DIY Outdoor Sofa – Build a Modern Outdoor Sofa

Difficulty

Moderate

This streamlined and sophisticated outdoor sofa makes a statement with its timeless design, crafted from cedar and built to accommodate standard 24x24" outdoor sofa cushions. Enjoy indoor-like comfort outdoors all summer long. **Matching chair** and **coffee table** plans also available **here**!

Tools

Kreg Tools

Kreg® Pocket-Hole Jig 720	Kreg® Pocket-Hole Jig 720

Other Tools

Miter Saw

Square

Table Saw

Tape Measure

Clamps

Drill (cordless)

Sander

Shop Vacuum

Materials

Wood Products

5 Cedar Board (Or Alternative) , 2x4 , 96"

2 Cedar Post (Or Alternative) , 4x4 , 96"

2 Cedar Board (Or Alternative) , 2x6 , 96"

3 Cedar Deck Board (Or Alternative) , 5/4x6 , 96"

1 Hardwood Dowel , Diameter , 1"

Hardware & Supplies

84 2-1/2" Blue-Kote Pocket Hole Screws

1 Waterproof Wood Glue

1 120 Grit Sandpaper

1 220 Grit Sandpaper

1 Penetrating Oil Stain (We Used Behr - Chocolate Color)

60 2-1/2" Deck Screws

3 Sets Of 24" X 24" Bottom And Back Cushions

Cut List & Parts

2 Arms , 3-1/2" X 3-1/2" X 32"

4 Legs , 3-1/2" X 3-1/2" X 19-1/2"

2 Bottom Side Spans , 1-1/2" X 5-1/2" X 25"

2 Back Top & Bottom Spans , 1-1/2" X 3-1/2" X 68-1/4"

1 Bottom Front Span , 1-1/2" X 5-1/2" X 71-1/4"

1 Bottom Back Span , 1-1/2" X 3-1/2" X 71-1/4"

6 Bottom Seat Supports , 1-1/2" X 3-1/2" X 19-1/2" (With 2° Angles On Each End)

2 Back Side Ends , 1-1/2" X 3-1/2" X 23"

2 Back Vertical Pieces , 1-1/2" X 3-1/2" X 16"

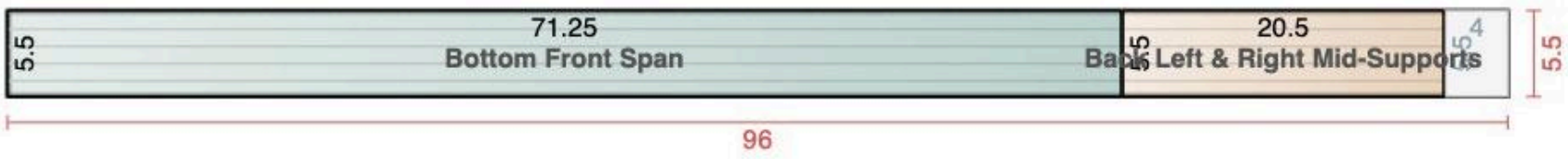
2 Back Left And Right Mid-Supports , 1-1/2" X 5-1/2" X 20-1/2"

1 Back Center Mid-Support , 1-1/2" X 5-1/2" X 20-1/4"

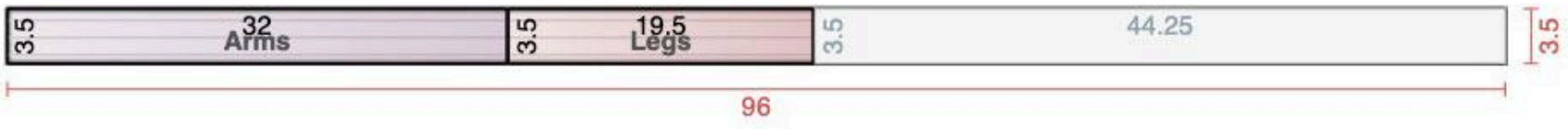
3 Seat Boards , 5/4" X 5-1/2" X 71-1/4"

8 Hardwood Dowel Inlays/Plugs , 1" Diameter X 2"

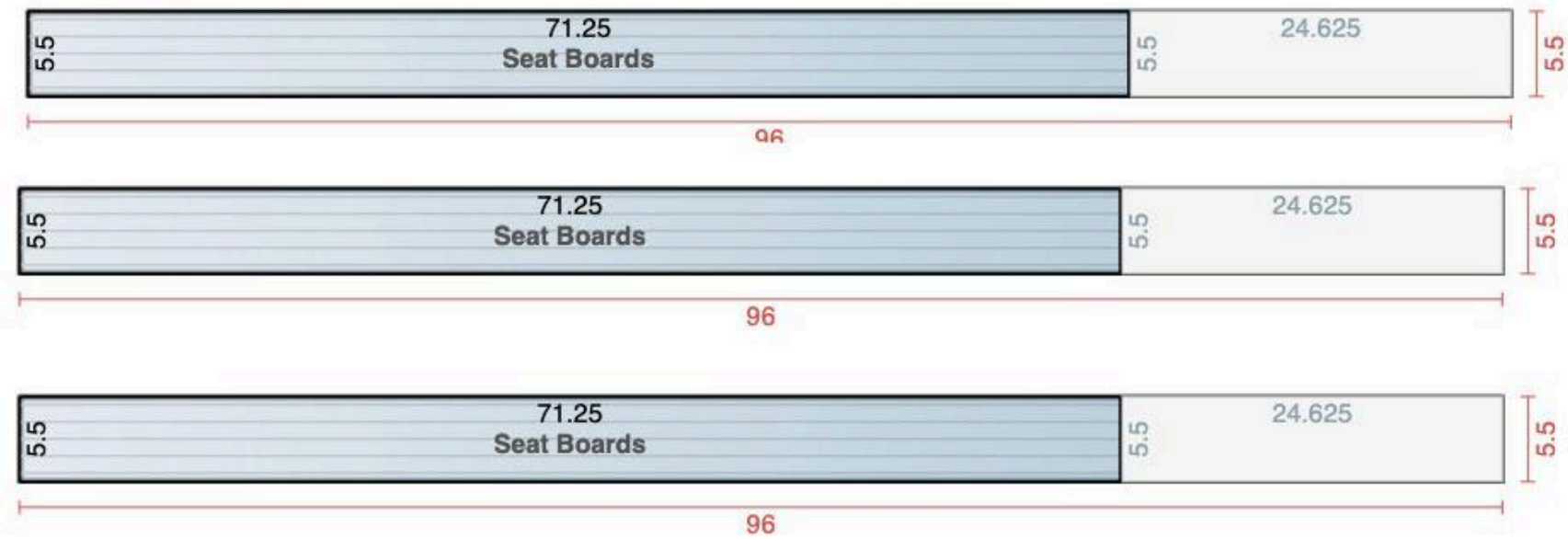
2x6's



4x4's



5/4x6's


5.5
71.25
Seat Boards
5.5
24.625
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96
5.5
71.25
Seat Boards
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Seat Boards
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24.625
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96

2x4's

3.5
19.5
Bottom Seat Supports
3.5
19.5
Bottom Seat Supports
3.5
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Bottom Seat Supports
3.5
19.5
Bottom Seat Supports
3.5
16
Back Vertical Pices
3.5
96
3.5
68.25
Back Top & Bottom Spans
3.5
23
Back Side Ends
3.5
49
3.5
96
3.5
68.25
Back Top & Bottom Spans
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23
Back Side Ends
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49
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96
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71.25
Bottom Rear Span
3.5
19.5
Bottom Seat Supports
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3.5
19.5
Bottom Seat Supports
3.5
16
Back Vertical Pices
3.5
16
Back Vertical Pices
3.5
44.11
3.5
96

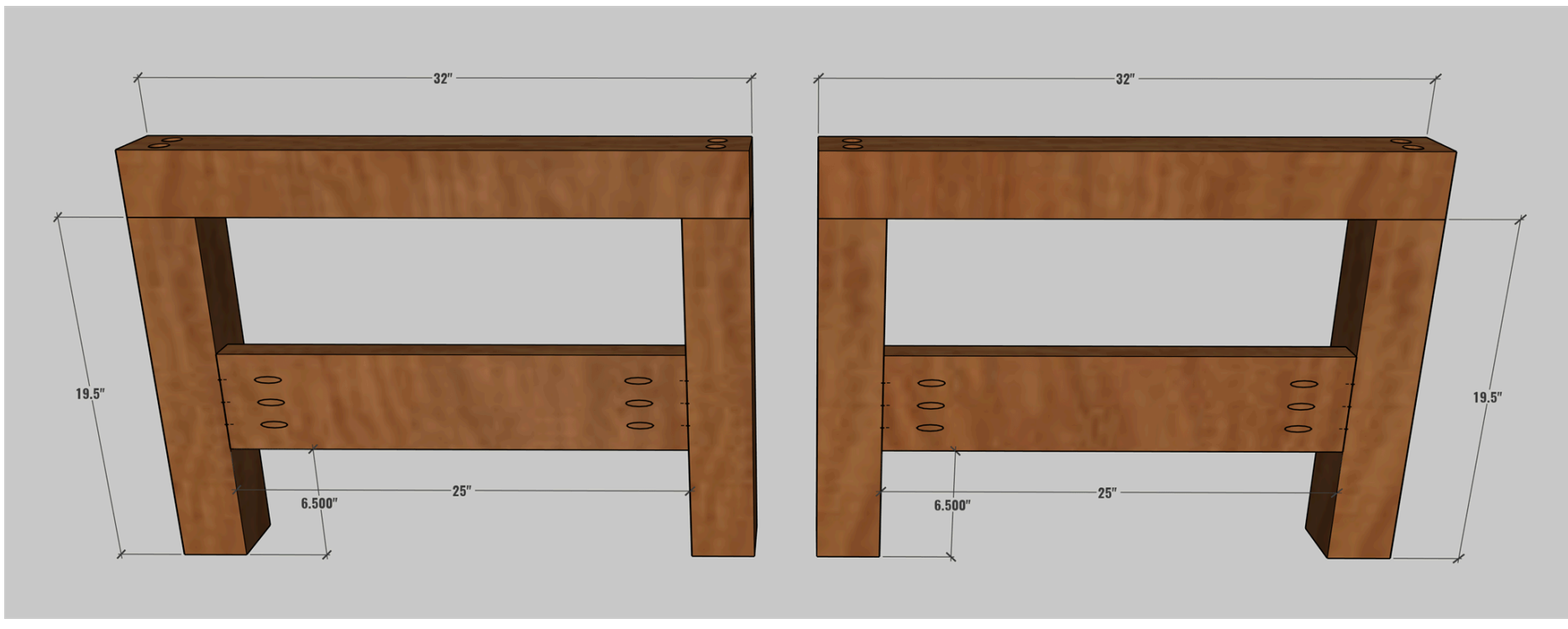
Directions

1 Assemble Arms & Legs

On each ARM piece, drill holes in the locations shown on the diagram using a 1" spade bit. Drill to a depth of approximately 1". Then pre-drill in the center of the hole as far down as you can using a 1/8" drill bit. Clamp arm and legs together and secure with waterproof wood glue and 3" deck screws. Squeeze some glue in the hole and then using a rubber or woodworker's mallet, gently tap the dowels into the holes until they feel secure. Then cut off the excess with a dovetail saw or flush cut saw. Sand smooth.

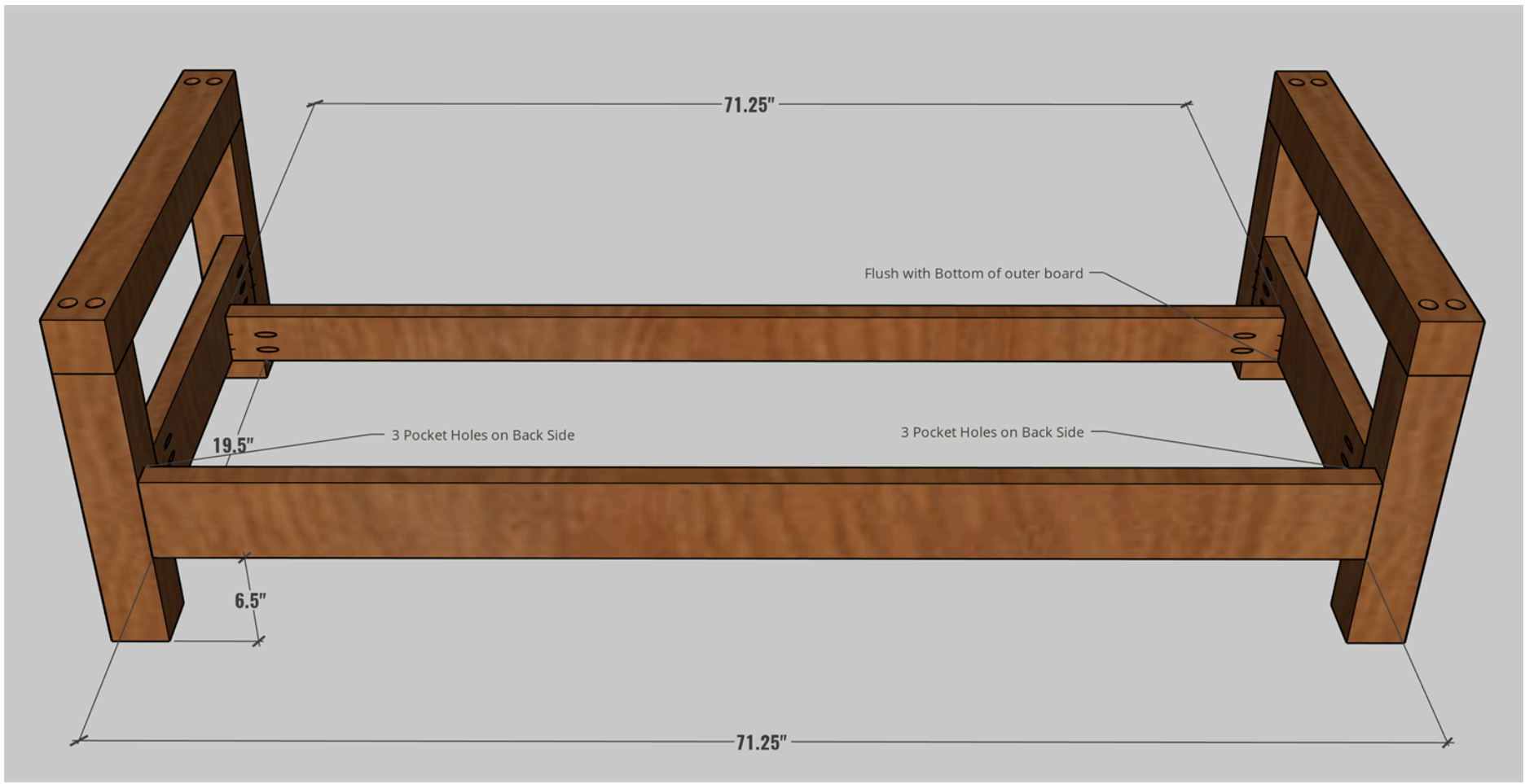
2 Add Bottom Side Spans

Drill pocket holes as shown on each piece. Measure 6-1/2" from the bottom of each leg. Attach BOTTOM SIDE SPANS ensuring the sides with the pocket holes are flush with the legs (these will be hidden on the inside of the piece when complete). Use waterproof wood glue and 12 x 2-1/2" Blue Kote pocket hole screws.



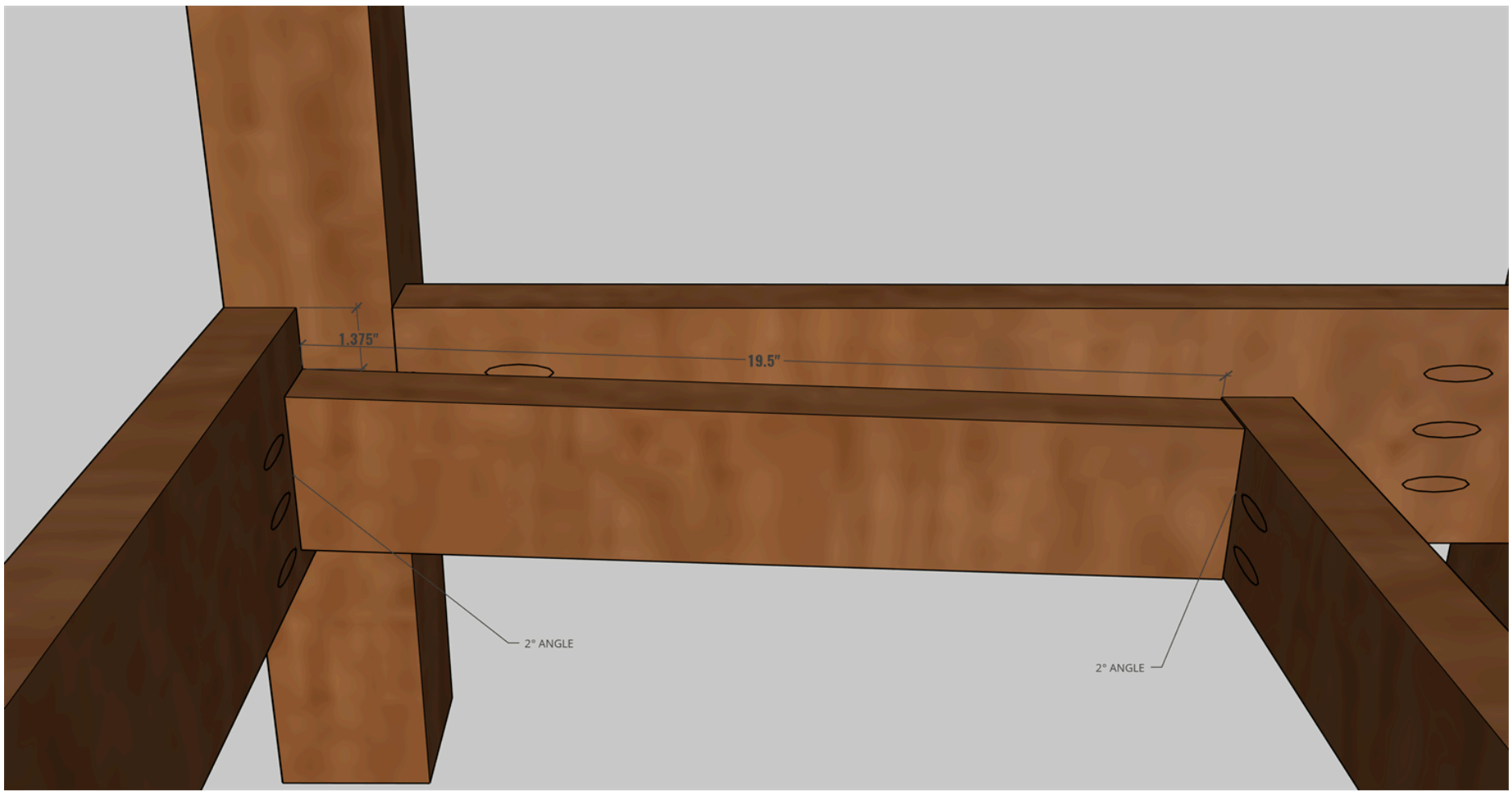
3 Attach Bottom Front and Back Spans

On the BOTTOM FRONT SPAN, drill 3 pocket holes on each end of the piece, ensuring the holes are on the same side of the board. Mark 6-1/2" from the bottom of each leg. Attach the BOTTOM FRONT SPAN with the pocket holes facing the inside with waterproof wood glue and 2-1/2" Blue Kote pocket hole screws. Drill 2 pocket holes on each end of the BOTTOM BACK SPAN, ensuring pocket holes are on the same side of the board. Mark 19-1/2" back from the inside of the BOTTOM FRONT SPAN. Attach BOTTOM BACK SPAN in that location, flush with the bottom of the SIDE SPAN board. Secure with waterproof wood glue and 2-1/2" Blue Kote pocket hole screws.



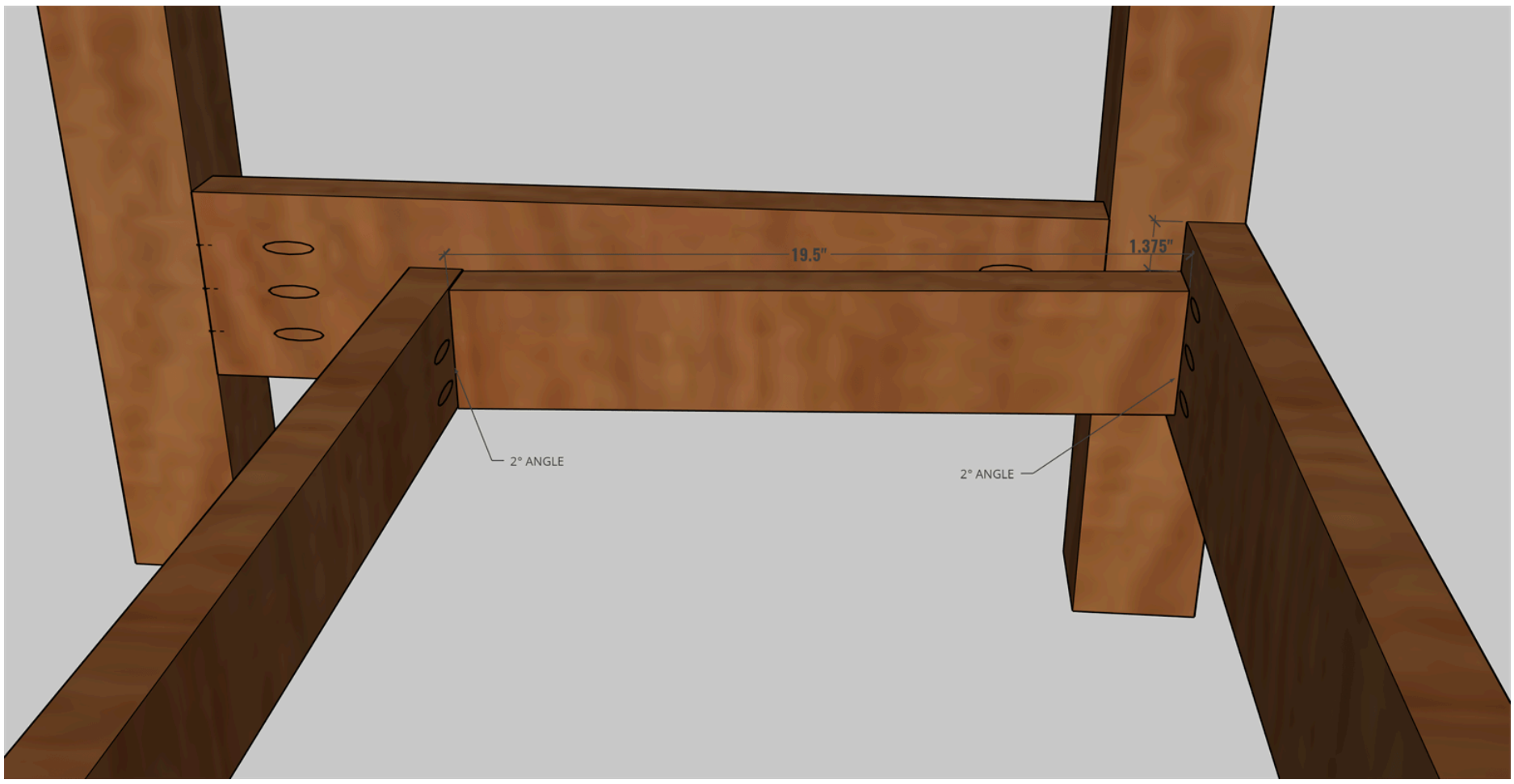
4 Attach Bottom Seat Supports (Left)

Attach a BOTTOM SEAT SUPPORT on the left-hand side. Each end should be cut at a 2° angle as shown in the diagram. Mark 1-3/8" from the top of the BOTTOM FRONT SPAN. Line up one BOTTOM SEAT SUPPORT to that line and it should meet flush to the BOTTOM BACK SPAN. Secure directly into the LEG and BOTTOM SIDE SPAN with four 2-1/2" deck screws.



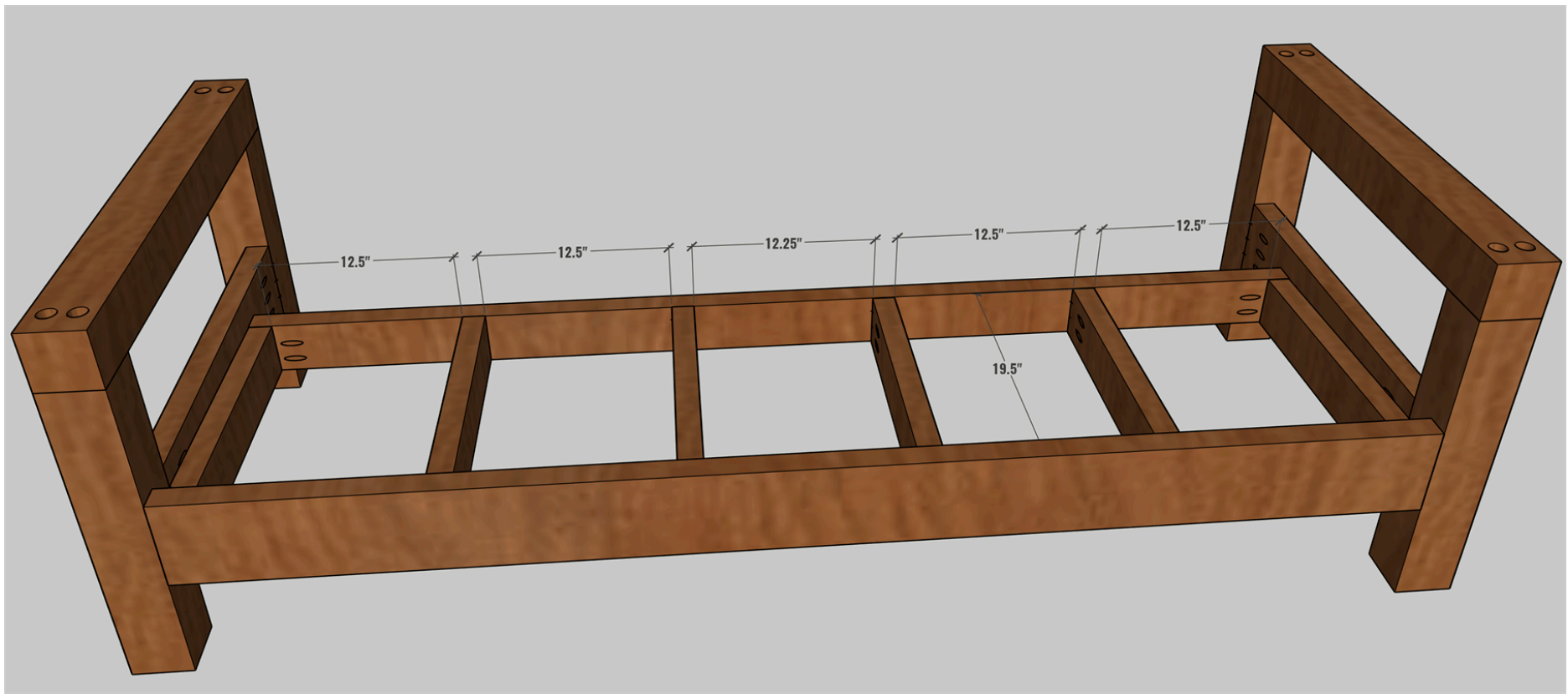
5 Attach Bottom Seat Supports (Right)

Attach a BOTTOM SEAT SUPPORT on the right-hand side. Each end should be cut at a 2° angle as shown in the diagram. Mark 1-3/8" from the top of the BOTTOM FRONT SPAN. Line up one BOTTOM SEAT SUPPORT to that line and it should meet flush to the BOTTOM BACK SPAN. Secure directly into the LEG and BOTTOM SIDE SPAN with four 2-1/2" deck screws.



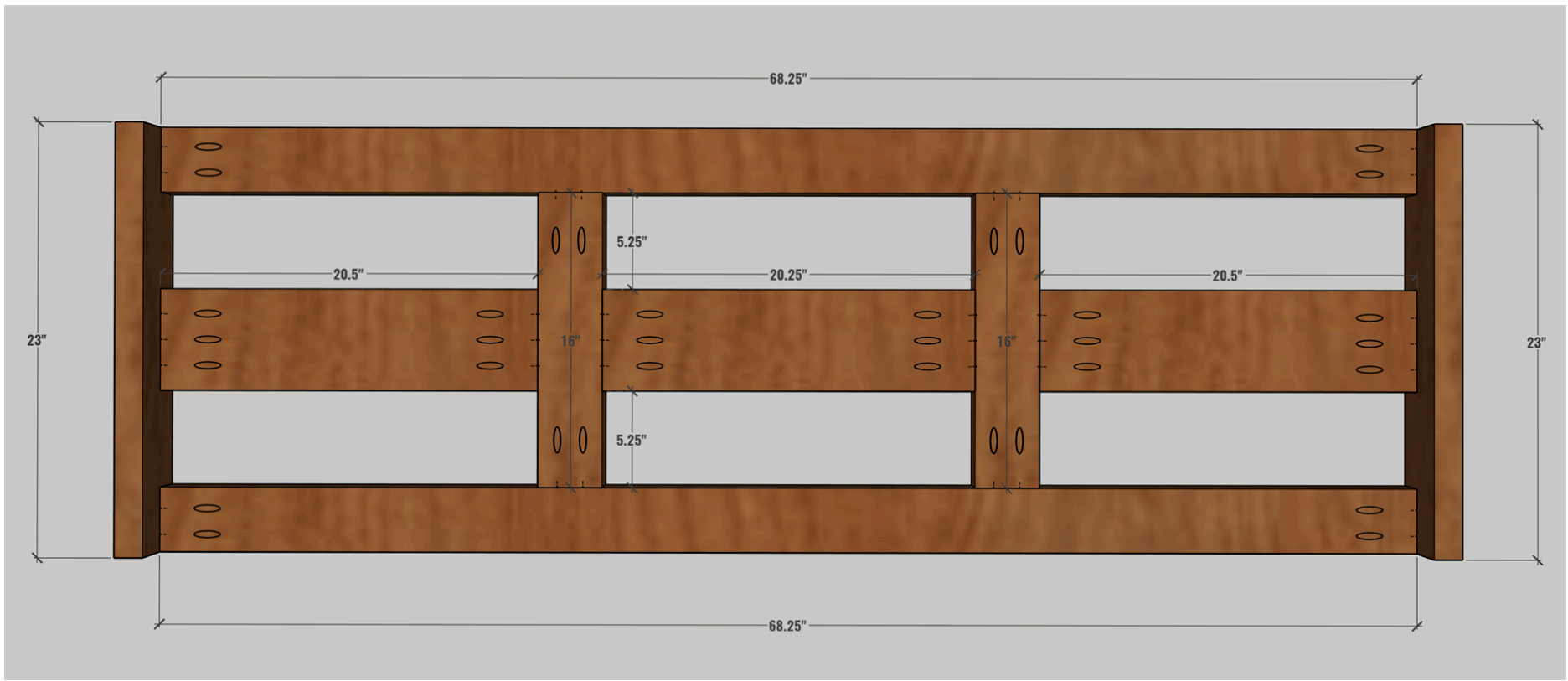
6 Remaining Bottom Seat Supports

On the remaining four BOTTOM SEAT SUPPORTS, drill 2 pocket holes on each end of the boards. Attach the BOTTOM SEAT SUPPORTS with the spacing shown on the diagram. Each end should be cut at a 2° angle as shown in the diagram. Mark 1-3/8" from the top of the BOTTOM FRONT SPAN. Line up one BOTTOM SEAT SUPPORT to that line and it should meet flush to the BOTTOM BACK SPAN. Secure with waterproof wood glue and 2-1/2" Blue Kote pocket hole screws.



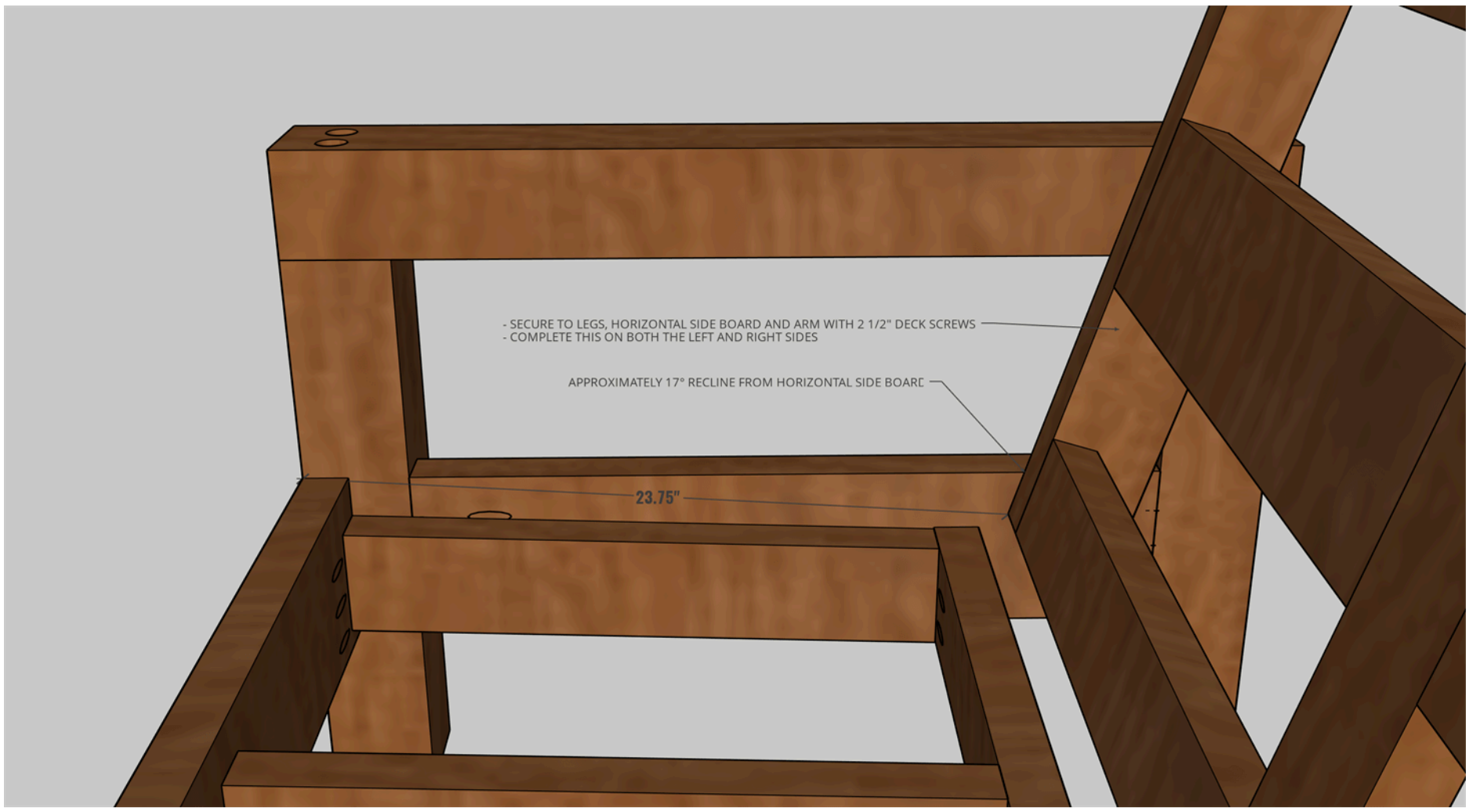
7 Assemble Back

For the back, all pocket holes should face the rear of the piece. Assemble back as shown, starting with the BACK SIDE ENDS to the BACK TOP AND BOTTOM SPANS. They should be flush with the front of the BACK SIDE ENDS. Attach with waterproof wood glue and 2-1/2" Blue Kote pocket hole screws. Next, add the BACK VERTICAL PIECES with the spacing shown on the diagram (both vertical and horizontal spacing). Finally, add the BACK LEFT & RIGHT MID-SUPPORTS, and CENTER MID-SUPPORT as shown using waterproof wood glue and 2-1/2" Blue Kote pocket hole screws.



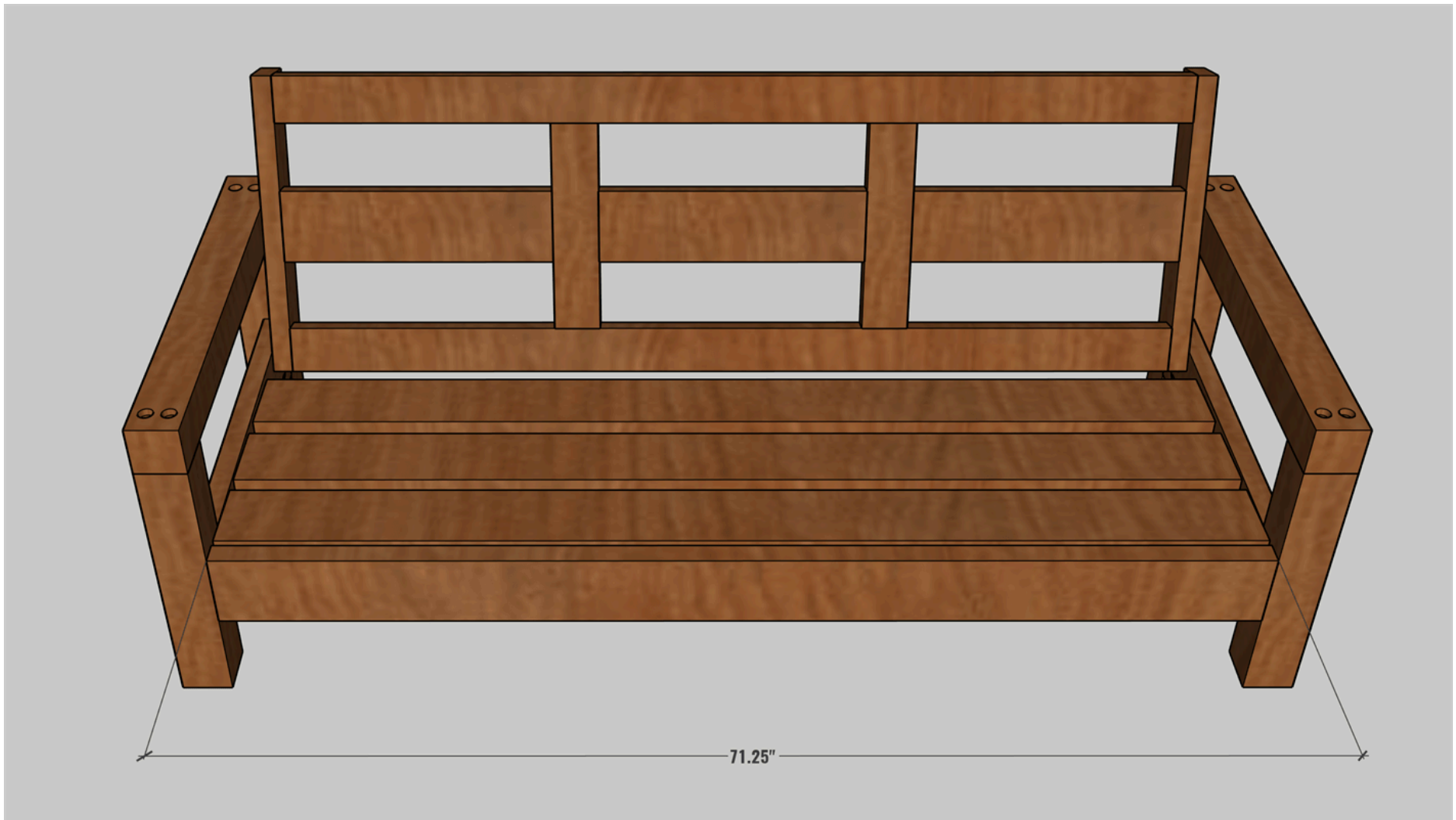
8 Secure Back to Sofa

(You might need some help with this part). Use a helper and clamps to position the bottom of the back 23-3/4" from the front of the BOTTOM FACE SPAN. This will allow your 24" cushions to overhang by 1/4". You can place it anywhere from 1-3/8"-2" from the top of the SIDE SPAN (depends on how high you want the back based on your back cushions). Then rotate the back until it is approximately a 17° recline from the HORIZONTAL SIDE SPAN (or 19° if you're using the seat base as your guide). Secure with 2-1/2" deck screws into the HORIZONTAL SIDE SPAN and back LEG on both the left and right side (4 screws on each side).



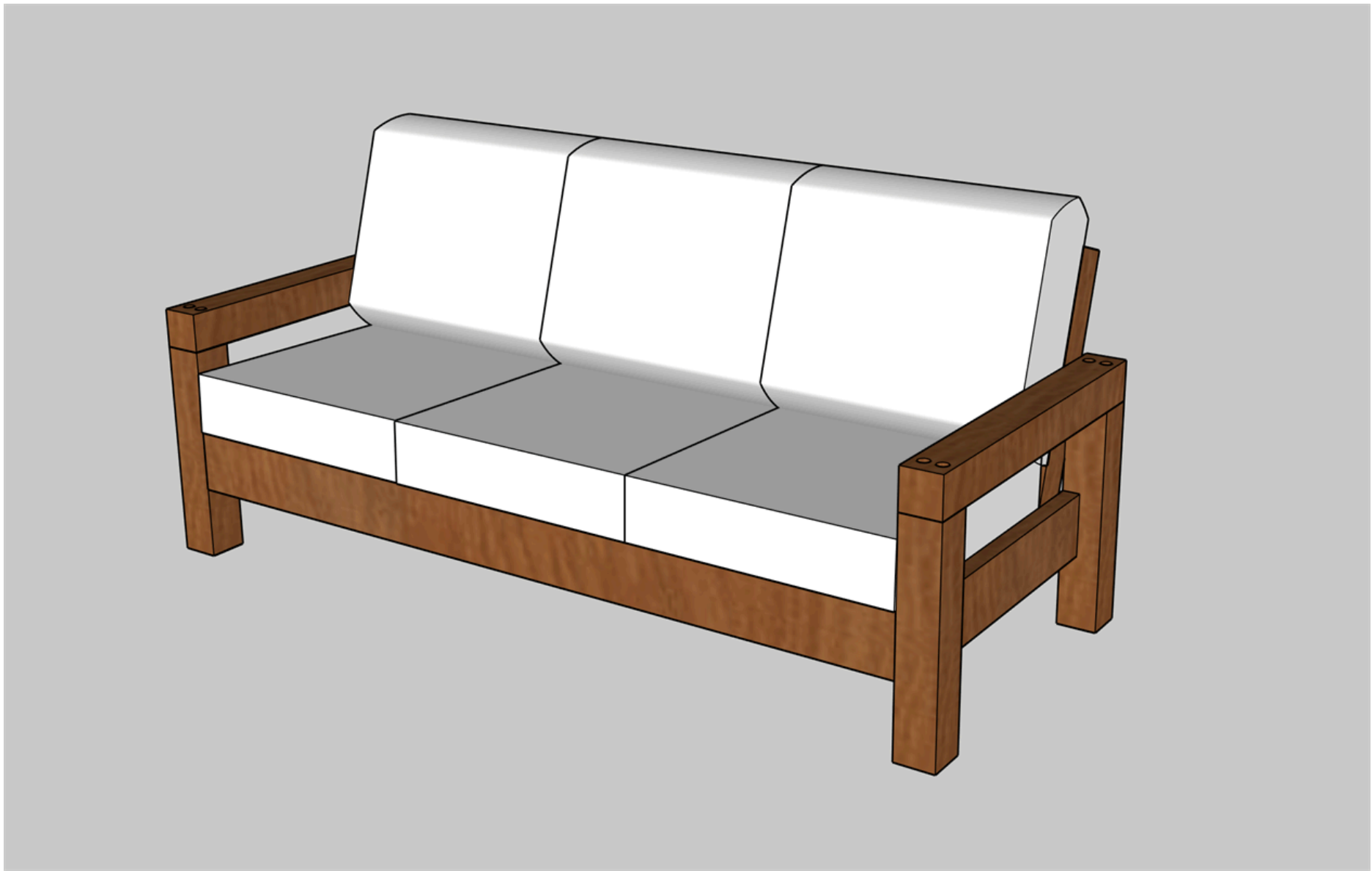
9 Attach Seat Boards

Attach SEAT BOARDS, spacing approximately 1" apart (doesn't have to be perfect - use your judgement). Secure with 2 1/2" deck screws into ALL of the BOTTOM SEAT SUPPORTS. Will require a total of 36 screws for this step.



10 Sand and Finish

Sand with a 120-grit sandpaper, then 220-grit sandpaper. Finish with some kind of sealer or wood penetrating oil (we used penetrating oil from BEHR). Allow to dry and add your cushions. Enjoy all summer long!



11 NOTE ON LUMBER

This project was made out of cedar, however, could be made out of pressure-treated wood as well. It is natural for 4x4 posts to crack before, during and after assembly as they dry and conditions change. It will add to the character of the piece and will not affect its stability or performance if assembled properly. If you'd prefer to work with 2x4's, simply laminate two boards together to create a 3-1/2" x 3" board and increase the length of the LEGS by 1/2" and BOTTOM SIDE SPANS by 1".