

Seven-stick Comb-back Chair

Detailed cutting list and machining instructions

Cutting List & Notes

| | | | | | |
|---|--------------|--------|--------|---------|--|
| 4 | Legs | 1-3/4" | 1-3/4" | 20" | Octagons, straight grain |
| 4 | Stretchers | 1-1/8" | 1-1/8" | 24" | Octagons, straight grain |
| 8 | Long sticks | 3/4" | 3/4" | 27" | Octagons, straight grain |
| 7 | Short sticks | 3/4" | 3/4" | 12-1/2" | Octagons, straight grain |
| 1 | Seat | 1-3/4" | 16" | 20" | Any grain OK |
| 2 | Arms | 1" | 7" | 17" | Any grain OK, can be nested on a wider board |
| 1 | Mid-arm | 1" | 3-1/2" | 12" | Any grain OK, can be nested on a wider board |
| 1 | Shoe | 5/8" | 7-3/4" | 18" | Any grain OK |
| 1 | Comb | 1-3/4" | 5" | 20" | Any grain OK |

5/8" wedge block 5/8" 8" 2" Width is approximate/nominal, straight grain

1" wedge block 1" 8" 2" Width is approximate/nominal, straight grain

Below shows photos and details of how I prepare the parts for classes, with options for you and your equipment/time.



Seat & Wedge Blocks

I usually glue up the seats from two boards with the grain running the same direction in both (this assists in saddling the seat). Then I cut the seat to shape as shown in the photo to reduce student time on the machines (reducing exposure to injury). The “wedge blocks” will become the wedges that assemble the chair after we cut them on the band saw with a miter gauge.



Legs & Stretchers

For students, I taper three of the four legs for them ahead of time to save on hard labor. I do this on the jointer (let me know if you want to do this). When I teach outside of LAP, I make the students taper all four legs by hand. Which is fine by me. I do this shit every day all day.

The stretchers are straight octagons. They only need three. But I provide four because about 50 percent of the students mess up their stretchers and need a replacement.



Sticks

The short and long sticks are all octagonalized on the table saw before class. I provide an extra long stick and short stick to each student for practice. This is reflected in the cutting list above.



Arm & Shoe

The armbow is made of four pieces that are joined and laminated: two arms and a mid-arm are joined. Then the shoe covers the assembled arm to reinforce everything. As noted in the cutting list, these parts can be nested in wide boards. Also note that the shoe has to be cut out by the students AFTER they assemble their arm. Everybody's arms come out a little different. Note the grain direction in the arms. The grain runs straight through the hands.



Comb

The comb is made from 8/4 scraps from the legs and seat. The students cut it out in class.

Tips on Purchasing & Milling Stock

Most of the stock I buy for a chair class is 8/4 (2" thick). This is cut down to make the seats, stretchers, sticks and combs. I also buy 1" stock for the arms and shoes.

When I pick through the 8/4 stock, I look for sections of straight grain I can use for legs, stretchers and sticks. Angled grain sections I can use for seats and combs. The arm stock doesn't have to be straight at all.