12'x20' Garage Shed Plan
# 12' x 20' Garage Shed Material List

## Site Preparation
- Concrete
- Bricks

## Bottom Frame
- Pressure-Treated Lumber
- Plywood

## Front/Back/Side/Top Wall Frames
- Pressure-Treated Lumber

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

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

## Car Door
- Pressure-Treated Lumber
- Wood siding boards

## Shed’s Window
- Pressure-Treated Lumber
- Window beading
- Glass

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

## Front/Back/Side Wall Exterior Siding
- Pressure-Treated Lumber
- Wood siding boards
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 foot wide and 1 foot 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 230 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 11'-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 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, ten boards cut to 6'-11" that will be the studs and two boards cut to 11'-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 six boards cut to 6'-11” that will be the studs, two boards cut to 1'-8 1/2” that will be the bottom plates and one board cut to 11'-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 four rafters 7'-8 1/2" long.

7.2 Using 1 1/2” x 3 1/2” pressure-treated lumber, cut fifteen collar ties 5'-11 3/4" long.

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

7.4 Connect the beams with 2x3" wood screws.
Install Plywood for the Roof

8.1 Cut sheets of 9/16” plywood for the roof sheathing using the drawing below as a guide. You will need two 4’ x 7’-9” sheets, eight 3’-8 3/4” x 7’-9” sheets and two 1’-8 1/4 x 7’-9” sheets.

8.2 Secure the plywood with 2” wood screws.
Assemble and Install Shed Door

9.1 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.

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

9.3 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”.

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

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

9.6 Assemble siding shields with 2” galvanized nails.

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

10.1 You will need 325 Sq Ft of asphalt shingle roofing.

10.2 Add the metal drip edge to the fascias.

10.3 Cover the plywood with building paper.

10.4 Install asphalt shingle roofing using an industrial stapler.
Window Installation for the Front and Right Walls

It is necessary to prepare 2 windows.

11.1 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.

11.2 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.

11.3 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.

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

11.5 Install two hinges (3”) with 6x1” wood screws and assemble the window. Install a lock on the inner side of the window (see nodes J, K)
Assemble and Install Car Doors

12.1 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.

12.2 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".

12.4 Using 1/4" x 3/4" pressure-treated lumber, cut and install a starter course 3'-6 3/4" long.

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

12.6 Assemble siding shields with 2" galvanized nails.

12.7 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 Lifting Garage Door.

13.1 As an alternative to a simple swing gate, you can install a lifting garage door. Before ordering, make sure that the width of the opening corresponds to the width of the gate.

13.2 Install all elements of the gate according to the instructions with self-tapping screws to the beams of the walls and roof.
Shed Decoration

Now that your shed is all done, you are ready to decorate it any way you want using your favourite paint, stain, or preservative.
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