

Purple Martin House

Woodworking plans: a 4-room, single-story martin house

Martins nest in colonies, using multi-room houses (more common in the East) or hollow gourds hung close together (more common in the West). This plan builds a 4-room wooden house: two rooms face each way, and every room has its own hinged front door with a 2 1/8" round entrance, so you can check and clean each nest on its own.

Design Specs

Spec	Measurement
Entrance hole	2 1/8" round, bottom 1 1/4" above the floor
Rooms	4, each 7" wide x 12" deep (front to back) x 6" tall inside
Mounting height	10 to 15 ft, on a pole you can lower for cleaning
Spacing	10 ft between units
Clearance	Keep 40 to 60 ft clear of trees and buildings
Paint	Outside white; leave the inside unpainted

Materials

Item	Qty	Notes
1x8 board, untreated (actual 3/4" x 7 1/4")	2 @ 6 ft	Walls, dividers, and doors (ripped to 6" wide)
3/4" exterior plywood, 4 x 4 ft	1 panel	Floor and roof
1 5/8" exterior screws (coated or stainless)	About 40	Assembly
1" exterior hinges, with screws	8	Two per door
Small turn buttons, with screws	4	One per door, to hold it shut
Exterior primer and white exterior paint	1 quart each	Outside only
Pole with a lowering system and mounting bracket	1	Telescoping, pulley, or winch type

Tools

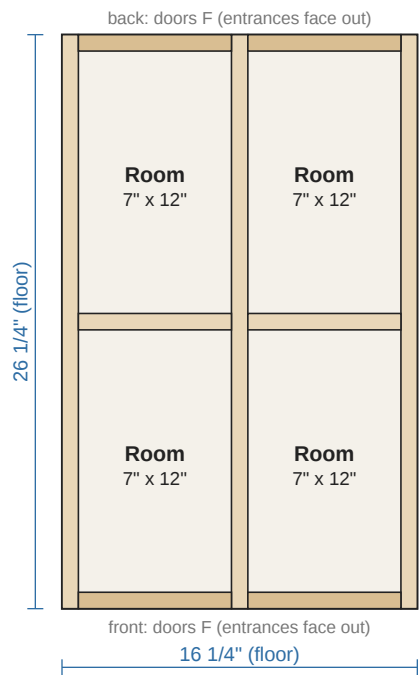
Circular saw or table saw • Drill/driver • 2 1/8" hole saw • 1/2" and 1/4" bits • 3/16" bit for pilot holes • Speed square • Tape measure • Pencil • Paintbrush • Sandpaper

Where the room size comes from: The Purple Martin Conservation Association (purplemartin.org, "Standards for Purple Martin Housing") lists a 6" x 6" minimum and recommends deeper 7" x 12" rooms. It gives no room height; the 6" height follows the Oklahoma Department of Wildlife Conservation, which lists rooms of about 6" x 6" x 6".

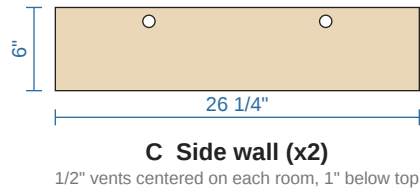
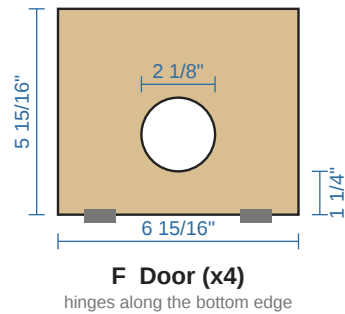
Cut List

Part	Qty	Size	From	Notes
A Floor	1	16 1/4" x 26 1/4"	Plywood	Four 1/4" drain holes per room
B Roof	1	20 1/4" x 30 1/4"	Plywood	Overhangs 2" on every side
C Side walls	2	6" x 26 1/4"	1x8 ripped	One 1/2" vent hole per room, near the top
D Center divider	1	6" x 26 1/4"	1x8 ripped	Runs front to back down the middle
E Cross dividers	2	6" x 7"	1x8 ripped	Separate front rooms from back rooms
F Doors	4	5 15/16" x 6 15/16"	1x8 ripped	2 1/8" hole in each

Floor Plan (top view, roof removed)



How it goes together: The floor (A) carries everything. The two side walls (C) and the center divider (D) run the full 26 1/4" length. The two cross dividers (E) sit 12 3/4" in from each end and split the house into front and back rooms. The four doors (F, darker tone) close off each room at the ends, hinged at the bottom so they fold down. The roof (B) screws down onto the tops of the walls and dividers.



Floor plan is to scale. The center divider (D) matches the side walls without vents. Cross dividers (E) are plain 6" x 7" pieces.

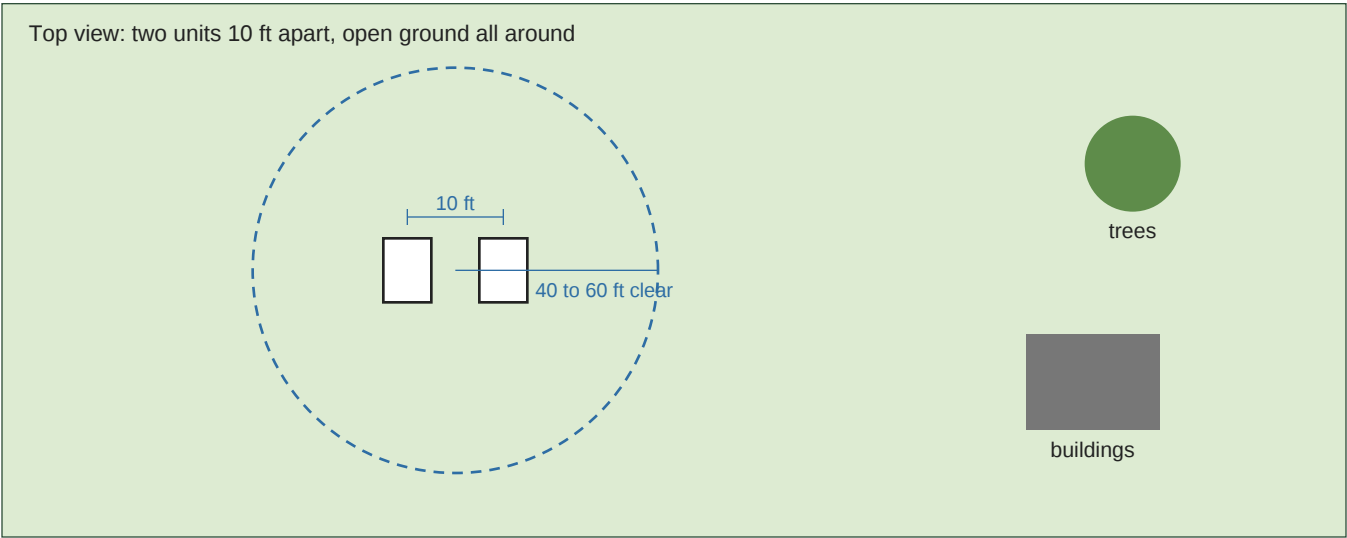
Assembly

- 1 **Cut all parts** per the cut list. Rip the 1x8s to 6" wide first; every wall, divider, and door comes from that 6" strip.
- 2 **Drill the entrance holes.** On each door, mark the center $3 \frac{15}{32}$ " in from either side and $2 \frac{5}{16}$ " up from the bottom edge. That puts the bottom of the hole $1 \frac{1}{4}$ " above the floor. Bore with a $2 \frac{1}{8}$ " hole saw, backing the door with scrap.
- 3 **Drill the vents and drains.** In each side wall, bore a $\frac{1}{2}$ " hole 1" below the top edge, centered on each room ($6 \frac{3}{4}$ " from each end). The roof overhang shelters them. In the floor, drill four $\frac{1}{4}$ " drain holes inside each room.
- 4 **Attach the side walls (C)** on top of the floor, flush with its long edges and both ends. Drill $\frac{3}{16}$ " pilot holes and drive screws up through the floor every 5" or so.
- 5 **Attach the center divider (D)** down the middle, 7" in from the inside face of each side wall. Screw up through the floor.
- 6 **Attach the cross dividers (E),** one on each side of the center divider, with their faces $12 \frac{3}{4}$ " in from each end so every room is 12" deep. Drive screws up through the floor into each divider and through the side walls into their outer ends.
- 7 **Attach the roof (B).** Center it so it overhangs 2" on every side, then screw down into the side walls, center divider, and cross dividers.
- 8 **Hang the doors (F).** Set each door in its opening, sitting on the floor between a side wall and the center divider. Mount two 1" hinges along the bottom, joining the door to the edge of the floor, so it folds down. Add a turn button on the wall or divider end beside the top corner to hold it shut.
- 9 **Paint the outside white.** Prime and paint every outside surface, including the doors. Do not paint the inside of the rooms.
- 10 **Attach the house to your pole's mounting bracket** at the center of the floor, following the pole maker's instructions.

Where to Put It

Mount the house 10 to 15 ft high on a pole you can lower for cleaning. Keep 40 to 60 ft clear of trees and buildings, and space units 10 ft apart.

Placement	Guideline
Mounting height	10 to 15 ft
Pole	One you can lower for cleaning (telescoping, pulley, or winch)
Clearance	40 to 60 ft from trees and buildings
Spacing	10 ft between units



Tips

- Use a pole you can lower for cleaning. Each hinged door lets you check and clean one room at a time.
- Paint the outside white, and leave the inside of every room unpainted.
- Keep the house 40 to 60 ft from trees and buildings in every direction.