Outdoor Glass Topped Dining Table- by Pneumatic Addict

Materials List:

- (2) 4 x 4 x 96" redwood posts
- (3) 2 x 4 x 96" redwood boards
- (4) 2 x 2 x 96" redwood posts
- (1) 43" x 36-5/16" x 1/4" tempered glass panel
- (8) Simpson Strong-Tie® Outdoor Accents APA4 90° angles
- (16) Simpson Strong-Tie Outdoor Accents hex-head washers
- (8) 3-1/2" Simpson Strong-Tie Outdoor Accents structural wood screws
- (8) #10 x 1-1/2" Simpson Strong-Tie Outdoor Accents connector screws
- (8) #10 flat washers
- 2-1/2" pocket-hole screws
Tools Needed:

- Miter saw or circular saw
- Table saw
- Power drill
- Pocket-hole jig
- 3/8" drill bit
- 3/16" drill bit
- 1/8" drill bit
- Wood glue

Cut List:

- (4) 4 x 4 post @ 28-1/2"
- (2) 2 x 4 board @ 31-15/16"
- (2) 2 x 4 board @ 37-9/16"
- (1) 2 x 4 board @ 41 9-16"
- (2) 2 x 4 board @ 17-1/4"
- (2) 2 x 2 post @ 42-1/8"
- (2) 2 x 2 post @ 39-7/16"
- (2) 2 x 2 post ripped to 1-1/4" x 1-1/2" @ 42-1/8"
- (2) 2 x 2 post ripped to 1-1/4" x 1-1/2" @ 33-7/16"

1. Use a miter saw or circular saw to cut four 28-1/2" legs from 4 x 4 posts.
2. Cut two, 2 x 4 x 31-15/16" aprons and drill two 1-1/2" pocket holes on each end. Connect leg pairs together with aprons flush to the top and outside edges of the legs. Secure through pocket holes, using wood glue and 2-1/2" pocket-hole screws.
3. Attach 37-9/16" aprons between panels. Secure in place using wood glue and 2-1/2" screws driven through 1-1/2" pocket holes.
4. Drill two 1-1/2" pocket holes on either end of the 2 x 4 x 41-9/16" cross support. Find the center of the 37-9/16" aprons. Align the cross support and secure in place using wood glue and 2-1/2" pocket-hole screws.
5. Center cross support sides on cross support. Attach using wood glue and 2-1/2" screws, driven through 1-1/2" pocket holes.
6. Now assemble to top frame. Since the glass panel cannot be cut smaller, make sure to double check your measurements before cutting the frame pieces. If anything, err on the side of too large instead of too small.

Cut two 2 x 2 x 42-1/8" posts and two 2 x 2 x 39-7/16" posts. Attach longer frame pieces to shorter frame pieces through 1-1/2" pocket holes, using wood glue and 2-1/2" screws.
7. To create a 1/4" groove for the glass panel to sit in, the 2 x 2 sub-frame pieces need to be cut down lengthwise or "ripped" to 1-1/4" x 1-1/2". Cut two 42-1/8"-long pieces and two 33-7/16"-long pieces.

Align longer sub-frame pieces inside the tabletop frame. Use a 1/8" drill bit to predrill holes every 8" horizontally through the sub-frame and into the outer frame. Secure the sub-frame in place using wood glue and 2-1/2" screws.
8. Place the top frame on the table base and allow a 1/4" overhang on each side. Countersink three 3/8" x 2" holes on the bottom side of each apron. Predrill into the underside of the top frame, using a 1/8" drill bit. Secure top in place using 2-1/2" screws.
At this point, apply any stain or finish you plan on using. Although redwood holds up extremely well outdoors, I highly recommend using an oil-based paint or clear coat to protect the wood from the elements.

9. Align an Outdoor Accents APA4 90° angle on each inside corner of where cross supports meet. Predrill through each hole, using a 1/8" drill bit. Attach APA4s using #10 x 1-1/2" Outdoor Accents connector screws, #10 washers and Outdoor Accents® hex-head washers.

The holes of the APA4s are in different locations on each side, so make sure to alternate their orientation so the screws on adjoining sides don't hit each other.
10. Align an Outdoor Accents APA4 90° angle on the outside of each leg, directly below the tabletop. Predrill through each hole, using a 3/16" drill bit.
For each hole, slide an Outdoor Accents structural wood screw through an Outdoor Accents hex-head washer and drive the screws till snug.
11. Carefully lower the tempered glass panel into the groove of the top frame.
Carefully lower tempered glass panel into groove.
That's it! I placed my new outdoor table on the patio beneath my DIY solar chandelier, and I'm ready to entertain in style.