

HOW TO BUILD A LEAN MEAN FAST SELLING ART MACHINE!



by
Brendan Reilly

Hi, I am Brendan, the creator of the 'Lean mean fast selling artmachine' and I am so happy that you have decided to download these instructions.

I am hoping that you have not just bought this book as it is cute, but that you want to design and build your own vending machine to sell art from for your exhibition, gallery etc. I am guessing that you have seen the vending machine in the exhibition and thought; 'I want to build one of those; that is such a good idea'.

The point of the vending machine came out of anger as I got sick and tired of seeing exhibitions and events and all the work is just placed on a table with a white cloth over the top. To me, that does not showcase the work off, I want a bit more of an experience when I am buying a piece of work, I wanted that little bit extra than just purchasing a book and getting in a paper bag and saying 'Cheers'. The customer has bought your artwork! A person has thought that is worth paying the money for!

Nine times of ten though, they look at the item once and maybe put in a draw somewhere until they need to find certain keys for a shed or need batteries for the TV remote. At least with this machine, they will have had an experience of going up to the machine, selecting which book they want, inserting the money and a piece of artwork coming out. That person will remember that item for how they bought it. That is an experience in itself.

This PDF will go through a step-by-step on how to build your own vending machine. This is just a base guideline on how I built mine but I have added little extra's so it matches my style of work. You do not need to do this. I want you to add your own little features to make it better. The dream would be that there would be these machines popping up all over the place, in different colours, shapes, sizes etc.

Make it your own.

I hope you enjoy building your own lean mean fast selling art machine.

Thanks and enjoy,

Brendan Reilly

www.brendanreilly.co.uk

HOW TO BUILD THE TIMBER FRAME

For this section, You will need:

Tools:

1 x saw

1 x drill

1 x positive end screw bit for a drill

1 x tape measure

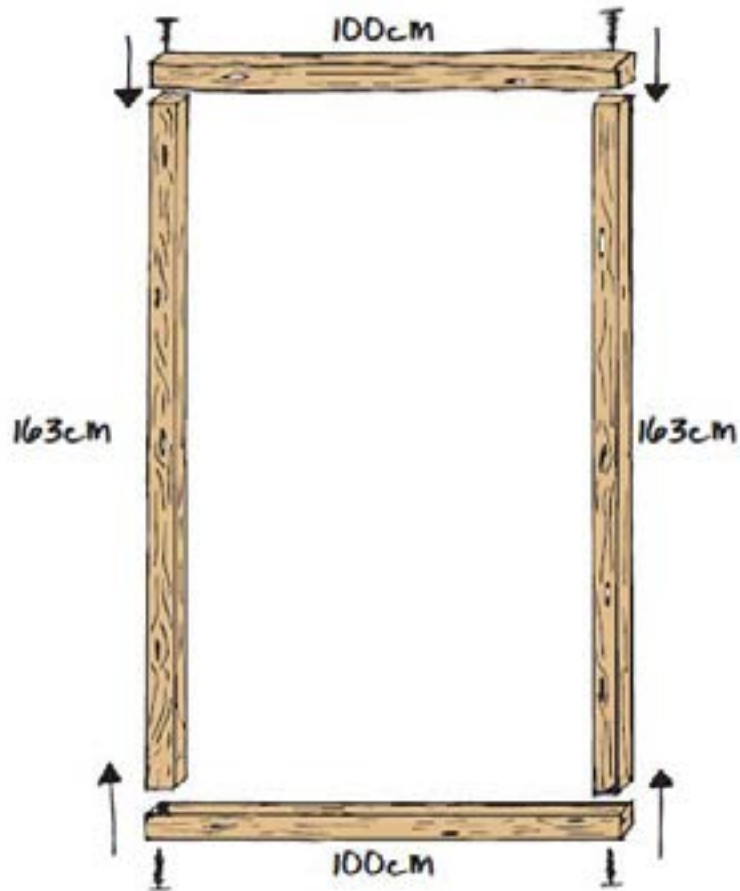
1 x pencil

Materials:

16 x lengths of timber

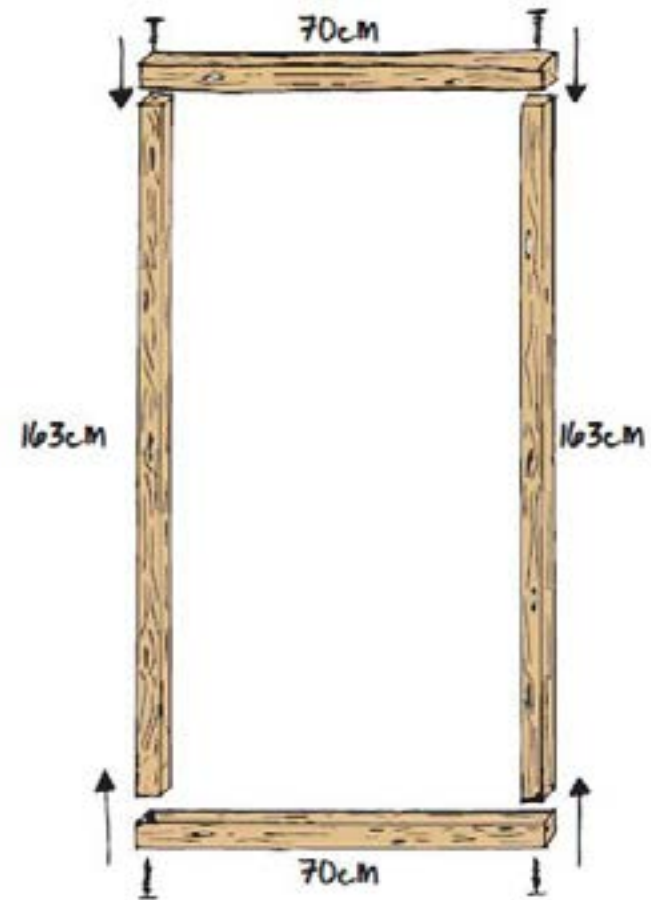
1 x pack of screws

1



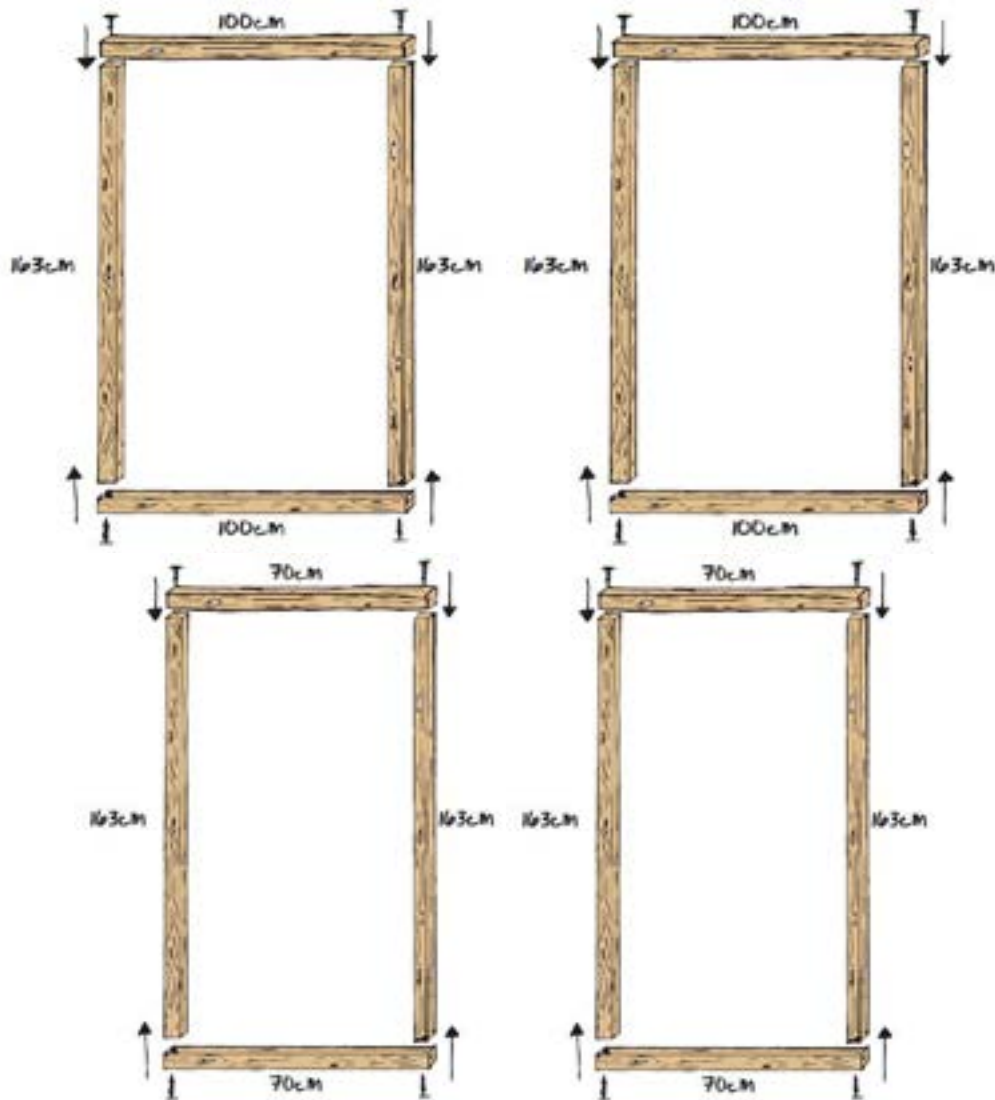
Once you have cut all your timber. You are going to make a rectangular shape. Attach the 2 pieces of 163cm to the 100cm timber by using your drill to screw in the large screws at each corner. If you feel your timber may split, use your drill bit and drill a hole through and then screw the screws in place. Repeat the process so you have 2 163cm by 100cm rectangular timber frame's.

2



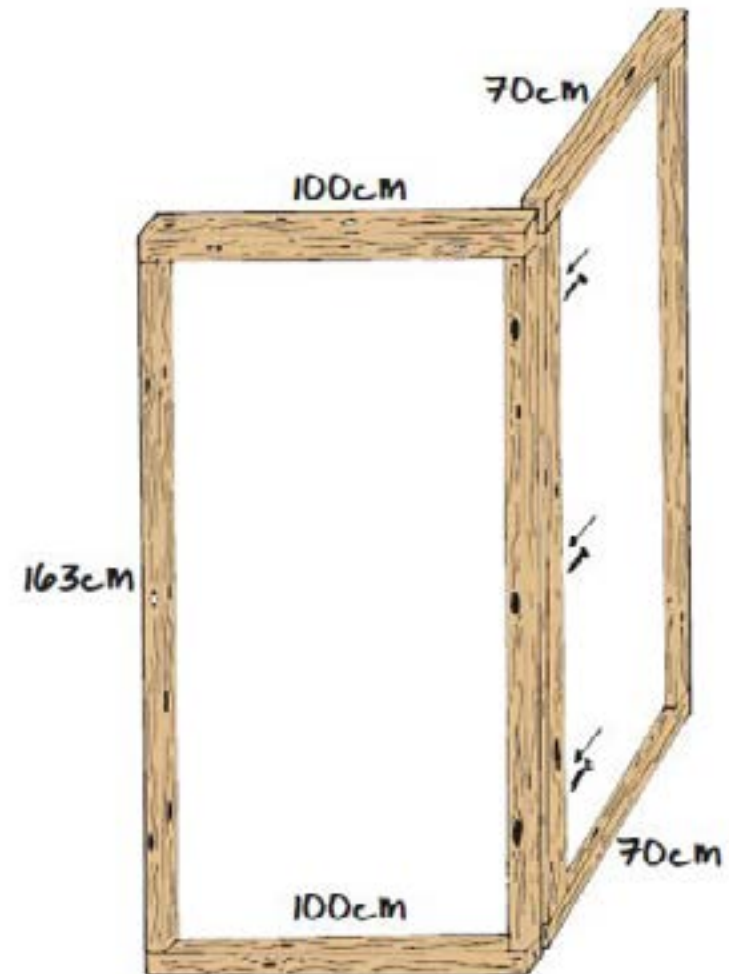
Then repeat the process as instruction number 2 but instead of using the 100cm timber, use the 70cm timber. Repeat the process so you have 2 163cm by 70cm rectangular timber frame's.

3



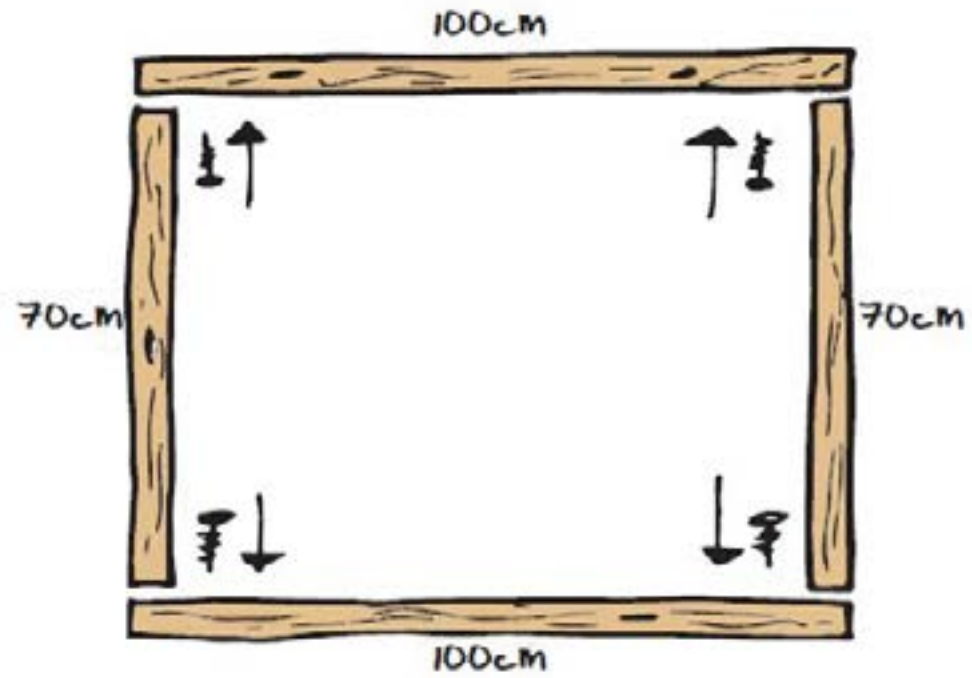
You should then have 4 frames that have been screwed together like this.

4



Still using your large screws, drill the screws on the inside (so it is easier to dismantle) make sure that you attach the smaller rectangular timber to the larger rectangular timber as the smaller rectangle is going to be the side of your machine.

5



From a birdseye view, this is how the timber should be attached together to create the shell for the machine.

HOW TO ATTACH THE PLYWOOD!

For this section, You will need:

Tools:

1 x saw

1 x bottle of wood adhesive

1 x hammer

1 x tape measure

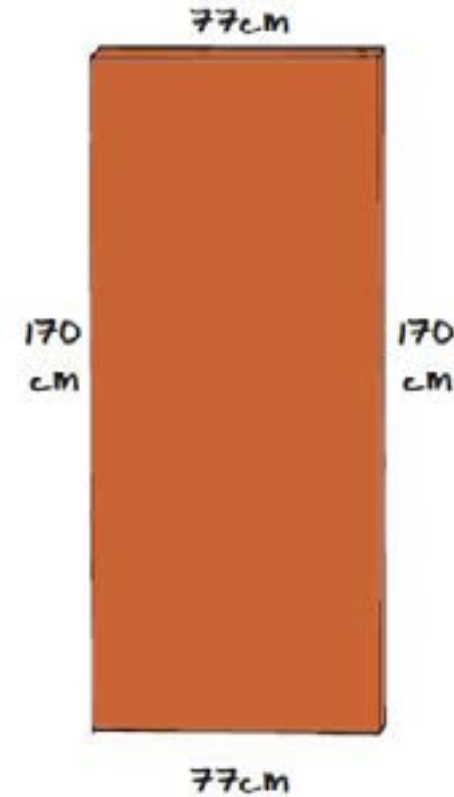
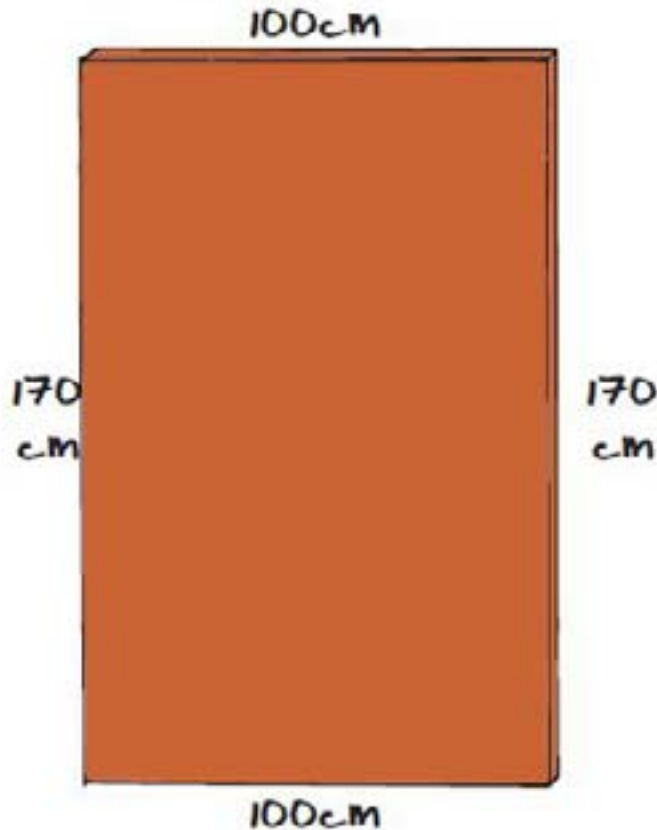
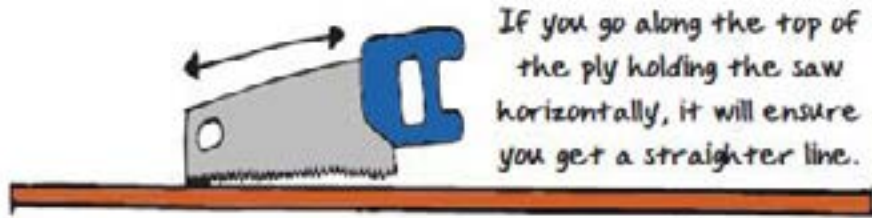
1 x pencil

Materials:

4 sheets of plywood

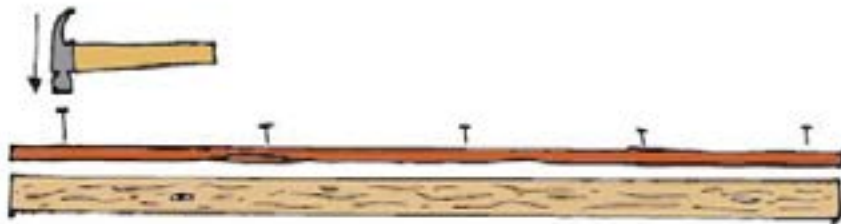
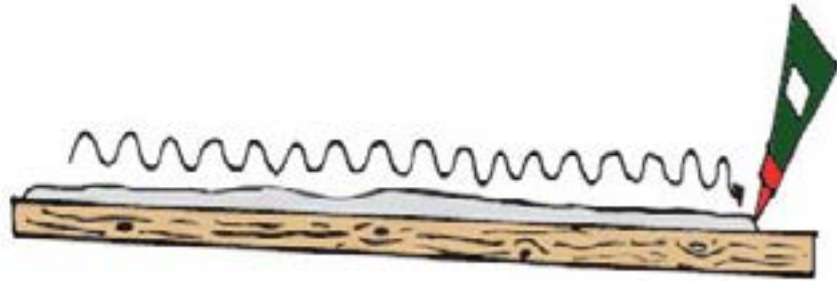
1 x pack of nails

1



Firstly you will need to get 4 sheets of plywood cut to these measurements. You can either do this yourself or the place where you buy it from could cut it for you. All the sheets of the ply should be measured to 170cm high. You may wonder why 170cm. The reason is that you have to include the extra 3.5cm at the top and bottom of the rectangle, so the ply covers it up. You also want to make for the ply to go on the side to be an extra 7cm to be 77cm so that there is a lip to cover that as well. You want to try to cover up the timber as much as possible.

2

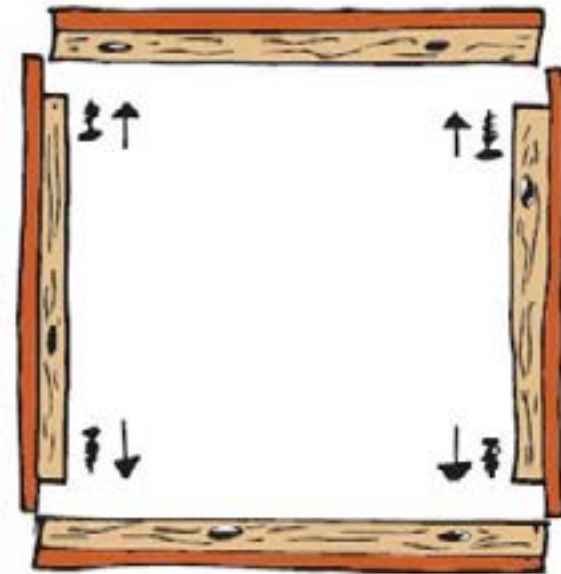


To attach the plywood, dismantle the shell first, you need to lay your frames flat and firstly squirt a small amount of wood adhesive along the timber. Then place your timber over the top aligning them correctly, nail them to the timber.

3



Remember, that the plywood is a little bit bigger to make a lip so on the smaller rectangles you want a 3.5cm lip at either side, so when it attaches together (below) it hides the timber.



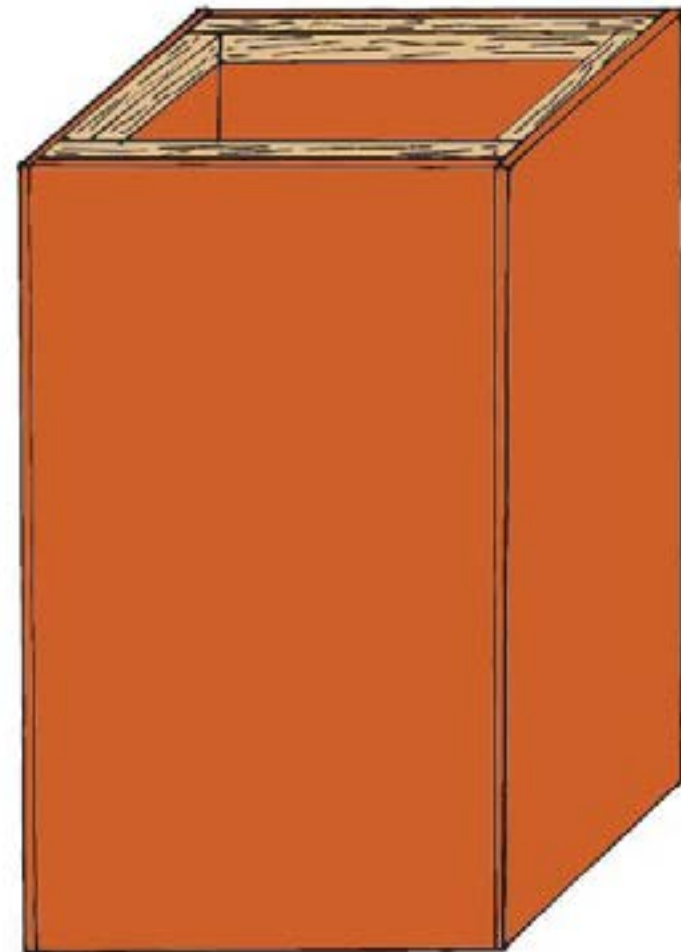
Then re-attach the shell together with the plywood on.



This is what the vending machine should look like so far.



This is a birdseye view of how the lips of the side panels should work to cover the timber.



HOW TO MAKE THE DOOR!

For this section, You will need:

Tools:

1 x saw

1 x bottle of wood adhesive

1 x hammer

1 x tape measure

1 x pencil

1 x drill

1 x positive ended drill bit

1 x plane

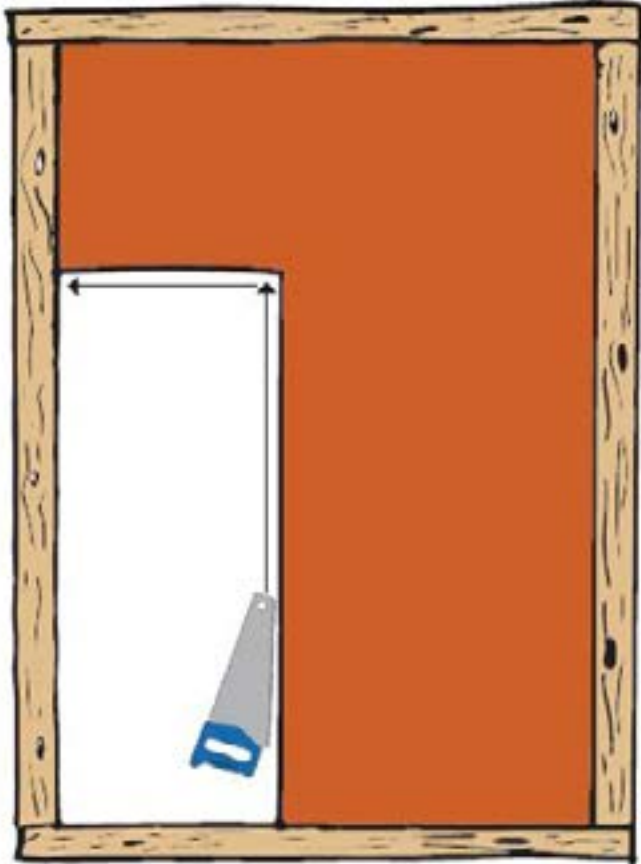
Materials:

2 x lengths of timber

1 x pack of screws

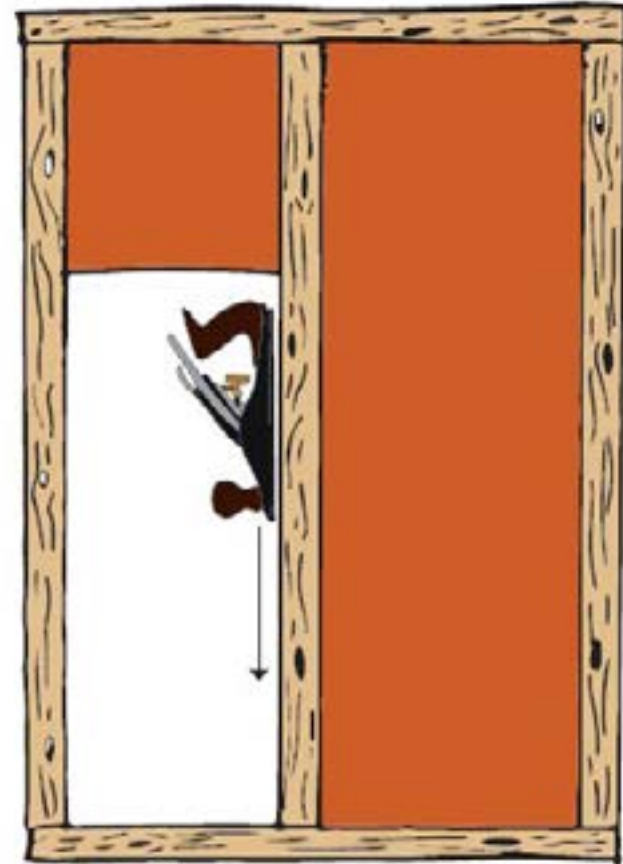
2 x door hinges

1



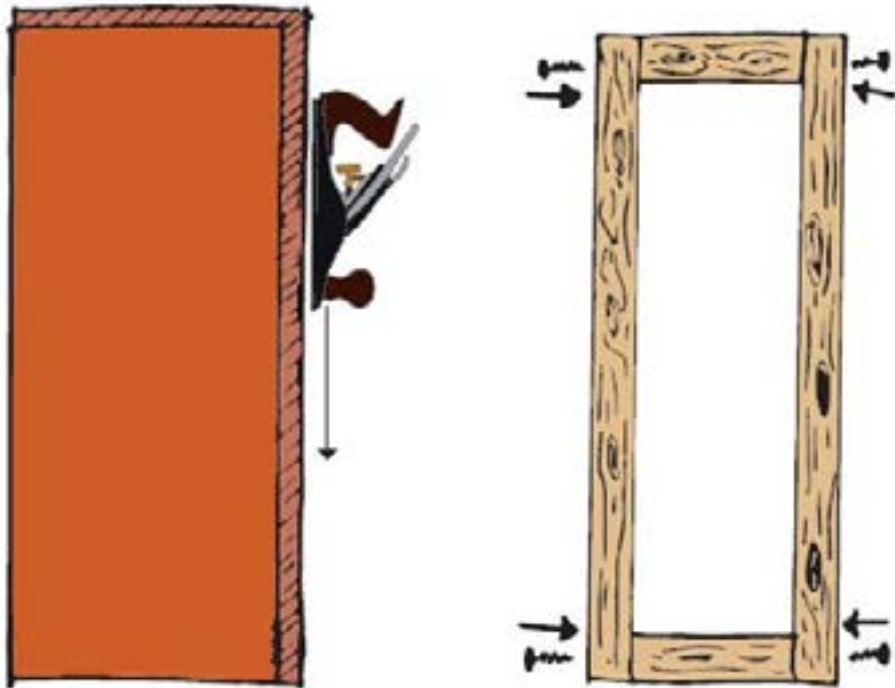
Using one of the side panels, which ever you want, you want to cut out a part of it carefully using either a jig-saw or a normal saw. Cut out of the panel approximately 100cm (h) by 40cm (w).

2



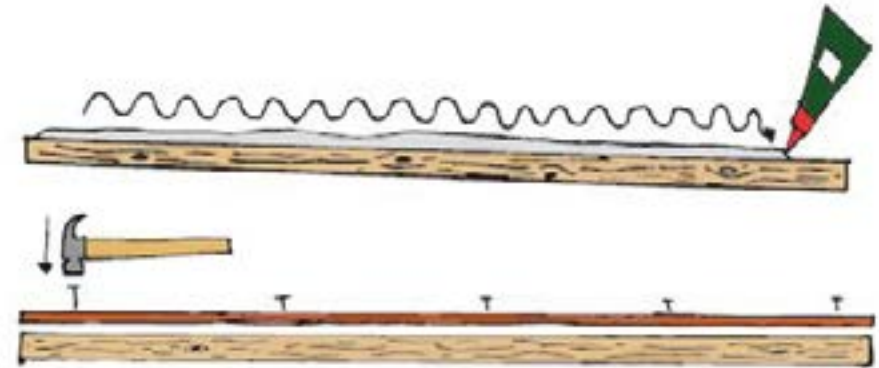
You then want to measure between the top and bottom timber and cut to this measurement a piece of timber to slot into the place. You are aiming to place it next to the edge of the door. You want to screw in a large nail at the top and bottom to secure it in place. You may also need to plane down the ply to make it straighter.

3



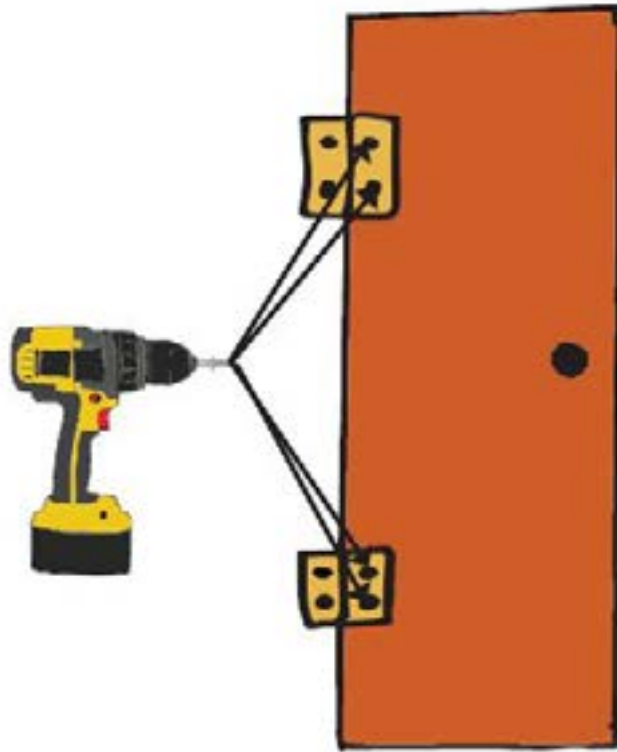
Plane down the piece of ply you have just cut out to make it around 1cm to 2cm smaller around the top and side so it will fit a bit better when it comes to making into a door. Once you have done that, measure around the door and similarly to making the timber shell, you want to make a rectangular shape out of timber to be a support for the door.

4



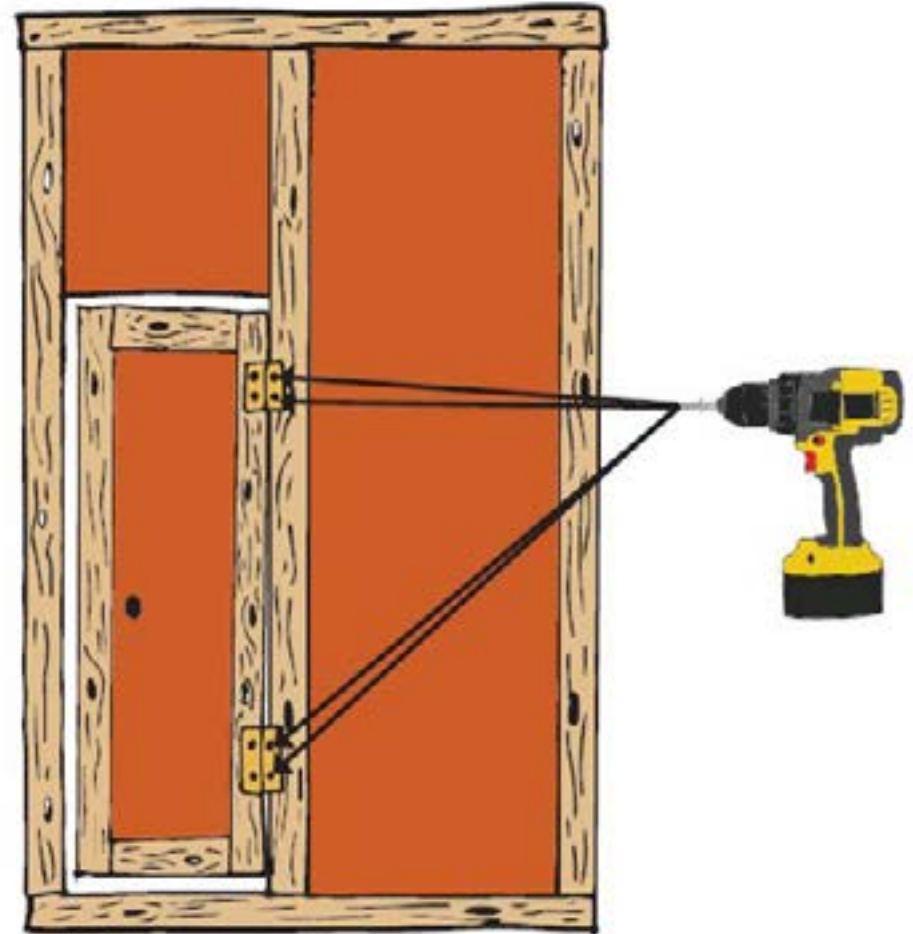
You then want to repeat the process of attaching the ply by gluing and then nailing it onto the timber.

5



Once you have your panel for the door built, all you need to do is attach 2 door hinges onto the panel ensuring that the small screw goes through the timber and not just the plywood. You may as well want to make a hole so you can get out of the machine. I used a large drill bit to make a hole in the door.

6



You then will have to attach the door by the hinges by screwing into the support that you have inserted into the panel.

HOW TO MAKE THE SHELVES!

For this section, You will need:

Tools:

1 x saw

1 x hammer

1 x nail punch

1 x tape measure

1 x pencil

1 x drill

1 x positive ended drill bit

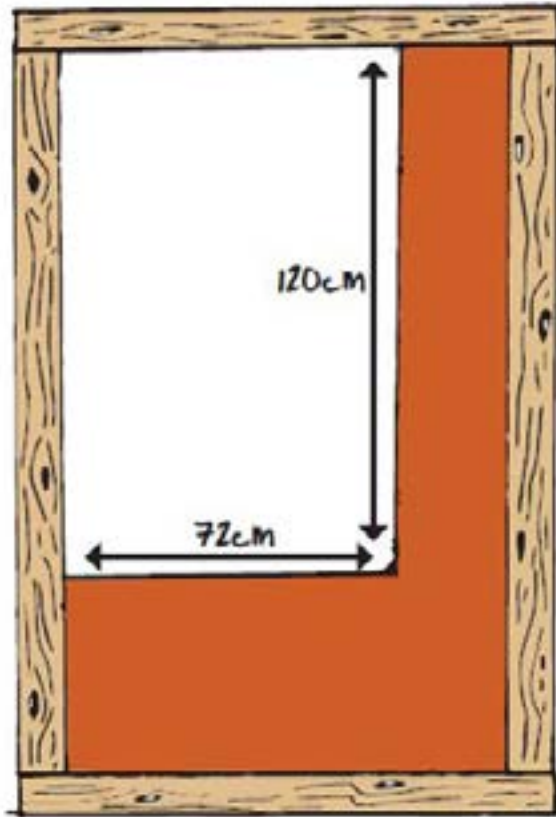
Materials:

2 x lengths of timber

4 x lengths of 1cm volume timber

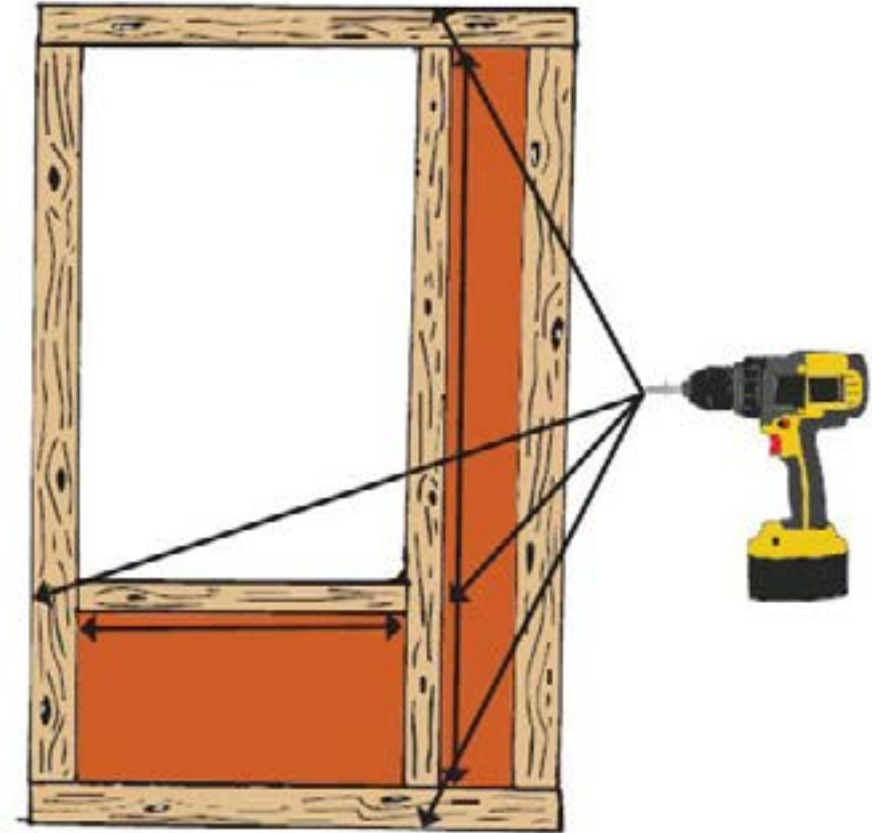
1 x pack of nails

1



Firstly, you need to cut out of the ply again. What I did was I used the timber that is a part of the shell as a starting pointing. This means from the edge, I marked 3.5cm in cause that is where the timber ends. From there you want to mark 72cm width by 120cm in height. The reason for this is that these measurements are enough for 5 rows and 4 columns. It also has a few centimetres added on for space for the wood for the shelves.

2



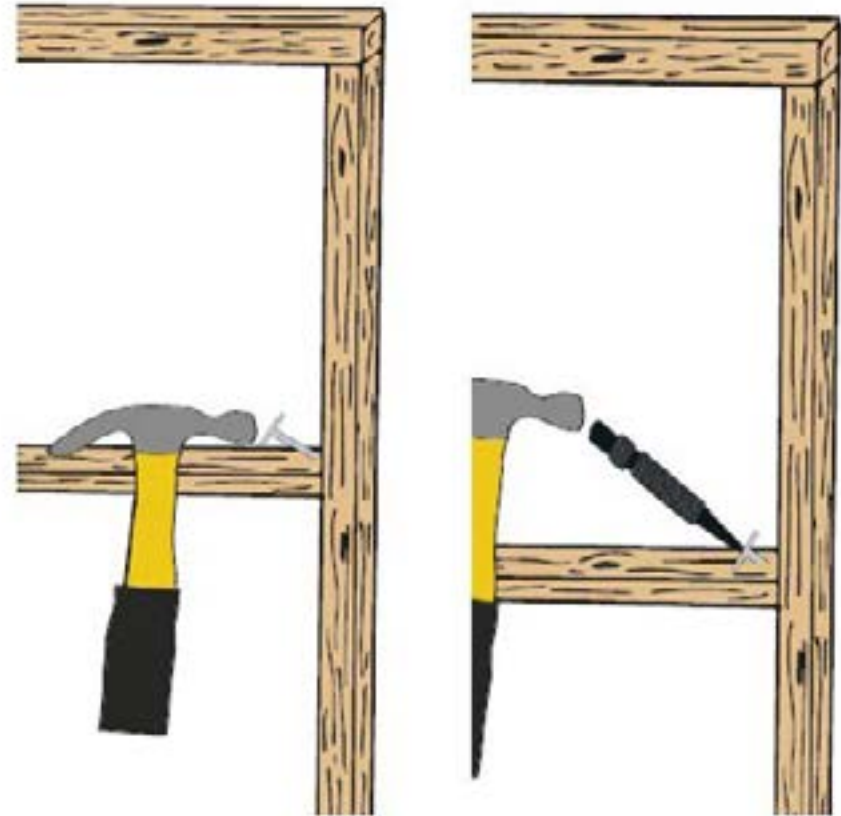
You then want to measure from the top to the bottom of the timber of the panel and make another support. You may need to drill in a screw and the top and bottom. Plus, you want to make one from the vertical support to the frame and screw that in aswell. It is just to round the window you are making. This will make a frame for your shelves.

3



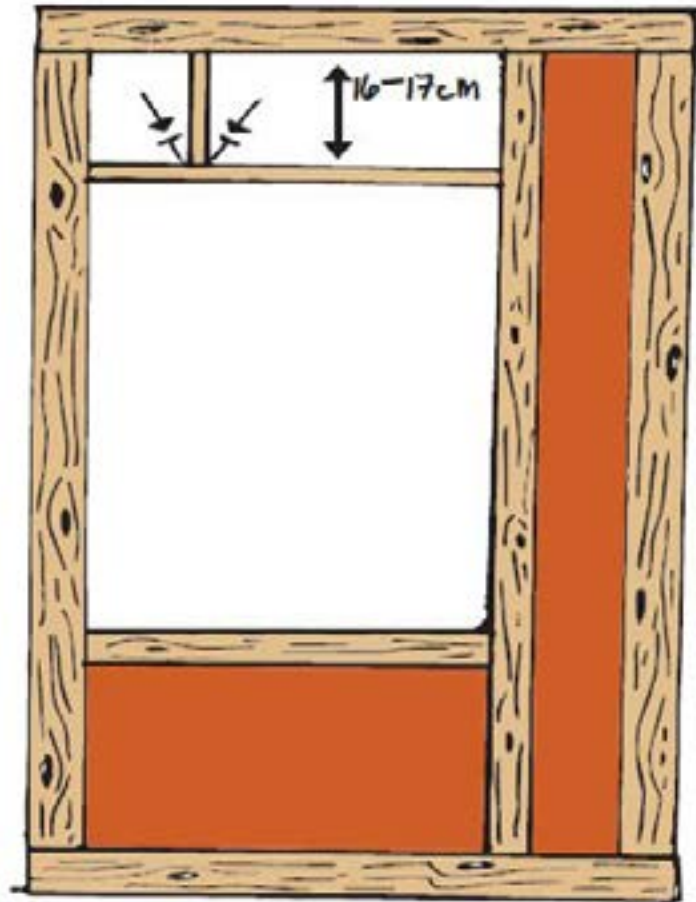
You now want to measure between timber shell and the vertical support to make the first row. Cut the wood into the measurement you get and repeat another three times. It should be approximately 72cm. You want to measure approximately 16-17cm as this is the typical size of A5 but gives a little leeway. You then want to attach them by using a hammer and nail at either side.

4



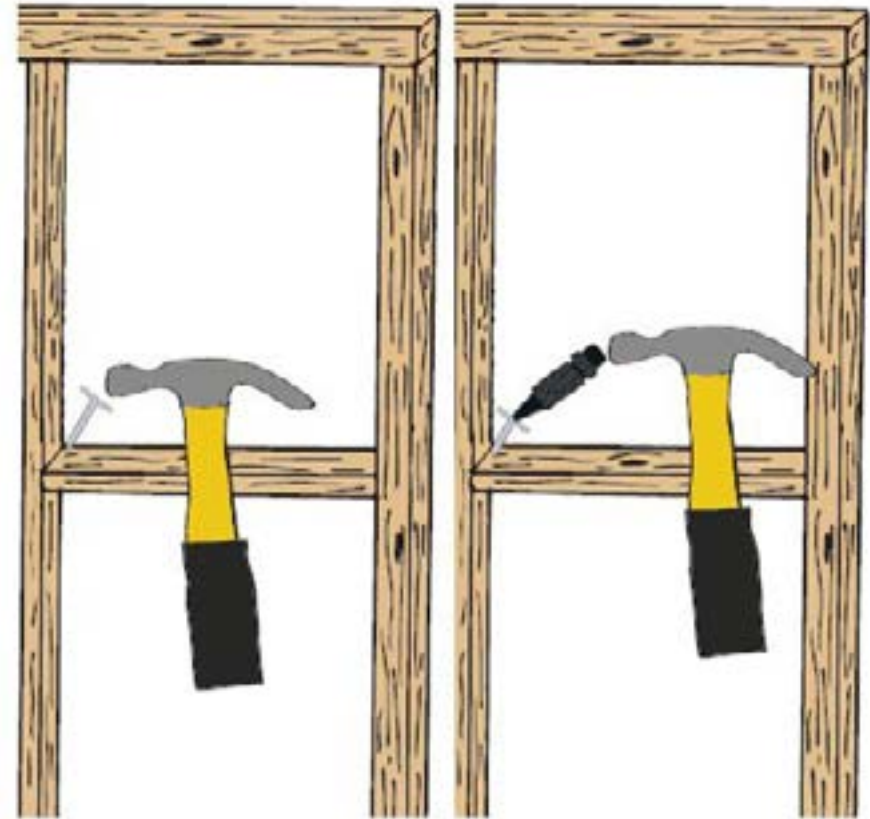
You want to hammer the nail in at a 45 degree angle. You then want to get a nail punch to embed the nail into the wood.

5



You now want to measure from the top timber and make 3 smaller pieces of timber to make the different sections. They should be approximately be 16-17cm. You want to repeat what you have just done but vertically.

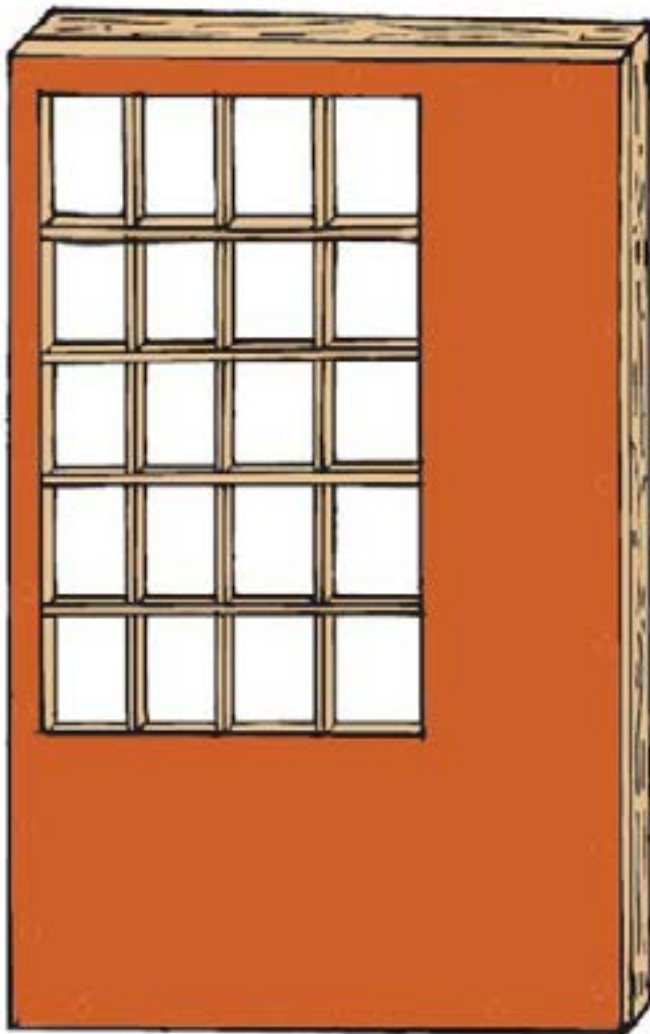
6



You now want to measure from the top timber and make 3 smaller pieces of timber to make the different sections. You want to repeat what you have just done but vertically.

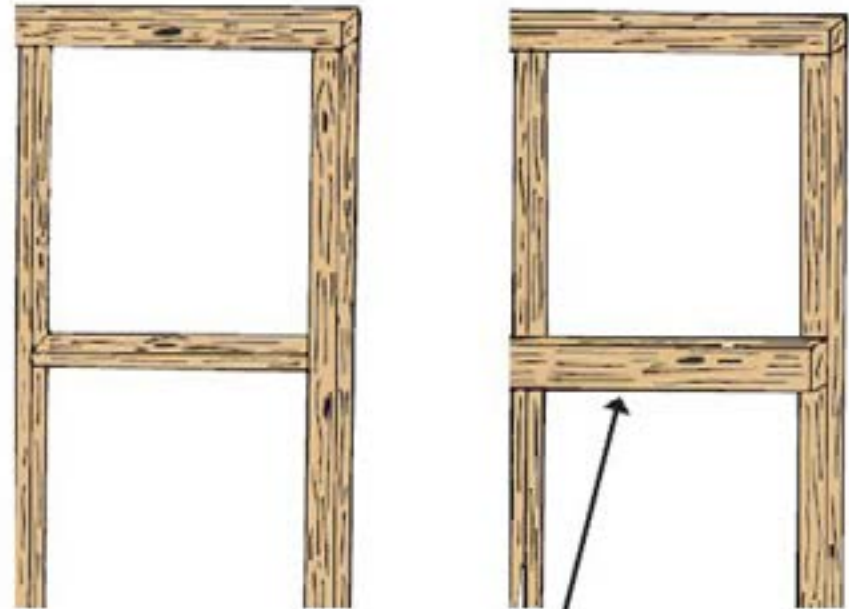
Repeat instructions 3,4,5,6 x 3 more times.

7



From the front, this is what the vending machine should look like so far.

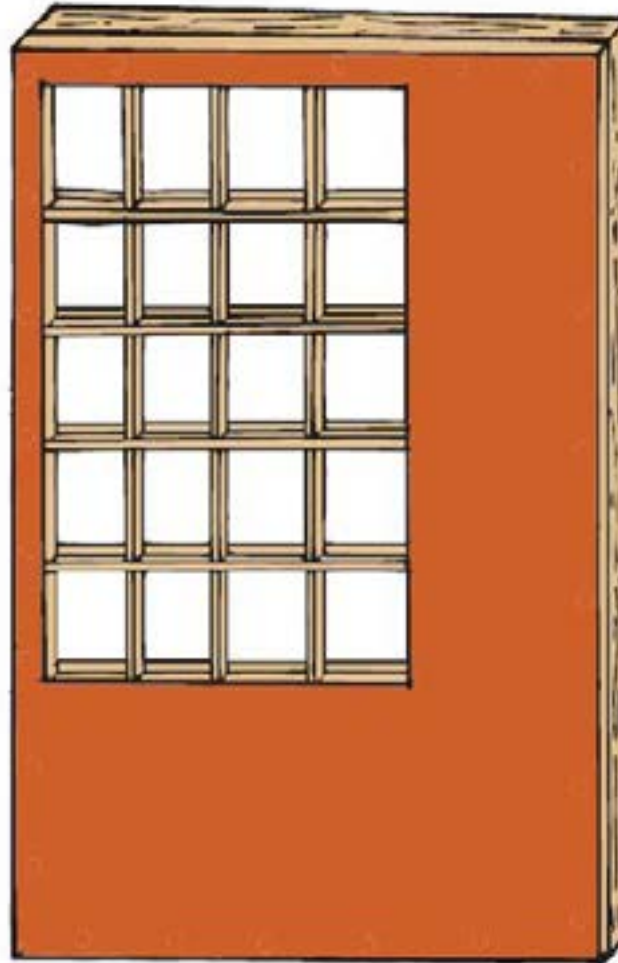
8



Once you have built your shelves, you want to make a lip to go behind the shelves so the books do not fall out.

So what I did was I measured the frame including the timber from side to side. I then cut another 3 pieces and nailed them at each side on each shelf.

9



After adding the lip to hold the books in place. This is what the vending machine should look like so far.

HOW TO PAINT THE WOOD!

For this section, You will need:

Tools:

1 x scraper

1 x piece of sandpaper

1 x paintbrush

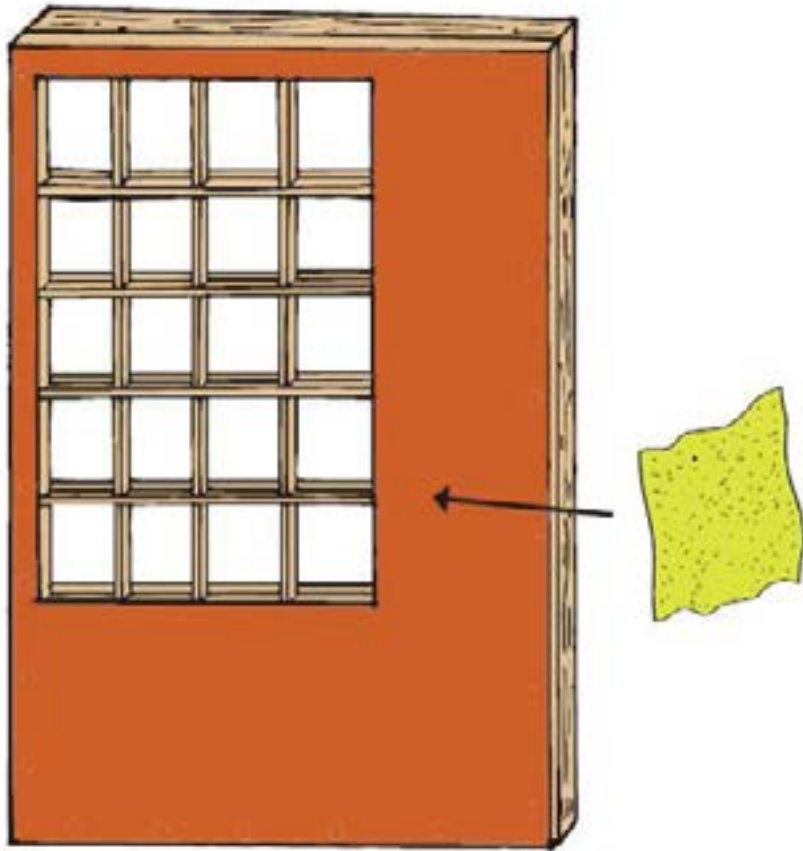
Materials:

1 x tin of undercoat

1 x tin of coloured paint

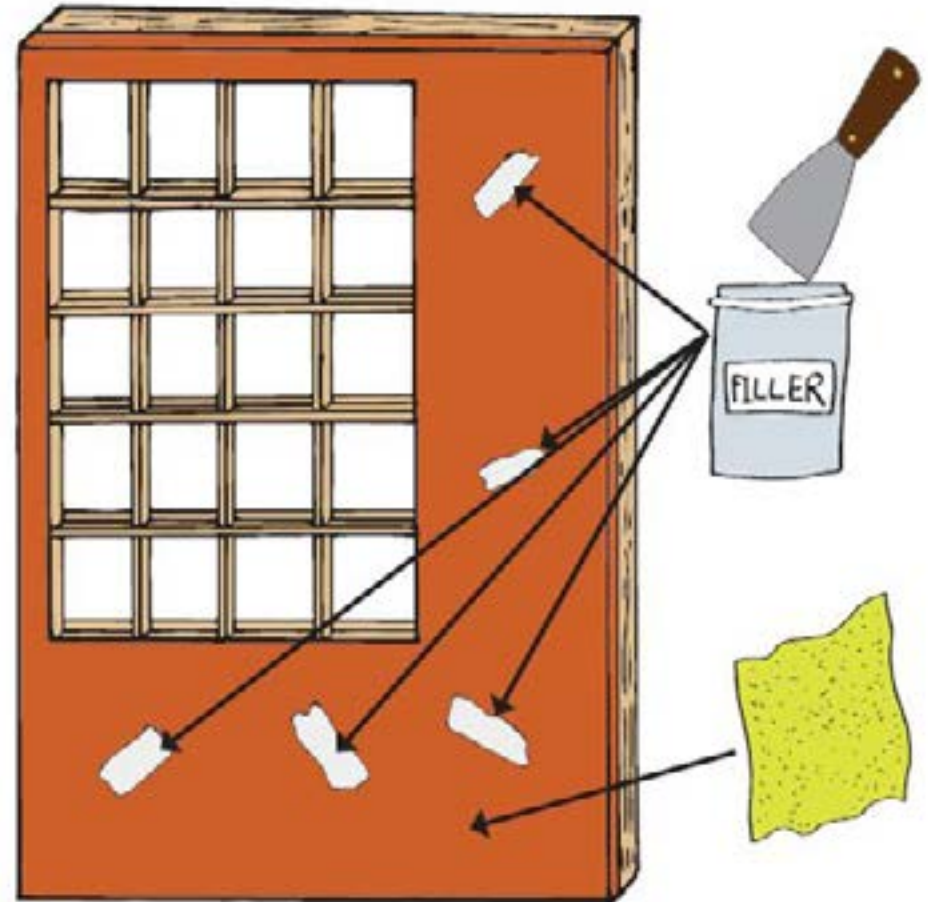
1 x pack of filler

1



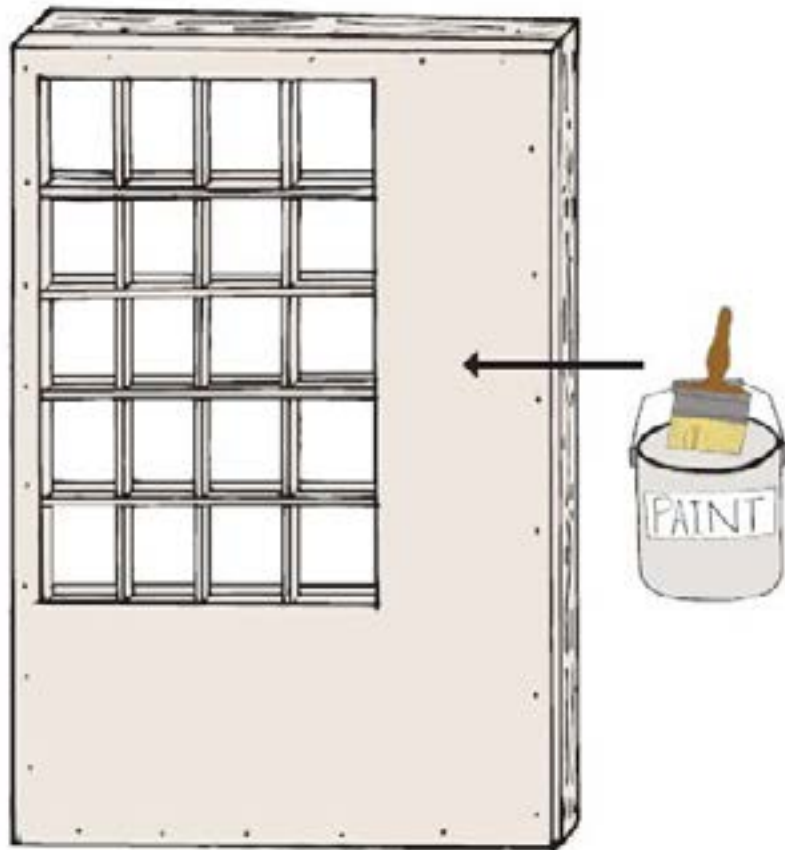
Firstly put the machine fully together. Grab your sandpaper and just rub down the all the way round the machine to just take that sharpness off. It also makes a more suitable surface to paint on.

2



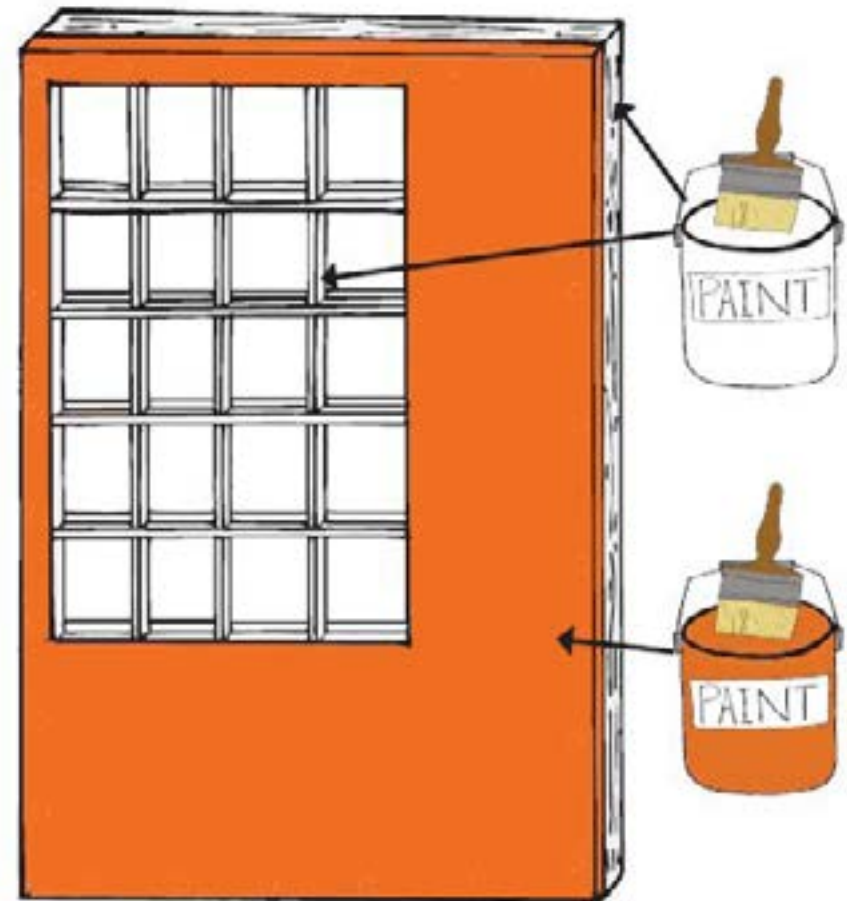
Secondly, you want to get your scraper and filler and fill in any small holes that are on the machine. It so it creates a nice flat surface. Once the filler dries, you want to go round it with sand paper again.

3



Next, you want to paint the machine with a white undercoat so whichever colour you want to paint it is a more vibrant colour.

4



Now it is up to you what colour you paint your machine. I painted my machine all the way round with a bright white and painted the shelves as well because I want to present the items I am selling on a white background. I then painted the rest of the machine a bright orange but it is totally up to you what colour you paint it.

ATTACHING THE PERSPEX!

For this section, You will need:

Tools:

1 x saw

1 x bottle of wood adhesive

1 x tape measure

1 x pencil

1 x drill

1 x drill bit

1 x positive ended drill bit

1 x counterpoint drill bit

1 x paintbrush

Materials:

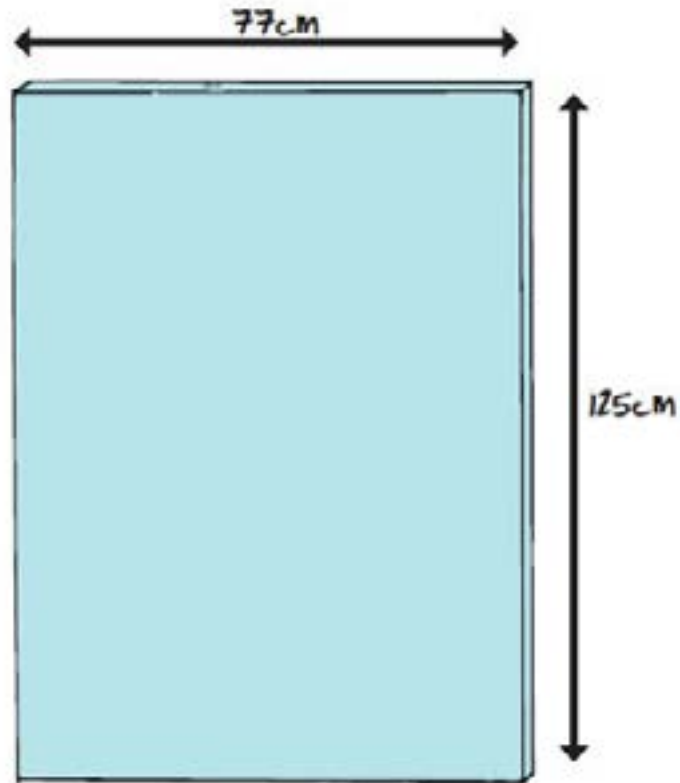
1 x piece of perspex

1 x pack of screws

4 x lengths of 1cm volume timber

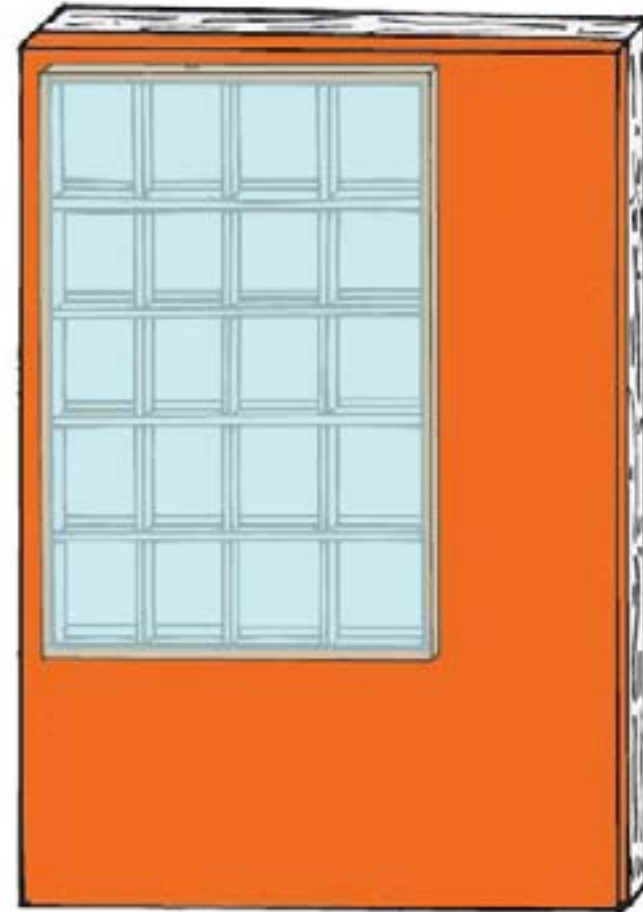
1 x tin of coloured paint

1



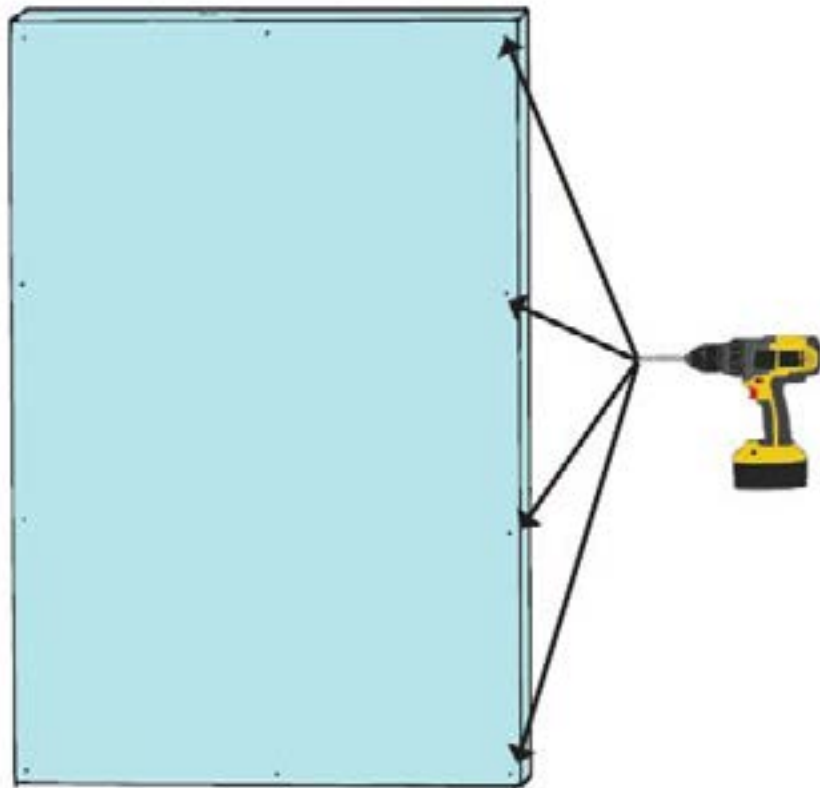
You will need to cut your perspex to this size. I would use a normal as an electric saw would make the perspex shatter. These size's also makes the perspex to be 2.5cm all the way around to be able to attach with screws.

2



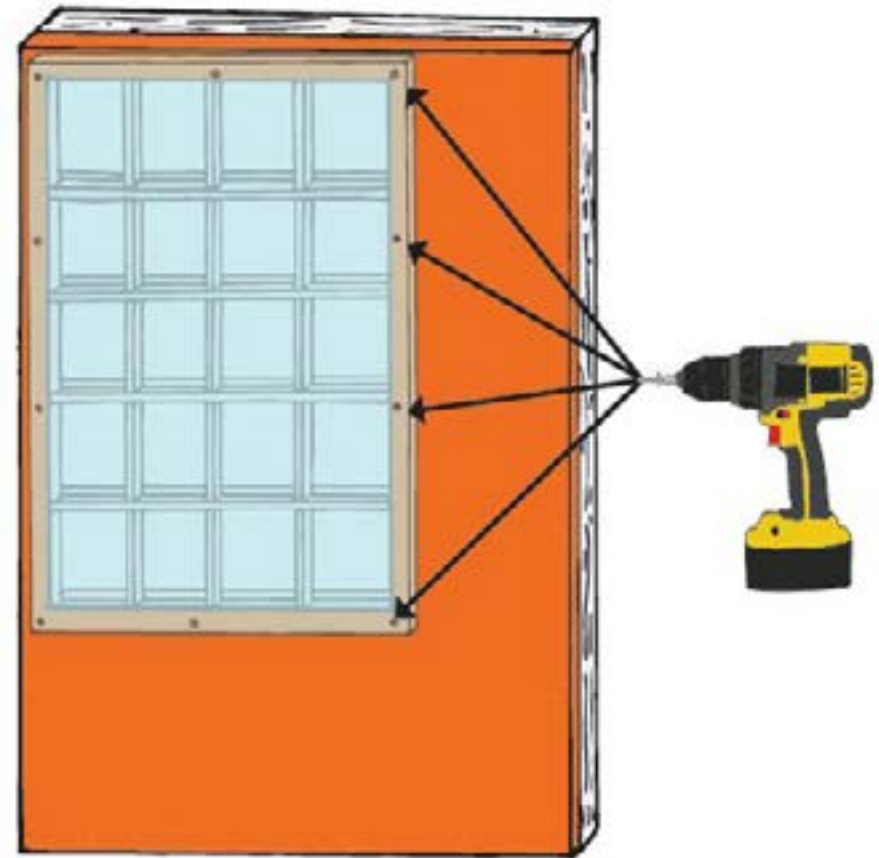
Ask a friend to hold up the Perspex and mark with a pencil where the holes are going to for the screws.

3



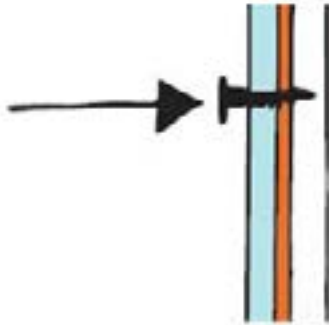
Drill through the marks for where you want the holes to go.

4



Ask a friend to hold up the Perspex and mark with a pencil where the holes are going to for the screws.

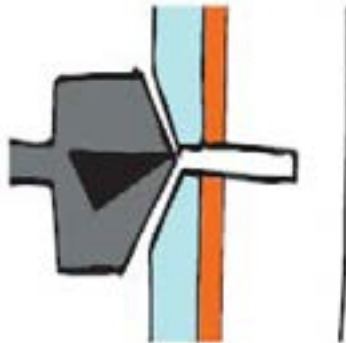
5



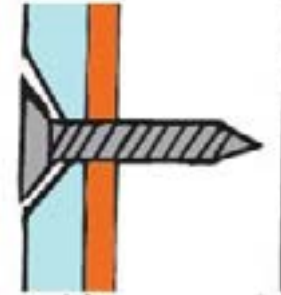
You then want to ask a friend to hold up the sheet of Perspex and with your screws, drill the screws through the holes and into the wood. Screw in all the screws into place.

Then because the screws are in place, the Perspex will not move.

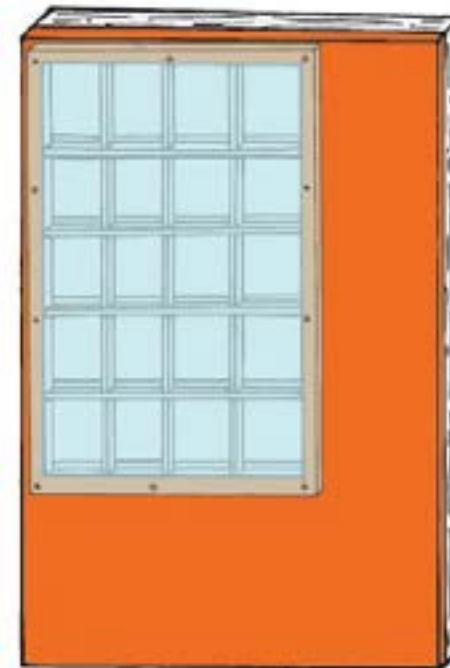
One at a time, remove the screws with a screwdriver so the Perspex does not split.



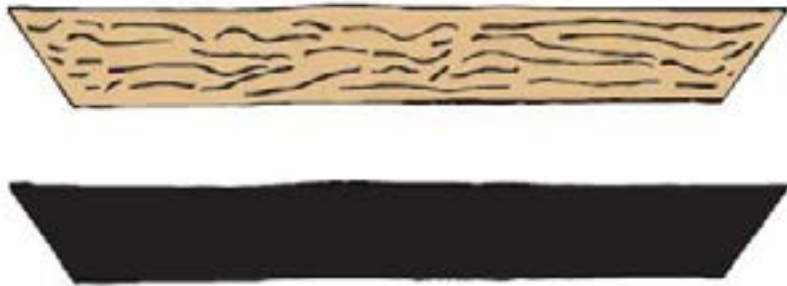
Attach the countersink drill bit into the drill and countersink all the holes in the Perspex.



Then with your screwdriver, screw back in the screws. The countersink will have made the screws flush with the Perspex.



6

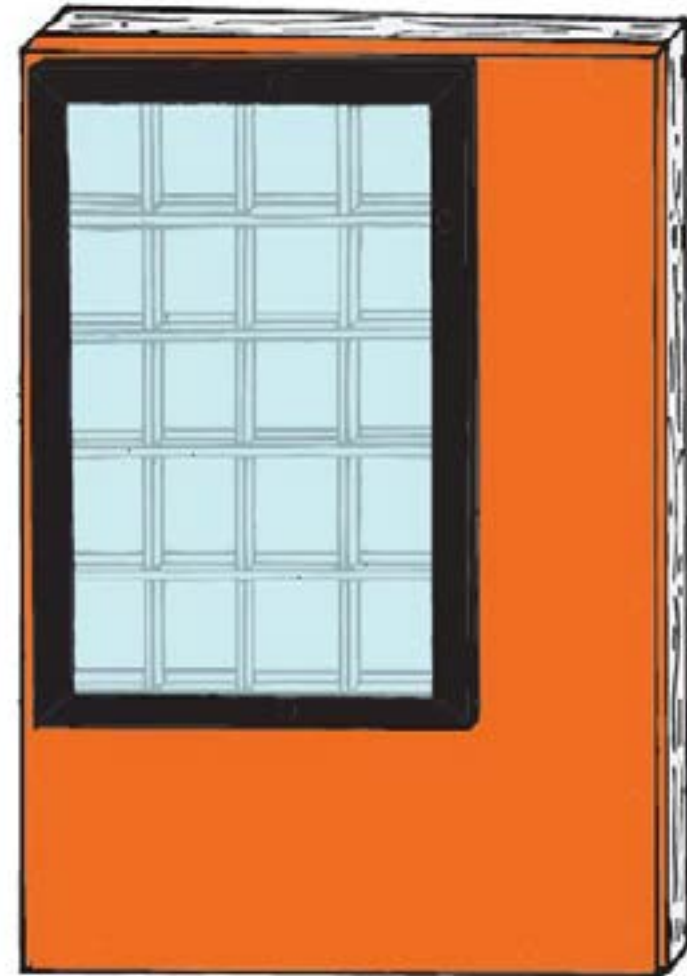


I used the timber that I used for the shelves and measured the Perspex (77 x 125cm) and cut 2 pieces that are 125cm high and 77cm in width. I then used a mitre to make 45 degree angles. I then painted them, I painted them with a black but you can choose whatever colour you want. You may need to put 2 coats on if you are using matt emulsion.



Then use some adhesive and glued the frame onto the perspex on the vending machine. Bare in mind that once you have glued the frame on, you can not take the perspex off.

7



The vending machine should look something like this.

MAKING THE COIN AND POST SLOT

For this section, You will need:

Tools:

1 x saw

1 x tape measure

1 x pencil

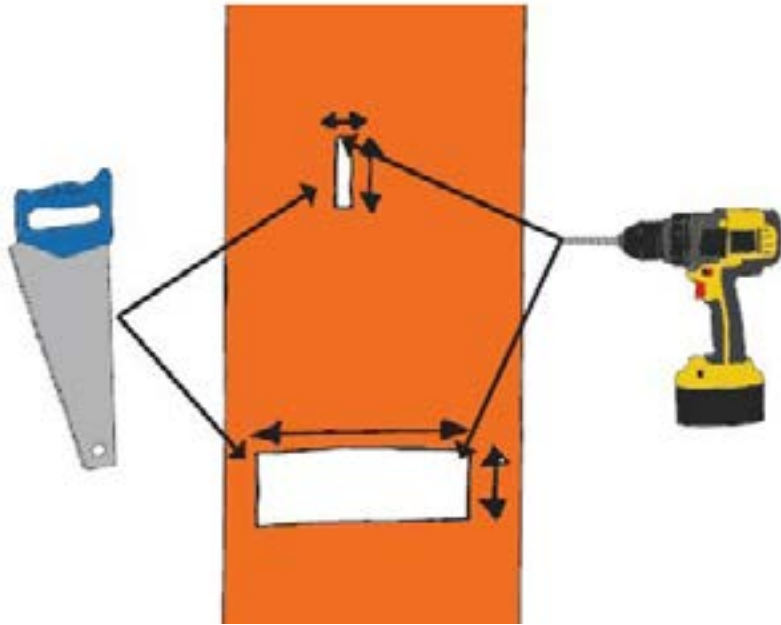
1 x drill

1 x drill bit

Materials:

None

1

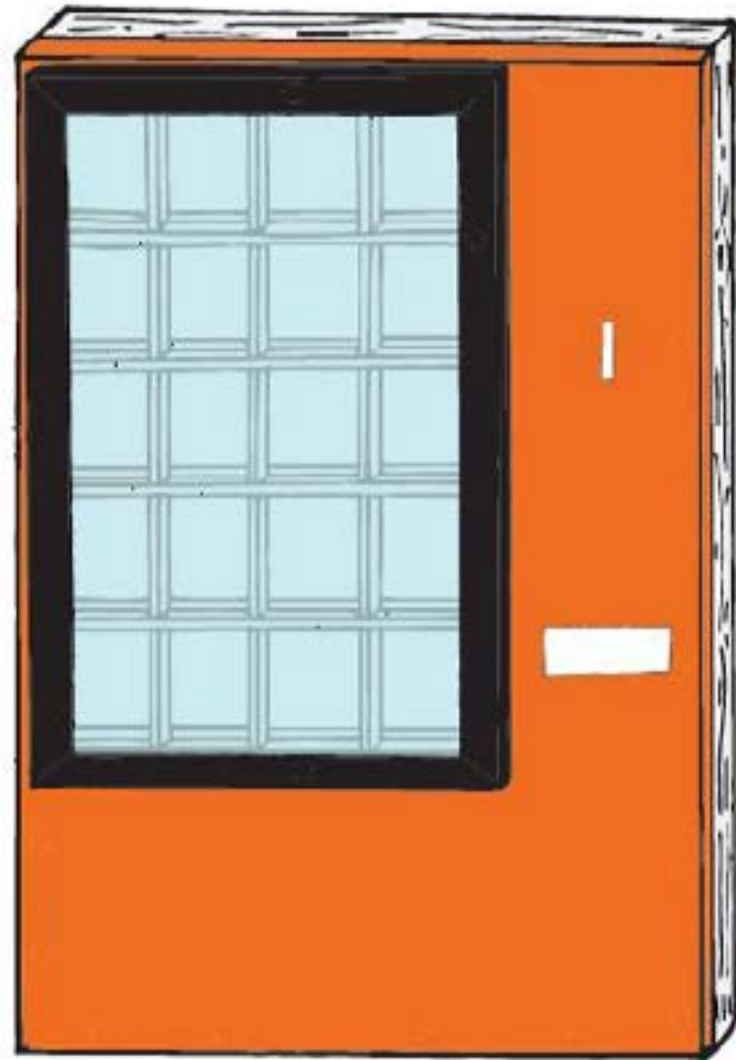


To make the coin slot, all you need is to make 2 slots into the plywood. To do this, I measured a 50 pence as that is the largest coin and a 1 pound coin because that is the thickest. I made my coin slot at 0.5 centimetres in width and 4.5

centimetres in height as this would be big enough for a coin slot. I then also made another slot for the book to come out of. A typical A5 booklet is 15cm in width and 21cm in height. So I made my slot 17cm wide by 3cm in height as that gives enough space for the book to be slotted through.

To make the hole I used a drill to make a small hole and then I got a saw from a metal saw and wrapped some masking tape round it to cut into the vending machine.

2



This is what the machine should be looking like at the moment.

ATTACHING THE WHEELS

For this section, You will need:

Tools:

1 x tape measure

1 x pencil

1 x drill

1 x drill bit

1 x positive ended drill bit

1 x paintbrush

1 x spanner

Materials:

4 x 15cm by 15cm by 2cm blocks of wood

1 x pack of large screws

8 x m6 45mm bolts

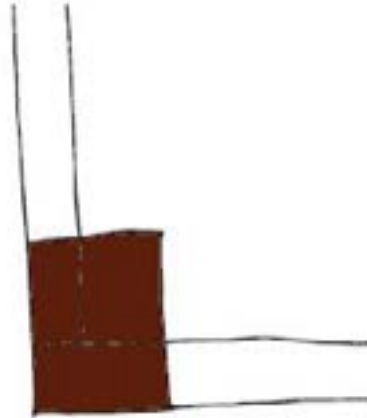
8 x m6 nuts

3 x casters

1 x caster with brake

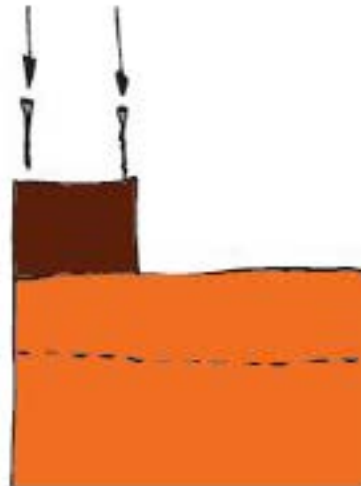
1

To attach the wheels to the vending machine, you will need to acquire some blocks of wood that is around 2cm thick and approximately 15cm x 15cm. Attach the blocks by screwing with 3 large screws into the corners of the timber shell of the vending machine.



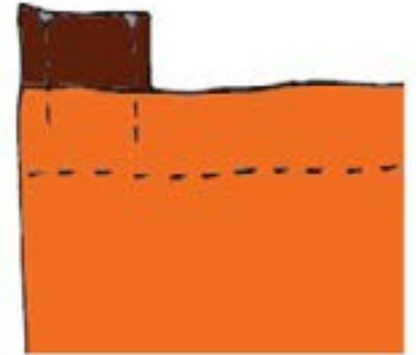
2

Screw in the large screws.



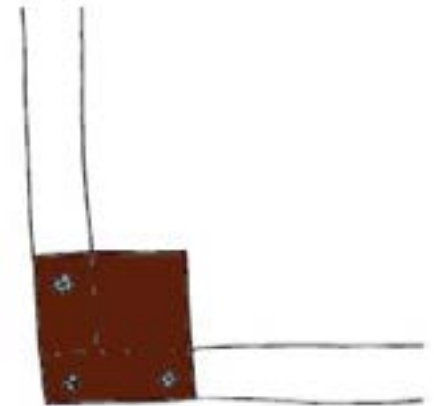
3

Make sure that they are going through into the timber.



4

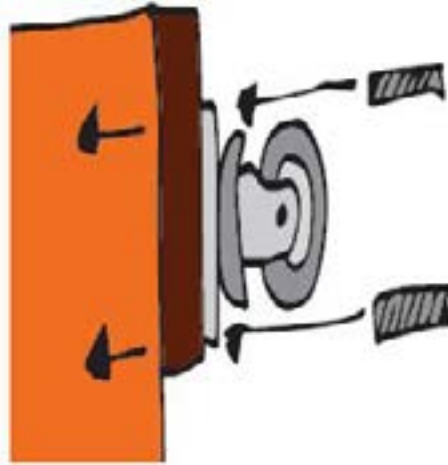
The screws should be looking something like this from the bottom.



5

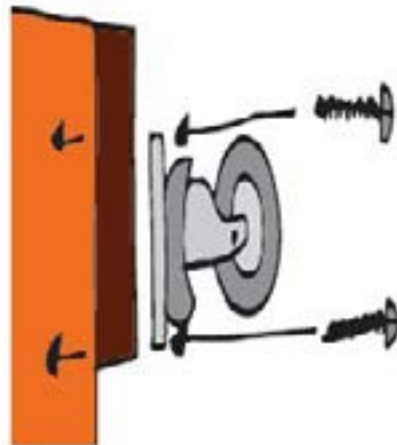
Once the wooden block is attached, grab your caster and mark where the holes need to be for the caster to be attached.

Drill 2 large holes into through the wooden block.



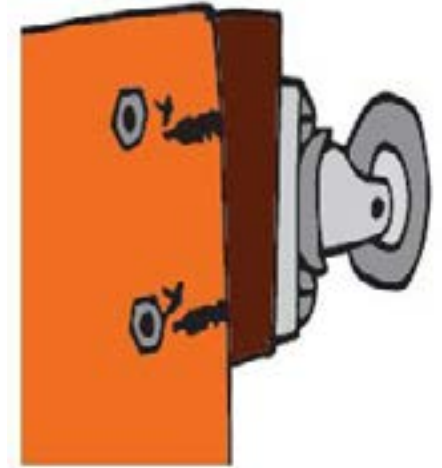
7

Grab your bolts and put them through the holes in the caster and the holes in the block.



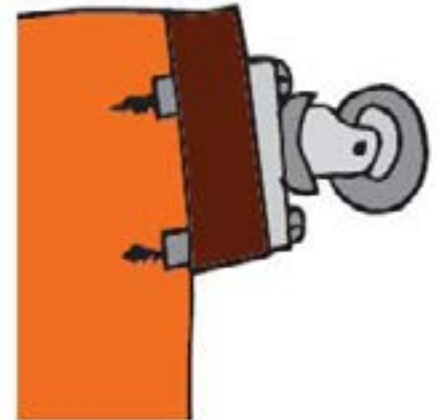
6

Then with the bolt, screw them in place. Use a spanner to make sure they are in place and will not come off.



8

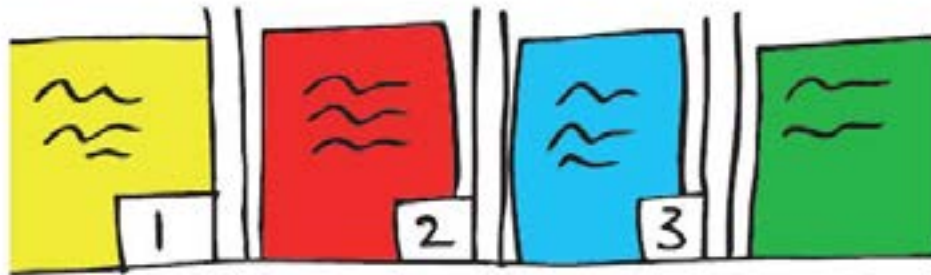
Repeat this on all 4 corners of the vending machine.



HOW THE MACHINE IS GOING TO WORK

I came up with this idea of how the machine is going to work. I found that using a real working coin mechanism and buttons to type in was too tricky. I found another way. I thought what about using a mobile phone.

1



The idea is that you look at what item you want and there is a number in front of with a price.

The customer chooses which item they want. They then read the instructions that will be on the vending machine.

2



They type in a mobile phone number and send a text with the number of the item they want.

In this case, 2.



3

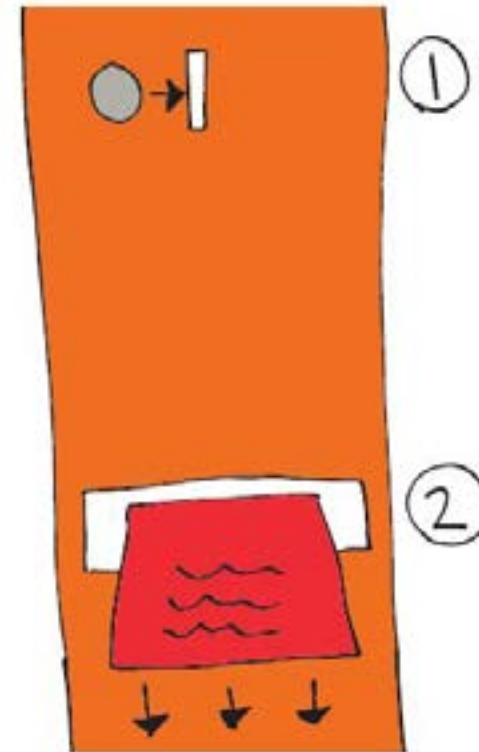
The person in the vending machine receives the text, valid if there is good signal.

4

If the person has not put in the money to buy an item the machine will text back saying the cost. In other words, you text back with the price of the item.



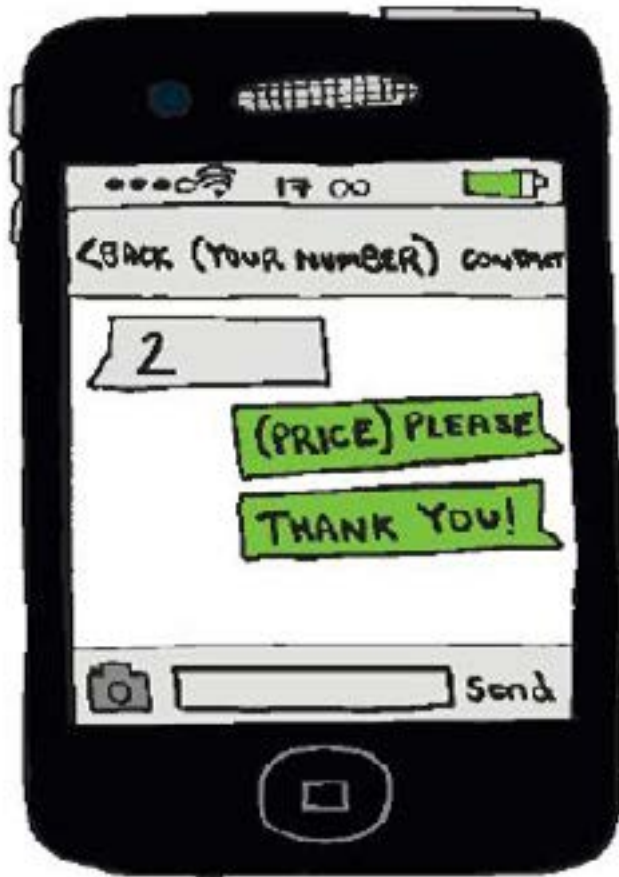
5



The customer then inserts the correct amount of change; make sure you place an exact change only sign on it somewhere.

Once you have received the correct amount of change, you then put through the slot the item they wanted.

6



If you are not too busy, you can then send a text message back saying thank you.

THAT IS IT!

You have now built a lean mean fast selling art machine!

I hope you enjoy your journey!

If you have any queries or additions I can make to these instructions. Feel free to tell!

Thank you and enjoy!

Brendan Reilly

Creator of the Lean Mean Fast selling art machine!

www.brendanreilly.co.uk