

How to build a Wendy House



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The Wendy House.

This Wendy house is basically a playhouse with a few feminine touches added. A Wendy house can give children hours of enjoyment. And with a little imagination, customized touches can be added to create a unique and special environment.

This house stands 2 metres high, is 2.3 metres long and 1.2 metres wide with a 700mm wide deck along the front.

Explanation of timber sizes.

The timber sizes referred to in this project are the finished or 'actual' sizes. For example: If you went along to the timber yard and asked for a piece of 75x50 dressed framing, the actual timber size would not be 75x50, but rather 65x46.

Confused? Well 75x50 was the approximate size of the timber before it was planed, dressed or gauged and is still referred to in timber yards as 75x50, even though the finished size is 65x46, give or take a mil. Hence the term used in this page 'ex 75x50'. For more timber terminology explanations [click here](#)

Note: This is the metric version. The standard (ft & inch) version more suited to North America can be seen [here](#)

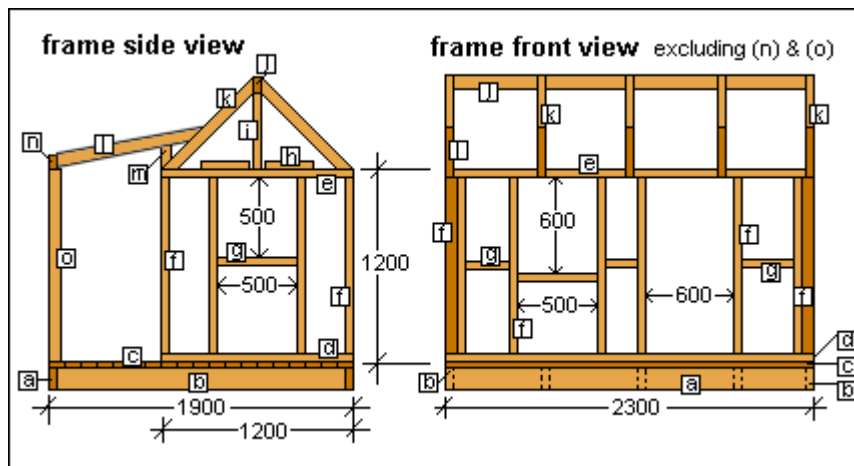
About the timber.

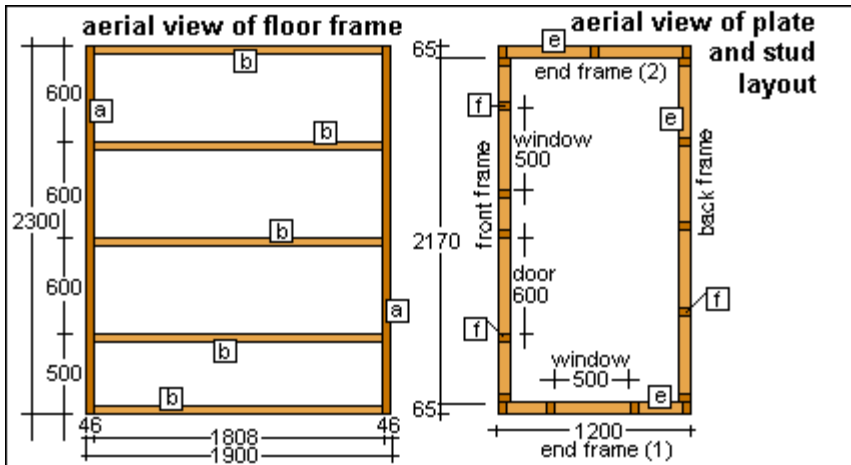
All timbers used for the construction of the Wendy house are readily available at most timber merchants or building suppliers.

The floor base is constructed of 145x46 (ex 150x50) treated dressed (gauged, smooth finish) covered with standard 90x32 pine decking.

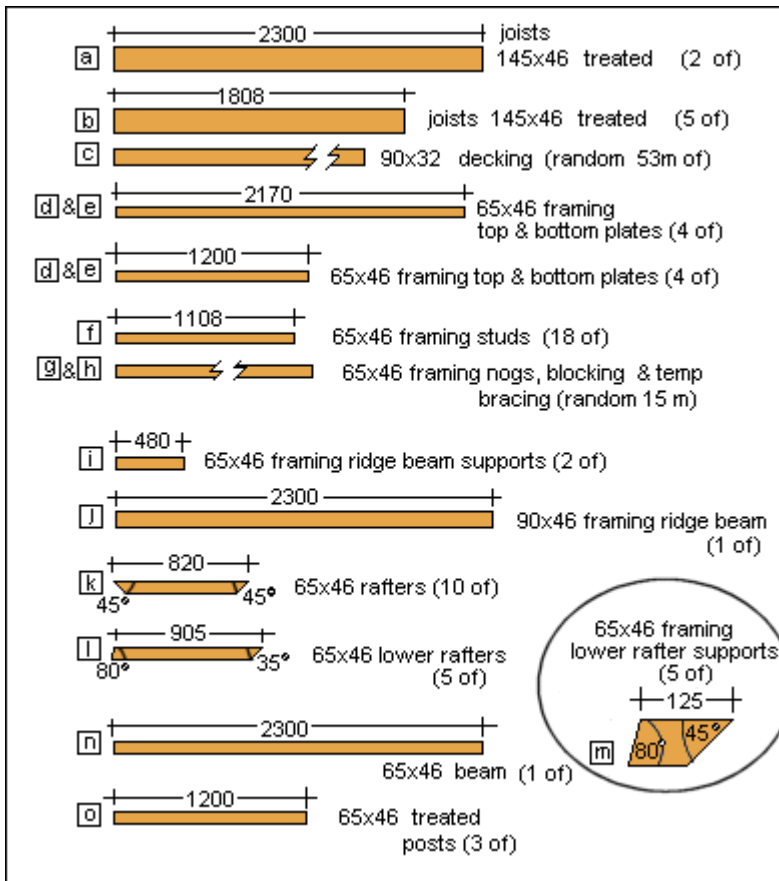
All the framing stock is 65x46 (ex 75x50) with the exception of the ridge beam which is 90x46 (ex 100x50) and the posts which are 65x46 (ex 75x50) treated for outside use.

The Plans. (The following images might take a tick to load)





The Floor and Frame Cutting List.



The Instructions.

Step one: The pieces

Cut all the timber as shown in the cutting list above.

Step two: The base and floor

On a level, flat piece of ground make a rectangle by nailing the two longer joists (a) to two of the shorter joists (b). Nail another three intermediate joists (b) in place evenly spaced (see above)

floor frame plan). Use 90 or 100mm galvanized nails.

Check that the floor base is square by measuring diagonally from corner to corner. When the diagonals are equal, then the base is square.

Cut the decking to length (20 lengths @ 2300mm) and lay and fix to the base beginning from one side. Use 75mm galvanized jolt head nails.

Step three: the wall frames

Lay out the bottom plates (d) flat on the floor to form a rectangle 2300x1200. Lay the top plates (e) on top of the bottom plates and mark the stud positions on the edge of both plates (see above plate and stud layout diagram).

Separate the plates (d & e) and lay the studs (f) in place. Cut and fix noggs (g) between studs (f) as shown in 'the plans' diagram above.

Nail the wall frame together.

There will be four wall frames in all, the two end frames and the front and back frame.

Stand the frames up in place and nail together. Ensure the bottom plates are straight and fix to the floor.

Check all corners are vertical (plumb) and fix temporary diagonal braces to the insides of the wall frames.

Step four: the roof frame

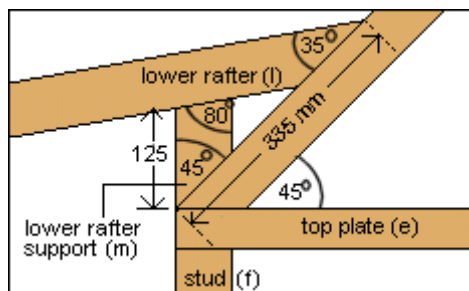
Centralize the two ridge supports (i) on top of the two end frames and fix in an upright position.

Balance the ridge beam (j) on top of the ridge supports (i) and fix in place with nails skewed (angled) through the ends of the ridge beam into the supports.

Fix the 10 rafters (k) in place (5 each side) beginning with the end rafters and then the intermediates.

Fix the lower rafter supports (m) in place at the lower end of the top rafters (k). (See diagram below.)

Fix the lower rafters (l) in place on top of the lower rafter supports (m), so that the top of the lower rafters (l) are at a point running 335mm up from the bottoms of the top rafters (k). (See diagram below.)



Nail the beam (n) to the end of the lower rafters.

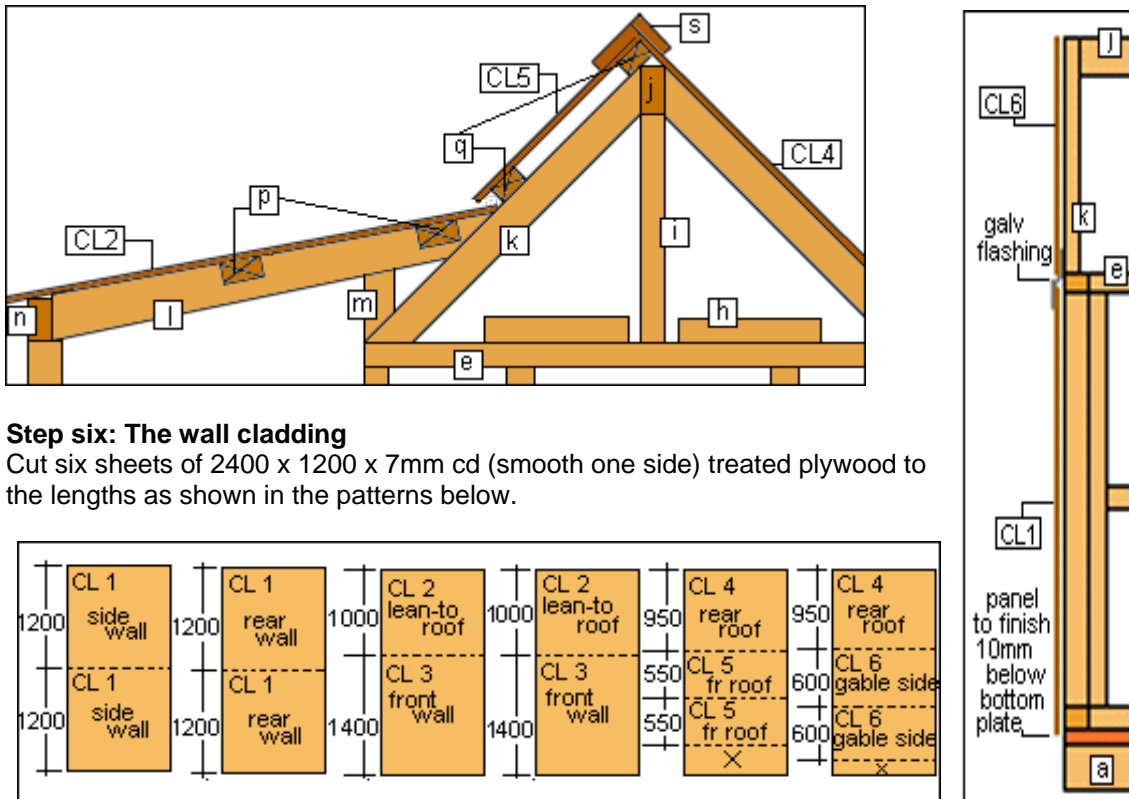
Fix three posts (o) plumb under the beam (n). One post in the middle and one at each end.

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Step five: The roof nogging and purlins

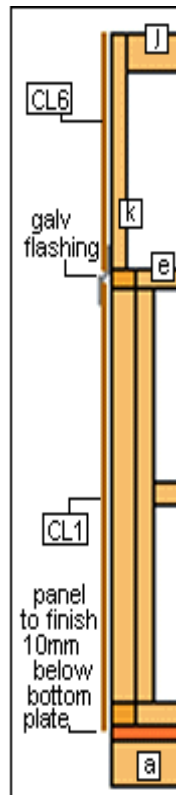
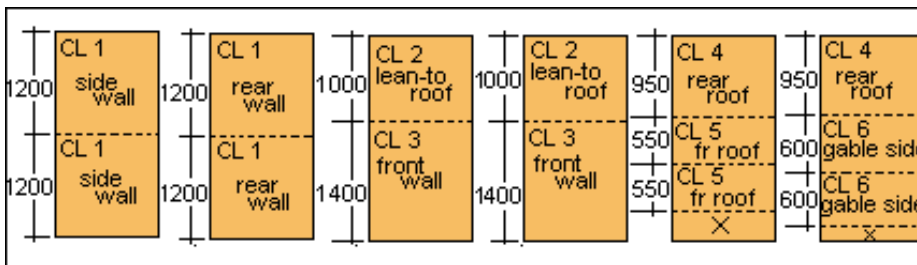
From 65 x 46 timber, measure, cut and fix two rows of nogs (p) between the lower rafters (l), one row along the top and one row along the middle as shown in diagram below.

Also using 65 x 46 timber, fix two rows of purlins (q) on top of the front upper rafters (k). Position as shown in diagram below, with one row at the apex and one row just above the lower rafters (l).



Step six: The wall cladding

Cut six sheets of 2400 x 1200 x 7mm cd (smooth one side) treated plywood to the lengths as shown in the patterns below.



Note: (CL) is short for cladding.

Fix the wall panels (CL1 and CL3) in place so that the bottom of the side and rear panels finish 10mm below the bottom plate. The front panels will need to be checked (marked and cut) around the lower rafters. Mark and cut out any windows (you might want to do a fancy shape here), doors or overhanging edges. Nail with 40 or 50mm flathead galvanized nails. Keep the door cutout intact, as this will later become the door.

Next hold the gable side panel (CL6) in place on top of the sidewall panel (CL1), mark to the triangular shape of the gable, cut and fix in place. Insert a length of galvanized horizontal weather-strip flashing so it tucks under the bottom of the gable side panel (CL6), and over the top of the sidewall panel (CL1). See diagram.

Step seven: The roof cladding

The roof plywood panels (CL2, CL5 and CL4) can be fixed in the same way as the wall panels. The roof panels will overhang the perimeter (front, back and sides) by approx. 50mm.

Step eight: The ridge capping, fascia and barge board

The ridge capping, fascia and barge board are (in this case) all the same type of timber, namely 100x25 sawn (rough sawn) treated pine.

The ridge capping is the boards on the ridge of the roof and its purpose is for waterproofing.

The fascia and barge board are the boards encompassing the house at the top of the walls tucked under the roof overhang.

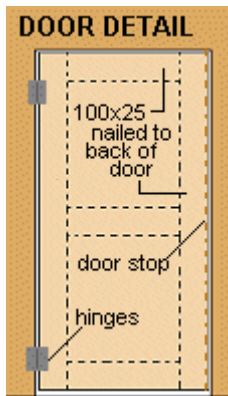
The boards along the front and back of the house are called the fascia boards and the boards running up the gable on the sides of the house are called the barge boards. Fix all with 75mm galvanized jolt head nails.

A pattern can be cut into the fascia and barge boards and the shape used is solely a matter of personal preference.



A pattern like this can be made on the fascia and barge boards by using the bottom of a paint tin (or similar) as a template to mark the rounds and then by cutting out with a jigsaw.

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Step nine: The door

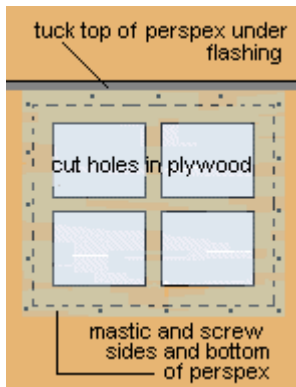
The cut-out piece of plywood saved from the door hole can now be made into the door. Trim the bottom edge (about 20mm) to ensure the door will easily open and sand the edges. There should be about 5mm clearance both sides of the door.

Reinforce the door with 100x25 strips of wood nailed to the back.

Pack the door in place and screw on the hinges. See diagram.

Nail a piece of doorstop (25x25) down the doorjamb stud 32mm in from the outside (the thickness of the door). This acts as both a doorstop and wind and weather seal.

A preferred door handle / lock / or latch can be fitted.



Step ten: The windows

Draw a window pattern such as an oblong, heart or 4 squares (keeping within the perimeters of the window frame) and cut out with a jigsaw. First drill a hole through the plywood using a drill bit large enough to make a hole that will accept the jigsaw blade.

Once the windows are cut out, cover with an oblong piece of 3mm Perspex. Ensure the Perspex is larger than the window holes to allow for waterproof mastic sealant and screwing.

The tops of the Perspex on the sidewalls should tuck under the existing flashing.

Step eleven: The handrail

Cut the 90x46 mg h3 top and bottom rails to length (to fit between the posts) and rebate them. On one side only, pencil two lines 25mm apart along the length in the centre of the rails. (See handrail detail diagram). Set the blade on your circular saw to a depth of 20mm and do repeated cuts along and between the two pencil lines.

Clean out with a chisel.

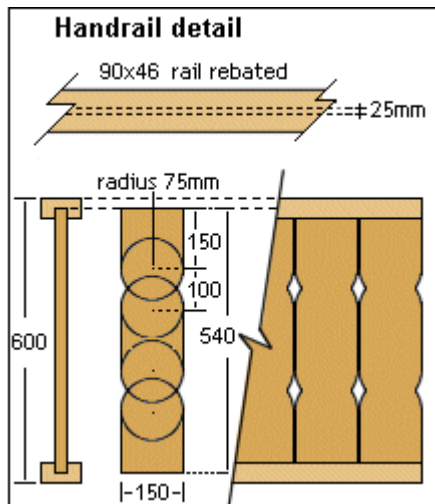
This will give you a rebated groove 25mm wide x 20mm deep along the centre of the rails.

Cut 150x25 timber (standard fence palings) into 540mm lengths and implement a pattern of your choice. The pattern shown in the handrail detail diagram is just one idea. Make the pattern on one piece of paling and use that as a template to do the rest.

Fit the palings into the rebated grooves in the top and bottom rails.

This is best done by laying the top and bottom rails on the ground and then inserting the palings into the grooves.

If the number of palings does not work out exactly, one of the palings will need to be marked and ripped (cut) down. When one section is finished, tie a rope around each end so the palings will not fall out while that section is being installed. Nail each section in, and fix the rails to the posts with 90mm galvanized jolt head nails. Do this to all 3 sections.



Materials List

- 145x46 (ex 150x50) stock for floor joists. 15m of
- 90x32 (ex 100x40) stock for decking. 50m of
- 65x46 (ex 75x50) stock for framing. 80m of
- 65x46 (ex 75x50) treated stock for posts. 4m of
- 90x46 (ex 100x50) stock for ridge beam. 2.4m of
- 90x46 (ex 100x50) treated stock for handrail. 6m of
- 150x25 treated stock for handrail. 20m of
- 100x25 stock for fascia, barge board, ridge capping and door backing. 18m of
- Galvanized horizontal weather strip flashing. 2.4m of
- 3mm thick Perspex or similar plastic for windows. 1.2 sq m of
- Assorted nails, mastic sealant, hinges, door handle, misc