

# Project Ideas & Information

## Cubby House



**Before purchasing tools, timber and materials, read every step thoroughly then talk to one of our experts**

### Step 1: Before You Start

Draw your cubby floor plan and elevations on graph paper to an easily convertible scale.

Depending on the size of your cubby some local Councils may require that plans are submitted for approval so it might be prudent to check with them first. While you're at it, check the locations of any underground utilities that you may encounter when excavating.

Consideration should also be given to what you are going to do with the cubby after it has outlived its usefulness. Maybe you could use it as a storage shed at a later date, in which case you may want to increase the wall height to suit future needs.

### Step 2: Choosing The Spot

Do you want proximity to a house doorway or window so that you can keep an eye on the kids?

Do you want morning sun or afternoon sun? Or shade? A cubby is pretty much like your house and should be positioned to make the most of the winter sun and provide protection from summer sun.

Consider the slope of the land of your preferred building site, this will have a bearing on the foundation type you can use.

### Step 3: Choosing Materials

Generally outdoor structures are made using treated pine. Treated pine timber should have an H4 rating for on, or below ground application and an H3 rating for above ground.

The recommended treatment for pine used in children's playground equipment is ACQ (alkaline copper quaternary) When using this material it is advised :

- Wear gloves and dust masks when sawing.
- Any cut or sawn surface of this material will need resealing to ensure its effectiveness in resisting attack.

- Dispose of any off cuts by burying them. Don't burn them as the smoke and ash are toxic.

Nails should be hot-dipped galvanised to ensure maximum resistance to corrosion and also to reduce marking of the timber from rust stains. Bolts, nuts, washers, coach screws or any other fixing device should also be hot-dipped galvanised to maximise the longevity of the structure.

### Step 4: Preparing The Site

Prepare the site using your builder's line, tape measure and line pegs to mark out your ground plan, ensuring that it's both parallel and square.

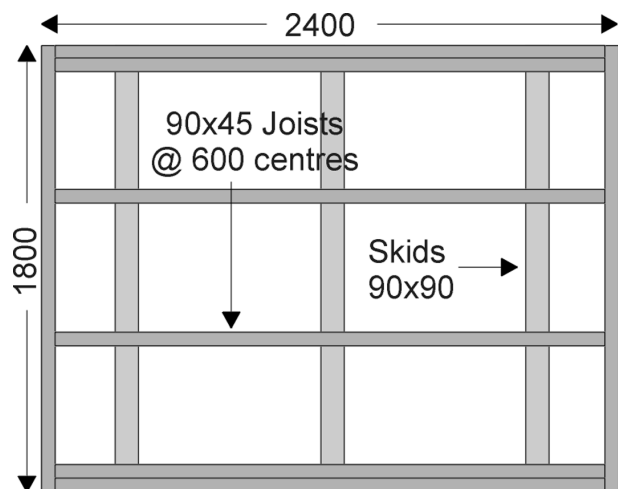
The instructions for this cubby are based on a Skid Foundation. This is where the floor joists are nailed to a skid foundation, which rests on a small gravel bed. The gravel provides a flat, stable surface that drains well to help keep the timbers dry. It is the easiest type to build on a flat surface and allows easy restoration of the landscape when the cubby is no longer required. Accordingly, excavate the site 300mm larger than the actual cubby structure to a depth of 50mm-100mm and fill with gravel.

Rake the gravel smooth, then check it for level using a level and a straight, 90x40mm length of timber about 2400mm long. Tamp the gravel thoroughly using a hand tamper or a compactor. Continually check the surface with the board and level, and add or remove gravel until the surface is level.

### Step 5: The Floor

The floor structure consists of three 90mm x 90mm equally spaced skids on which rests the joists. Skids typically run parallel to the length of the building and are cut to the same dimension as the floor frame. Set the skids on the gravel so they are, level, parallel and their ends are even.

For a small structure such as a cubby, floor joists of 90mm x 45mm dimension are sufficient. Using Fig 1 as a guide cut and assemble the floor structure as shown.



**Floor Structure (Fig. 1)**

Once the basic frame has been nailed, run your tape measure from opposite corners, if the measurement is equal, your floor is square. If not, push/pull corners until measurements are equal.

Cover the floor with 20mm plywood, nailing a maximum of 200mm apart on all joists. Alternative flooring can be used such as 20mm thick floorboards, or other suitable sheet.

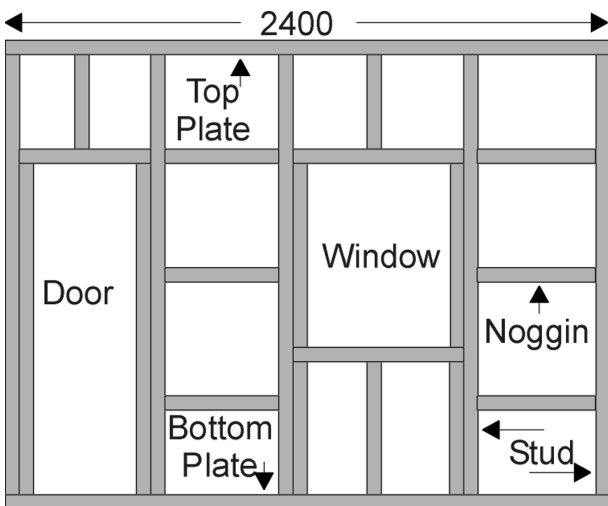
## Step 6: The Wall Frames

The very best place to build walls is on your newly constructed flat wooden floor

Using your floor layout as a guide, mark and cut 90mm x 45mm timber for the top and bottom plates. Place them on edge beside each other and mark for the studs. The first stud will be at the end of the wall. The remaining studs should be at 600mm centres meaning that from the edge of the wall to the centre of each stud will be a multiple of 600mm. Take into consideration where you want your doors and windows to be located.

Separate the plates and lay the studs in place. If you are using vertical boards on the exterior of your cubby fit two or three rows of noggings, evenly spaced between all the studs, this gives the exterior vertical boards something substantial to be nailed to. Nail the wall frame together.

The first wall section to go into place is always the back wall, do not fasten yet. Use scrap wood as a brace to hold up wall. Place one side wall, flush with back wall, then the other side wall and finally insert the front wall in place. Now all your walls should be fastened to one another



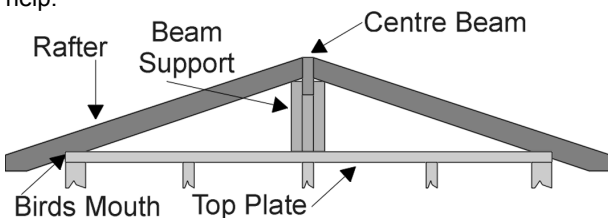
Wall Structure (Fig. 2)

Before fastening the walls to your floor, you should check them for square in the same way you did with the floor. Once you have done this, begin fastening the walls to the floor using 75mm screws or nails approximately every 200mm.

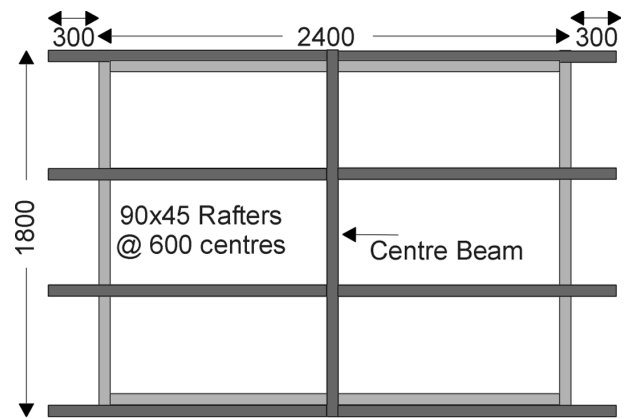
## Step 7: The Roof

The simplest roof to build is a Skillion roof. On the top plate of the frame at the back wall, nail a 90mm x 45mm second top plate (the 90mm dimension horizontal). Now nail 90mm x 45mm timber (with the 90mm dimension vertical) skillion rafters to the back wall top-plate at about 450mm centres. These will run from the back wall and sit on the top plate of the front wall. Let the rafters overhang the front wall by about 150mm.

If on the other hand, you like the look of a Gable roof and are feeling adventurous, the following procedure will help.



Rafter Structure (Fig. 4)



Roof Structure (Fig. 3)

You will need to determine the pitch of the roof and then work out the length of the rafters required together with the dimensions of the "birds mouth" cut, (the notch in a rafter that rests on the top plate of a wall). There is plenty of information and calculators available on the internet that will help you with your calculations or your local library will have books on the subject.

Once you have made the necessary calculations for your rafters, cut and fix two beam supports on top of (and in the middle of) the front and rear wall top plates. The roof beam can then be cut to length and fixed in place on top of the two beam supports.

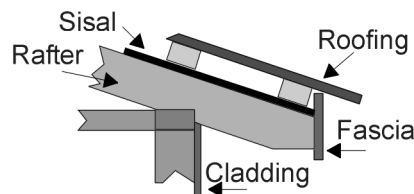
Now cut four end rafters as per your calculations and fix in place. Plumb and temporarily brace.

Cut the intermediate rafters and fix in place. Generally the rafters will sit above each stud of your side walls.

If you intend to line the ceiling of the cubby now is the time to install any ceiling joists you may require.

## Step 8: Finishing Off.

The hard work is now complete and all that is left to do is fit the roof and wall cladding, fit the fascia and barge boards and install the door and window.



Finishing Off (Fig. 5)

Because of the many options available, you should consult the manufacturer's literature for instructions on roof and wall cladding as well as any internal lining that you wish to use.

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