

# DIY Plans for Adirondack Chairs

by George Marmo, Custom Wood Creations



**All Black**

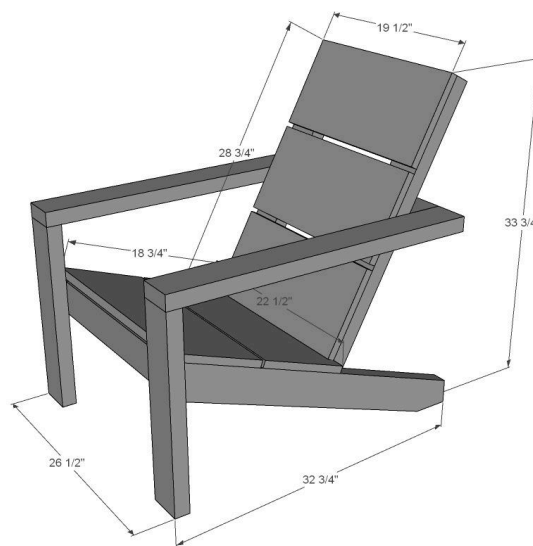


**Padre Brown**



**Black & Padre Brown**

Plans include a Shopping List, Tools, Cut List, and Assembly Instructions to build your Adirondack Chair. Chairs are made with horizontal seat backs that can be painted semi-gloss black or with Padre Brown stain. Joints are screwed and glued for strength and durability. Use only the finest materials such as rust-proof hardware, prime lumber, and exterior paints and stains. Sand surfaces as needed.



## Shopping List

- 2" x 4" x 8' Prime Lumber (4)
- 1" x 10" x 8' Premium Board (2)
- 2-1/2" Pocket-Hole Screws (24)
- 1-1/4" Pocket-Hole Screws (20)
- Titebond III Premium Wood Glue
- Behr Exterior Paint & Primer, and Stains

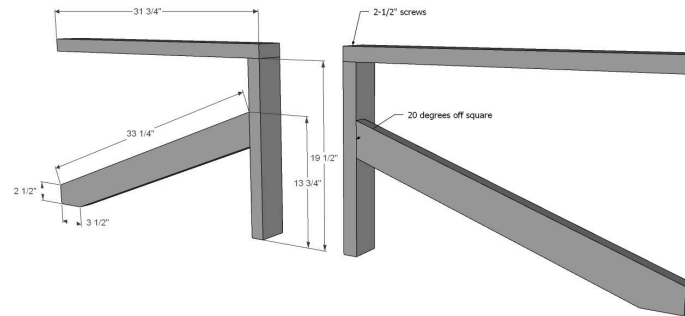
## Tools

- Circular or Compound Mitre Saw
- Speed Square and Tape Measure
- Power Hand Drill
- Hand Sander, brushes, and pads
- F Clamps
- Pocket Hole Jig

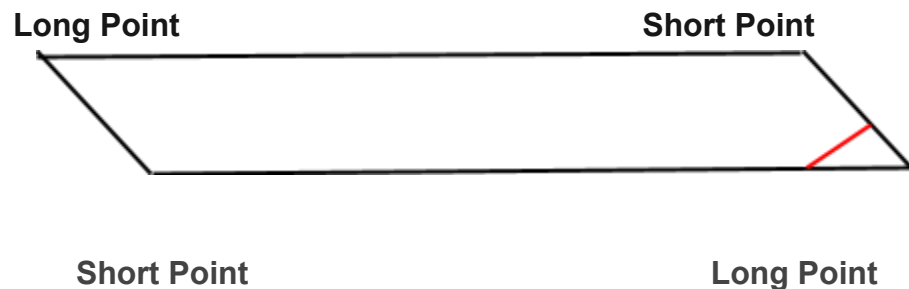
## Cut List

- 5 - 2x4 @ 19-1/2" - Legs and Horizontal Supports
- 2 - 2x4 @ 31-3/4" - Arms
- 2 - 2x4 @ 33-1/4" - Stringers
- 2 - 2x4 @ 32-3/4" - Back Supports
- 2 - 1x10 @ 22-1/2" - Seats
- 3 - 1x10 @ 19-1/2" - Backs

## STEP 1 - Build Left and Right Leg Assemblies

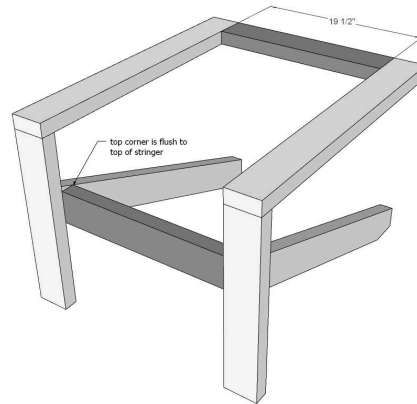


1. Set pocket hole jig and drill bit to 1 1/2" then drill 2 pocket holes to back side of each leg.
2. Add wood glue to the joint then use 2 1/2" pocket hole screws to attach each leg to each arm while making sure the assembly is square.
3. The picture below is how the Stringer should look after cuts are made. Set Chop Saw to 20 degrees and cut each end of the Stringer (short-to-long and long-to-short). Measure 2 1/2" from the short point on the right side, make a mark then draw a line using a speed square. The cut line is the red line. The foot should be the short piece below the red line.



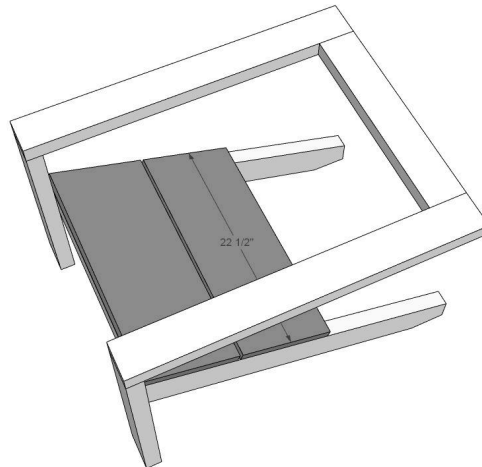
4. Attach Stringers to arm assembly using 2 1/2" pocket hole screws.
5. The stringer should be on the inside of the left and inside of the right arms and 13 1/4" above the bottom of the leg.
6. Use a flat surface to help assemble and make sure the assembly is square.

## STEP 2 - Attach Front and Back Supports



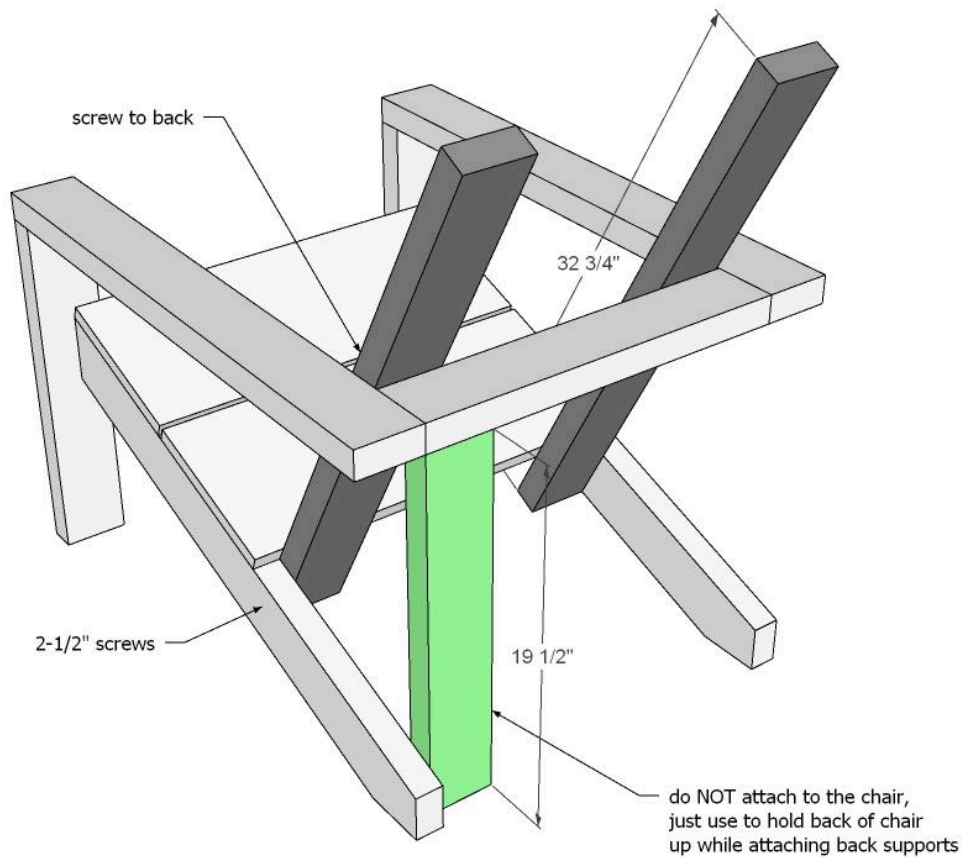
1. Drill pocket holes on each end of the front and back Supports
2. Flip the assembly upside down to attach the cross Supports
3. Apply glue, position cross Supports then clamp in place
4. Measure the height of the front cross Support in 2 places to ensure squareness then attach it with 2 1/2" pocket hole screws
5. Ensure the front support's back corners are flush with the Stringer so the seat back boards sit properly.

## STEP 3 - Attach Seat Boards



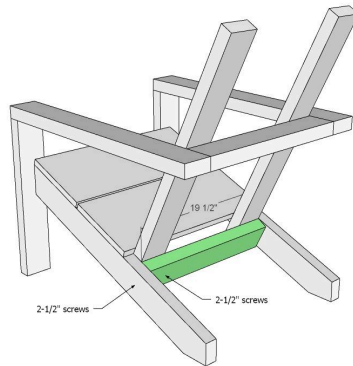
1. Paint or stain boards before assembly.
2. Lay the seat boards on the frame, make sure they are even on both sides, clamp in place then attach with 1 1/4" pocket hole screws
3. Use 1/4" spacers to ensure equal distance between the boards
4. Use 2 screws on each side of each seat and drill into the middle of the Stringer below

## STEP 4 - Attach Back Supports



1. If painting, prime the Back Supports and cross member before assembly
2. Place a 19 1/2" support under the backs of the chair to ensure proper height
3. Place the Back Supports under the last seat board and rest on the Back Support. Measure 28 1/2" from the last seat board to the top of the seat support then clamp in place. Check the lengths of both supports so they are equal length from the seat board.
4. Attach the Back Support with 2 1/2" pocket hole screws to the Stringer and back support.
5. Repeat for the second Back Support

## STEP 5 - Attach Back Support



1. Paint or stain boards before assembly.
2. Attach a 19 ½” support to the Back Supports with 2 ½” pocket hole screws from the side and back

## STEP 6 - Attach Seat Backs

1. Paint or stain boards before assembly.
2. Attach Seat Backs to Back Supports with 1 ¼” pocket hole screws by starting at the top. Use clamps to hold in place. Use 2 screws on each side of the Seat Back and drill into the middle of the 2x4s..
3. Make sure the top board is even with the Back Supports and use a level to ensure even on the sides.
4. Use shims to ensure gaps between the boards are equal
5. Leave a gap at the base for drainage

## Supplies found on Amazon or at Home Depot

- LIONMAX Pocket Hole Screws, 100 PCS #8 x 2-1/2", Coarse Thread, Square Drive, Blue Coated Weather Resistant Pocket Hole Screws, 150MM Drive Bit Included
- LIONMAX Pocket Hole Screws, 100 PCS #8 x 1-1/4", Coarse Thread, Square Drive, Washer Head, Zinc Plated Pocket Hole Screws, 150MM Drive Bit Included
- Titebond III Ultimate Wood Glue, 16-Ounces
- Massca Twin Pocket Hole Jig Kit with Drill Bit, Hex Key & Stop Collar
- Behr Ultra, Black Paint & Primer with Satin Enamel finish
- Behr Padre, Brown Premium Semi-Transparent Waterproof Stain & Sealer