Make a classic Adirondack chair



The distinctive Adirondack chair takes its name from the high country in upstate New York in the US. Made from hardwood timber, it's a lawn chair which features a combined seat support and back leg, giving it the lines that just make you want to put it under a tree, grab a book and a nice long drink and forget the world around you. While they are fun to make, they can be a little fiddly and some experience in woodwork would be a great help.

Here's how

Step 1 Expand the back-leg pattern onto a plywood template and cut out with a jigsaw. Transfer the pattern to the two back legs (A). Mark and square across two lines 565 and 600mm from the front edge; these will be used later for the back rail (D)*. Cut out legs with jigsaw, smooth off and round edges.

* This chair has a deep seat. A pillow against the backrest may help people with shorter legs. Alternatively, bring the back rail (D) forward and adjust sizes accordingly. For every 16mm brought forward, shorten armrests by 15mm.

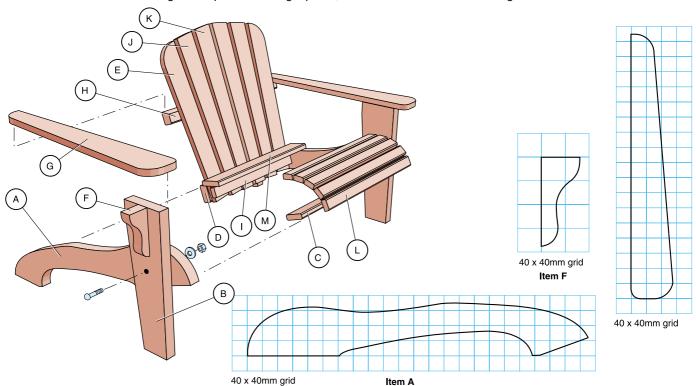
Step 2 Cut the front legs (B), mark 45mm across the bottom and 50mm down from the top back. Join marks and cut the angle on the back of the leg.

Step 3 Measure 80mm from the front on the underside of the back leg. Clamp a straight edge of timber to your workbench and set the front leg down with the back leg on top. Place an offcut under the back leg to maintain the right plane; it is correct when both

legs have a flat bearing on the straight edge, and the 80mm mark on the back leg aligns with the front edge of the front leg. At this stage, the back leg should be 235mm up the front leg. Draw a diagonal line across the joint, then pre-drill for two screws 35mm from the centre. Apply exterior-grade glue to the joint and screw together. Then drill through both legs at the centre of the line, and bolt together with a cup head bolt, with the head on the outside of the front leg. Make the other leg assembly a mirror image.

Step 4 Cut front and back rails (C, D). With leg assemblies upside down, glue and screw the front assembly to the underside of back leg 110mm from front. The back rail is screwed between the two lines marked earlier. Temporarily screw a splat support under the back rail.

Step 5 Taper inside edge of outer splats (E) by measuring 70mm across the bottom. Cut, then plane smooth. Cut an 85° angle on the bottom so splats fan to the side. Pre-drill base for two screws. Rest on temporary support, position each splat with a slight outward rake, and fix with a single screw.



Step 6 Cut the two armrest brackets (F) and screw to the outside centre of the front legs. Ensure tops are flush. Expand pattern and cut out armrests (G) using a plywood template and reversing to make a mirrored pair. From the back, mark 45mm along the top inside edge, and mark 50mm from the front on the underside. This marks where the armrest fits against the back of the splat and the front of the front leg. Screw to the front legs only.

Step 7 Cut the back support (H), and bevel the top edge to match the rake of the splats (about 20°). Slightly bevel the outside-back edges and mark position on back of splats. Along the top bevelled edge, measure 45mm in from both sides. Screw armrests to back support using the marks as a guide to positioning.

Step 8 Unscrew the splats. Refit them against the armrests, back support and back leg using the second screw holes. Screw through back support into outer splats. Centre and screw the batten (I) to the face of the splats.

Step 9 On the bottom edge of the mid and central splats (J, K), measure 15mm from both sides and join to the top corners. Cut and plane the splats

to form long tapers. Stand the splats between the back rail and the batten and even out the spacing. Mark the positions of the splats. Screwing through the batten, secure the splats to the back rail. Then work from behind to screw the back support to the splats.

Step 10 Drive a small pin into the centre of the batten and, with a piece of string and a pencil, draw a 620mm-radius arc across the splats. Round the outside corners using a paint tin as a template, then cut with a jigsaw. Remove the temporary splat support.

Step 11 Cut seat slats (L) to size, bevel the two top edges and pre-drill for installation. Butt together the three front slats, then screw in place. Use a 5mm plywood spacer when fitting the remaining slats. Trim the last slat (M) to suit the space. Smooth the chair with sandpaper, then finish with an exterior pigmented oil or paint traditional white.

A Arrange the front and back legs against a straight edge to get the correct alignment.
B After joining leg assemblies, screw a temporary slat to the bottom of the back rail.
C To secure splats, screw through battens into the back rail.







What you will need

Item A B C D E F G H I	Part Back legs (2) Front legs (2) Front rail Back rail Outer splats (2) Armrest brackets (2) Armrests (2) Back support Batten Mid splats (2)	Size 140 x 35 x 900mm 140 x 35 x 480mm 70 x 20 x 550mm 70 x 35 x 480mm 85 x 20 x 650mm 65 x 35 x 150mm 140 x 20 x 700mm 50 x 35 x 640mm 40 x 19 x 480mm 85 x 20 x 650mm	Material Hardwood Hardwood decking Hardwood Hardwood decking Hardwood Hardwood flooring Hardwood Hardwood Hardwood or cedar Hardwood decking
	Batten	40 x 19 x 480mm	Hardwood or cedar

35mm-thick F27 structural-grade kiln-dried hardwood is often available from larger timber suppliers. For smaller sections, try using non-fluted decking and flooring, ripped to width. As this project is made of hardwood, pre-drill clearance holes for all screws and 3mm pilot holes to lessen likelihood of screws snapping and timber splitting. If you would like to hide screws with timber plugs, counterbore with a 10mm bit and cut 10mm plugs from offcuts with a plug cutter. Also needed are offcuts of plywood for templates, 70 x 19mm off-cut, exterior-grade glue, two 75mm 10 cup-head bolts, assorted galvanised screws. To ensure accuracy, check all components against chair as it is being built.

