16'x20' Garden Shed Plan
16'x20' Garden Shed Material List

Site Preparation
- Concrete
- Bricks

Bottom Frame
- Pressure-Treated Lumber
- Plywood

Wall Frames
- Pressure-Treated Lumber

Shed’s Door
- Pressure-Treated Lumber
- Wood siding boards
- Plywood

Walls Exterior Siding
- Pressure-Treated Lumber
- Wood siding boards

Top Frame
- Pressure-Treated Lumber

Fasteners & Hardware
- Door hinges
- Door pulls
- Surface bolt
- Window lock
- Wood square louver gable vent
- Galvanized nails
- Wood screws

Shed’s Roof
- Pressure-Treated Lumber
- Pressure-Treated Board
- Plywood
- Building paper
- Asphalt shingles
- Metal drip edge

Drainage System
- Pressure-Treated Lumber
- Half round gutter
- End pieces with outlet
  - 45° elbow
- Drainage pipe
- Joint connector
- End cap
- Round hunger
- Wall fastener

Shed’s Window
- Pressure-Treated Lumber
- Window beading
- Glass
Shed's Window Shutter
• Pressure-Treated Lumber

Shed's Pergola
• Pressure-Treated Lumber

Door Ramp
• Pressure-Treated Lumber
• Plywood

Wall Sheathing
• Plywood
Foundation Preparation

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

1.2 For the foundation, dig the trenches at least 1 feet wide and 1 feet deep.

1.3 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.

1.4 Once the concrete has cured, use standard-sized bricks and lay them across the foundation. You will need roughly 285 bricks for this step.
**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 three boards cut to 11" that will be the cripple studs, one board cut to 5'-4" that will be the door header, sixteen boards cut to 6'-11" that will be the studs, two boards cut to 7'-4" 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 Left and Right Wall Frames

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 four boards cut to 5 1/2” that will be the cripple studs, four boards cut to 2'-10 1/2” that will be the studs, two boards cut to 3'-4” that will be the window header and rough sill, twelve 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 the Roof Frame

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

6.2 Using 1 1/2 “ x 3 1/2 “ pressure-treated lumber, cut fifteen collar ties 7'-2 1/4” long according to the dimensions.

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

6.4 Connect the beams with 2x3” wood screws.
Assemble and Install Shed Doors

7.1 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 5'-11 3/4” that will be the vertical girts and two boards cut to 2'-3/4” that will be the horizontal girts.

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

7.3 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”.

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

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

7.6 Assemble siding shields with 2” galvanized nails.

7.7 Install three 3” door hinges using 6x1” wood screws. Finish the doors installation by attaching 4” surface bolts and 6” door pulls.
**Roof Sheathing Installation**

8.1 You will need 400 Sq Ft of asphalt shingle roofing.

8.2 Add the metal drip edge to the fascias.

8.3 Cover the plywood with building paper.

8.4 Install asphalt shingle roofing using an industrial stapler.
Window Installation for Left and Right Walls

It is necessary to prepare 2 windows.

9.1 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.

9.2 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.

9.3 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.

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

9.5 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 Window Shutters

It is necessary to prepare 4 windows shutters.

10.1 Assemble frames using 3/4 “ x 1 1/2 “ pressure-treated lumber and secure with 3” wood screws. You will need one board cut to 1'-4 3/4" two boards cut to 3'-3/4" that will be the vertical girts and two boards cut to 1'-7 3/4” that will be the horizontal girts.

10.2 Mill a recess along the vertical girts for the jalousies.

10.3 Use 1/4 “ x 1 1/2 “ pressure-treated lumber for the jalousies. You will need twenty two boards cut to 1'-5 3/4”.

10.4 Install two 3” door hinges using 6x1” wood screws.
Assemble and Install Decorative Door Shutter

It is necessary to prepare two decorative door shutter.

11.1 Assemble front frame using 1 1/2 “ x 1 1/2 “ pressure-treated lumber and secure with 3” wood screws. You will need two boards cut to 6’-7” that will be the vertical girts and two boards cut to 1’-5 1/2” that will be the horizontal girts.

11.2 Assemble back frame using 3/4” x 2 1/2 “ pressure-treated lumber and secure with 5” wood screws. You will need two boards cut to 6’-7” that will be the vertical girts and two boards cut to 1’-3 1/2” that will be the horizontal girts.

11.3 Use 3/4 “ x 3/4 “ pressure-treated lumber for the lattice. You will need thirty six boards cut to 2’-3/4”. Assemble according to the drawing.
Assemble and Install Roof Drainage System

12.1 Assemble roof drainage system on the front fascia board. You will need 5" half round gutter 18' long, two end pieces with the outlet, six 45° elbows, two 3" pipes 6' long, two joint connectors and two end caps.

12.2 Fasten the round gutter to the fascia with the round hungers.

12.3 Fasten the vertical pipe section with the four wall fasteners.
Assemble and Install Door Ramp

13.1 Assemble the five 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’-8”; one 1 1/2” x 2 1/2” board cut to 3’-3/4” and one 1 1/2” x 3 1/2” board cut to 6 1/4”.

13.2 Connect and secure all frames using one 1 1/2” x 2 1/2” board 5’-9” long and 3” wood screws.

13.3 Cut the 9/16” plywood sheet with dimensions 3’-3/4” x 5’-9” for the top plane and two sheets with dimensions 9 1/4” x 2’-9 1/2” for the sides.

13.4 Assemble siding shields with 2” galvanized nails.
Shed Decoration

Now that your coop 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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