ cedar back slat
F. $21 \times 41 / 4 \times 201 / 2$ cedar front leg
G. $21 \times 21 / 2 \times 29$ " cedar back leg
H. $21 \times 23 / 4 \times 61 / 2^{\prime \prime}$ cedar arm bracket
I. $21 \times 51 / 4 \times 28$ " cedar arm


## Step 2: Making the Seat

Lay out the side-rail shape on your stock, cut to the lines with a jigsaw and sand the edges smooth. Then, cut the back rails to size, and saw the curves that give the chair back its concave shape. Note that the cut on the top rail is square, while the bottom rail has a 7 -degree bevel.

Cut the seat slats to size and round the upper edges of each with a $1 / 4-$ in. quarter-round bit in a router table. Then, round the exposed edges-those that won't abut
other parts-of the side and back rails. Keep the router table set up for this job so you can round the edges of the other parts as they're made.

Because of the shape of the seat, most of the slats require bevels on one or both edges. Use a table saw or hand plane to cut the bevels.


Step 3: Assemble the Seat

Start seat assembly by screwing the lower back rail to the seat sides with one screw at each end of the rail. Then, add slat No. 4 as indicated in the drawing, again using only one screw at each end. Measure opposite diagonals of the subassembly and adjust it until it's square. When you're satisfied, add a second screw to each end of the two slats to lock the pieces in position.


## Step 4: Arrange Slats

Use a 1-in.-thick block as a spacer to position the rear seat slat. Then install the remaining slats. Because the seat is curved and many of the slat edges are angled, don't try to measure these spaces. Instead, simply arrange the slats by eye so that they appear uniform.


## Step 5: Attach Legs

Cut the front legs to size and round the long edges on the router table. Mark a line on the inside face of each leg that indicates the bottom edge of the side rail. Then, attach the legs to the seat assembly with screws driven from the inside of the side rails.


## Step 6: Add the Back

The back slats are tapered to create a fan shape when installed. Cut each 35 1/2-in.-long slat blank so one end is $31 / 4 \mathrm{in}$. wide and the other is $21 / 4 \mathrm{in}$. wide. We did this on a band saw, but a jigsaw will work, too. Smooth the sawn surfaces, cut the curved top ends and round the edges.

Cut the rear legs to size, angling the top ends at 64 degrees. Clamp each rear leg to a side rail, bore and countersink screw pilot holes, and secure the legs with screws.


## Step 7: Attach Back Rail

Screw the top back rail to the top ends of the back legs, and lay the chair on its back to install the back slats.


## Step 8: Align Slats

Place a 4-in. block under the upper back rail to provide clearance for the long back slats. Mark the centers of the top and bottom back rails, align the center back slat with these marks and screw it in place. (Note: no laser beams were used in this assembly --the original picture is damaged.)


## Step 9: Secure Slats

Install the outer two slats. Secure the remaining slats so the top curved ends are aligned and the spaces are uniform. Since the back slats are the focal point of the chair, any gap too large or too small, will immediately draw your eye, so uniformity here is very important.


## Step 10: Install the Arms

Cut out the arms and arm supports, and round the edges. Temporarily clamp the supports in place and secure them with screws.


Step 11: Attach Arms

Attach the arms to the front and rear legs with screws.


## Step 12: Make the Table

The table is built the same way as the chair-all exposed edges are rounded on the router table and the parts are simply screwed together. Lay out the feet on 1-in. stock and cut to the lines with a jigsaw, then cut the remaining rectangular pieces to size. Attach each foot with three screws.


## Step 13: Attach Stretchers

Bore pilot holes and screw the two stretchers to the legs.


## Step 14: Space Slats

To assemble the top, it's easiest to first clamp the pieces together with 3/8-in.-thick spacers placed between the top slats. Then, attach the cleats-use the base sub-assembly to make sure they're spaced properly.


## Step 15: Attach Cleats to Base, Finish

Finally, screw the base to the top cleats.

Lightly sand the chair and table with 120-grit paper. Keep in mind, though, that cedar is a soft, oily wood that doesn't sand as well as pine or hardwood. You won't achieve the silky smooth surface that you'd expect on indoor furniture.

We finished our pieces with Sikkens Cetol 1, 077 Cedar. First, wipe all the sanding dust from the wood, then apply a coat of finish with a natural-bristle brush. Allow each coat to dry for 24 hours before applying the next. Three coats should provide adequate protection from the elements.


I have made about 20 of these chairs and have given them all away to charity. This is the first chair I am keeping for myself. I have several past posts here. I need to make the table.


I made them out of Douglas pine I had left over from building a patio. I cut all parts to size. First I thought that they were too big for us and therefore downsized them 1,2. After building one, it turned out to be too small after all. A nice chair for the kids and I started over with two new chairs with the original measurements.


The specs are very difficult to read. Do you have blow up of them or templates?

Here is the correct link with visible and readable sizes
http://pop.h-cdn.co/assets/cm/15/06/54d112e5a5fd4_-_PMX0706Adiron.pdf
Difficult to see measurements in plan on download
http://pop.h-cdn.co/assets/cm/15/06/54d112e5a5fd4_-_PMX0706Adiron.pdf
Had to use 3-1/2" lumber for back slats because 3-1/4" not available, so adjusted. Made for a change in upper back support. Put back legs on inside, which made support solid. Made necessary adjustment to attach arms. Will know to make changes before back legs go on next time. A Kreg jig would have made the alteration easier. Turned out well. Love it!


Great instructable! I only made 2 of the chairs, they are pretty easy to make, and very comfortable


Nuestro primer trabajo en familia, gracias por las instrucciones...!


I made these chairs twice. The first set I used expensive spanish cedar. On the second set I used $82 \times 4 \mathrm{~s}$ and $82 \times 6$ s that were nothing more than construction grade Lowe's lumber. I milled these pieces of wood to $1^{\prime \prime}$ and $3 / 4^{\prime \prime}$ as needed and then painted them black. Black was the worst.
EVERYTHING shows on it.


How much wood do I need tobuy
I know this is 4 years old, but it might help someone. Each chair is just over 17 board feet (if l'm not mistaken). To calculate board feet, multiply the length x width x thickness of a board (inches) and divide by 144 .

1) If you are going to you a specialty wood like cedar figure on about 25 board feet. There will be waste.
2) You can make one chair and the table from 1 standard $8^{\prime} x 4^{\prime}$ piece of $3 / 4$ " plywood.
3) You can make one chair with 6 standard $2 \times 6 \times 8$ lumber. You can get this pressure treated to withstand the elements.
Thanks for the plans. My father made these beautiful red chairs, with some light adaptations, and now we can find Adirondack garden chairs in the French Alps !


Я це зробив! Але столик трохи інший.


Well... I kind of made one as well. It IS my 1 st ever so it did not come out as good as I aimed it to be, but I do grade it "acceptable" anyway. It is, after all, only 2 inches tall.


## Great weekend project



Amazing!
Sorry to be such a noob. In the plans, when the thickness is 1 " does that mean really $1^{\prime \prime}$ or the finished $.875^{\prime \prime} \mathrm{I}$ find at big box stores. The same is true for the $3 / 4^{\prime \prime}$ boards. Do I use the $3 / 4^{\prime \prime}$ boards which are actually . 625 " finished? It seems like I would have to plane boards to end up with the literal 1 " and $3 / 4$ " thicknesses. Any advice?

Yes, the sizes are the nominal sizes, what we nowadays would refer to as "rough lumber." Long ago the lumber mills offered finished lumber as an option and most people ended up buying it that way, but to avoid confusion, the lumbermills kept the same "rough cut" name.
So almost all lumber nowadays is sold S4S, which means "surfaced four sides" which is why a 2 x 4 is only $1.5 \times 3.5$.

Yes, it's confusing, but you're correct.
some slight changes but great guide, Thank you!


Here's a link to the plans in PDF format. http://pop.h-cdn.co/assets/cm/15/06/54d112e5a5fd4__PMX0706Adiron.pdf

Great. Thank you
Good.
has anyone tried this with polywood? If so, what thickness did you use?
This was a fun build. It took me about $72 \times 6 \times 8$ cedar deck planks.


Great work, was the 7ea 2X6X8 for one or two chairs? Thanks.
Actually, now I use $1 \times 6 \times 12$ s(deck planks, $2 \times 6$ is wrong) and roughly it takes about seven for two chairs . There is less waste. Plus I adjusted the back slats so I end up with two pieces instead of just one. I use this simple jig to cut the diagonals. I have made seven chairs now. I made pattern so they are easy to replicate.


I am up to five chairs now. One of these time I need to make some for me.


Nice job!
I googled for the PDF of the plans with measurements it's still on the web
fun project made for a 4 H woodworking project made out of cedar and used a red stain


[^0]If you go to the Popular Mechanics website, you download the plans and they are quite nice.
Nice and easy project, just looking for garden chair ideas.
Can anyone provide with a link to the plans in .pdf format suitable for printing and template use?
Really want to make these chairs!! Thanks!
Hi Tabla. I just took measurements from the PDF in the internet. For me (home use) it was enough precise.
Made another one with spruce wood. And replaced the chair back of the first one.


I did it with scrap wood during eastern break

hi, I bought extra wood as I am building multiple sets. A rough guess for 2 chairs and a table 150 200 cdn. I used higher end screws and had a lot of waste cutting the back slates, due to poor sized and available lumber. I definitely could build them cheaper with better lumber supplier. When I first looked at the project I used Home Depot online to get a rough price and think it was about $\$ 60$ per chair
My first build, great instructions I'm very happy with the project.
Roughly, what did it cost you in materials?
This will be my first wood working project and I have a quick question. How do I figure out how much wood to buy from these plans?
good lookin chair


Done with White Oak b/c I did not want to pay so much for Cedar. Made this decision with the help from the person working at the lumber yard. Had to go with $7 / 8$ inch for the 1 inchers $\mathrm{b} / \mathrm{c}$ the 1 inchers had to be plained. 2 coats of Spar Urethane. They're heavy, but I don't plan on using them like regular lawn chairs and I doubt if teenagers will be running down the street with them. Person at the lumber yard said 'The wind won't knock these over'. How do they look? My first, trial chair I did was with Pine from Home Depot and the wood cost me the same as the White Oak from the lumber yard. Goebelguzzler


This would be an awesome instructable if you could clear up this step. It's also illegible in the PDF. Thanks
see the next website:<br/><a rel="nofollow"
href="http://www.popularmechanics.com/home_journal/woodworking/2919751.html">http://www.popularmechanics.com/home_journal/woodworki <br/>
Here in CANADA we call the Muskoka chairs....There is one in my backyard -
I understood that this type of chair was called a Muskoka chair, too! In fact, the world's largest
Muskoka chair is in Gravenhurst in the area of Ontario known as, well... Muskoka.
Here is a site with some authoritative information about the differences.
Woodmill is a company that makes this type of chair.

## Muskoka

1. Origin to the Muskokas
2. Seat lower to ground, comfort fit
3. 19" span between arms
4. Longer seat front to back

## Adirondack

1. Origin to the American Adirondack Mountains
2. Seat higher off ground
3. 21-1/2" span between arms
4. 1-1/2" legs

And, there you have it.
HA HA! I've been to the chair in Gravenhurst. Climbed up, and took a photo :P


[^0]:    Thsi might be a fun project if the instrucitons weren't blurred

