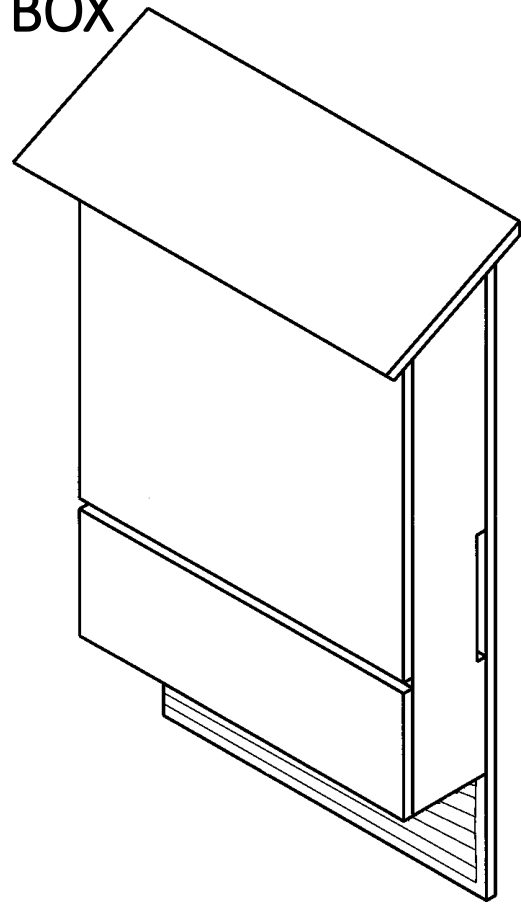


TWO CHAMBER BAT BOX

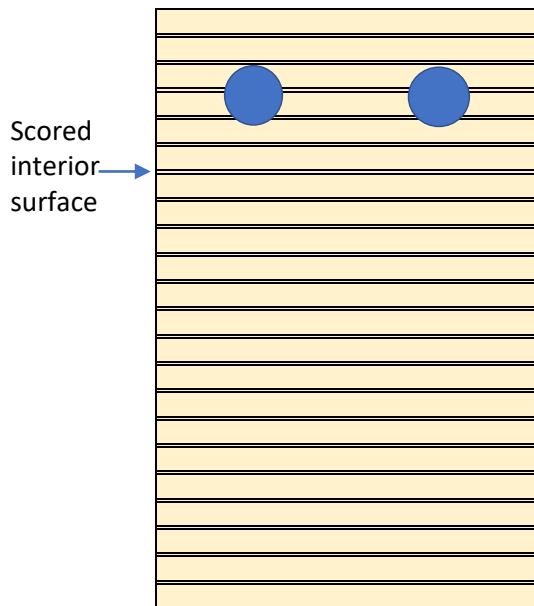
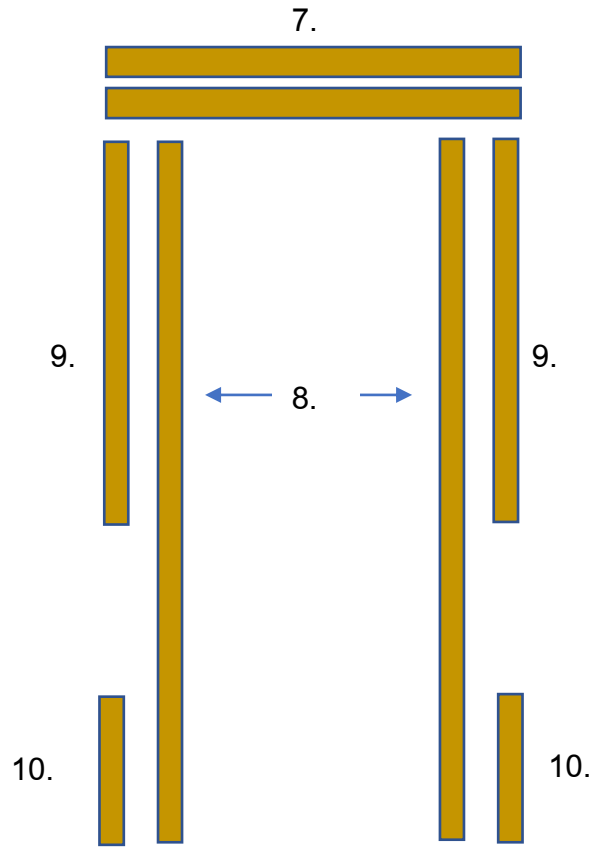
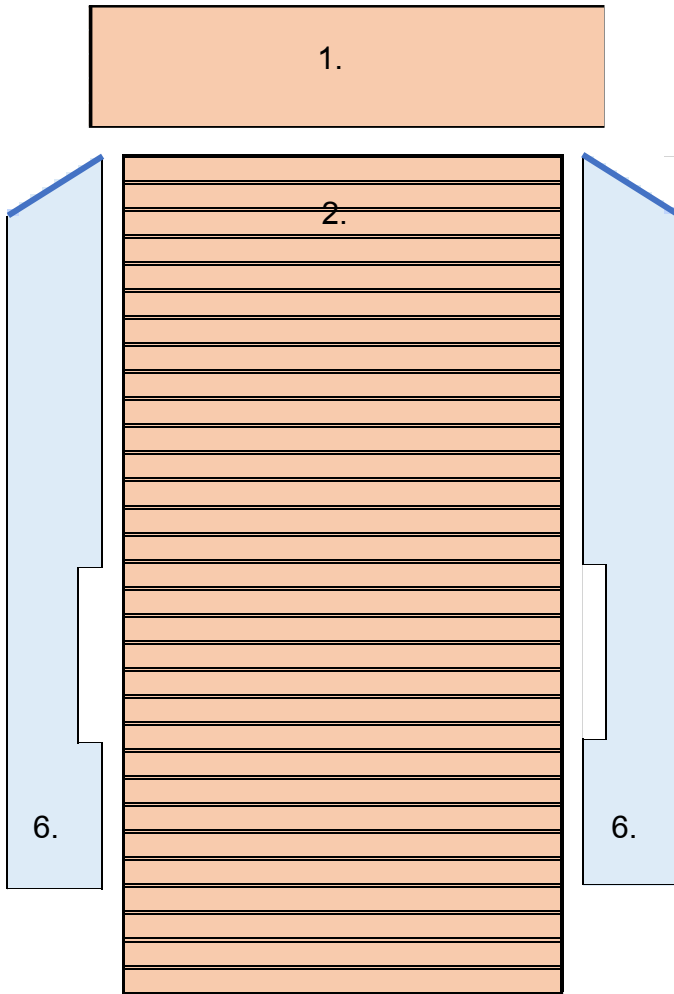
NOTE: Take a look at the “Tips” section before building.

1. Measure, mark, and cut all pieces of the first house according to the sawing diagrams below
2. Roughen interior landing surfaces by cutting horizontal grooves, spaced $\frac{1}{4}$ " to $\frac{1}{2}$ " apart. Each groove should be about $\frac{1}{32}$ " to $\frac{1}{16}$ " deep. This includes the backboard, partition, and both pieces of the front. Try not to use plastic mesh, as it can degrade and cause injury to the bats
3. If you did not stain beforehand, apply 1-2 coats of a dark, water-based stain to all interior surfaces. Don't use paint or it will fill in the grooves
4. Optional: If mounting using the mounting pole in the diagram, position mounting board at 8" from side edge. Countersink pilot holes spaced evenly along the center of the backboard (interior side). Attach mounting pole using $1 \frac{1}{4}$ " screws (at least 4), screwing from the inside out (no protruding screws).
5. Attach sides to the back board, caulk first. The long side (side with the vent), is the side placed up against the board. Make sure all edges are even and flush. After caulking, screw the exterior grade, $1 \frac{5}{8}$ " screws from the exterior side of the back into the sides (use at least 3). Make sure the screws don't protrude into the interior of the box and that you avoid the vent.
6. Attached the 5" spacers, 10" spacers, and the first roof support to inside using 1" screws. 5" spacers go below the vent, while 10" go above the vent. Don't block vent. Refer to diagram for clarification Make sure roof support is flush to roof by dry fitting roof before attaching support. Roost chamber space should be $\frac{3}{4}$ " from front to back.



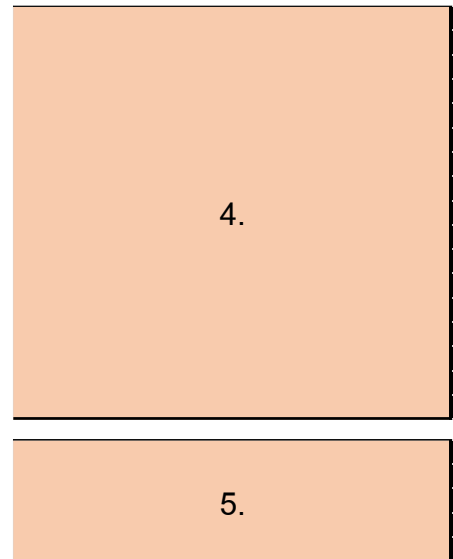
7. Mark where screws are for spacers on sides so that you don't screw into them. Place partition even with the bottom edge of the roof (dry fit roof to make sure it is flush), then place 20" spacers and second roof support on top of partition. Make sure roof support is flush to roof by dry fitting roof to check. 20" spacers should be positioned just below roof support. Use 1 5/8" screws to attach spacers, roof support and partition by drilling through to the spacers below. Make sure no screws protrude into the chamber.
8. Place the upper front piece on the sides, and dry fit the roof to make sure the upper front piece is properly positioned. There should be little to no gap. Mark where front piece falls, then remove roof and attach the upper front piece to sides, caulk down. Place lower front piece down caulk down on the sides, making sure to leave a 1/2" vent gap (see diagram on 1st page). Attach with 1 1/4" screws.
9. Dry fit roof and mark screw spots in line with sides, then place roof caulk first on the sides. Attach with 1 1/4" screws. Make sure no screws protrude into the chamber
10. Caulk all edges, including top and sides.
11. If you did not paint/stain before hand, prime and paint, or stain all exterior surfaces and edges (2-3 coats).

TWO CHAMBER PARTS DIAGRAM



PART OF BAT BOX

1. Roof
2. Back
3. Inner partition
4. Upper front
5. Lower front
6. Sides (2)
7. Roof Supports (2)
8. 20" Spacers (2)
9. 10" Spacers (2)
10. 5" Spacers



TWO CHAMBER PARTS LIST AND NOTES

Material to make 2- Two chamber Houses

1. ½" outdoor grade plywood – ½ sheet (4' X 4')
2. ¾" outdoor grade plywood – ½ sheet (4' X 4')
3. 1" X 6" X 8' Common wood (pine or cedar) – 2 boards
4. 1 lb – 1 ⅝" coated deck or exterior grade screws
5. 20 to 25 - 1 ¼" coated deck or exterior grade screws
6. 20 to 25 – 1" exterior grade screws
7. 1 quart dark, water-based stain – exterior grade
8. 1 quart water-based primer - exterior grade
9. Two quarts flat, water-based paint or stain – exterior grade
10. 1 tube paintable latex caulk

Optional:

1. Mounting Post - 1" X 1 ½ " X 42" pressure treated wood.*
2. Black asphalt shingles or galvanized metal
3. 12 to 20 roofing nails

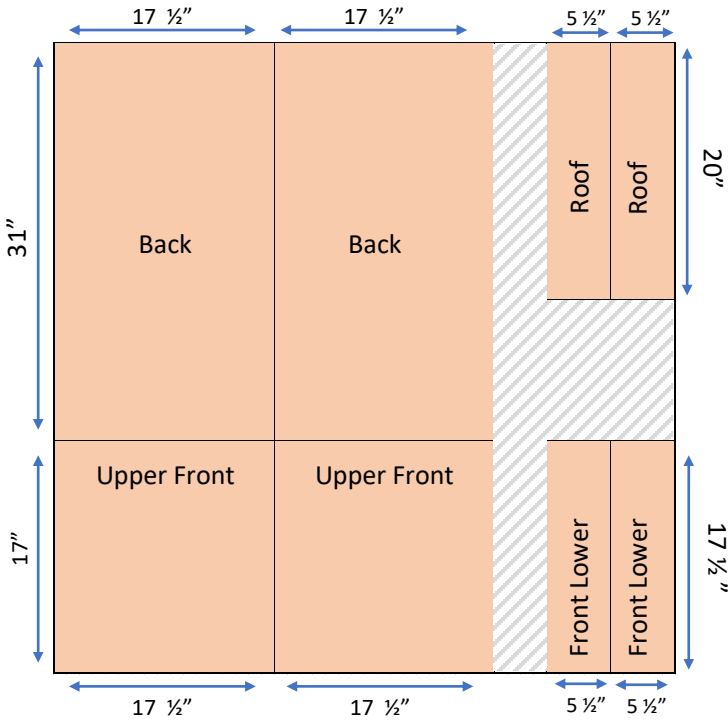
Notes:

1. **Make sure no screws penetrate in the roosting spaces – this can injure the bats.**
2. Tip: Paint and stain all boards before cutting and assembly. Paint all exterior surfaces and stain interior surfaces.
3. Roughen or score all interior landing surfaces with a saw or sharp tool. Space grooves ¼" to ½" apart, cutting 1/32" to 1/16 " deep.
4. Side boards – vent goes on the long side of the board. The long side is placed against the back piece of the box. (see diagrams on following pages).
5. Top of the side board must be flush to the top of the back piece to ensure proper fit of the roof.
6. *Optional Mounting post for tree mounting – must screw to the back before box is assembled. Screw from the inside out.

SAWING DIAGRAMS - TWO-CHAMBER BAT BOX

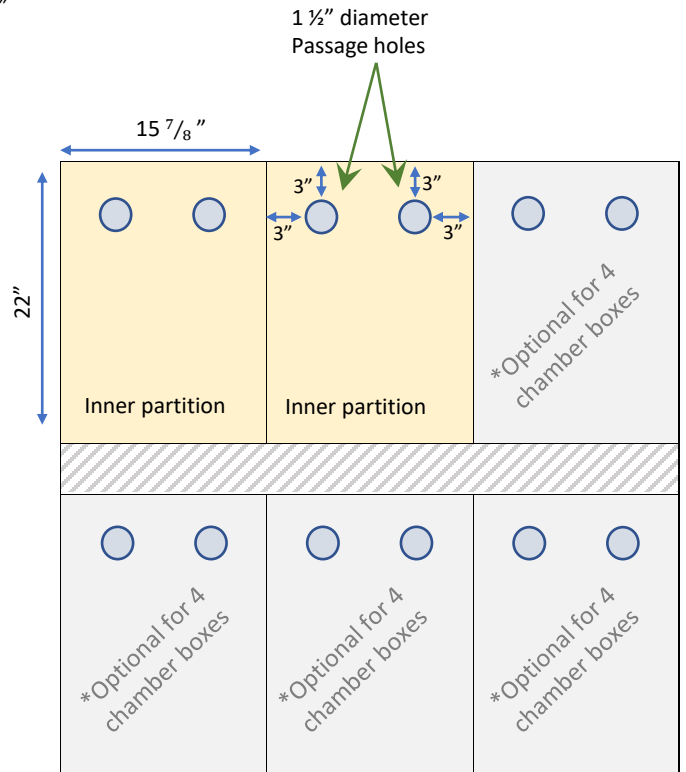
Builds two boxes

(Modified from Four-chamber plans – see attached)



4' X 4' Sheet
 1/2" thick Untreated
 outdoor grade plywood

4' X 4' Sheet
 3/8" thick Untreated
 outdoor grade plywood

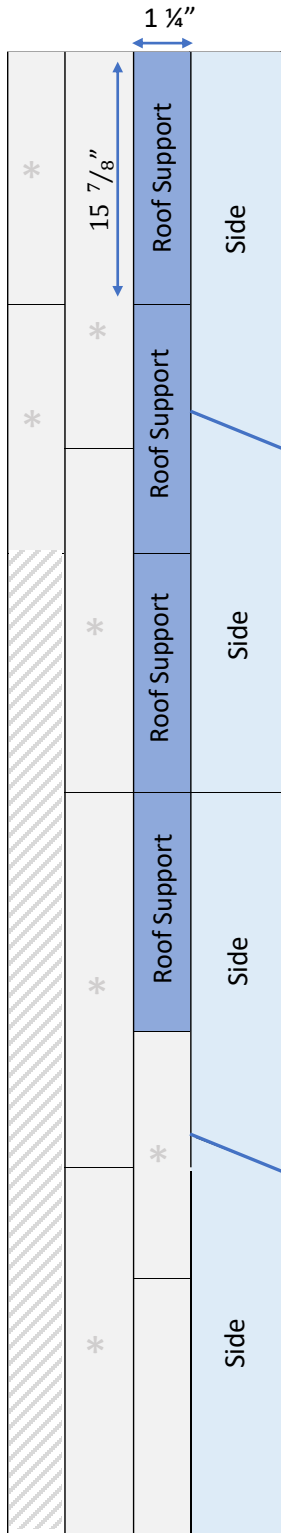


Extra material

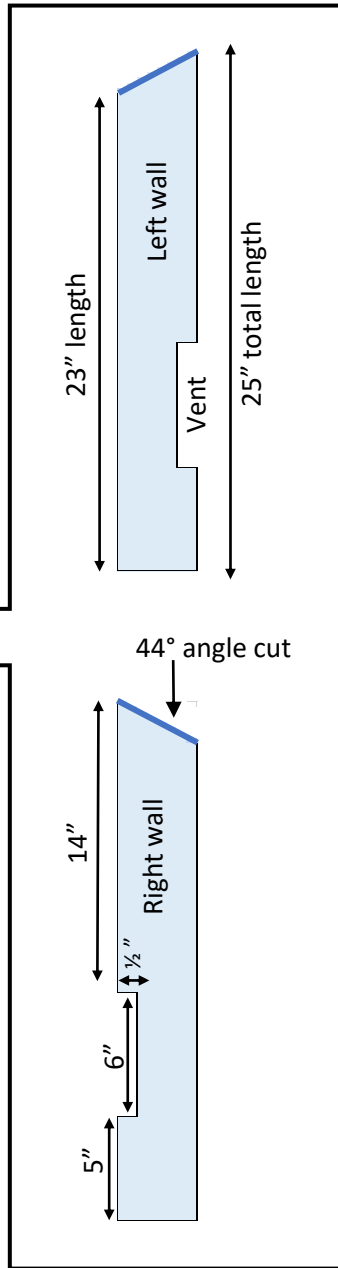
*There is one inner partition per two-chambered box.
 Four-chambered boxes have three inner partitions.

SAWING DIAGRAMS CONTINUED

Sides and roof supports

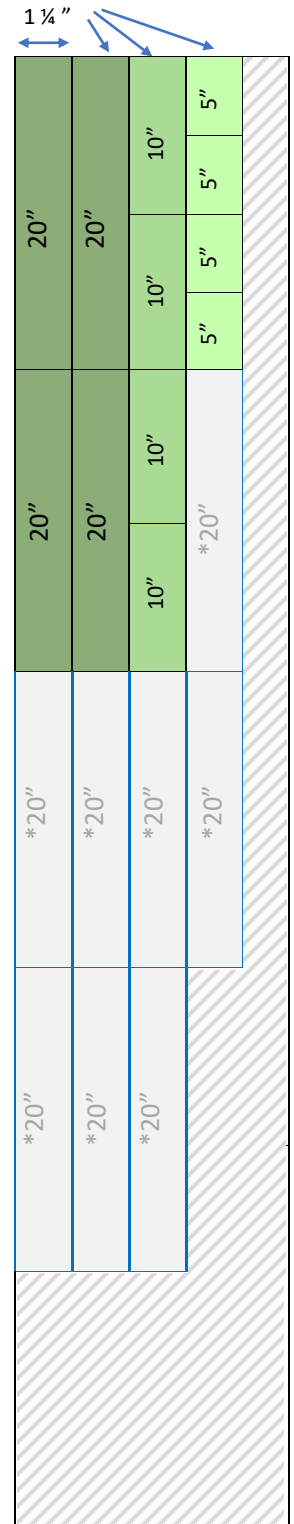


1" X 6" X 8'
untreated common board



*Optional for 4 chamber boxes

Spacers



1" X 6" X 8'
untreated common board

Bat house external paint color guide based on average summer temperatures in the United States.

