



Technical tips for safety shelter repair

Dedication:

We dedicate this handbook to the beneficiaries of our program which displays some ways, ideas and basic information about the safe practices to improve critical shelters, through providing trainings and education for the beneficiaries who are not specialists in the construction, by guiding them to improve the shelter to live with dignity and Taking into consideration the safety of children and the protection of both sexes as much as possible. Below are some uses of the organization materials, and working methods.

Roofing:

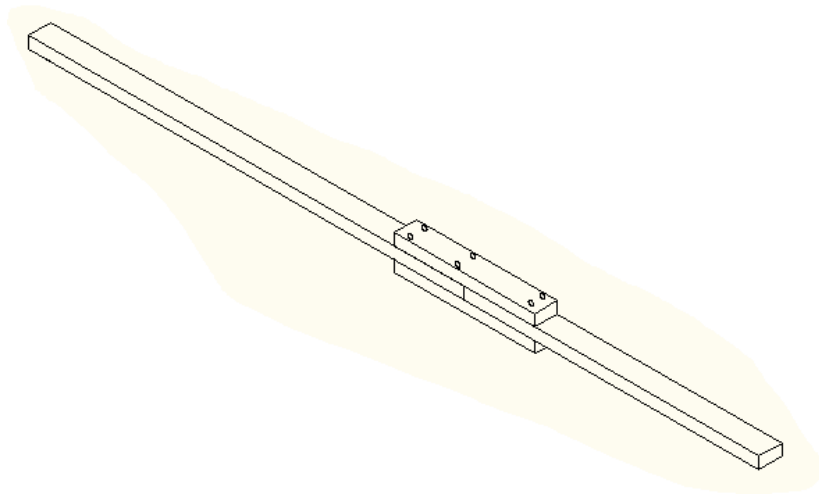
Roofing on block built walls: - wood timber must be set up above the walls with transverse spaces (1.22 m) (which is the same width of the plywood's) toward the width of the room from the center to the center, and when the wood timbers are placed over the walls should be protruding from the walls (10 cm) to be used to tie the plastic sheets by ropes, as well as to tie the endings of the wood timbers by wires tied with a reinforcement steel fixed in the joint of the block as shown in the figures.

The work includes sloping wood over the wall by digging the blocks from one side with the same dimensions of the cross section of the wood timber so the wood timber settle in these holes and in the other side is based on the face of the block and put it on the wall directly so that the ceiling would be 10 cm slope in the width of the room. Then we place the plywood's on the wooden frame well and without spaces, the plywood's should be ended with the external ends of the block or in the middle of the wood timber in order to prevent the effect of

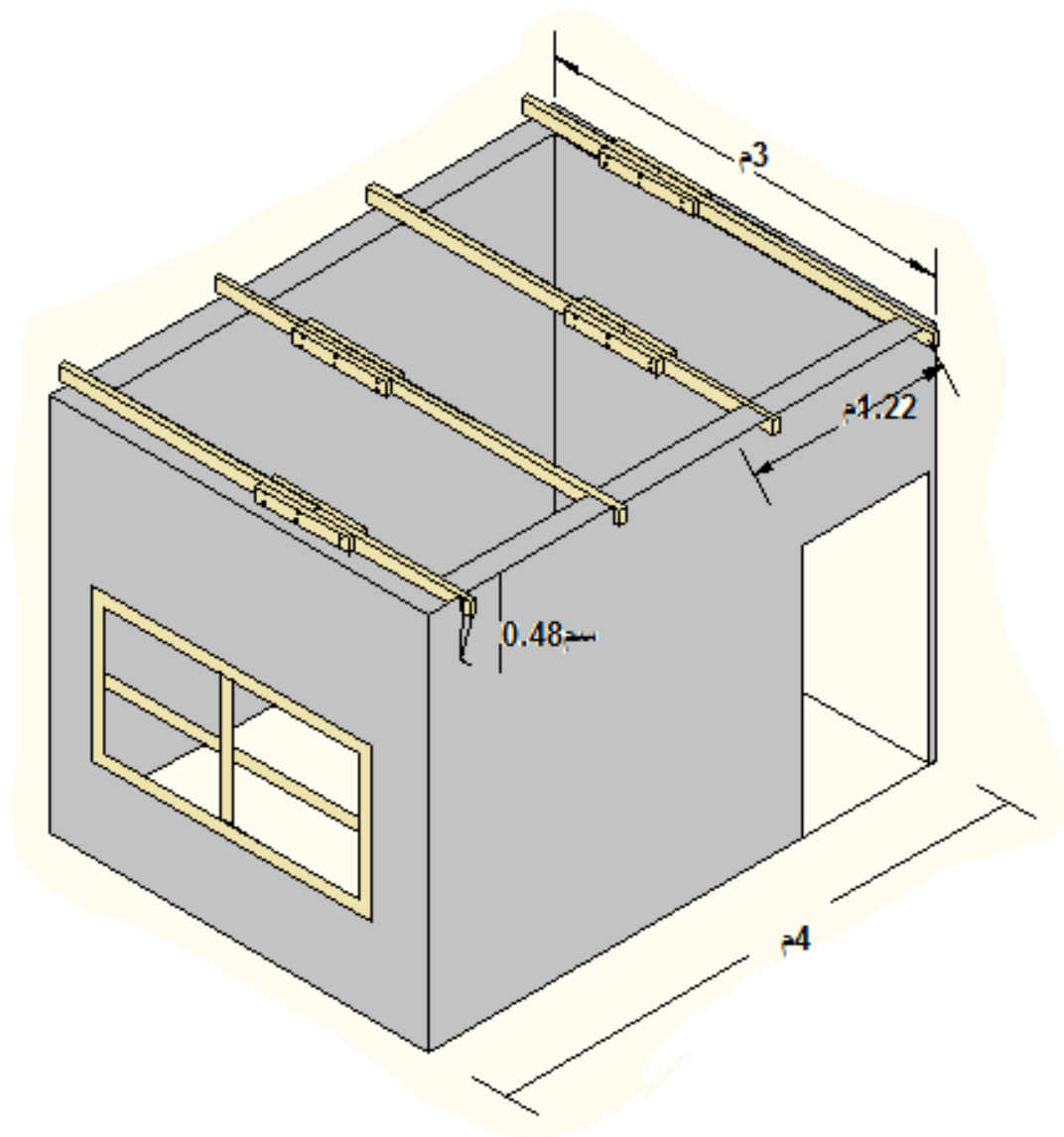
wind on the ceiling and taking into account the dimensions of the room to cut the plywood according to the room dimension.

Note: If the dimensions (width) of the room is larger than the length of the wood timber which is 2m fasten the two wood timber with each other by two pieces of the same wood by using nails(4inch), as shown in the figures below and this is the strongest and healthiest way guaranteed to no less binding force with time.

tie the wood timber with the walls so as to prevent the roof movement due to the wind and this can be done by tying wire diameter (2 or 3 mm) on the ends of the wood timber and on the other end we tie the wire with reinforcement steel (10 mm thickness) and a length (10 cm) fixed in the joint of the block.

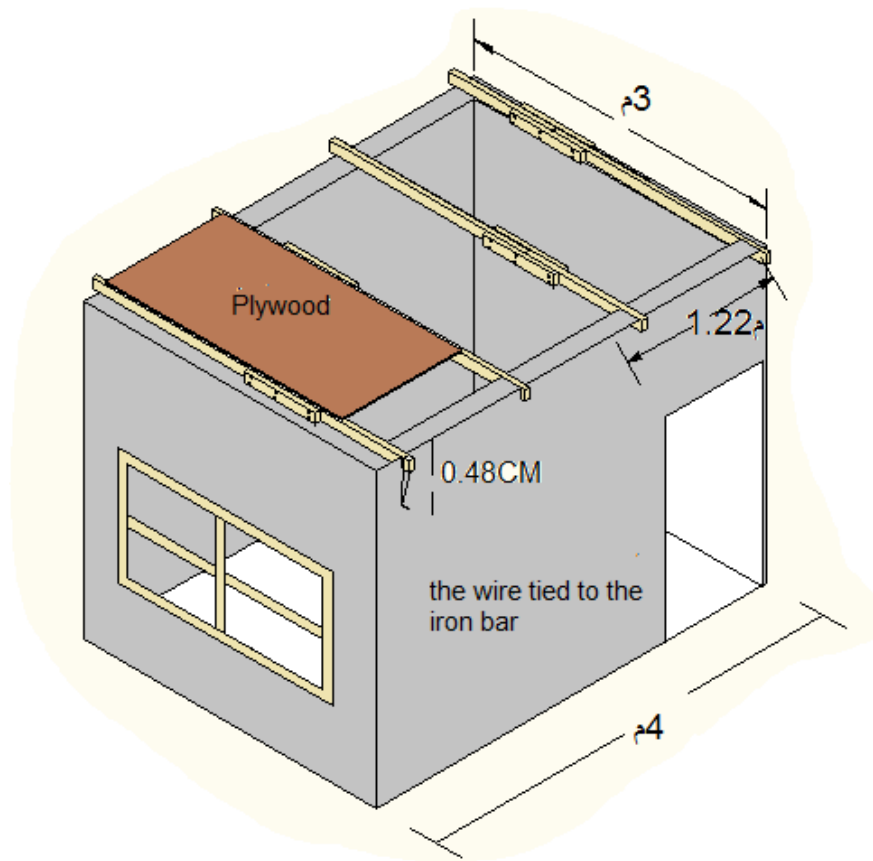


This figure shows fixing two wooden timbers.

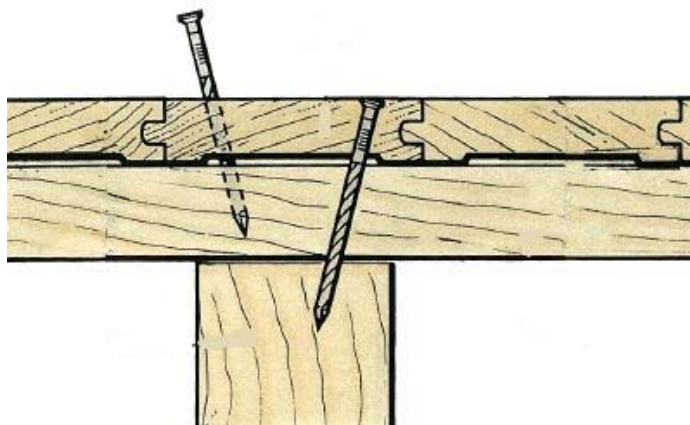


Room sample explains how to connect the end of the wood timber by wire (this should be done for both sides for all the wood timbers).

Put the wood timbers in the same way in the figure to avoid gather all the weakness points in the same side.



The figure explains fixing the plywood on the wood timber.



This figure shows the right and safe way to hammer the nails.

After we install the plywood we tie plastic sheets, we pass ropes in the holes of the plastic sheets which are often metal rings circular shape and tie it with the ends of the wood timbers, we also hammer nails in the rest of the non-fixed plastic sheets, the nails should be close together and place small pieces of wood or plastic bottles cover to strengthen the linkage.

Stairs:

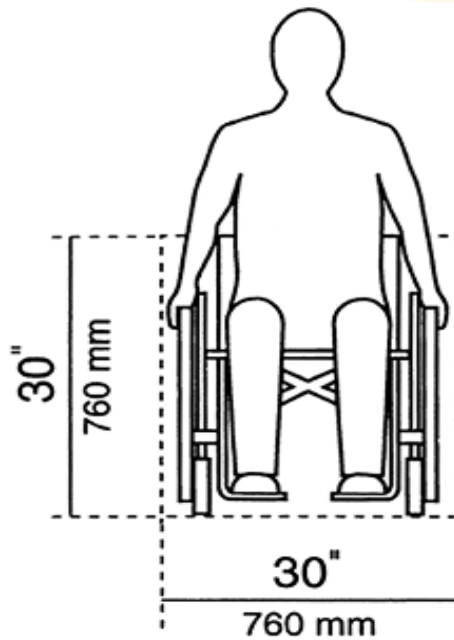
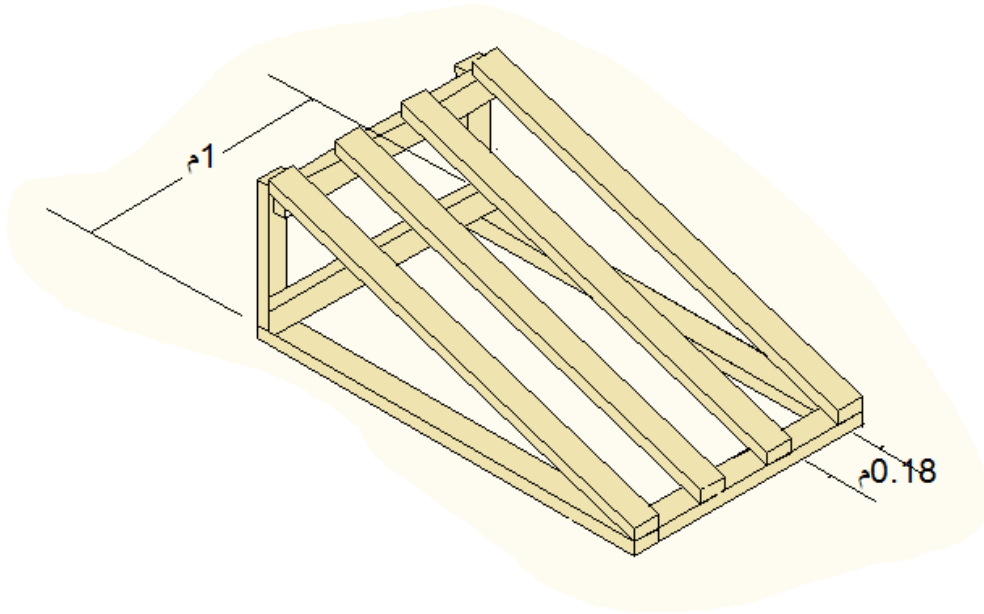
There are several ways to build stairs but the easy and suitable way by the materials available to the Organization are the following method:

Install two wood timbers 2 m length together by a piece of wood dimensions (30 * 10 * 1 inch thickness) parallel with the stair steps with nails (2 inch) and vertical distances of 20 cm and this should be done for both sides of the stairs. Then cut pieces of the wood timber with dimensions of 90 cm or 1 meter the number depends on the required at the site, and then we install each two pieces on the (30*10) timber at both ends so the width of step would be 20 cm using nails (4 inch). The slope of the stairs should be (3: 1) as the figure describes below.



Ramps for wheelchair users:

it could be done as shown in the figure which shows a structure of wood timber, slope (3: 1) and then we cover by a layer of ply wood on the surface of the ramp, the dimensions of the ramp are according to the height of the entrance, but the width is according to the door width which is usually one meter.



Notice the dimension of wheel chair.

Then place the plywood over the ramp and fix with nails as shown below.

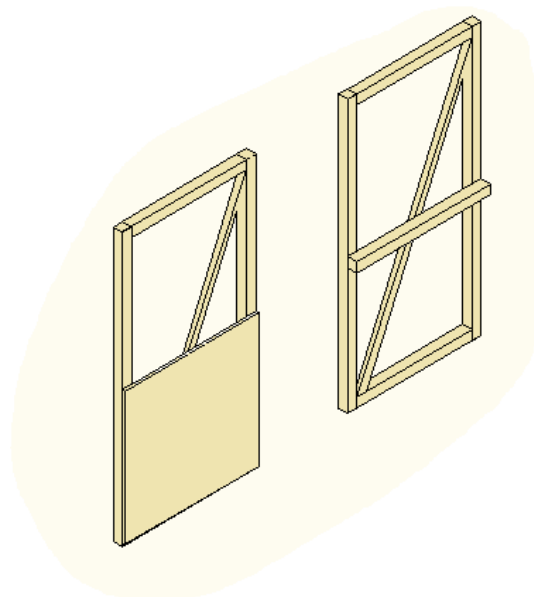


Doors:

- The frame of the door: Wood timber to be cut into 2m length two pieces, and installed sideways on both sides of the door opening vertically by nail 4 Inch, then cut another piece of the wood timber also one piece 1m width according to the door width install it on the roof of the door opening between the last two pieces.

The door: cut a plywood dimensions (1 * 2) m according to the door dimensions and then install it on the frame.

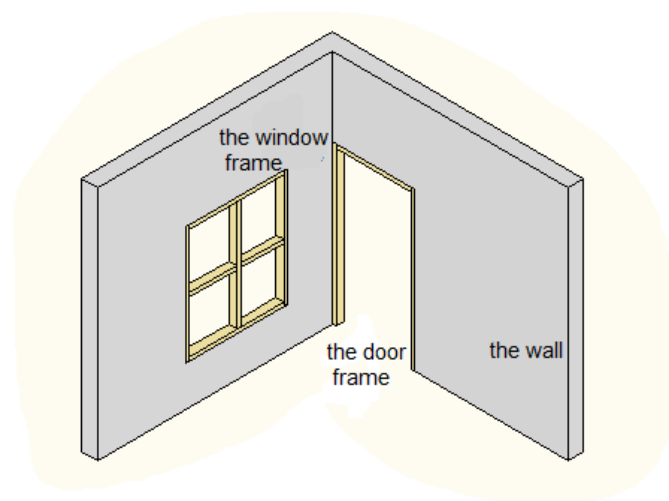
The figure below shows other ways of making doors.



Windows:

Cut wood timber two pieces for the sides of the window according to its dimensions and fix with nails then do cut two pieces of wood timber for the roof and floor of the window, according to the dimensions of the window and install it by nails 4 Inch then do the partitions for the window.

Note: it also can be done by cutting the plywood at the same dimensions of the window opening and fix it.



The figure shows how to fix the frame of doors and windows.

Quarry for ladders:

For the safety of your children and to ensure their lives, you must build a quarry for ladders in the house and anywhere need to build a quarry...

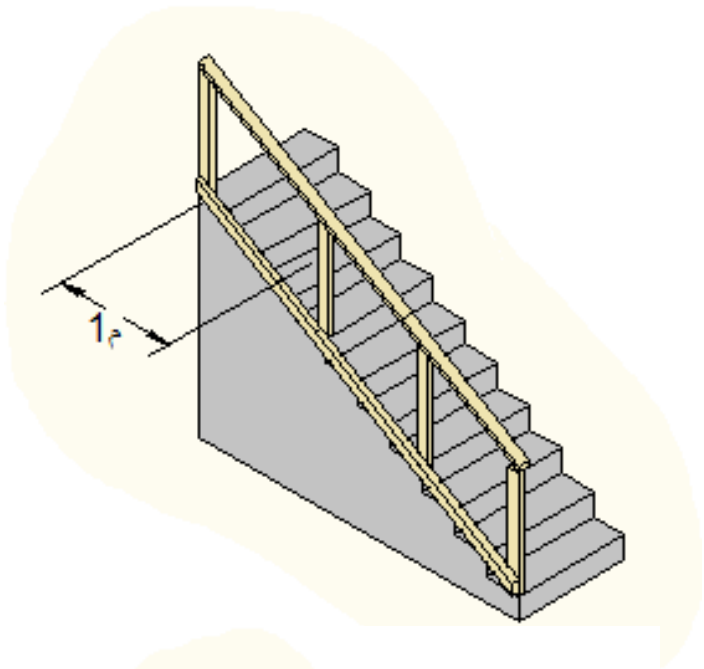
NOTE: Use this method to work the quarry of ladders that we have explained previously.

the work: cut several wood timber length 1 m and install it on both sides of the stairs in a vertical spaces of 75-100 cm, and then we cut a wood timber the same length of the ladder and install it on the vertically fixed wood timber and then

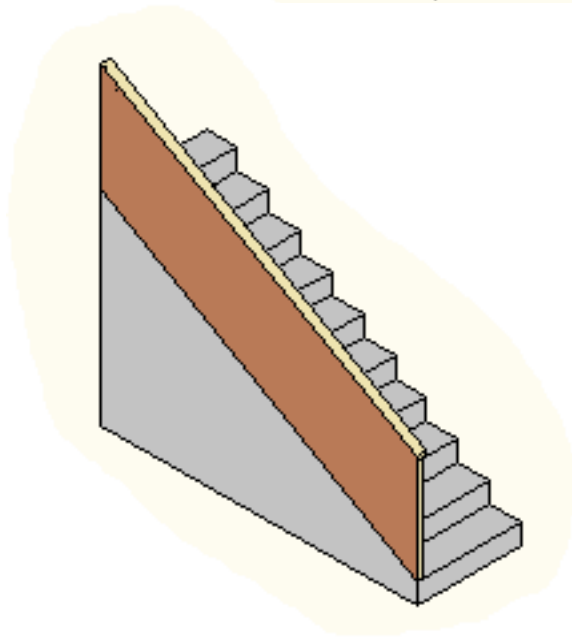
cut a piece of the ply wood along the stairs and install it on the timber mentioned above with nails 1 inch.

Note: If you have a precast stairs at home the quarry can be done by installing a wood timber on the side of the stairs and then do the installation of the 1 m wood timber on this wood and repeat the same previous process as shown in the figures.

The figure shows how to fix the wooden timber on the stair



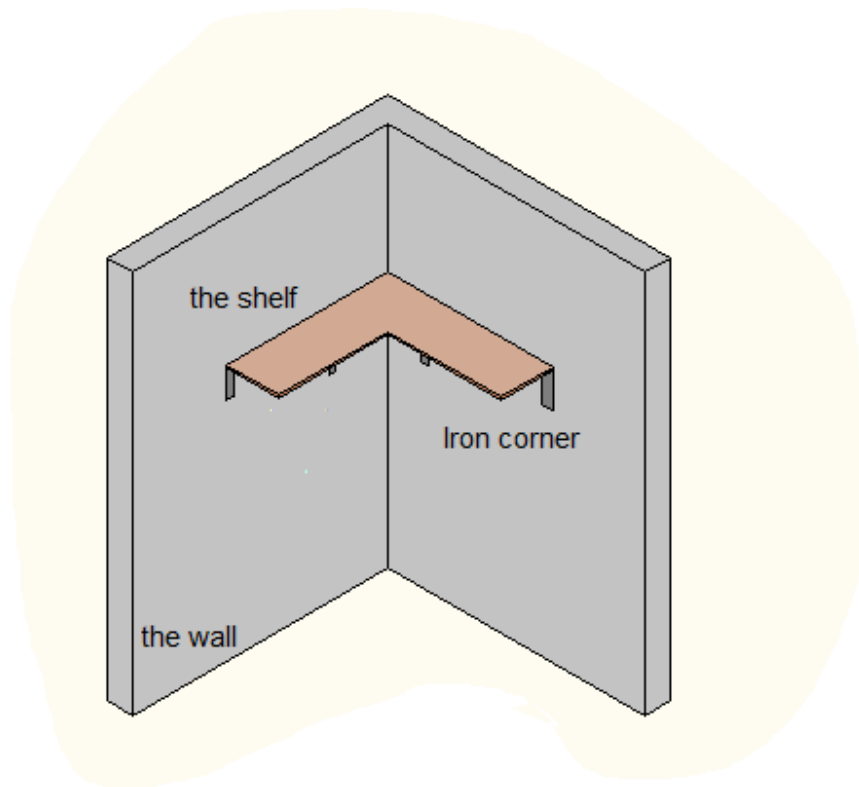
The stairs after placing the plywood.



Shelves :

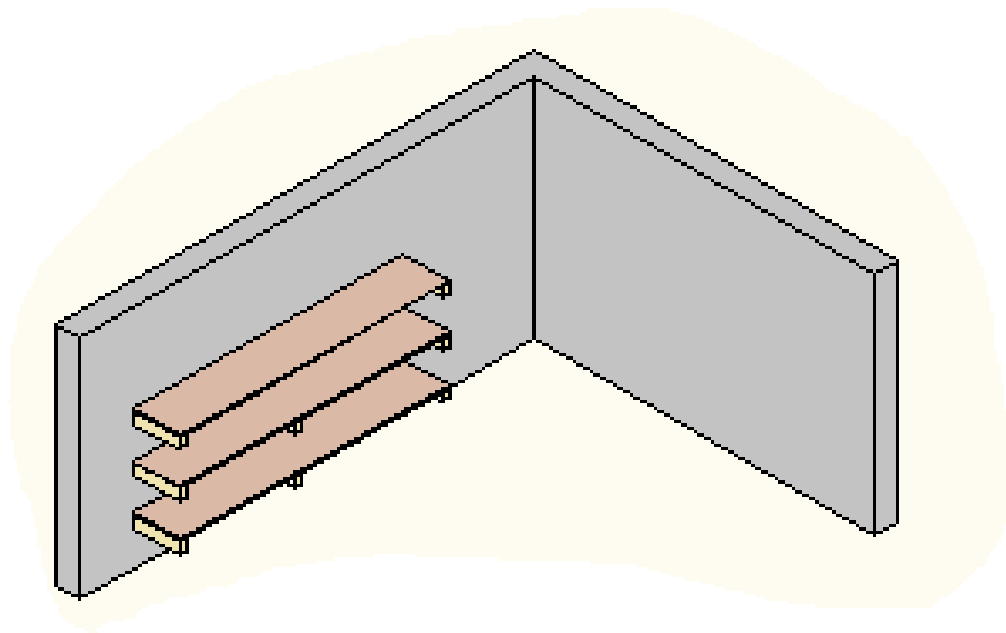
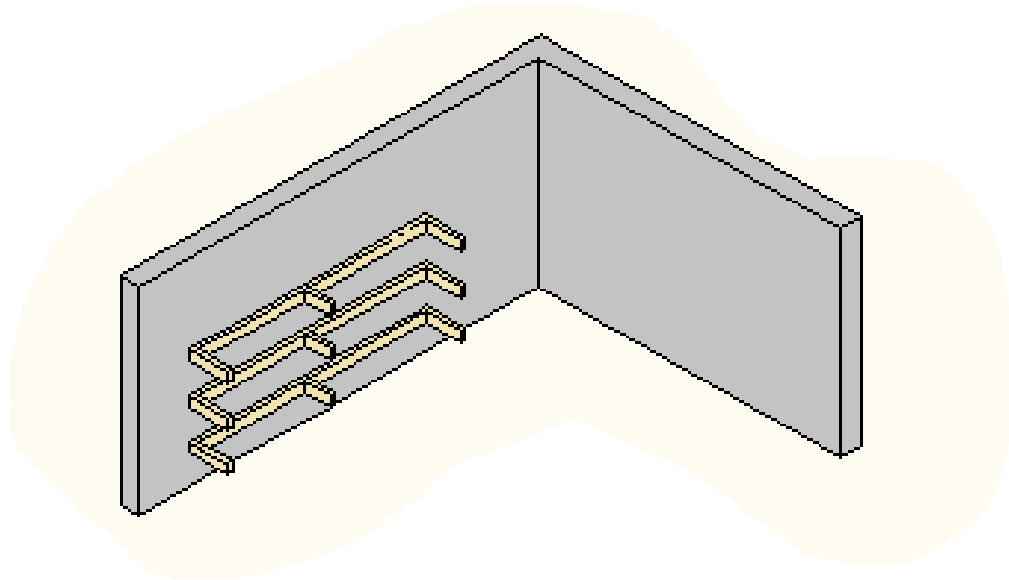
You can use Wood in your house to meet most of your needs, including furniture, shelves are an example, you can make one in your room the size you like, below is a simple and quick method .

The method is: fixing and installing an iron angle (40 * 40) mm so that the plywood would lie on it by fixing it with nails or bolts then cut the plywood according to the suitable length and width 40cm, and fastened with nails on the iron corner.



The distance between the iron corner 70-60 cm center to center

Below is another way shows the method in figures:



Partitions:

You can use plywood and wood timber in partitions to separate the place you want into two sections or more to provide privacy for family members, especially women and that can be done by:

Cut and install wood timbers according to measurements of both sides of the wall, ceiling and floor in the desired place and fasten with nails to become a frame for the place and then install wood timber with horizontal spaces 1.22 m on the frame then do apply the plywood on these pannels by nails vertically and then cover the other remaining spaces above or leave it.

How to use silicon anti-leak:

Silicon water proof used to fill the cracks and openings in ceilings and walls to prevent water leakage into the house and used in the following way:

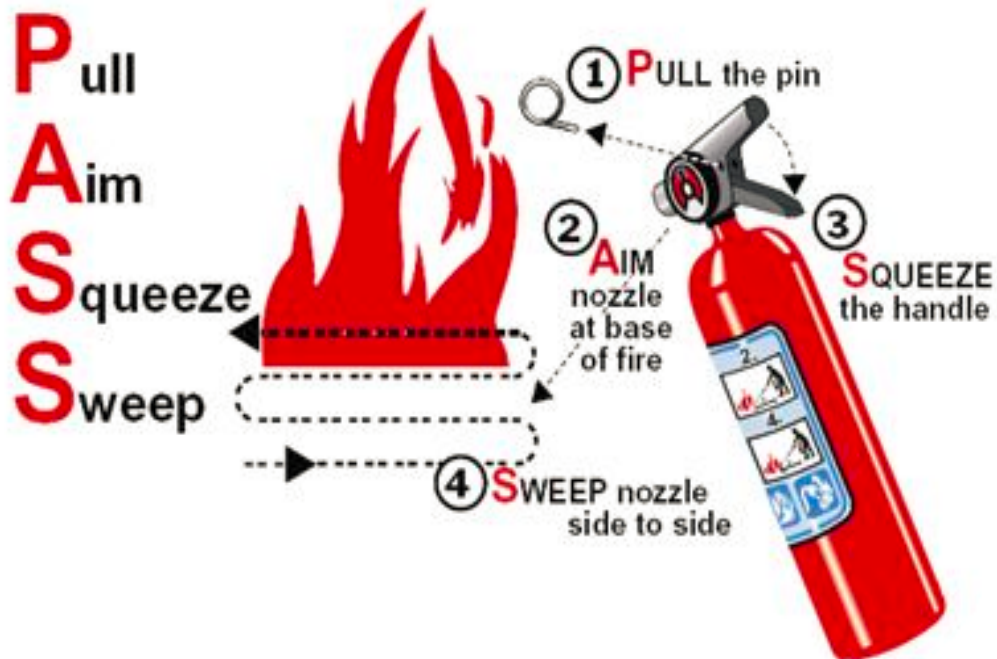
- prepare the place to inject the silicone material.
- put the silicone tube in the gun.
- injecting silicon material in the right spot
- Close the injection port.
- Cut the injection port.



How to operate fire extinguisher:

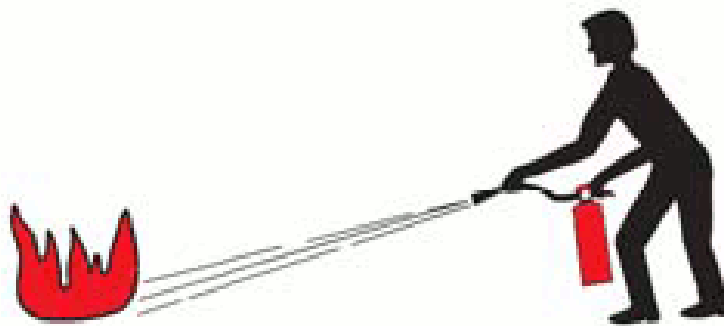
The fire extinguisher has essential presence in each house to ensure the safety of the residents, but it is useless if the family doesn't know how to use it, so someone should take the responsibility to teach the family members on how to use fire extinguisher.

To operate an extinguisher:



According to the steps shown in the picture above:

1. We pull the pin.
2. We direct the nozzle on the fire base with a distance of 2.50-3 meters away.
3. Push the handle and move the nozzle from side to side on the fire base, taking into account not to touch the nozzle because it is too cold it may hurt the skin



The first aid kit:

Non-woven wound plaster:

Non-woven wound dressing: a dressing is placed on the wound contains moisturizers absorbs defilement and blood from the wound.

Sterile Guaze pad

Adhesive Eye Pad: used in case of an eye injury to avoid infecting

Burn dressing

Emergency blanket: to carry patients in emergency.

Antiseptic spray: Spray sterile wounds and scratches

Antiseptic insect Repellent:

Insect Bite Cream: To sterilize the sting or bite

Plasters (Band aid) (10pcs - 19mmx72mm)

Gel for burns

CPR mouthpiece: Placed in the mouth to facilitate the entry of air into the trachea

Plaster (Band aid) Roll

Triangular bandage

Bandage Roll

Normal gloves

Ice Pack

Antiseptic cleaning wipe

Alcohol pad

Plastic Scissors

Safety pin

Pencil

Dear beneficiary:

These were just some simple easy ideas for you to enhance your shelter. Depending on your needs be creative to ensure the safety of your family and to facilitate your daily life.

For inquiries, please call the number below:

