

36 SHED



Site Work

Begin by marking out the building's location in your yard. For a structure of this size, it's simplest to build a lightweight frame that's the exact size of the shed, then use the frame to mark the site.

Use 3/4-in.-thick pine to build your frame. Cut the sides to the exact dimensions of the floor, and use one screw in each corner to fasten the sides into a rectangle. Screw a diagonal brace between two sides of the frame to hold it square.

Clear the building site and level any obvious high spots. Place the frame in the site and adjust its position until you're happy with the location of the shed. Drive stakes into the ground to mark each corner, stretch string between them (Photo 1) and then remove the frame.

Find the highest corner of the site and excavate for the first foundation corner block. Plan on having 3 to 4 in. of block exposed above grade. Dig out an area several inches wider than the block. Spread 2 or 3 in. of crushed stone in the hole to form a stable base for the block.

Now you're ready to position the first block, aligning its edges with the layout string. Check that the block is level across its length and width (Photo 2), and adjust the crushed stone as required.

Use a long, straight 2 x 4 and level to check the relative height of the second corner, then excavate the site for the block. Check that the second block is level with the first (Photo 3), and add the remaining corner blocks in the same way.



Use a wooden frame to find the best spot for your shed. Drive a stake at each corner and use string to delineate the site.



Dig a hole for the first block at the highest point in the grade. Add gravel, install the block, align it with the string, and level it



Use a straight 2 x 4 and a 4-ft. level to check that the corner blocks are installed at the same height.



Building The Floor

It's a good idea to use pressure-treated lumber for the floor joists. Cut 2 x 6 stock to length for the front and back rim joists, and then lay out the locations of the floor joists on 16-in. centers. Nail joist hangers to the inside surface of each inner joist using 1-1/2-in. joist hanger nails (Photo 4). Next, place the inner front and back joists between the corner blocks, and then cut and position the floor joists (Photo 5). Nail the floor joists in place, then attach the outer rim joists to the front and back of the floor frame.

After marking joist locations on long front and rear rim joists, install metal hangers with 1-1/2-in. joist hanger nails.



Compare opposite diagonal measurements of the floor assembly to check that it's square. Nail 3/4-in.-thick plywood to the joists for the shed floor (Photo 6).

Lay the front and rear joists on the corner blocks. Then, cut the joists, position them in the joist hangers and secure with nails.



After doubling the front and rear joists, add the 3/4-in. plywood floor. Nail it in place with 8d nails spaced about 6 in. apart.

Wall Construction

Cut 2 x 6 stock to size for the door and window headers. Use pieces of 1/2-in. plywood as spacers between the 2 x 6s to bring the header assemblies to 3-1/2 in. thick. Nail together the header pieces with 16d common nails.

Cut 2 x 4 stock to length for the wall studs and window and door jack studs. Nail each jack stud to a wall stud with 8d common nails. Build the four corner posts by nailing three 2 x 4 spacers between two studs as shown on the diagram

Begin framing the back wall by laying out the stud locations on the top and bottom plates. Then, lay out the framing members on the deck (Photo 7). Nail through the top plate and into the wall members, then secure the bottom plate. Frame the window opening, and nail the second top plate to the wall, keeping its ends back 3-1/2 in. from each end of the wall.

Now compare the opposite diagonal measurements of the wall and adjust the assembly until it's square. Then, apply 1/2-in. plywood sheathing, using 6d common nails spaced about 6 in. apart.

Stand the rear wall, bracing it with 2 x 4s nailed between the wall and the outside floor joists (Photo 8). Nail the bottom plate to the deck so the plywood sheathing is flush with the edge of the deck.

Frame the front wall, but don't apply the sheathing yet. Instead, stand the framed wall and brace it. Position the wall 1/2 in. from the deck edges to allow for the thickness of the sheathing. Then frame the side walls, one at a time, and stand them. Leave the second top plate off the side walls until they are raised. Nail the walls together at the corners, and then cut and install the side wall top



With the back wall framing members cut to length and headers assembled, lay out the pieces on the shed floor and join with nails.



Install 1/2-in. plywood wall sheathing on the framed back wall. Then, raise the assembly and secure it with diagonal braces.



Frame and raise the remaining walls without sheathing. After nailing together the corner studs, add the top plates.

plates (Photo 9). Use a level to check that the corners of the building are plumb, and nail temporary diagonal braces to the inside surface of each wall.

Apply the remaining plywood sheathing (Photo 10). At the side walls, keep the plywood 1-1/2 in. down from the top to provide room to nail the gable-end sheathing.



When the framing is in place and the assembly is square and plumb, add the remaining plywood sheathing.



To find the rafter cutting angle, align the 5- and 12-in. marks on the framing square's legs with the edge of the rafter stock.



Set up a worktable with the outline of the rafter assembly marked. Then, join each pair of rafters with a plywood gusset.

Framing The Roof

Use a framing square to lay out the 5-in. pitch on the first roof rafter (Photo 11). Cut out the rafter and use it as a pattern to make the second rafter. Test the first two for proper fit, then trace and cut the remaining rafters.

Cut a gusset for each truss from 1/2-in.-thick plywood as shown in the plans. Use a sheet of 3/4-in. plywood as an assembly table, and draw the outline of the roof truss directly on the plywood surface. Align two rafters over the pattern and nail the gusset to the rafters with 1-1/2-in. roofing nails (Photo 12).

Toenail the trusses to the front and rear walls with 8d common nails (Photo 13). At the gable ends keep the gussets on the inside faces of the trusses.

Cut 2 x 6 stock to length for the subfascia, and nail the boards to the rafter ends with 16d common nails. Cut and install the gable-end sheathing, and then nail 1 x 6 pine furring over the gable rafters.

Rip cedar stock to width for the front and back soffits and cut it to length. Use 6d galvanized finishing nails to fasten the soffit boards to the rafters and subfascia. Then, install the cedar fascia and rake trim.

Install the plywood roof deck, allowing it to overhang the fascia by 1/2 in. along the eaves. Nail aluminum drip edge to the eaves, and apply



roofing felt. Then, install the drip edge along the rake edges.

With all the rafters assembled in pairs, position each pair on the wall top plates and secure by toenailing.

Roofing And Siding

Follow the manufacturer's directions for installing the roof shingles (Photo 14).

Since the tongue-and-groove siding is installed vertically, add 2 x 4 nailing blocks between the studs, about halfway up the wall. Cut and install these nailers by toenailing them between adjacent studs.

If you plan to stain or paint the trim a different color than the shed siding, it's a good idea to finish the roof trim before applying the siding. Cut siding boards to length and begin installing them at a corner of the building. Use galvanized finishing nails to fasten the boards—8d nails for fastening to the 2 x 4 framing and 6d nails for the plywood sheathing (Photo 15). Face nail the first board, but fasten succeeding boards with nails driven diagonally through the tongue so the heads will be hidden. Set the nailheads slightly below the wood surface.



Use 1/2-in. plywood for the roof deck and cover it with roofing felt. Install shingles following the manufacturer's instructions.



Nail 1 x 6 tongue-and-groove cedar siding in place. Use 8d nails over wall framing and 6d nails when nailing into plywood alone.



Windows And Doors

After staining or painting the siding, install the door and window jambs (Photo 16). Nail the jambs directly to the framing, with the outside edge of each jamb flush to the face of the siding. At the windows, slope the sill pieces about 5° toward the outside of the building, add the top jambs, and then cut the side jambs to fit.

Cut stops for the windows from 1 x cedar stock, and install the outer stops with 6d galvanized finishing nails. Then, place a window in each opening and add the inner stops.

Rip door and window trim and shed corner boards from rough-sawn cedar. Cut each piece to length and nail in place.

Cut siding boards to length for the shed door. Use clamps to pull the boards together, but don't use glue on the joints. Cut the battens for the door, and screw them to the inside surface of the boards.

Hold the door hinges in place and mark the mounting-hole locations. Bore pilot holes and fasten the hinges to the shed. Position the door with a 1/4-in. space on the sides and top, and mark the hinge holes. Bore pilot holes and mount the hinges (Photo 17). Install the door pull and hasp. Cut the doorstops and nail them in place on the top and open-side jamb. Then, stain or paint the windows, door and remaining trim.

Cut stock for doorjambs and nail in place. At a window, install the angled sill piece first, then the top jamb, then side jambs.



Position the door in its opening with a 1/4-in. space at the top and sides. Bore pilot holes for the hinge screws and secure the hinges.

We built a ramp from pressure-treated stock to make it easier to wheel a mower or snowthrower into the shed. To build a ramp, use 2 x 6 material spaced about 1/2 in. apart for the ramp deck, and 2 x 4 stock for battens underneath.