

3' x 3' Tortoise House Build Notes

Materials:

Base: 23/32" CD Plywood (1 sheet)

Ceiling/Roof: 19/32" CD Plywood (2 sheets)

Walls: 2" x 10" (2 x 8')

Roof uprights: 2" x 3" (3 x 8')

8" Heavy Duty Strap Hinge

4" x 4" Angle Framing Anchor (quantity 3)

3" Narrow Utility Hinge (2 hinges per pack with screws)

3" deck screws

2" deck screws

1/4" wire mesh

Aluminum window screen

60-minute roofing paper

Roll roofing (Shasta white)

Cut:

Base: 23/32" plywood into one 3' x 3' piece

Walls: (2 x 10")

2 x 36" (left/right walls)

1 x 33" (back wall)

1 x 17" (front wall)

1 x 18" (inside middle wall/divider)

Roof Truss: (2" x 3")

3 x 38"

3 x 16"

Roof:

19/32" CD Plywood 48" x 40" (quantity 2)

Using leftover 19/32" plywood, cut **3** 12" x 12" x ~16-3/4" triangles. Basically the 12" x 12" is at a perfect 90-degree angle.

Door:

Using leftover plywood, cut **2** 17-1/2" x 10-1/2" pieces.

Stack/clamp the two pieces on top of each other, horizontally, mark and cut out the center 4" from the edge left/right and 2-1/2" from the top/bottom.

Assembly:

Cut the base and walls, screw walls together with 3" screws using 3 screws per edge. Once all walls are screwed together, screw walls to the base from the bottom.

Cut the ceiling and attach to walls/base assembly with two 8" heavy duty strap hinges.

Cut the 6 38" 2x3 truss boards, using the 4"x4" angle, put two boards together at a 90-degree angle. At the point, screw in the 12"x12" triangle into the sides of the 2x3 boards—repeat 2 more times for a total of three truss pieces.

Down the center of the ceiling, screw in the three 16" 2x3 boards to the top of the ceiling sticking straight up. Screw from the inside. This is a two-person job.

Cut the two 48" x 40" roof panels.

Now is a good time to paint everything, including the truss pieces, base box (inside and out/bottom).

I used enamel gloss to hopefully make it more waterproof and easier to keep clean.

The rest of the roof assembly should be done on site at the final location as it's going to be too heavy and awkward to move.

Make sure the base is raised up and that water won't get in. We used 40 red clay bricks to create a base. We tried cinder blocks, but felt it was too tall and didn't want to build a ramp.

Roof assembly—take the 2x3x38" truss and fasten the triangle to the the 16" 2x3 upright from the ceiling. Make sure the triangle is facing out, the middle does not matter which way it's facing. Use 2 2" screws through the triangle to the upright boards. Once all three trusses are in place use a 3" screw to secure the 2x3 to the ceiling—make sure the screw does not go all the way though to the ceiling board. This will help keep the trusses from moving.

Next, with the help of two other people, place the 48"x40" panels on each side of the house. Make sure the overlap and meet at the top. Make sure the front sticks out 7-8" from the front and the back sticks out about 4-5". Once everything is in place, secure wood panels to 2x3 with 2" screws.

Starting at the bottom of the roof panel, place the 60-minute roofing paper down with staples. Then place the flat roofing roll in with staples.

The last piece is to make and install the door. Using leftover plywood, cut 2 17-1/2" x 10-1/2" pieces. Stack/clamp the two pieces on top of each other, horizontally, mark and cut out the center 4" from the edge left/right and 2-1/2" from the top/bottom. Next cut some 1/4" wire mesh and aluminum screen to fill in the door hole. Figure out which side will be facing in and which will be facing out. You want the aluminum screen to face inside the house and the wire mesh facing out. Sandwich the screen/mesh between the two pieces of wood and secure the two pieces together. You can use wood screws—I used a crown staple gun with 1-1/4" staples. I also painted all sides of the wood before I assembled it.

Use the pair of 3" hinges on the right side, so the door will open left to right. Finish it off with a latch to keep the door closed and secured at night and keep your tortoise safe at night.