16'x20' Garage Shed Plan
Foundation Preparation

1.1 Fill the trenches to ground level with concrete and let cure, or harden. Since curing times vary between brands, read the packaging for recommended curing times.

1.2 Once the concrete has cured, use standard-sized bricks and lay them across the foundation. You will need roughly 320 bricks for this step.

1.3 Clear the area where you want to build the shed and layout for the foundation. Use the below illustration as a guide.

1.4 For the foundation, dig the trenches at least 1’ wide and 1’ deep.
Framing the Floor

2.1 Assemble the frame using 1 1/2” x 7 1/4” pressure-treated lumber. You will need fifteen boards cut to 15’-9” that will be the joist.

2.2 Secure the beams with 8x5” wood screws.

2.3 Using a speed square or carpenter’s square, check the corners to make sure they are 90°.
Assemble Front Wall Frame

3.1 Using 1 1/2” x 3 1/2” and 3 1/2” x 3 1/2” pressure-treated lumber, construct front wall frame using the drawing below as a reference. You will need one board cut to 11” and two boards cut to 6” that will be the cripple studs, one board cut to 2'-8” that will be the door header, two boards cut to 3'-4” that will be the window header and rough sill, sixteen boards cut to 6'-11” and two boards to 2'-10” that will be the studs, two boards cut to 8'-8” that will be the bottom plates and one board cut to 20’ that will be the top plate.

3.2 Connect the beams with 2x4” wood screws.

3.3 Using a speed square or carpenter’s square, check the corners to make sure they are 90°.
Assemble Back Wall Frame

4.1 Using 1 1/2” x 3 1/2” and 3 1/2” x 3 1/2” pressure-treated lumber, construct back wall frame using the drawing below as a reference. You will need seventeen boards cut to 6’-11” that will be the studs and two boards cut to 20’ that will be the top and bottom plates.

4.2 Connect the beams with 2x4” wood screws.

4.3 Using a speed square or carpenter’s square, check the corners to make sure they are 90°.
Assemble Right Wall Frame

5.1 Using 1 1/2” x 3 1/2” pressure-treated lumber, construct side wall frames using the drawing below as a reference. You will need thirteen boards cut to 6'-11" that will be the studs and two boards cut to 15'-5" that will be the top and bottom plates.

5.2 Connect the beams with 2x4” wood screws.

5.3 Using a speed square or carpenter’s square, check the corners to make sure they are 90°.
Assemble Left Wall Frame

6.1 Using 1 1/2” x 3 1/2” and 3 1/2” x 3 1/2” pressure-treated lumber, construct left wall frame using the drawing below as a reference. You will need eight boards cut to 6'-11" that will be the studs, two boards cut to 3'-8 1/2" that will be the bottom plates and one board cut to 15'-5" that will be the top plate.

6.2 Connect the beams with 2x4” wood screws.

6.3 Using a speed square or carpenter’s square, check the corners to make sure they are 90°.
Assemble the Roof Frame

7.1 Using 1 1/2 “ x 5 1/2 “ pressure-treated lumber, cut thirty rafters 9'-3 3/4” long according to the dimensions.

7.2 Using 1 1/2 “ x 3 1/2 “ pressure-treated lumber, cut thirteen collar ties 10'-4” long according to the dimensions.

7.3 Using 3/4 “ x 7 1/4 “ pressure-treated board, cut the ridge board 20’ long according the illustration below.

7.4 Connect the beams with 2x3” wood screws.
Assemble and Install Shed Door

8.1 Build the door frame for the shed using 1 1/2 “ x 3 1/2 “ pressure-treated lumber and secure with 5” wood screws. You will need two boards cut to 5'-11 3/4” that will be the vertical girts and two boards cut to 2'-3/4” that will be the horizontal girts.

8.2 Prepare the 9/16” plywood sheet with dimensions 2'-7 3/4” x 5'-11 3/4” for the door according to the drawing.

8.3 Use 2 1/2 “ x 3/4 “ pressure-treated lumber for the door trim and fasten with 2” wood screws. You will need two boards cut to 2'-2 3/4” and two boards cut to 5'-11 3/4”.

8.4 Using 1/4 “ x 3/4 “ pressure-treated lumber, cut and install a starter course 2'-2 3/4” long.

8.5 For the exterior siding on the door, use 1/2 “ x 6” wood siding boards and the illustration below as a reference.

8.6 Assemble siding shields with 2” galvanized nails.

8.7 Install three 3” door hinges using 6x1” wood screws. Finish the doors installation by attaching 6” door pull.
Roof Sheathing Installation

9.1 You will need 405 Sq Ft of asphalt shingle roofing.

9.2 Add the metal drip edge to the fascias.

9.3 Cover the plywood with building paper.

9.4 Install asphalt shingle roofing using an industrial stapler.
Window Installation for the Front Wall

10.1 Using 1 1/2 “ x 2 1/2 “ pressure-treated lumber, assemble the outer frame for the window as shown in the drawing below. You will need two boards cut to 3'-1" that will be the vertical girts and two boards cut to 3'-4" that will be the horizontal girts. Additionally, add vertical 2'-11 1/2" long and horizontal 3'-1" long supports using 3/4” x 1” lumber and cut the recesses for the window hinges.

10.2 Use 1 1/2 “ x 1 1/2 “ pressure-treated material to make the inner frame and secure with 3” wood screws. You will need two boards cut to 2'-9 3/4" that will be the vertical girts and two boards cut to 3'-3/4" that will be the horizontal girts. Mill a recess for the glass panes and for the hinges.

10.3 Use 1 1/4 “ x 1 1/2 “ pressure-treated material to make the inner frame supports and secure with 3” wood screws. You will need two boards cut to 2'-9 3/4” and mill a recess for interconnection.

10.4 Prepare and install glass into inner frame groove and fasten it by window beading from four sides. Use 1/2” galvanized nails.

10.5 Install two hinges (3") with 6x1” wood screws and assemble the window. Install a lock on the inner side of the window.
Assemble and Install Car Doors

11.1 Build the door frames for the shed using 1 1/2" x 3 1/2" pressure-treated lumber and secure with 5" wood screws. You will need two boards cut to 6'-5 1/4" that will be the vertical girts, two boards cut to 3'-11 3/4" that will be the horizontal girts, two boards cut to 4'-7" that will be cross braces and one board cut to 3'-4 3/4" that will be middle girt.

11.2 Use 2 1/2" x 3/4" pressure-treated lumber for the door trim and fasten with 2" wood screws. You will need two boards cut to 3'-6 3/4" and two boards cut to 7'-1/4".

11.3 Using 1/4" x 3/4" pressure-treated lumber, cut and install a starter course 3'-6 3/4" long using Node F on page 26 as a reference.

11.4 For the exterior siding on the door, use 1/2" x 6" wood siding boards and the illustration below as a reference.

11.5 Assemble siding shields with 2” galvanized nails.

11.6 Install six 3” door hinges using 6x1” wood screws. Finish the doors installation by attaching 6” door pulls (see nodes N, O).
**Assemble and Install Door Ramp**

12.1 Assemble the seven door ramp frames from pressure-treated lumber and secure with 3\" and 5\" wood screws. For each frame you will need one 1 1/2" x 1 1/2" board cut to 1'-9 1/2"; one 1 1/2" x 2 1/2" board cut to 3'-2 1/2" and one 1 1/2" x 3 1/2" board cut to 6 1/4".

12.2 Connect and secure all frames using one 1 1/2" x 2 1/2" board 8'-1 1/2" long and 3\" wood screws.

12.3 Using 5 1/2" x 3/4" pressure-treated lumber, prepare seven boards 8'-2 3/4" long and install with 2\" wood screws to the frames.

12.4 Cut two 9/16" plywood sheets with dimensions 9 1/4" x 3'-1 1/4" for the sides.

12.5 Assemble siding shields with 2" galvanized nails.
Thank You

Now that your shed is all done, you are ready to decorate it any way you want using your favorite paint, stain, or preservative.
For more great HOW-TO plans please visit: https://shedplans.org

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