

Browse Haus

Assembly Instructions and Material Schedule

Begin with a selection of found lumber and size-appropriate fasteners. Project construction may vary a bit depending on available material. Our design utilizes scrap tight knot cedar decking, plexiglass, torx screws, and a two pairs of basic hinges. The goal is to construct three boxes: one large base and two folding benches that reveal a book chamber when deployed. Self tapping torx screws, while expensive, provide excellent strength, will not pull lose, and will not split the wood.

Materials

5/4x6 TK Cedar 57'

5/4x5 TK Cedar 94'

2x6 TK Cedar 17.5'

Door Hinge, 3" x 4"

1 Box 2.5" Torx Screws

24 2.5" Machine Screws, Washers, Nyloc Nuts

For the base

- 1) Using 5/4 x 4 boards, cut 12 lengths at 16". Assemble 4 "L" shaped corner pillars, and two "T" shaped center pillars.
- 2) Cut two 2x6 "skids" to 35"
- 3) Cut three 5/4x6 base plates.
- 4) Align two corner pillars flush to the outside edge of a base plate and fasten, creating an open frame. Repeat the process for the "T" columns, but center the "T" on the edge of the base plate. There will now be three open frames, 36" long and 17" high.
- 5) Align the three completed frames across the 2x6 skids, leaving 1/2" reveal on at the corners. Verify lateral outside dimensions to 36", center the "T" frame, then fasten to skids. Fill the voids between the open frames with infill boards, leaving 1/4" between for airflow.
- 6) Cut two 36" 5/4x6 and one 5/4x4 top chord and affix flush to the top of the "L" and "T" frames, respectively. Exterior dimensions (not counting the skids) will now measure 36"x36"x18"
- 7) Create four hinge bolt cutouts: On each 5/4x6 top chord, locate hinge position 7/5" OC inboard from each edge. Using a hand saw, make two 1/2" deep cuts at hinge width. Using a hand chisel, score the wood between the cuts and pound out the excess. Trim excess and ease the edges.
- 8) Starting with the top chord, affix 4 36" 5/4x6 lengths of cladding to the exterior, holding the ends flush to the outside corners. Use this opportunity to make sure that the "L" and "T" pillars are plum, ensuring 36"x36" top to bottom. Use two addition broad-head Torx screws to fasten the cladding to the end top plates, ensuring hinge plate stability.

- 9) Complete the cladding top chord all the way around, then complete the bottom chord. Ensure that chords are level with each other at each corner.

For the benches:

- 1) Cut 4 36" 5/4x4 lengths, and 6 18" 5/4x4 lengths. Lay the 18" lengths on top of and perpendicularly to the 36" lengths to form two bench frames. Verify squareness and fasten.
- 2) Create 4 "L" and 2 "T" pillars 16" in length as per step 1 above.
- 3) Align each of the 4 corner pillars flush to the outside edge of each bench frame and fasten, creating an open frame. Repeat the process for the "T" columns, but center the "T" on the edge of the bench plate. There will now be three open frames describing a volume 36"x18"x17"
- 4) Cut six 16" 5/4x4 lengths and fasten vertically flush below top of each pair of "L" and "T" pillar. Total height of the pillar and cross member will be 17"
- 5) Cut 4 36" 5/4x6 lengths and 2 36" 5/4x4 lengths for the bench tops. Attach the 5/4x6 lengths across the top of the newly created frames, holding them flush to the edge of the "L" and "T" pillars.
- 6) Cut and affix 4 5/4x6 @ 36" and 4 @ 18" cladding to the top of the bench. Holding the cladding top edge flush with the bench top. Repeat for bottom rail.
- 7) Create four hinge bolt cutouts in bench top as per step 7 above.
- 8) Overturn the benches and attach 4 (2 each) 35" lengths of 2/6 to the bottom sides, providing 1/2" reveal on all sides.
- 9) Stack benches onto base, bottoms up. Using hinge bolt cutouts and hinges as a guide, mark and drill bolt holes in base only. Hog out the outer 2 holes to provide hinge adjustability. Install hinges, using machine screws, washers, and 1/4" Nyloc nuts. Finger tighten.
- 10) Using a level or straight edge, make certain that hinges align on the x axis. Locate and drill hinge holes on the bench. Install fasteners to finger tight. Test hinged articulation" Are the hinges free from binding? Does the bench touch the ground evenly? Does it touch the base evenly? Adjust as necessary. Tighten hinge fasteners.
- 11) Cut and install plexiglass around the inside perimeter of the book chamber using mirror anchor clips to install.
- 12) Cut and install 4 used road bicycle tubes around the perimeter of the depression in the top chord of the main box (including the center frame) such that a gasket is formed.

13) Cut a sheet of Plexiglas to form the book chamber lid. Attach with hinges to one side, such that the glass can be opened like a hood.