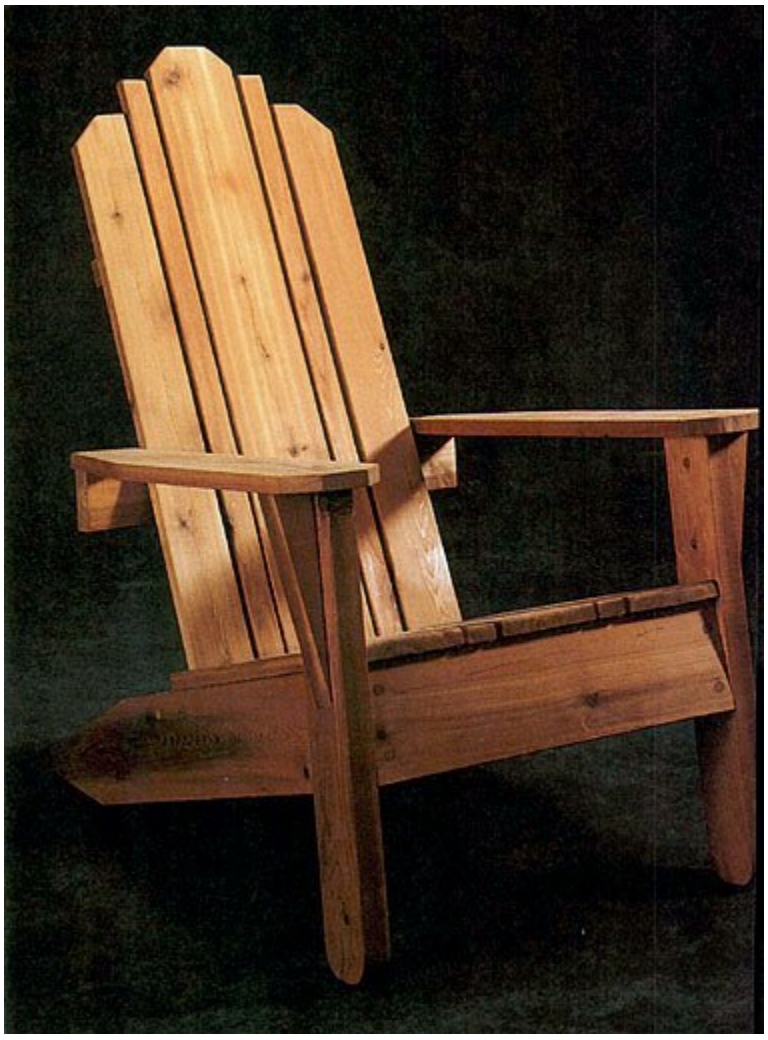
# Adirondack Chair



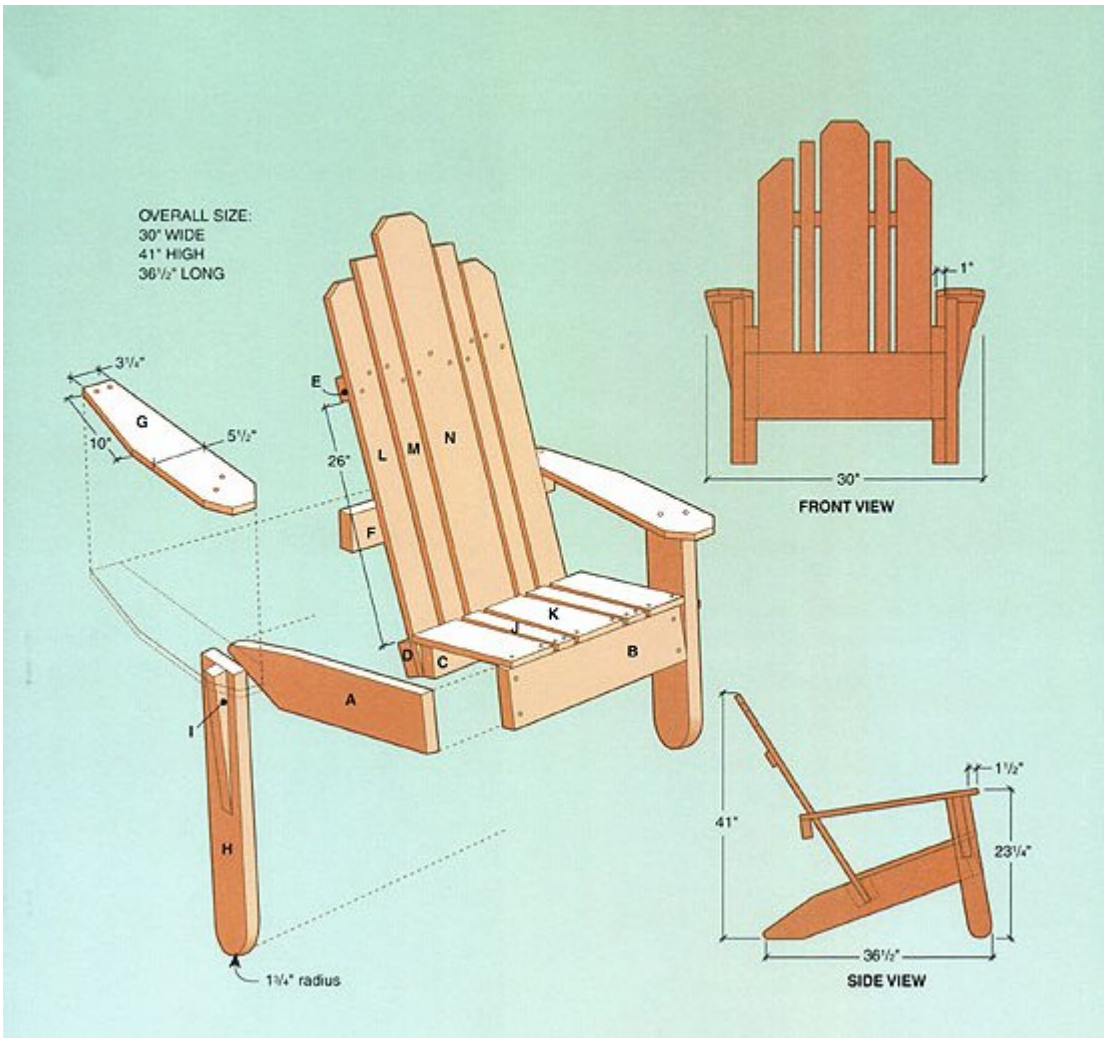
Adirondack furniture has become a standard on decks, porches and patios throughout the world. It's no mystery that this distinctive furniture style has become so popular. Attractive—but rugged—design and unmatched stability are just two of the reasons, and our Adirondack chair offers all of these benefits, and more.

But unlike most of the Adirondack chair designs available, this one is also very easy to build. There are no complex compound angles to cut, no intricate details on the back and seat slats, and no mortise-and-tenon joints. Like all of the projects in this book, our Adirondack chair can be built by any do-it-yourselfer, using basic tools and simple techniques. And because this design features all the elements of the classic Adirondack chair, your guests and neighbors may never guess that you built it yourself.

We made our Adirondack chair out of cedar and finished it with clear wood sealer. But you may prefer to build your version from pine (a traditional wood for Adirondack furniture), especially if you plan to paint the chair. White, battleship gray and forest green

are popular color choices for Adirondack furniture. Be sure to use quality exterior paint with a glossy or enamel finish.

CONSTRUCTION MATERIALS **Quantity Lumber** 1 2 × 6" × 8' cedar 1 2 × 4" × 10' cedar 1 1 × 6" × 14' cedar 1 1 × 4" × 8' cedar 1 1 ×




| Cutting List | | | | |
|---|---|---|---|---|
| **Key** | **Part** | **Dimension** | **PCs.** | **Material** |
| **A** | Leg | 1 1/2 × 5 12 × 34 1/2" | 2 | Cedar |
| **B** | Apron | 1 1/2 × 5 1/2 × 21" | 1 | Cedar |
| **C** | Seat support | 1 1/2 × 3 1/2 × 18" | 1 | Cedar |
| **D** | Low back brace | 1 1/2 × 3 1/2 × 18" | 1 | Cedar |

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|---|---|---|---|---|
| **E** | High back brace | 3/4 × 1 1/2 × 18" | 1 | Cedar |
| **F** | Arm cleat | 1 1/2 × 3 1/2 × 24" | 1 | Cedar |
| **G** | Arm | 3/4 × 5 1/2 × 28" | 2 | Cedar |
| **H** | Post | 1 1/2 × 3 1/2 × 22" | 2 | Cedar |
| **I** | Arm brace | 1 1/2 × 2 1/4 × 10" | 2 | Cedar |
| **J** | Narrow seat slat | 3/4 × l 1/2 × 20 1/4" | 2 | Cedar |
| **K** | Wide seat slat | 3/4 × 5 1/2 × 20 1/4" | 3 | Cedar |
| **L** | End back slat | 3/4 × 3 1/2 × 36" | 2 | Cedar |
| **M** | Narrow back slat | 3/4 × 1 1/2 × 38" | 2 | Cedar |
| **N** | Center back slat | 3/4 × 5 1/2 × 40" | 1 | Cedar |
| **Tools:** Circular saw, drill, jig saw, belt sander<br>**Materials:** Moisture-resistant glue, 1 1/4", 1 1/2", 2" and 3" deck screws, 3/8 × 2 1/2" lag screws with washers, finishing materials.<br>**Note:** Measurements reflect the actual size of dimension lumber. | | | | |

CUT THE LEGS.

Sprawling back legs that support the seat slats and stretch to the ground on a near-horizontal plane are signature features of the Adirondack style.

**1.** Cut the legs (A) to length.

**2.** To make the tapers, mark a point on one end of the board, 2" from the edge. Then, mark another point on the adjacent edge, 6" from the end. Connect the points with a straightedge.

**3.** Mark a point on the same end, 2 1/4" in from the other edge. Then, mark a point on that edge, 10" from the end. Connect these points to make a cutting line for the other taper.

**4.** Cut the two taper cuts with a circular saw.

**5.** Use the tapered leg as a template to mark and cut identical tapers on the other leg of the chair**(photo A)**.

Cut tapers into the back edges of the legs.

BUILD THE SEAT.

The legs form the sides of the box frame that supports the seat slats. Where counterbores for deck screws are called for, drill holes 1/4" deep with a counterbore bit.

**1.** Cut the apron (B) and seat support (C) to size.

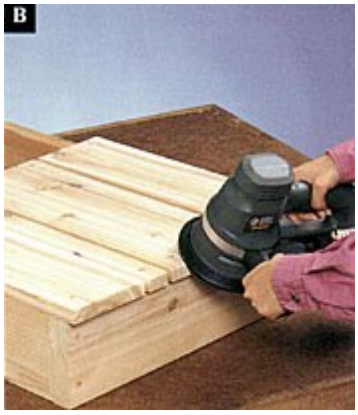
**2.** Attach the apron to the front ends of the legs with glue and 3" deck screws, in the manner described above.

**3.** Position the seat support so the inside face is 16 1/2" from the inside edge of the apron. Attach the seat support between the legs, making sure the tops of the parts are flush.

**4.** Cut the seat slats (J) and (K) to length, and sand the ends smooth. Arrange the slats on top of the seat box, and use wood scraps to set 3/8" spaces between the slats. The slats should overhang the front of the seat box by 3/4".

**5.** Fasten the seat slats by drilling counterbored pilot holes and driving 2" deck screws through the holes and into the tops of the apron and seat support. Keep the counterbores aligned so the cedar plugs form straight lines across the front and back of the seat.

**6.** Once all the slats are installed, use a router with a 1/4" roundover bit (or a power sander) to smooth the edges and ends of the slats **(photo B)**.



Round the sharp slat edges with a router or a power sander.

MAKE THE BACK SLATS.

The back slats are made from three sizes of dimension lumber.

**1.** Cut the back slats (L), (M) and (N), to size.

**2.** Trim the corners on the wider slats. On the 1 × 6 slat (N), mark points 1" in from the outside, top comers. Then, mark points on the outside edges, 1" down from the comers. Connect the points and trim along the lines with a jig saw. Mark the 1 × 4 slats 2 " from one top corner, in both directions. Draw cutting lines and trim.

ATTACH BACK SLATS.

**1.** Cut the low back brace (D) and high back brace (E) and set them on a flat surface.

**2.** Slip 3/4"-thick spacers under the high brace so the tops of the braces are level. Then, arrange the back slats on top of the braces with 5/8" spacing between slats. The untrimmed ends of the slats should be flush with the bottom edge of the low back brace. The bottom of the high back brace should be 26" above the top of the low brace. The braces must be perpendicular to the slats.

**3.** Drill pilot holes in the low brace and counterbore the holes. Then, attach the slats to the low brace by driving 2" deck screws through the holes. Follow the same steps for the high brace and attach the slats with 1 1/4" deck screws.

CUT THE ARMS.

The broad arms of the chair are supported by posts in front, and a cleat attached to the backs of the chair slats.

**1.** Cut the arms (G) to size.

**2.** To create decorative angles at the outer end of each arm, mark points 1" from each corner along both edges. Use the points to draw a pair of 1 1/2" cutting lines on each arm. Cut along the lines using a jig saw or circular saw **(photo C)**.

**3.** As an option, mark points for cutting a tapered cut on the inside, back edge of each arm. First, mark points on the back of each arm, 3 1/4" in from each inside edge. Next, mark the outside edges 10" from the back. Then, connect the points and cut the tapers with a circular saw or jig saw. Sand the edges smooth.

Make decorative cuts on the fronts of the arms (shown) and the tops of the back slats, using a jig saw.

ASSEMBLE THE ARMS, CLEATS AND POSTS.

**1.** Cut the arm cleat (F) and make a mark 2 1/2" in from each end of the cleat.

**2.** Set the cleat on edge on your work surface. Position the arms on the top edge of the cleat so the back ends of the arms are flush with the back of the cleat and the untapered edge of each arm is aligned with the 2 1/2" mark. Fasten the arms to the cleats with glue.

**3.** Drill pilot holes in the arms and counterbore the holes. Drive 3" deck screws through the holes and into the cleat.

**4.** Cut the posts (H) to size. Then, use a compass to mark a 1 3/4"-radius roundover cut on each bottom post corner (the roundovers improve stability).

**5.** Position the arms on top of the square ends of the posts. The posts should be set back 1 1/2" from the front ends of the arm, and 1" from the inside edge of the arm. Fasten the arms to the posts with glue.

**6.** Drill pilot holes in the arms and counterbore the holes. Then, drive 3" deck screws through the arms and into the posts **(photo D)**.

**7.** Cut tapered arm braces (I) from wood scraps, making sure the grain of the wood runs lengthwise. Position an arm brace at the outside of each arm/post joint, centered side to side on the post. Attach each brace with glue.

**8.** Drill pilot holes in the inside face of the post near the top and counterbore the holes. Then, drive deck screws through the holes and into the brace **(photo E)**. Drive a 2" deck screw down through each arm and into the top of the brace.

Attach the square ends of the posts to the undersides of the arms, being careful to position the part correctly.

Drive screws through each post and into an arm brace to stabilize the arm/post joint.

ASSEMBLE THE CHAIR.

All that remains is to join the back, seat/leg assembly and arm/post assembly to complete construction. Before you start, gather scrap wood to brace the parts while you fasten them.

**1.** Set the seat/leg assembly on your work surface, clamping a piece of scrap wood to the front apron to raise the front of the assembly until the bottoms of the legs are flush on the surface (about 10").

**2.** Use a similar technique to brace the arm/post assembly so the bottom of the back cleat is 20" above the work surface. Arrange the assembly so the posts fit around the front of the seat/leg assembly, and the bottom edge of the apron is flush with the front edges of the posts.

**3.** Drill a 1/4"-dia. pilot hole through the inside of each leg and partway into the post. Drive a 3/8 × 2 1/2" lag screw and washer through each hole, but do not tighten completely **(photo F)**. Remove the braces.

Clamp wood braces to the parts of the chair to hold them in position while you fasten the parts together.

**4.** Position the back so the low back brace is between the legs, and the slats are resting against the front of the arm cleat. Clamp the back to the seat support with a C-clamp, making sure the top edge of the low brace is flush with the tops of the legs.

**5.** Tighten the lag screws at the post/leg joints. Then, add a second lag screw at each joint.

**6.** Drill three evenly spaced pilot holes near the top edge of the arm cleat and drive 1 1/2" deck screws through the holes and into the back slats **(photo G)**. Drive 3" deck screws through the legs and into the ends of the low back brace.

Drive screws through the arm cleat, near the top, and into the slats.

APPLY FINISHING TOUCHES.

**1.** Glue 1/4"-thick, 3/8"-dia. cedar wood plugs into visible counterbores **(photo H)**.

**2.** After the glue dries, sand the plugs even with the surrounding surface. Finish-sand all exposed surfaces with 120-grit sandpaper.

**3.** Finish the chair as desired—we simply applied a coat of clear wood sealer.

Glue cedar plugs into the counterbores to conceal the screw holes.