
Simple Bed Frame

Using 2×4s and Plywood

Wood Requirements

- Buy four (4) 2×4 by 8' long “studs”
 - Premium kiln-dried lumber is lighter, but not necessary
 - Cost is \$2.73 each and that comes to \$10.92
- Buy one sheet of 4' × 8' × 3/4” plywood
 - Actual thickness is 23/32 inches
 - I got plywood that is sanded on one side (“BC Sanded Pine”)
 - Cost for one sheet is \$34.78

Step 1a: Prepare the 2×4 Studs

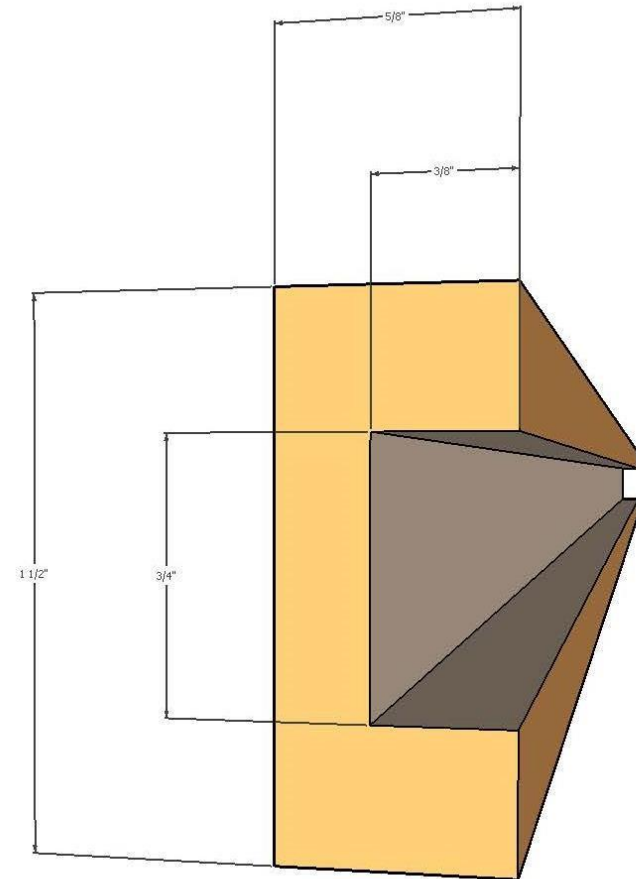
- Trim the 2×4 studs so they measure $1\frac{1}{2}'' \times 3''$
 - Using a table saw, I first cut each stud to be $3\frac{1}{4}''$ wide
 - Next I flip each stud over and cut it to be $3''$ wide
 - Doing this removes the curved corners found on typical 2×4 studs and leaves a rectangular piece that is $1\frac{1}{2}'' \times 3''$
- Using a miter saw cut the 2×4 studs as follows:
 - Piece #1: $72'' + 12'' + 9''$
 - Piece #2: $72'' + 12'' + 9''$
 - Piece #3: $32'' + 32'' + 12'' + 12''$
 - Piece #4: $12'' + 12'' + 9'' + 9'' + 9'' + 9''$

Step 1b: Prepare the Plywood

- Buy one sheet of 4' × 8' × 3/4" plywood
 - Actual thickness is 23/32 inches
 - I got plywood that is sanded on one side (“BC Sanded Pine”)
 - Cost for one sheet is \$34.78
 - Trim the plywood sheet to 74" by 38"
- Optional – Wood to make plywood side trim
 - Need 230" linear inches of wood that is 1 1/2" x 5/8"
 - Initially trim to four pieces: 76" 76" 40" 40"

Step 1c: Prepare the Edge Trim

- Optional: Prepare wood for edge trim (to go on the plywood)
 - Initially trim 4 pieces: 76" 76" 40" 40"
- Two strips: 1½" x 5/8" x 75"
- Two strips: 1½" x 5/8" x 39"
- Using a table saw, I cut a groove that fits around the plywood
 - The groove is ¾" wide and 3/8" deep
- Using a miter saw, cut each corner at 45 deg

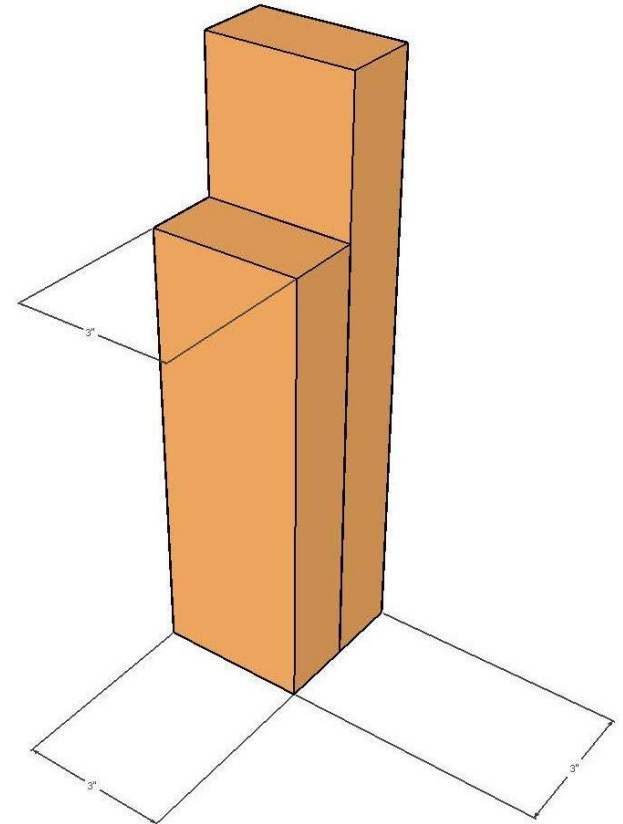


Step 2: Make the Rails

- I use miter corners to attach the 1 ½" × 3" rails
 - Use a miter saw to cut the 45 deg corners

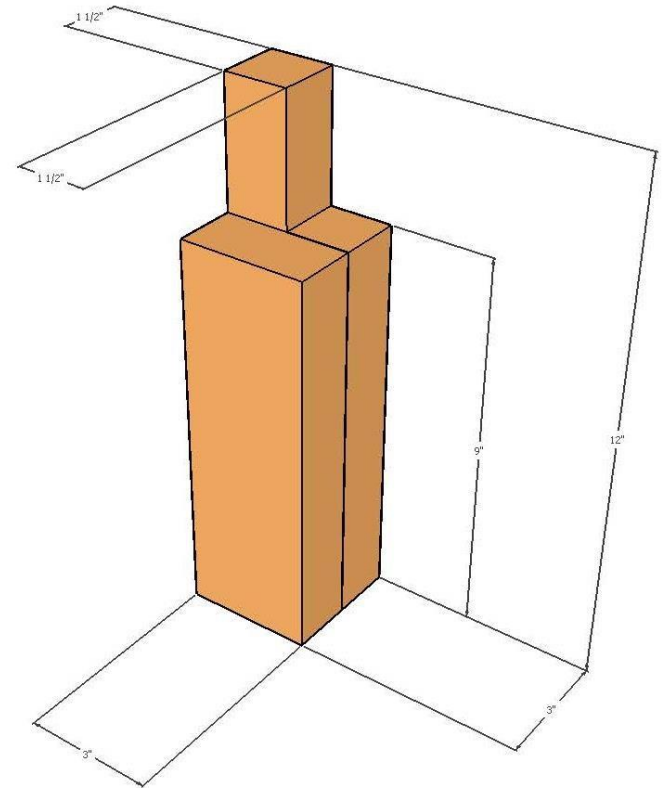
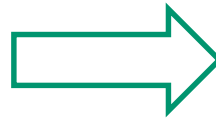
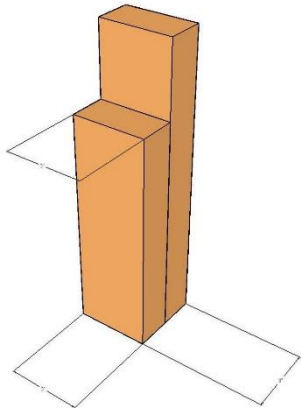
Step 3: Make the Side Legs

- You need two (2) side legs
 - For each leg, glue a 9” piece to a 12” piece
 - For each leg, hold together with two or three screws of length 2½”
- There is no need to modify these legs after the glue dries. They are the correct shape.



Step 4: Make the Corner Legs

- You need four (4) corner legs
 - For each leg, glue a 9” piece to a 12” piece
 - For each leg, hold together with two (2) screws of length 2½”
- The tops need slight trimming after drying
 - For each of the corner legs, remove a 3” by 1 ½” section at the top



Finished Bed



Finished Bed with Top

