

## 16'x20' Garden Shed Plan

## Compare our Free vs. Premium plan

This perfectly designed plan will guide you through the entire process of building your very own shed for any backyard or garden.


Check out the benefits you would get with our premium edition:

| Features | Free plan | Premium edition |
| :---: | :---: | :---: |
| Steps count | 14 | 28 |
| Illustrations for Each Step |  |  |
| Print Ready |  |  |
| Step By Step Instructions |  |  |
| Full Materials and Cuttings List |  |  |
| Additional Illustrations |  |  |
| Additional Blueprints |  |  |
| Tools List |  |  |
| Fastening Elements List |  |  |
| Technical Support |  |  |

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## 16'x20' Garden Shed Material List

## Site Preparation

- Concrete
- Bricks


## Bottom Frame

- Pressure-Treated Lumber
- Plywood


## Wall Frames

- Pressure-Treated Lumber


## Shed's Roof

- Pressure-Treated Lumber
- Pressure-Treated Board
- Plywood
- Building paper
- Asphalt shingles
- Metal drip edge


## Shed's Window

- Pressure-Treated Lumber
- Window beading
- Glass


## Shed's Window Shutter

- Pressure-Treated Lumber


## Shed's Door

- Pressure-Treated Lumber
- Wood siding boards
- Plywood


## Top Frame

- Pressure-Treated Lumber


## Fasteners \& Hardware

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


## Drainage System

- Half round gutter
- End pieces with outlet
- $45^{\circ}$ elbow
- Drainage pipe
- Joint connector
- End cap
- Round hunger
- Wall fastener


## Door Ramp

- Pressure-Treated Lumber
- Plywood


## Shed's Pergola

- Pressure-Treated Lumber


## STEP 1

## 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.


## STEP 2

## Framing the Floor

2.1 Assemble the frame using $11 / 2^{\prime \prime} \times 71 / 4^{\prime \prime}$ pressure-treated lumber. You will need fifteen boards cut to 15 ' -9 " that will be the joist.
2.2 Secure the beams with $8 \times 5$ " wood screws.
2.3 Using a speed square or carpenter's square, check the corners to make sure they are $90^{\circ}$.


## STEP 3

## 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 $5^{\prime}-4$ " that will be the door header, sixteen boards cut to $6^{\prime}-11^{\prime \prime}$ that will be the studs, two boards cut to $7^{\prime}-4$ " that will be the bottom plates and one board cut to $20^{\prime}$ that will be the top plate.
3.2 Connect the beams with $2 \times 4$ " wood screws.
3.3 Using a speed square or carpenter's square, check the corners to make sure they are $90^{\circ}$.


## STEP 4

## 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 $2 \times 4$ " wood screws.
4.3 Using a speed square or carpenter's square, check the corners to make sure they are $90^{\circ}$.


## STEP 5

## 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 $51 / 2$ " that will be the cripple studs, four boards cut to $2^{\prime}-101 / 2^{\prime \prime}$ that will be the studs, two boards cut to $3^{\prime}-4 "$ 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 $2 \times 4$ " wood screws.
5.3 Using a speed square or carpenter's square, check the corners to make sure they are $90^{\circ}$.


## STEP 6

## 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 $11 / 2$ " 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 $2 \times 3$ " wood screws.


## STEP 7

## Assemble and Install Shed Doors

7.1 Build the door frames for the shed using $11 / 2$ " $\times 31 / 2$ " 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 $2^{\prime}-3 / 4$ " 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 $21 / 2$ " 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 $1 / 2$ " $\times 6$ " 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 $6 \times 1$ " wood screws. Finish the doors installation by attaching 4 " surface bolts and 6 " door pulls.


## STEP 8

## 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 $11 / 2$ " x $21 / 2$ " 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 $3^{\prime}-4$ " that will be the horizontal girts. Additionally, add vertical 2'-11 1/2" long and horizontal 3'-1" long supports using 3/4" x $1^{\prime \prime}$ lumberand cut the recesses for the window hinges.
9.2 Use $11 / 2$ " 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 $2^{\prime}-93 / 4$ " that will be the vertical girts and two boards cut to $3^{\prime}-3 / 4^{\prime \prime}$ that will be the horizontal girts. Mill a recess for the glass panes and for the hinges.
9.3 Use $11 / 4$ " x 1 1/2 " pressure-treated material to make the inner frame supports and secure with $3^{\prime \prime}$ wood screws. You will need two boards cut to $2^{\prime}-93 / 4$ " 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 $6 \times 1$ " wood screws and assemble the window. Install a lock on the inner side of the window.


## STEP 10

## Assemble and Install Window Shutters

It is necessary to prepare 4 windows shutters.
10.1 Assemble frames using $3 / 4$ " $\times 1$ 1/2 " pressure-treated lumber and secure with 3 " wood screws. You will need one board cut to $1^{\prime}-43 / 4$ " two boards cut to $3^{\prime}-3 / 4$ " that will be the vertical girts and two boards cut to $1^{\prime}-73 / 4$ " 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 $6 \times 1$ " wood screws.


## STEP 11

## Assemble and Install Decorative Door Shutter

It is necessary to prepare two decorative door shutter.
11.1 Assemble front frame using $11 / 2$ " x $11 / 2$ " 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 $21 / 2$ " 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.


## STEP 12

## Assemble and Install Roof Drainage System

12.1 Assemble roof drainage system on the front fascia board.

You will need $5^{\prime \prime}$ half round gutter 18 ' long, two end pieces with the outlet, six $45^{\circ}$ elbows, two $3^{\prime \prime}$ 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.


## STEP 13

## 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 $11 / 2^{\prime \prime} \times 1$ 1/2" board cut to $1^{\prime}-8^{\prime \prime}$; one $11 / 2^{\prime \prime} \times 2$ $1 / 2^{\prime \prime}$ board cut to $3^{\prime}-3 / 4$ " and one $11 / 2^{\prime \prime} \times 31 / 2^{\prime \prime}$ board cut to $61 / 4$ ".
13.2 Connect and secure all frames using one $11 / 2^{\prime \prime} \times 21 / 2^{\prime \prime}$ board $5^{\prime}-9$ " long and $3^{\prime \prime}$ wood screws.
13.3 Cut the $9 / 16^{\prime \prime}$ plywood sheet with dimensions $3^{\prime}-3 / 4^{\prime \prime} \times 5^{\prime}-9$ " for the top plane and two sheets with dimensions $91 / 4$ " 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.


## Compare our Free vs. Premium plan

This perfectly designed plan will guide you through the entire process of building your very own shed for any backyard or garden.


Check out the benefits you would get with our premium edition:

| Features | Free plan | Premium edition |
| :---: | :---: | :---: |
| Steps count | 14 | 28 |
| Illustrations for Each Step |  |  |
| Print Ready |  |  |
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| Full Materials and Cuttings List |  |  |
| Additional Illustrations |  |  |
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