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## GENERAL INFORMATION

Wood is a natural material, growing and adapting depending on weather conditions.

Despite the technical drying methods it is, nonetheless, impossible to completely prevent it from some degree of warping and formation of resin and cracks, especially on the outside surfaces.

The varying knot formations are also typical of spruce. These variations accentuate the beauty of wood.

### Is your cabin alive?

It is technically impossible to produce absolutely stagnant material from trees, even by using the most sophisticated production methods, since the material literally grows out of the earth.

Due to constantly changing temperatures and the varying level of moisture in the air during the course of the year, combined with the rain, wind and sunshine, wood will always shrink and swell alternately, as the pores absorb moisture and dry out again. It is possible that the timber may warp a little, but this does not affect the

stability and functionality of the structure. The swelling and drying of pores in the wood also leads to wall settling. And this is the reason why doors and window frames are not fixed to the wall logs but loosely inserted into the walls. This is the best way to ensure that the natural wood movement does not cause any damage.

### Fast aging prevention

The timber we use is absolutely untreated, except for the impregnated floor beam parts. If timber is exposed to harsh exterior climates, it needs to be protected from the damaging effects of weather changes, sunlight, moisture and biological infestation.

It means, that it will turn greyish over the years. To guarantee the longevity of your Log Cabin (which should be at least a lifetime), we recommend to treat it with three coats of quality preservative. It is not advisable to paint the wood before assembling the logs – this is best done when the cabin is already constructed and the weather is fine. However, if you wish to paint odd parts in different colours, this should be done before the cabin is assembled.

An adequate ventilation and the prevention of water penetration are the best ways to protect wood from rotting.



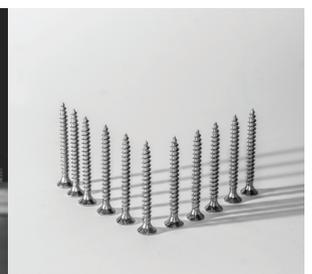
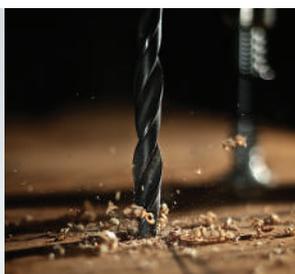
## BEFORE STARTING

### ROOF COVER

This cabin is only the main part of the completed cabin. The package includes: windows, doors and all the necessary wooden parts. Such fixing components as screws, nails, etc. are NOT INCLUDED. If the cabin will stand under open sky, then the roof cover is absolutely crucial, however it is NOT INCLUDED as well. If you still don't know what kind of a roof cover to choose, we recommend you to contact your dealer for advice.

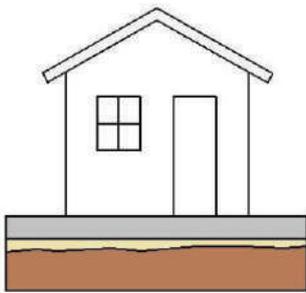
**Before starting the assembling make sure that you have all the tools and items that will be necessary:**

Tools that will be necessary for assembly:	Items that will be necessary for assembly:	Tools and items that would be useful for assembly:
<p><b>Hammer</b></p> <p><b>Screwdriver</b></p> <p><b>Ladder</b></p> <p><b>Saw</b></p> <p><b>Level</b></p> <p><b>Roulette</b></p>	<p><b>Nails</b></p> <p><b>Screws</b></p>	<p><b>Knife</b></p> <p><b>Drill</b></p> <p><b>Pliers</b></p> <p><b>Rubber hammer</b></p> <p><b>Chisel</b></p> <p><b>Sand paper</b></p> <p><b>Wood glue</b></p>

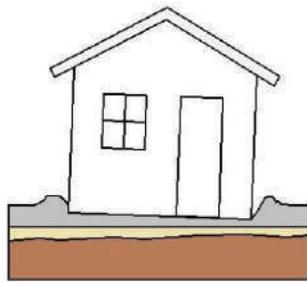


# 1. FOUNDATION

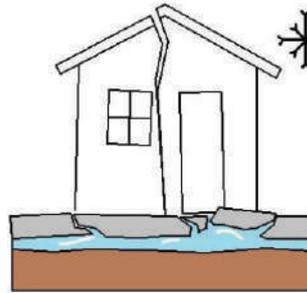
The most important task before your Log Cabin is assembled, is to have the base prepared properly.



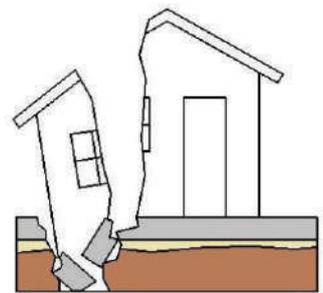
Strong Base



Soft Base



Water under Base



Empty pockets

To ensure complete stability, it is important that the foundation is level and flat. Also it's good to make sure that the ground permeates water well and that the frost heaving is prevented.

**Tip:** An even base is the main step for a successful assembly: log walls will be easy to assemble, doors and windows will work much better.

As an alternative, we recommend solid concrete slab or a concrete sole.

*If you have any doubts about the foundation, we recommend you to contact your dealer for advice.*

## DEPENDING ON YOURTYPE OF CABIN BASEBEAMS CAN HAVE TWO TYPES OF LOCKS :



Flat lock (No lock)

Half lock

**Tip:** It is recommended to fix the foundation to the base so it will stay stable and in one place.

**Tip:** Wooden parts are not very close friends with humidity, even if those parts are impregnated, so it is recommended to separate them from concrete base with any kind of waterproof layer of your choice.

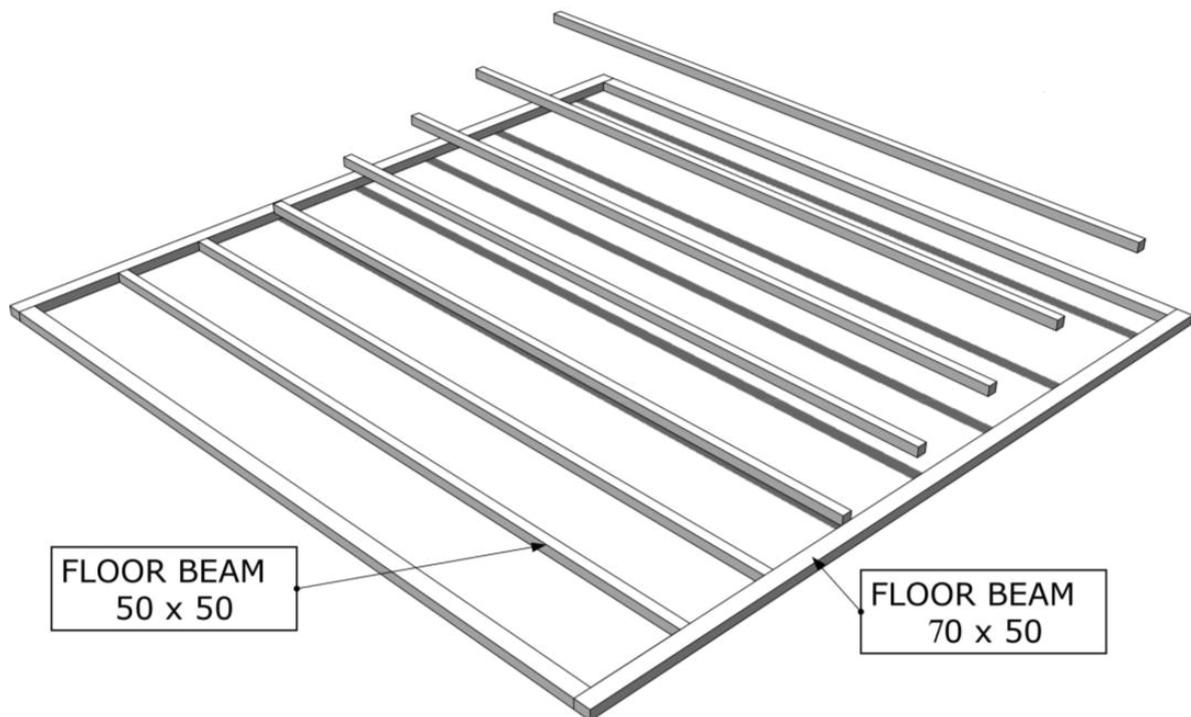


Make sure that all the corners of the construction you have screwed together have an exact 90° angle.

1. Start with the side beams (FLOOR BEAM 70x50), put all of them in to square shape as it is shown in the 'Base Plan', DON'T SCREW IT YET.

2. Then place all 50x50 beams in a certain distance from one another as it is shown in the 'Base Plan'.

3. Screw them all together

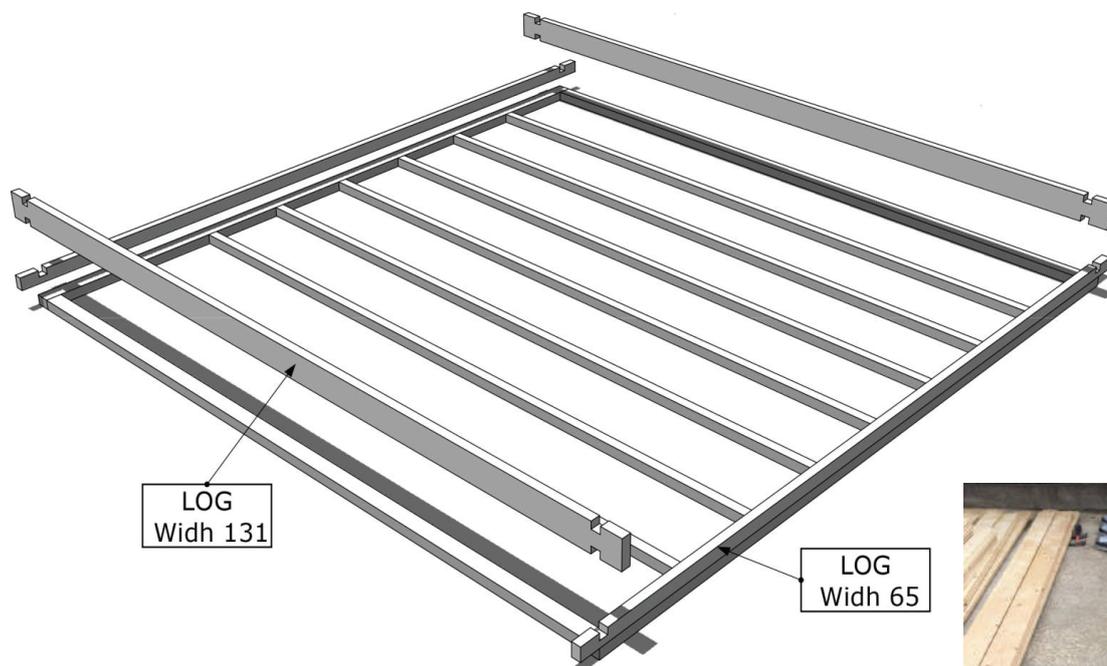
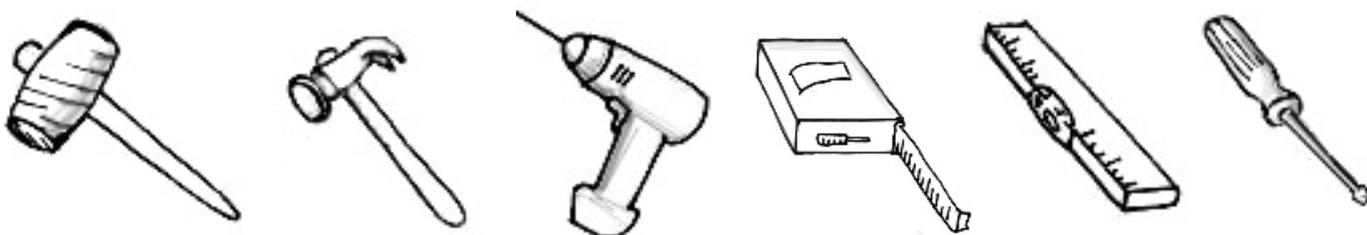


## 2. FIRST LOGS OF YOUR CABIN

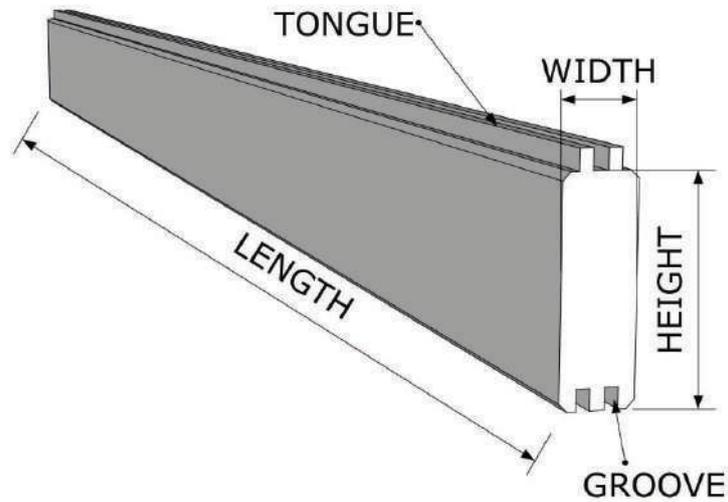
As you might have noticed, not all the cabin logs are 131mm in width, a few of them are 65mm.

**Tip:** The placement of the first logs is very important, because a good start is the key to success.

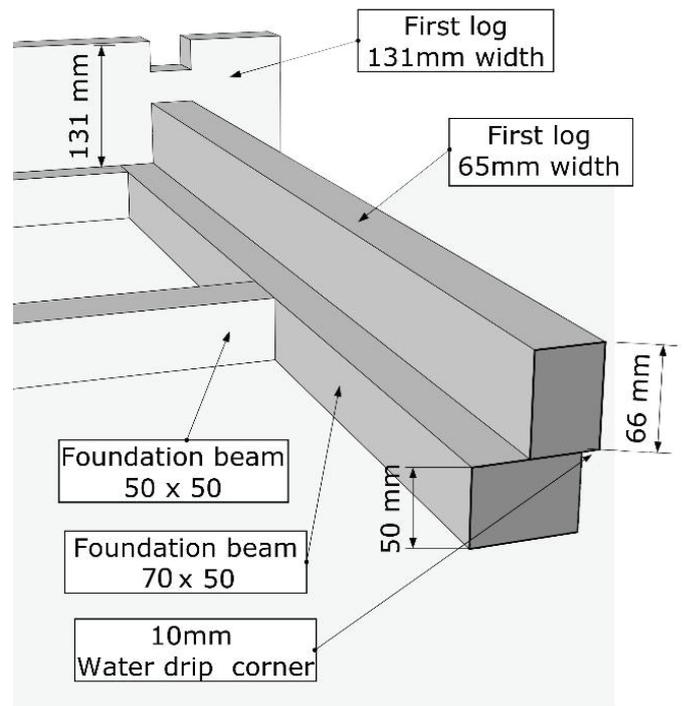
Tools that will be useful or necessary:



**ALL LOGS HAVE TO BE PLACED TONGUE UP.**

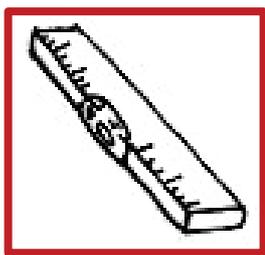


1. Place all the first logs in a correct order.
2. Make sure that they are placed exactly in the middle of the base length with about 10mm ridge for rain water dripping (as shown in the illustration).
3. Screw the first logs in place.

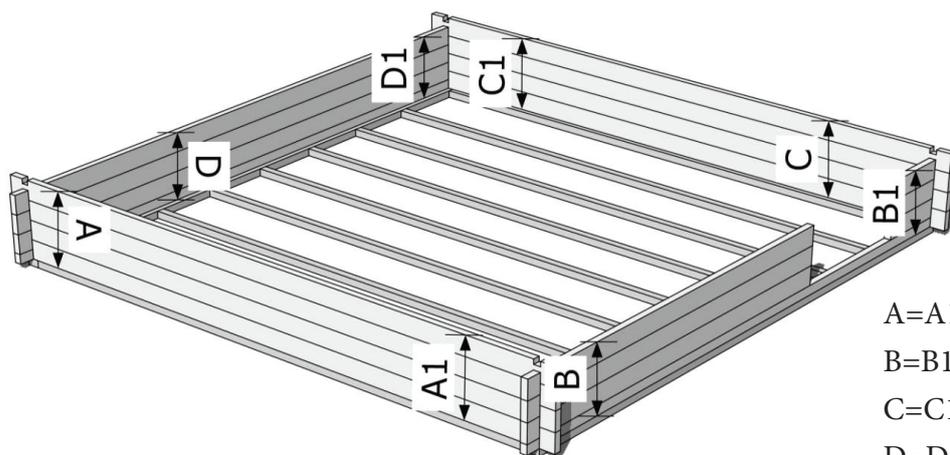


Continue on assembling by using all the necessary Axis Plans

We strongly recommend that after every 3 to 4 logs assembled, you would check the construction level and/or height differences



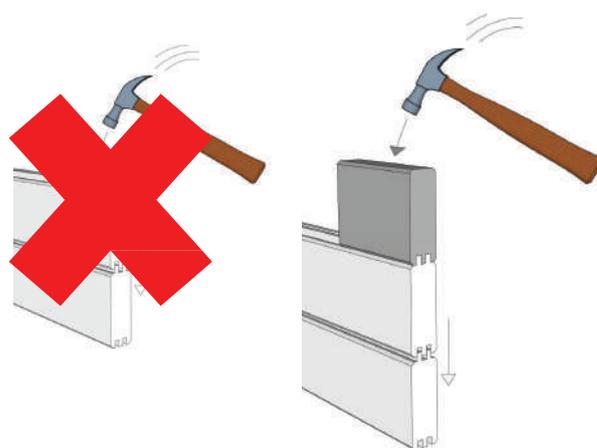
**LEVEL**



A=A1  
B=B1  
C=C1  
D=D1

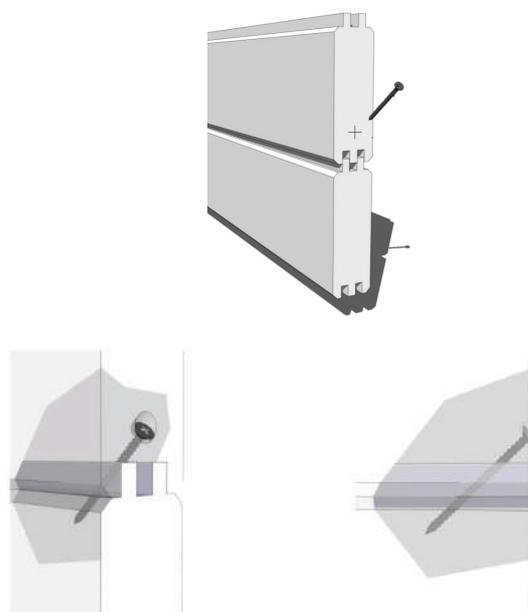
If there is at least a 2mm mismatch between any of the corners, it might have serious consequences, because later, as you apply more and more logs, the error will become more visible and it might even lead to a mismatch of 1cm or more and you will find yourself in trouble while assembling the roof.

To fix it, use a hammer with a piece of wood to knock the logs in to place.



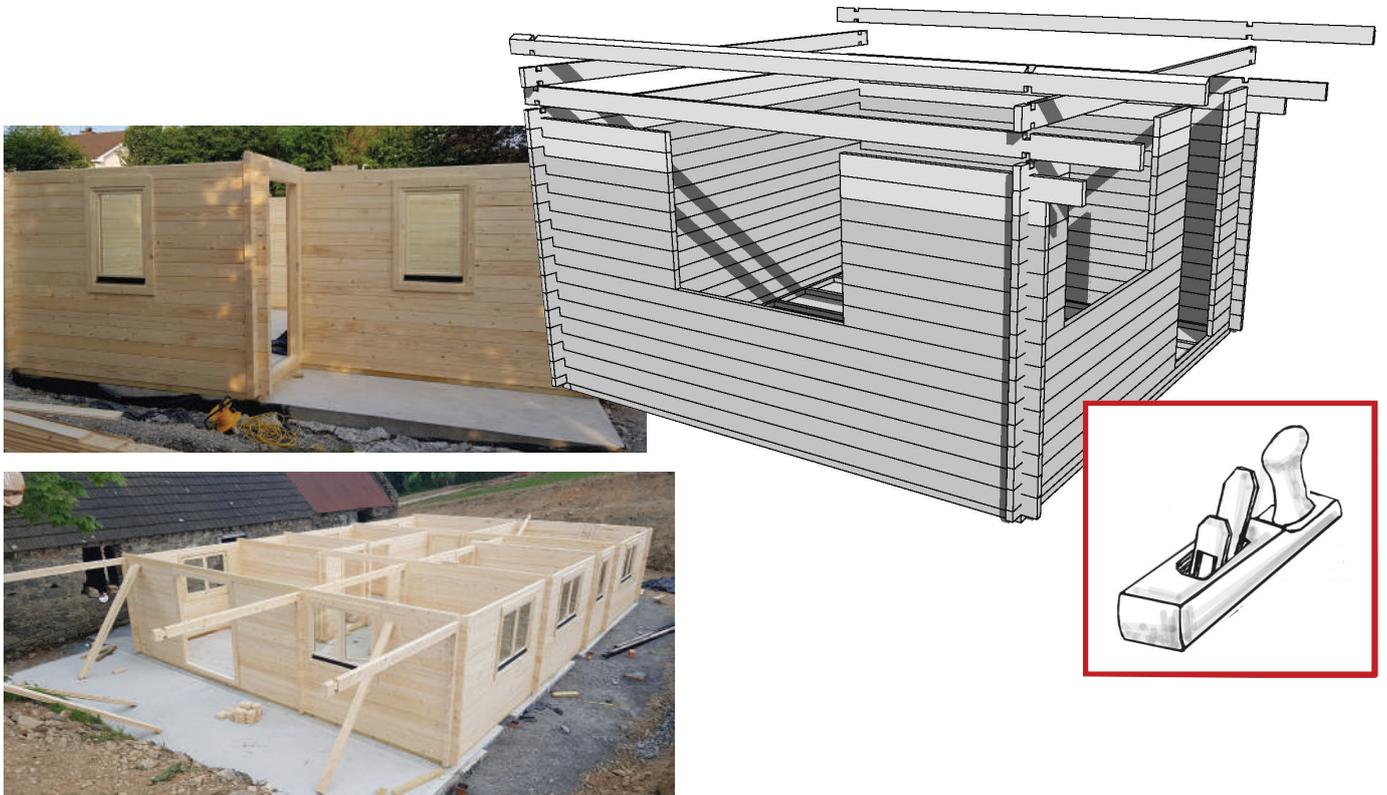
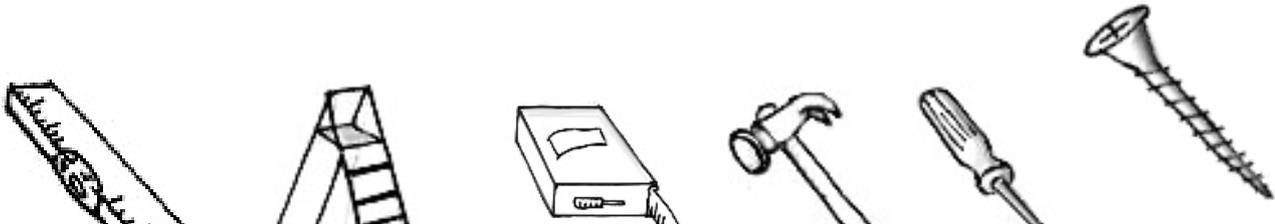
If the hammer and wood technique doesn't work – no matter how many times you knock, it bounces back and wouldn't stay in place as you would like it to - you will have to screw that log to the lower one (see the picture below).

**Tip:** Don't forget to check the level and height differences every 3 - 4 logs assembled



### 3. FINAL WALL PARTS

Tools that will be useful or necessary:



The parts at the very top have a unique angled corner. These are the parts that will be in contact with the roof. It might be that you will have to adjust the corner so that it would fit better with the roof. You have to be prepared for that. Fixing doors in to your cabin is not as hard as it might seem; for your own convenience, we would recommend you to mount them only after at least 5 logs are applied.

**Tip:** Do not hurry with the very last two cornered parts, these parts have to be even with the triangle of the roof.



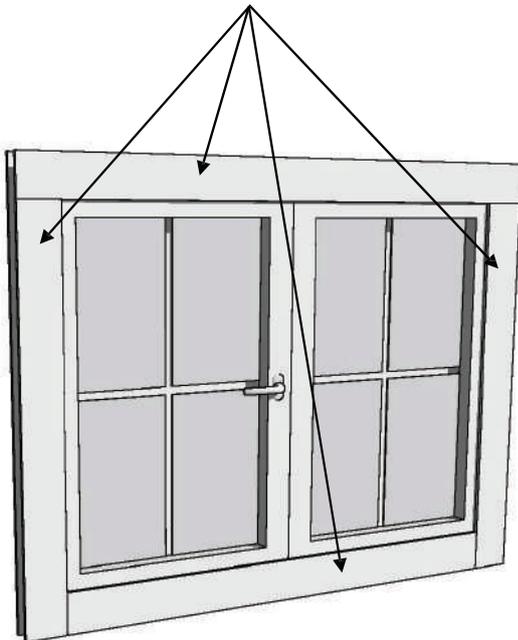
## 4.DOORS AND WINDOWS

Tools that will be useful or necessary:

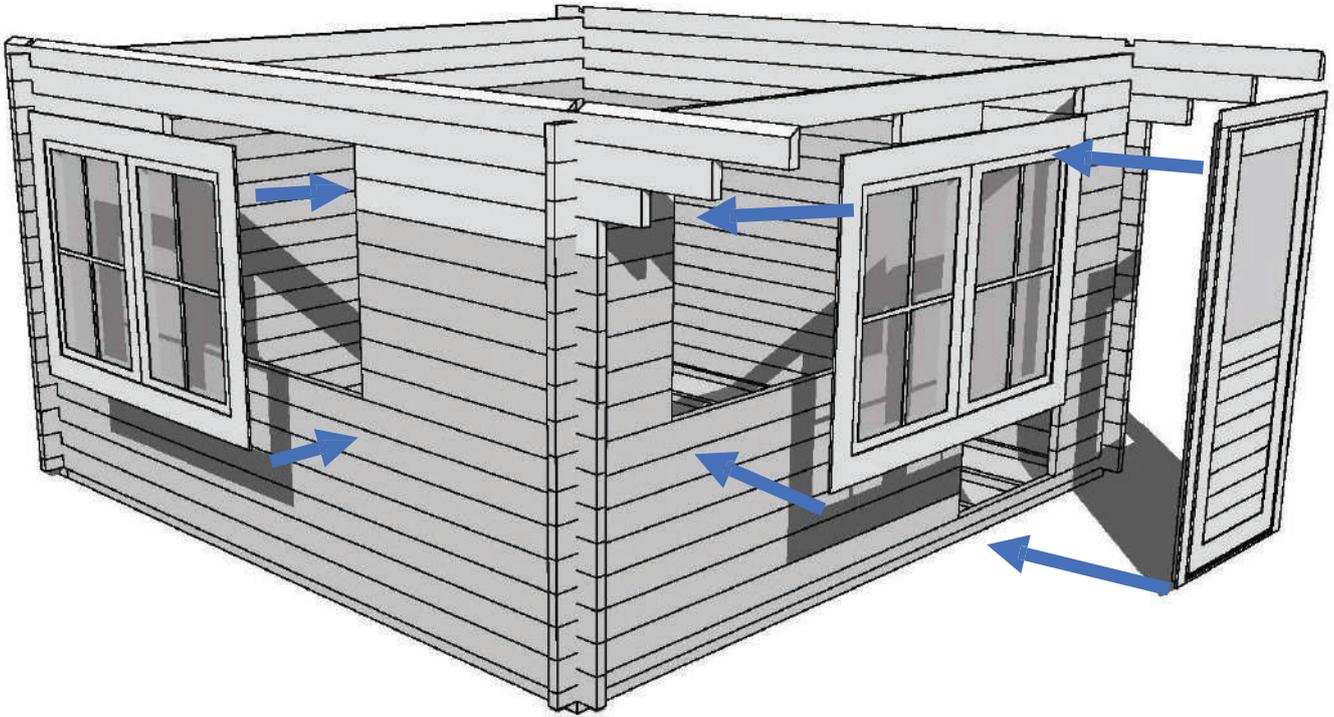


Before mounting outside windows and door, it is necessary to prepare them for water insulation.

1. Unscrew internal window/doors edgings.
2. Apply silicone on the external edgings inner side.



Place doors and windows in their places and screw back the inner edgings



## DOORS

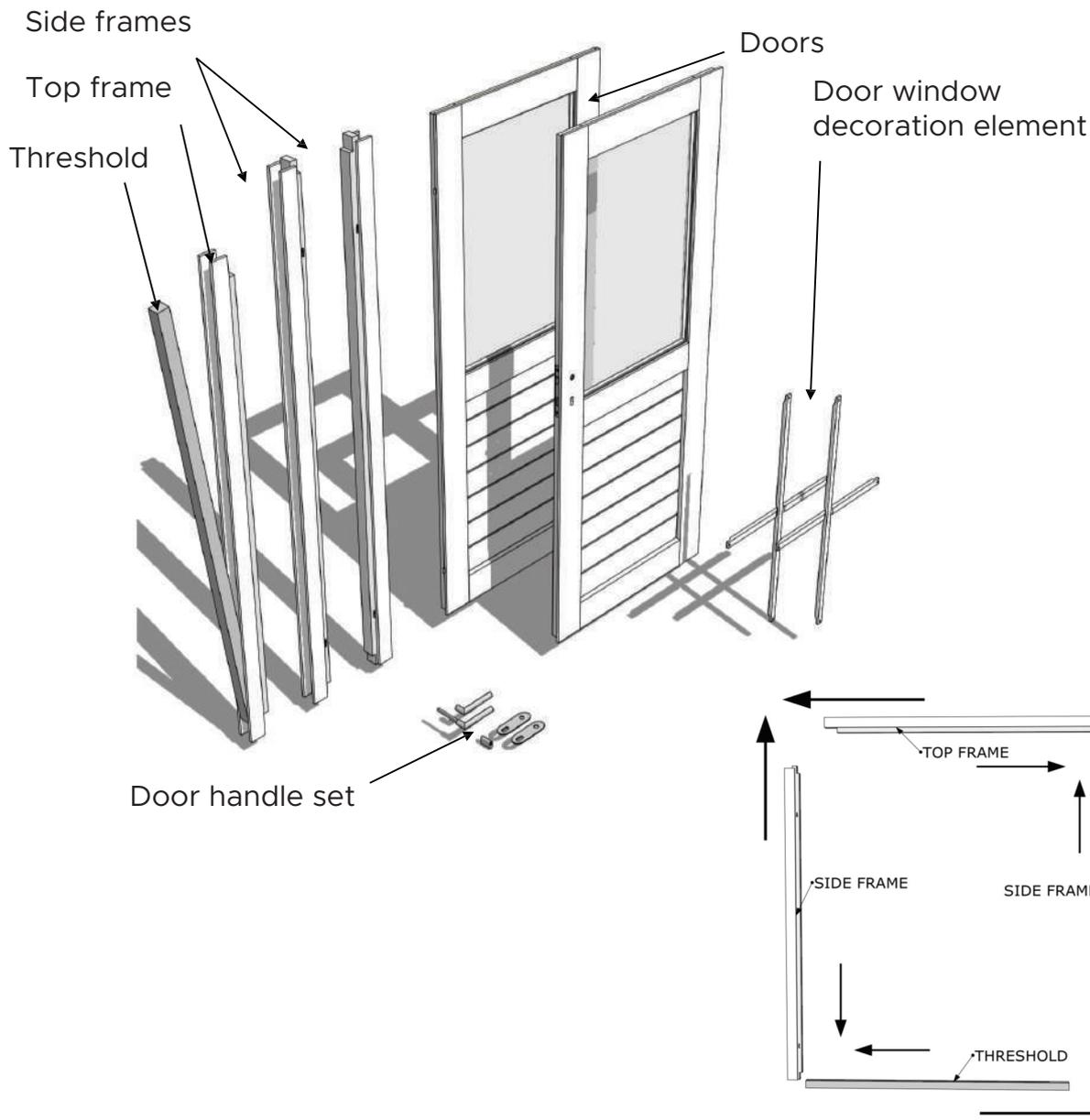
**Tip:** Usually the door opens outward, from left to right.

### SINGLE DOOR

As you might have noticed, the door comes fully prepared for assembly, all you have to do is to silicone it and slide it to the right place. Also, be sure that you are fixing the right side of it. The door frame has an adequate tolerance so that the wall log would fit in smoothly. If it doesn't fit in easily, ensure that the logs at the sides and the battens of the frame are straight. The bottom of the doorsill should be absolutely level with the base.

If the frame does not fit around the logs, you will need to cut the wall logs leaving about 5mm gap between the door and the wall.

**Do not use too much strength in order not to break the frame.**



## DOUBLE DOOR

At this point, the door frame has to be put together at site using nails or screws. Screw the side, upper and bottom parts together. Make sure that the distance of the side frames is exactly the same at the top and the bottom. The door frames are fixed straight into their places from above (hinges outside).

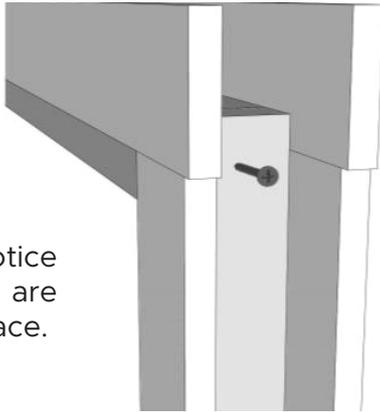
Further adjustments can be made by tightening and loosening the hinges.

Do not nail or screw the door and window frames to the walls, because it might be damaged due to the wood expansion and contraction.

First, find all the parts of the frame and doors. When you have found all of it, examine it, make sure that you know exactly which part is the side frame or which one is top frame. You will find threshold placed in the top frame, take it out. Look at the drawings and find out what shape of door you have there, knowing that will be easier to assemble it.

### YOU ARE READY TO START

**1.** Take all the frame parts and start with furthest corners, as it is shown in the picture, first assemble top frame with the side frame and threshold with another side frame.

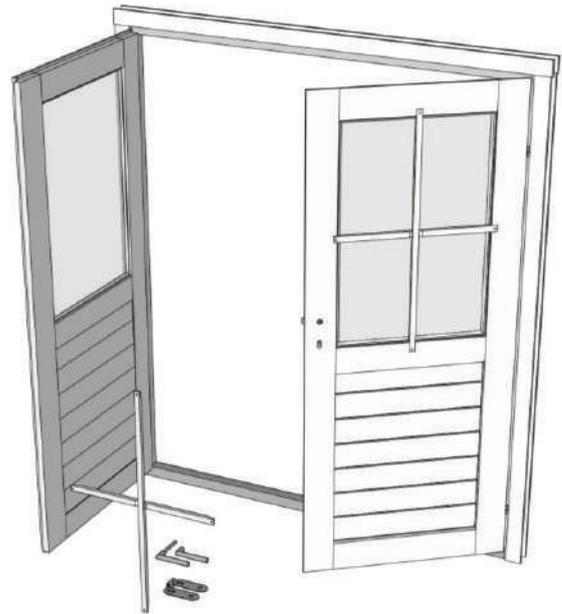


You will notice that screws are already in place.

**2.** Then, screw both of them in to a perfect rectangle. That is your door frame, when it's time place it in to your log cabin.

It's obvious that doors themselves belong to the frame, but don't rush! Mounting doors on to the frame should be the very last step in your log cabin's assembly.

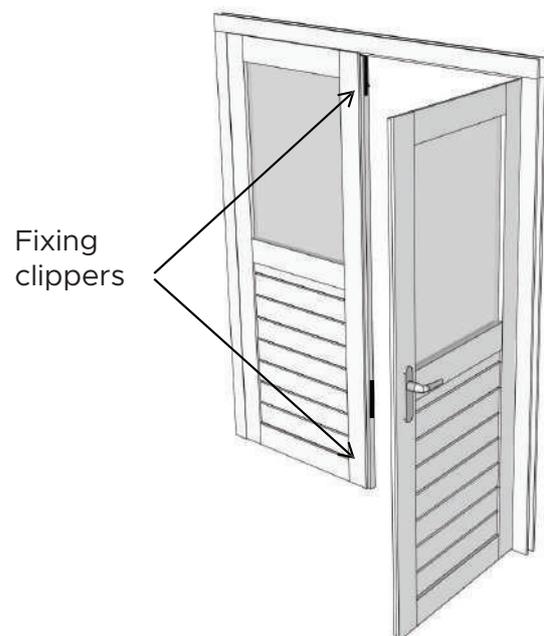
If you are not going to finish the assembly in one day, it is recommended to place the main piece of finished doors under the open sky, so it would be kept under the same conditions as all the rest of your cabin's parts. That will make sure that it will get the same darker color tone from the sun as all the rest of your cabin.



## THE PRINCIPLE OF DOUBLE DOOR OPENING AND ADJUSTING

The double door has two opening parts, the first one opens with the handle, another one has a fixing clipper mounted on top and bottom of it (see the picture).

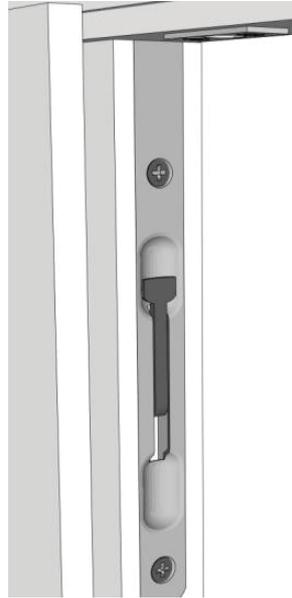
To open both sides, first open the part with the handle. Then the lever of a top fixer needs to be lifted up, and the bottom one lowered down (see the pictures below).



**CLOSED**



**OPEN**

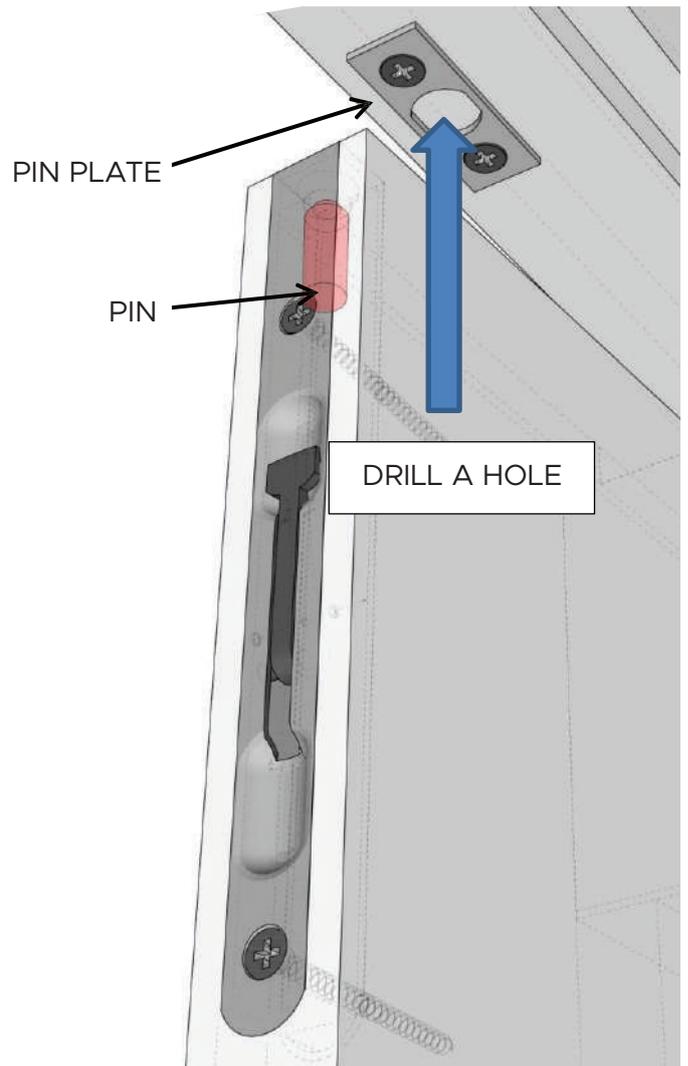


## ADJUSTING

Note that the pictures represent only the top fixer. Bottom works the same way.

When the door is fixed in place, you have to adjust the locks.

Carefully measure the exact spot where the pin will slide in to the door frame. Drill the hole and screw the pin plate in to the place. Check if locks work properly.



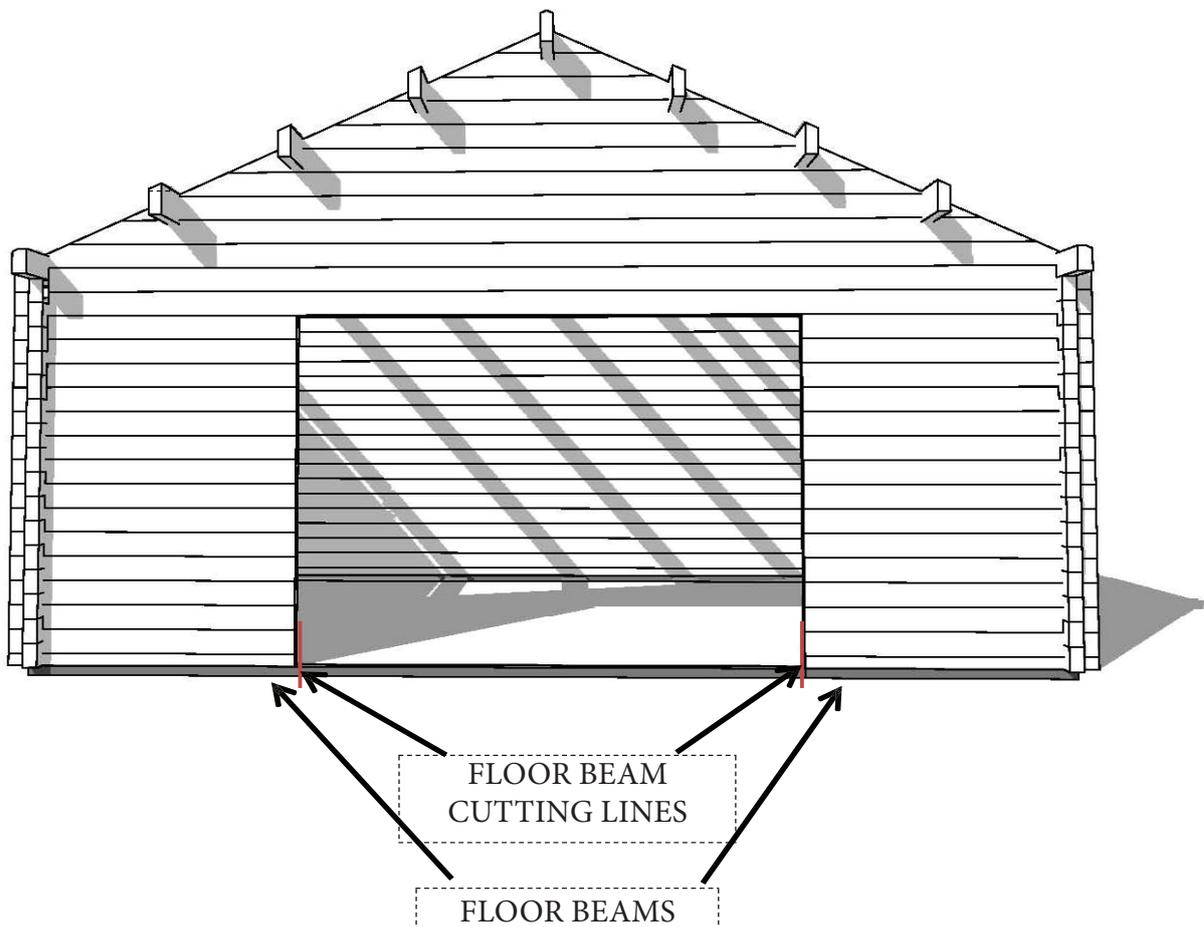
## GARAGE DOOR

It's not a secret that the main function of this type of building is the car parking. Because of the comfort, the door has to be as close to the ground as possible, and we have a special technique that is not clearly represented in the drawings.

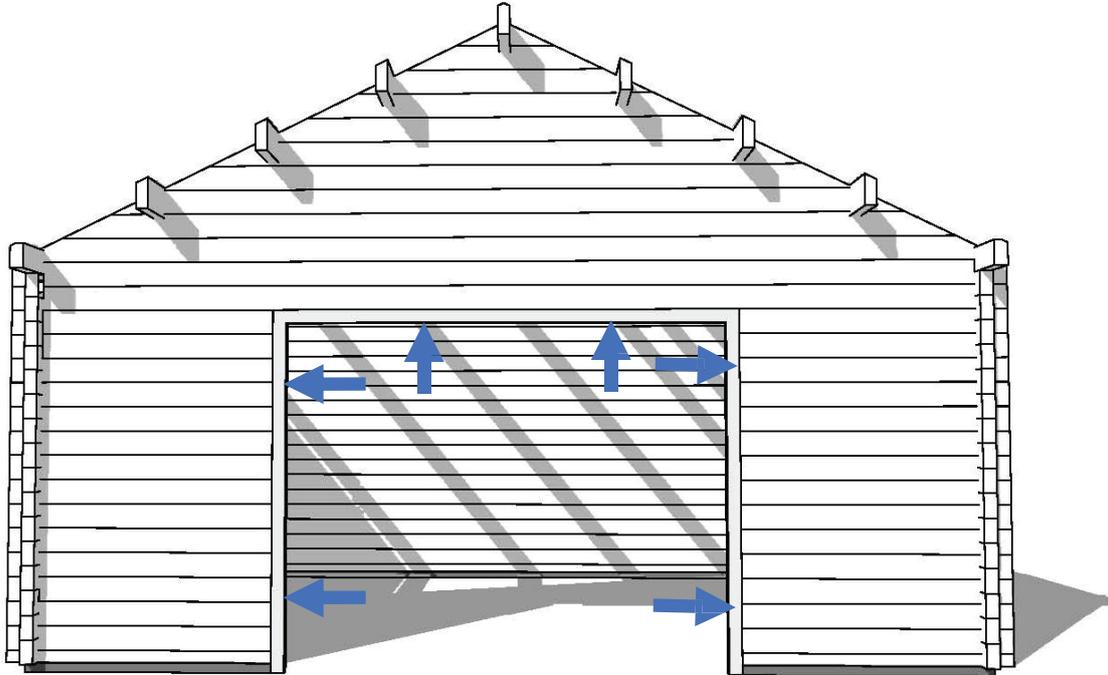
The key thing is the floor beams. As you can see on the beam plan there are no cuts in it, it's just a solid square, that's why you have to make some changes to enjoy a smooth entrance with the car.

Carefully study the drawings until you are able to predict the exact location of the door: draw a cutting line on the beam and make sure that later, when you apply first logs of your garage, it will fit perfectly.

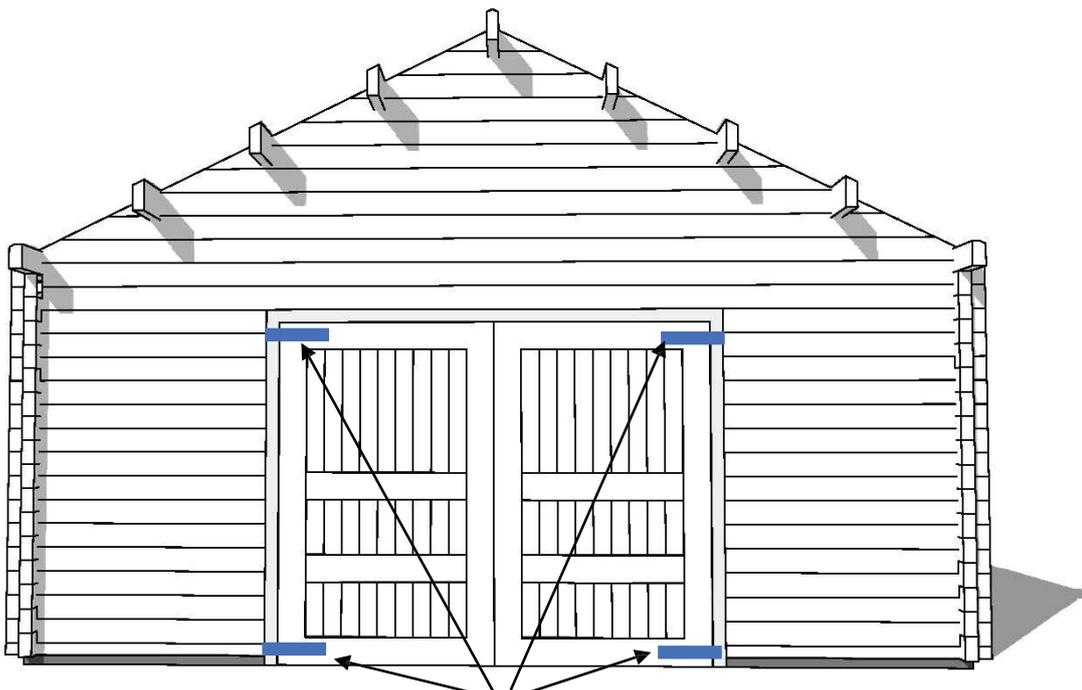
Cut the floor beam at marked places and start the assembly.



After that you need to fix the door frame. Place the door frame pieces in to right places of the opening and screw them to wall



When the door frame is in place time to fix the doors. Doors comes separately from hinges, so you can adjust door height, or straightness on the assembly site



## TILT & TURN WINDOW WORKING PRINCIPLE (OPENS INSIDE)

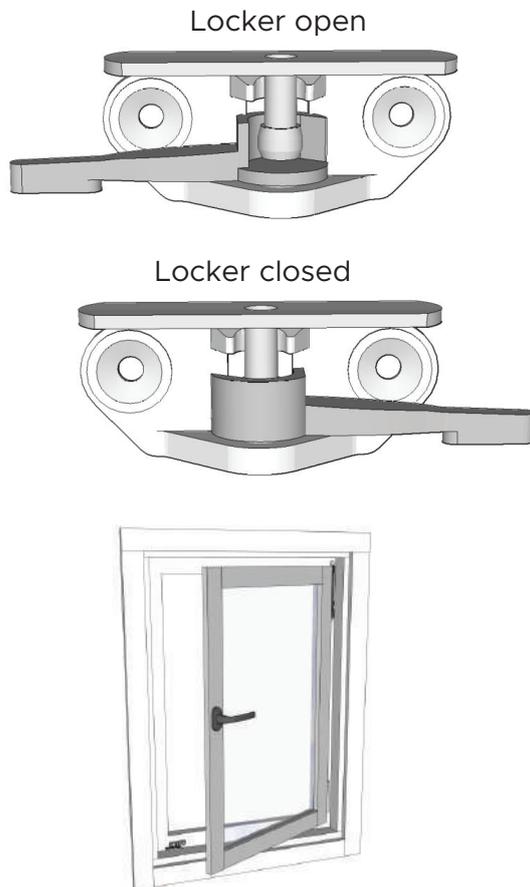
There are three main points to know:

- the handle
- the hinge
- the locker

Two ways to open the window:

- to tilt
- to turn

**Turn opening**, switch locker position to open



**Tilt opening**, press the hinge clipper to release the rod. The locker has to be closed.



## TURN WINDOW WORKING PRINCIPLE (OPENS OUTSIDE)

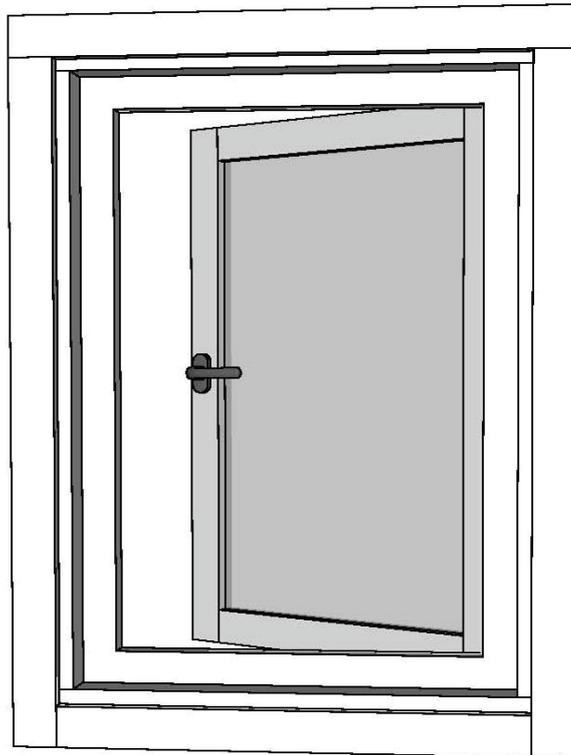
There is one main point to know:

- the handle

One way to open the window:

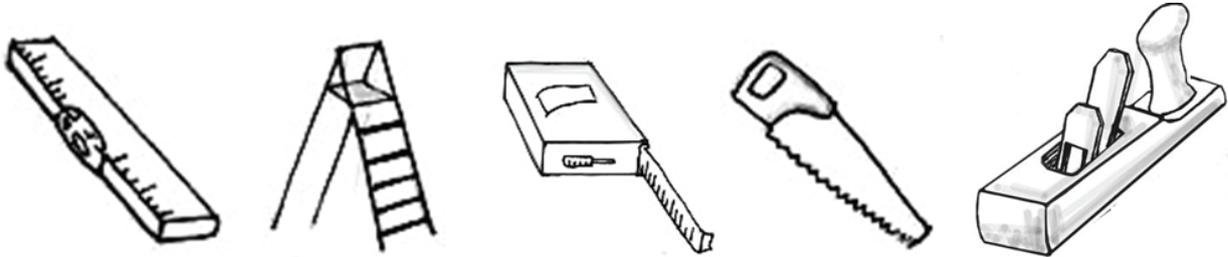
- to turn

**Turn opening**, use handle to open the window



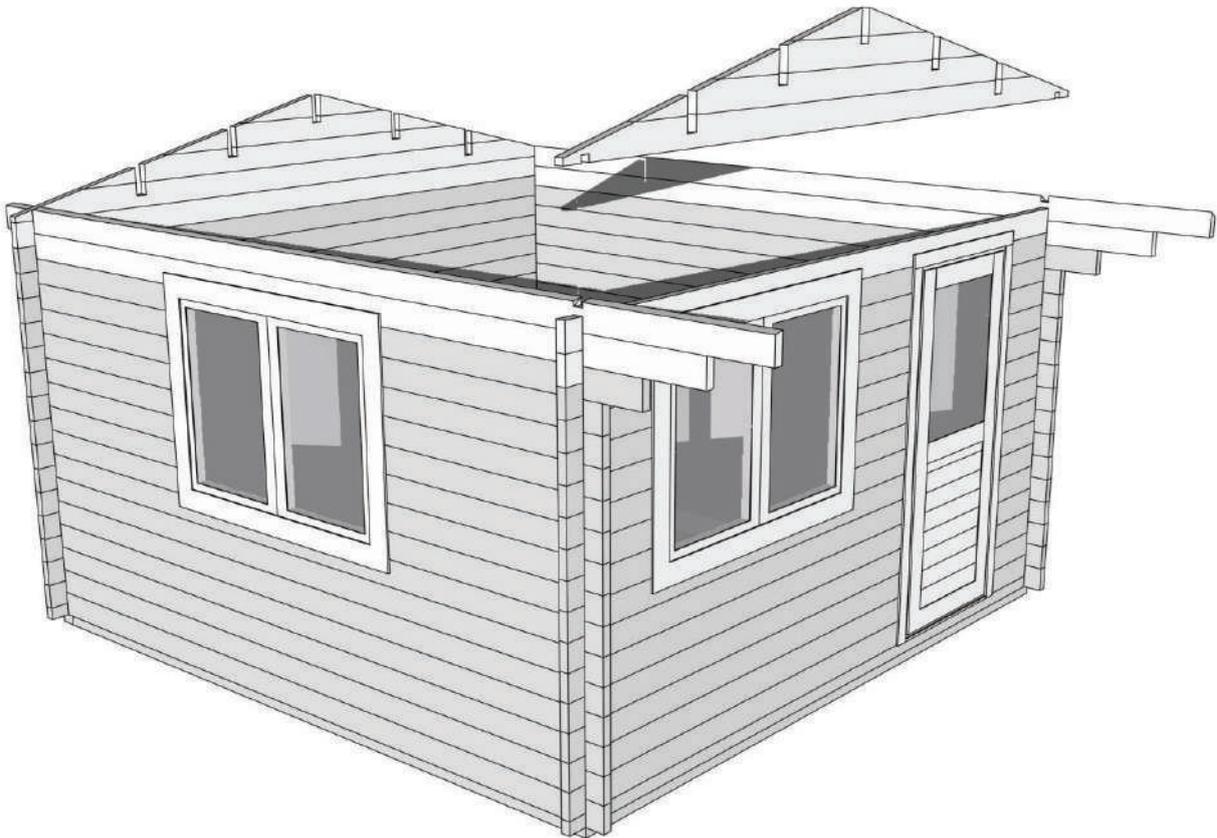
## 5. ROOF TRIANGLES

Tools that will be useful or necessary:



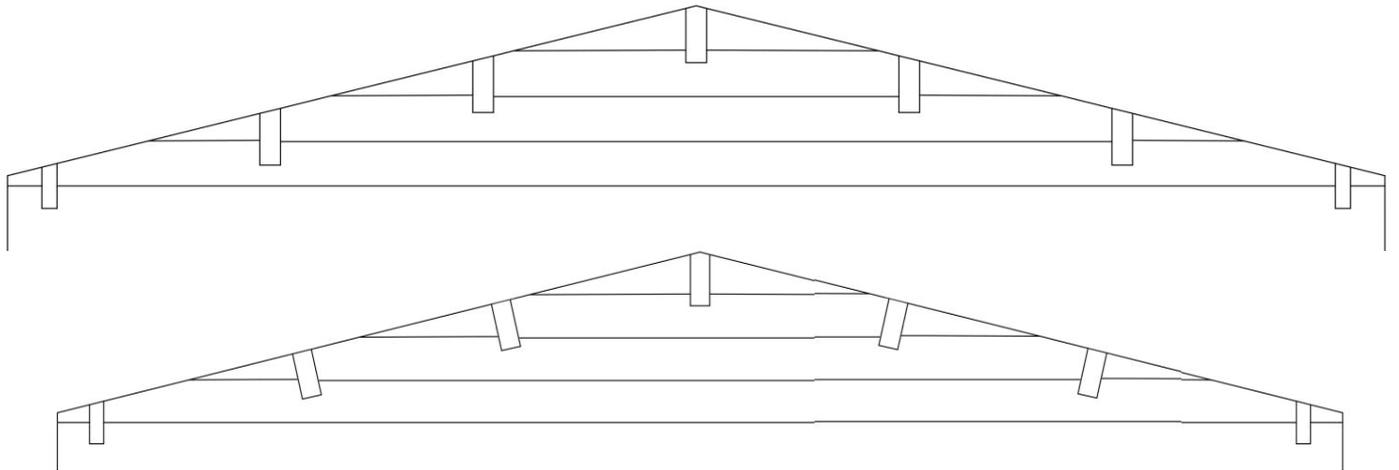
### CHECK THE FINAL LEVELS AND HEIGHTS

Carefully attach the triangle on top of the wall and fix it in place

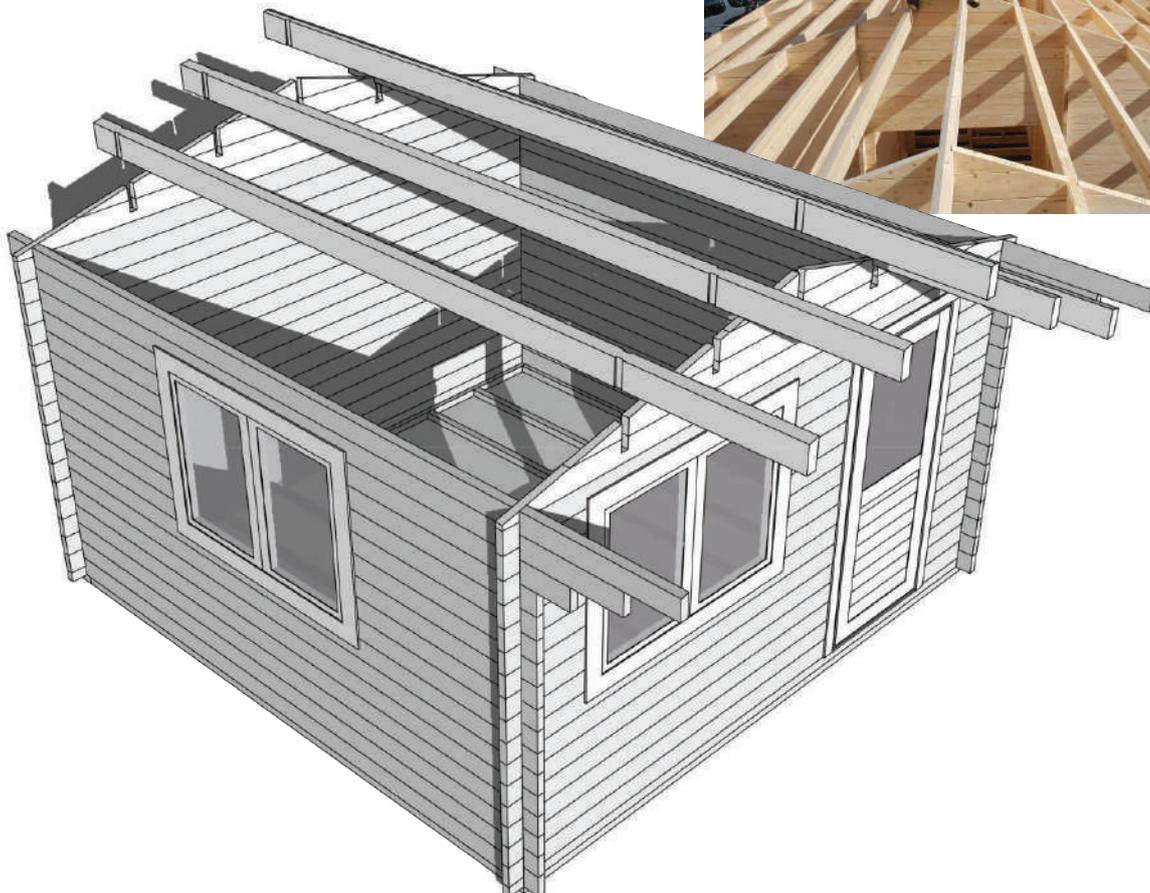


## 6. ROOF BEAMS

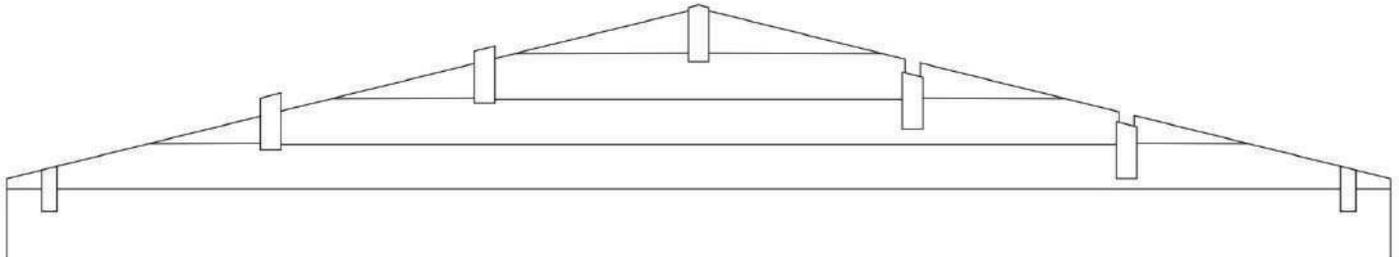
**Tip:** There are two types of roof beams: Vertical and Angled



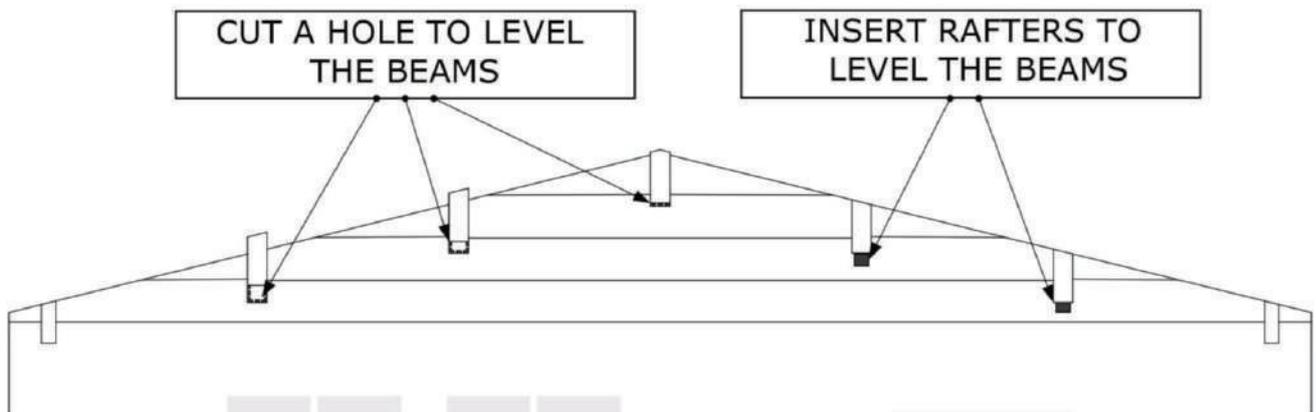
First just put all of the beams in to their places on a triangle.



All the beams have to be in one line with the roof triangle



If there is a mismatch you have to fix it, because later on you will have problems with the roof boards



Depending on the type of mismatch, you should either cut deeper holes in the triangle, or add some rafters (any piece of wood you can find around) to lift the beam.

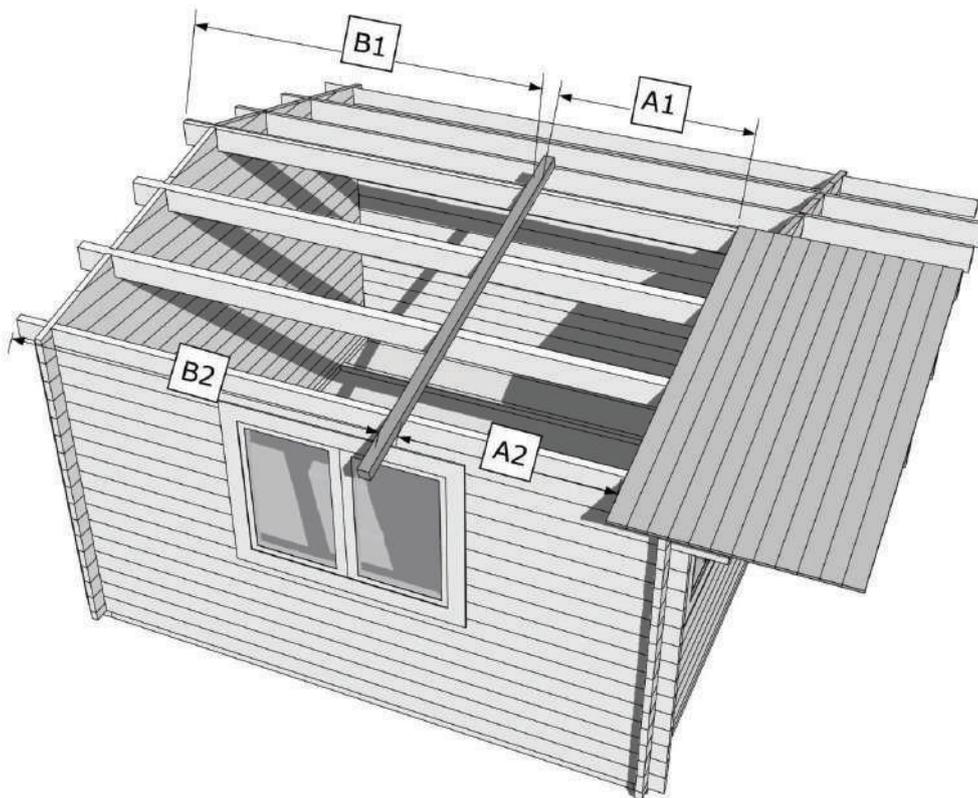
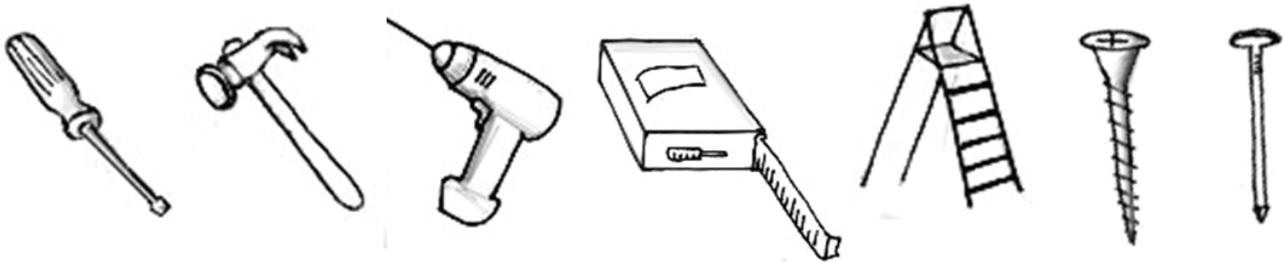
If the cornered wall parts in a triangle, are not in the same line, it has to be adjusted.

**Tip:** Before adding rafters, make sure that they are stable, because they will stay there.



## 7. THE ROOF

Tools that will be useful or necessary:



First thing that needs to be pointed out is that you will need a straight log or a plank, which will be fixed in the middle of the roof; if  $B1=B2$  you will be able to check the measurements  $A1$  and  $A2$ .

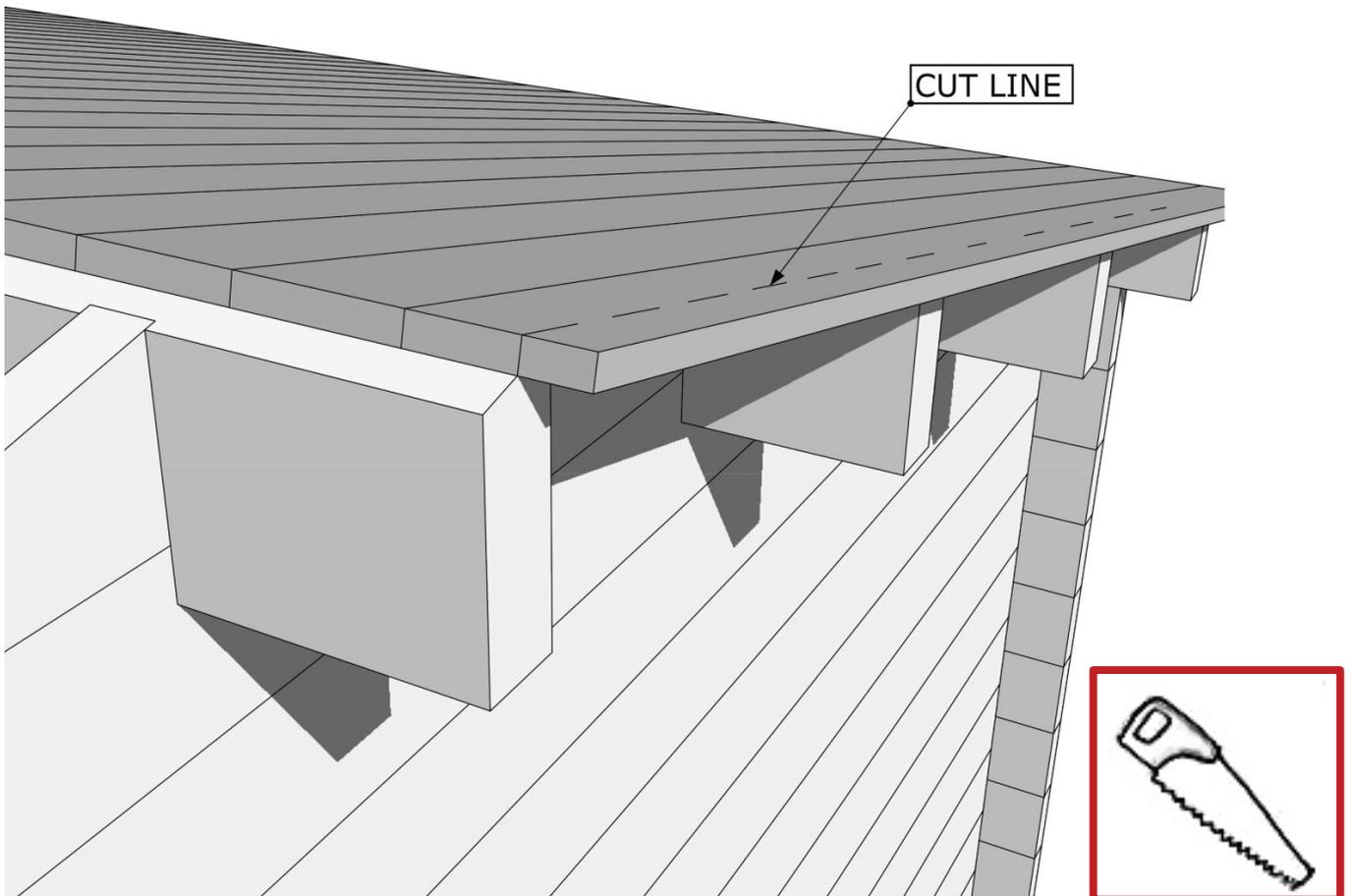
**The main rule:  $A1=A2$**

We recommend you to start in the front side and continue by moving backwards. All the roof boards have to be fixed side by side and checked for any mismatches.

After you reach the middle plank that was used for measurement, unscrew it and continue with the rule:

**B1=B2**

Keep assembling one side of the roof until the edge, it might be that you will need to cut the last plank in order to adjust the width.



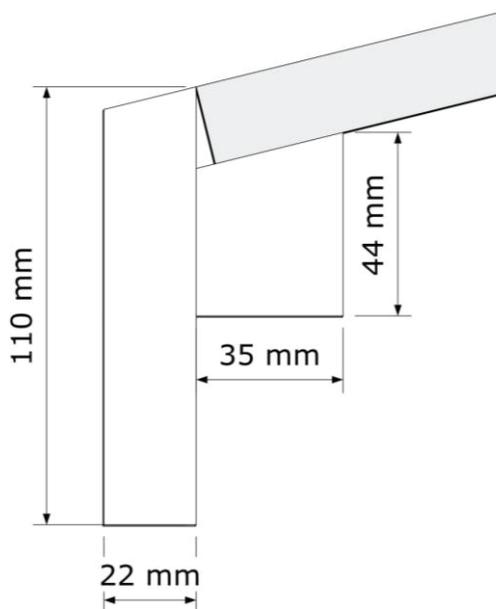
Use the same strategy assembling the other side of the roof.

## 8. EAVE FASCIA

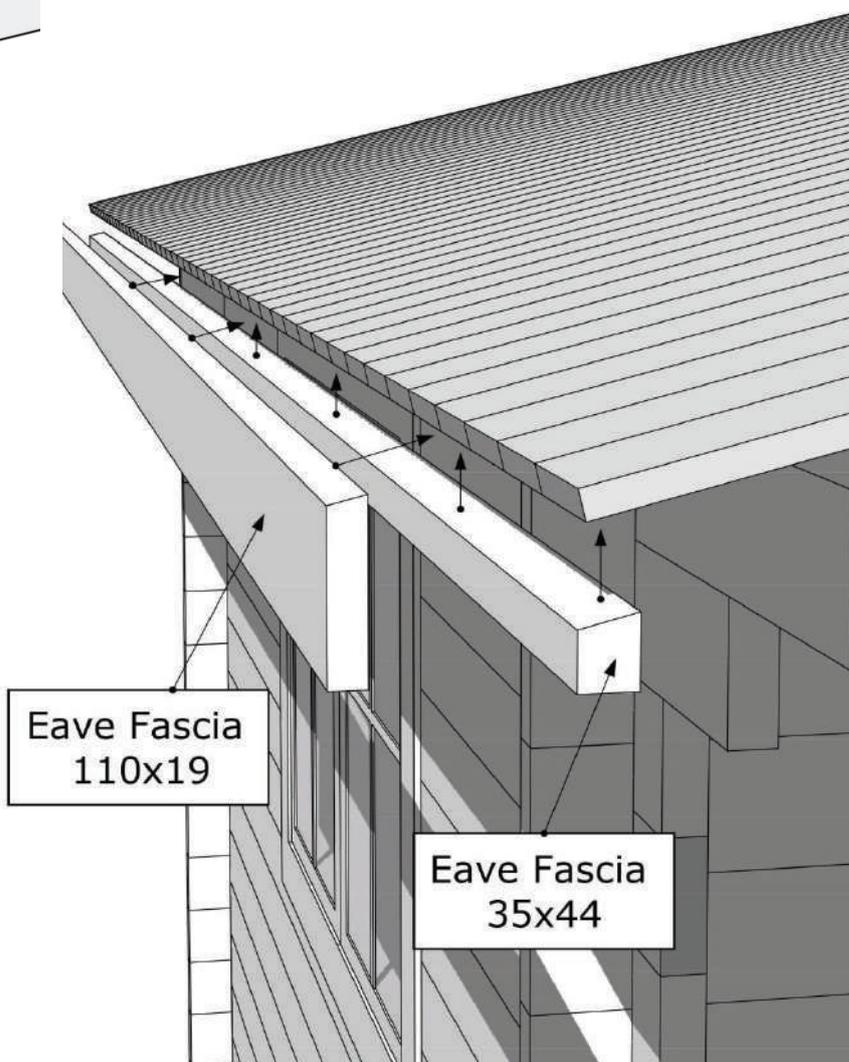
Tools that will be useful or necessary:



At this point, the roof has to be prepared for Apex Fascia and Eave Fascia (it's a plank that is fixed on the side of the roof).



Start with Eave Fascia, fix it as it is shown in the pictures. The side part is meant to be absolutely vertical for the rain water gutter mounting (optional).



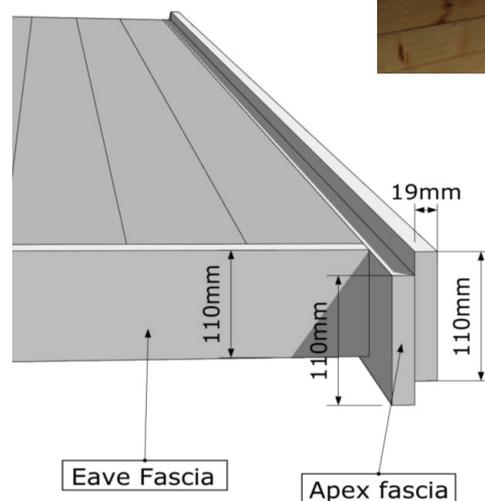
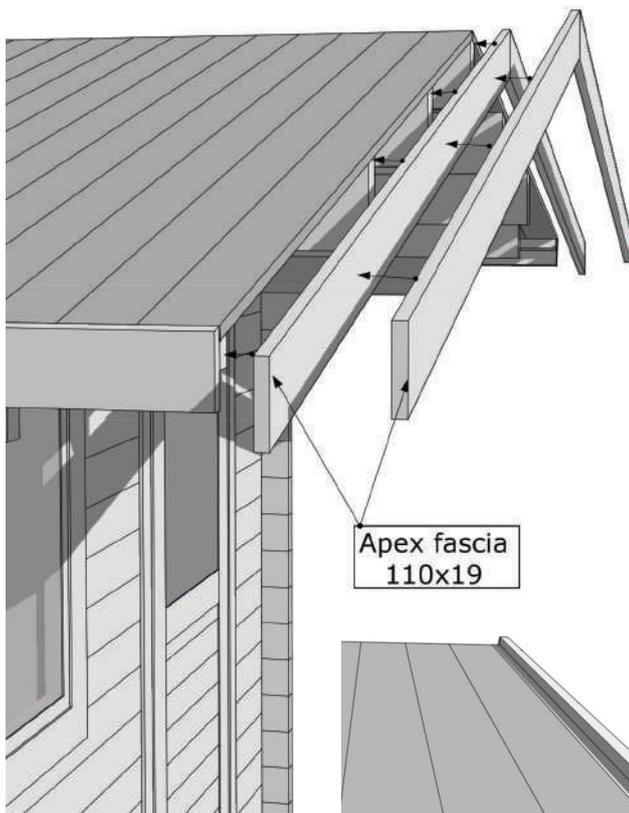
## 9. APEX FASCIA

Tools that will be useful or necessary:



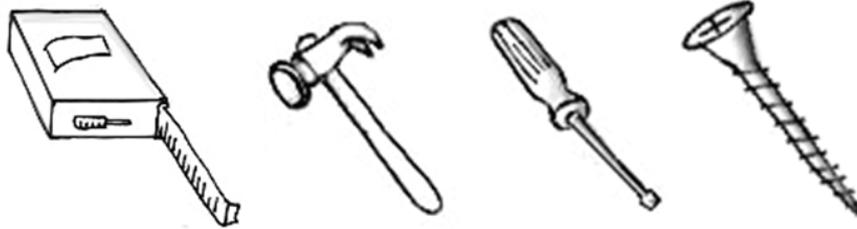
Eave and Apex fascia is the main parts for the rain water directing, and one of the most visible cosmetic element of entire cabin.

There are few things we would recommend for the assembly. First line of Apex Fascia on a triangle should be in same level with the roof boards (see picture below), and the second line should be raised about 2cm above the roof board, that will direct the rain water to the side of the roof.

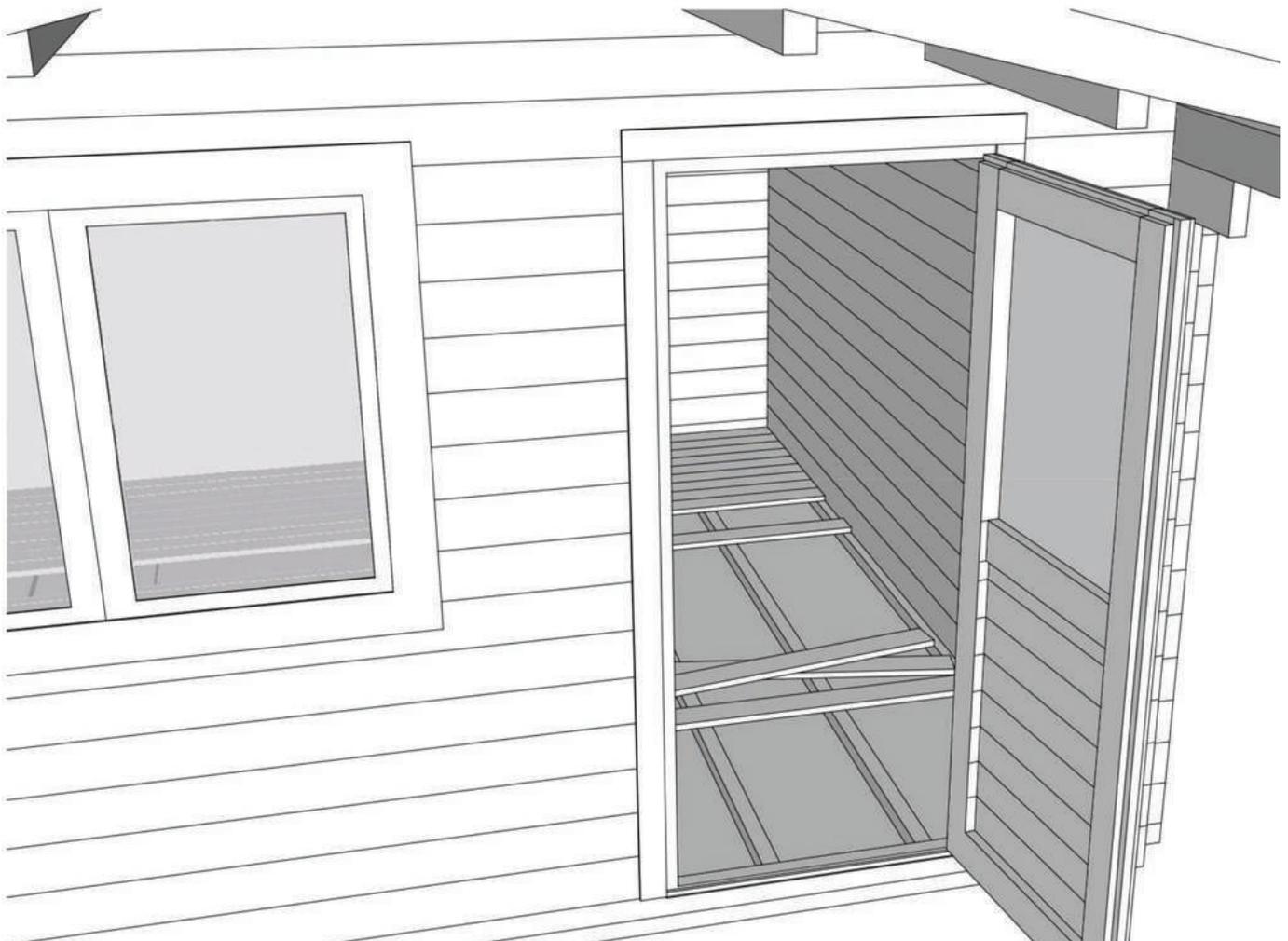


## 10. THE FLOOR

Tools that will be useful or necessary:

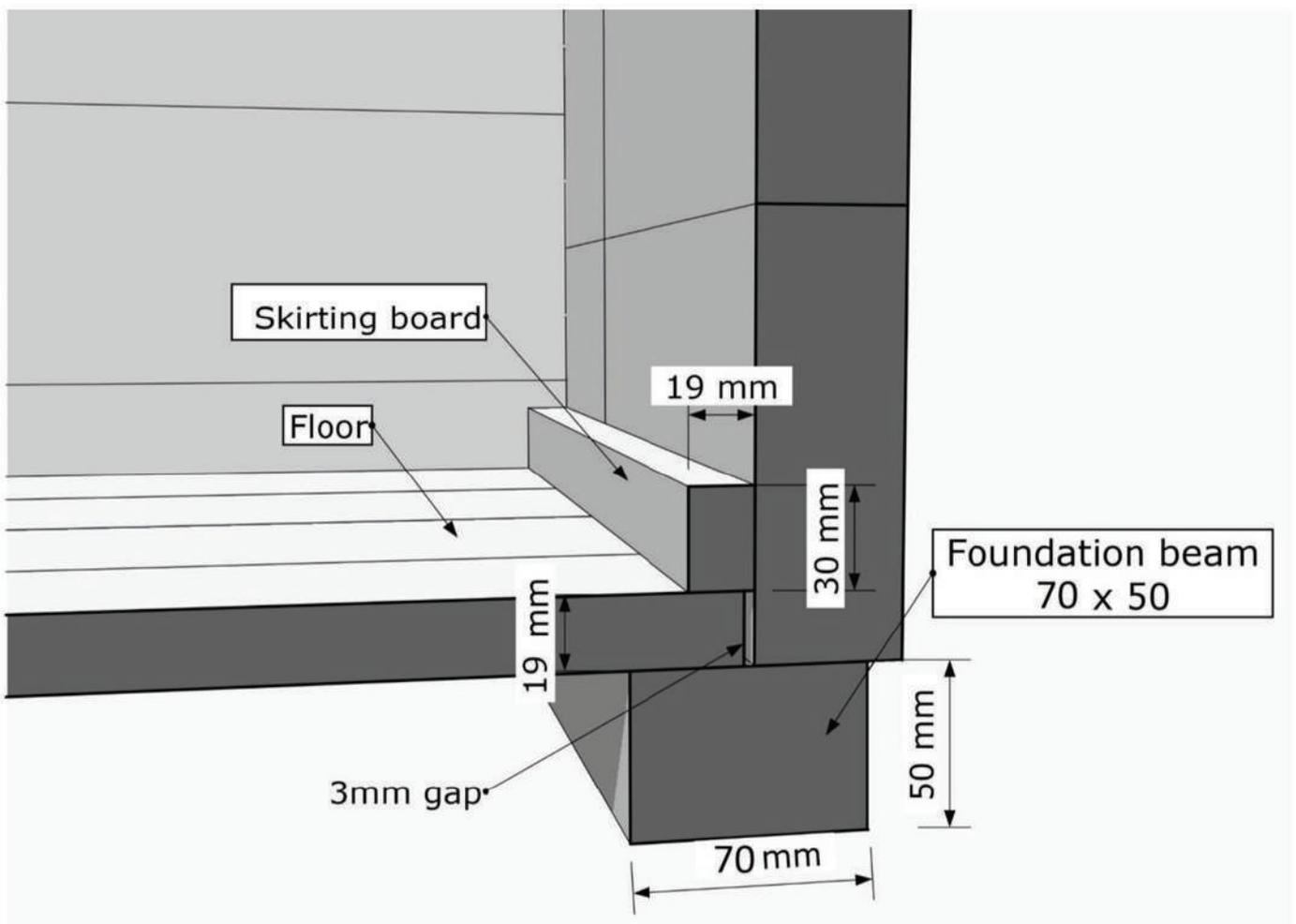
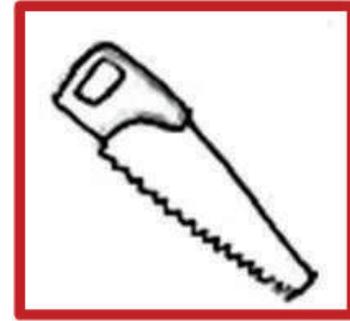


Now, when everything is done, it's time for the floor. Open the door, get some floor boards and start from the back.



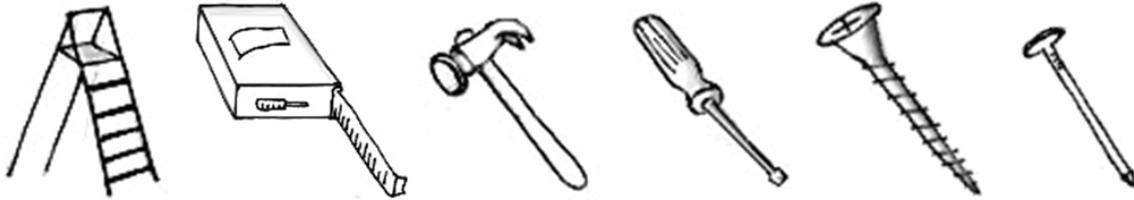
The floor boards are 6mm shorter in length, than a distance between the cabin walls, so if the cabin was built correctly, assembling the floor should be a very easy and enjoyable job. The same as assembling the walls, here you will need a hammer and a piece of log to knock the planks in a certain place.

**SAME AS ROOF PLANKS, THE LAST ONE WILL HAVE TO BE ADJUSTED SO IT WOULD FIT.**



## 11. THE FINNISHING TOUCHES

Tools that will be useful or necessary:

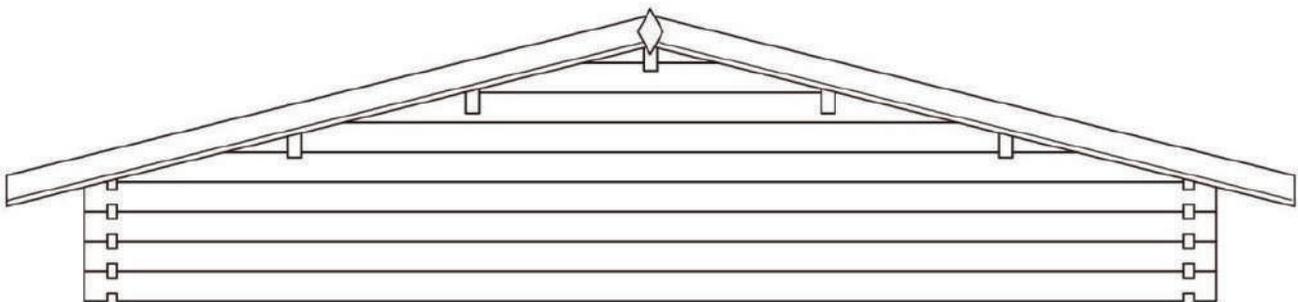


### SKIRTING BOARD.

Skirting boards are used to cover the gap between the floor planks and the wall. All skirting boards are about 100mm longer than a distance between the cabin walls. So you will definitely have to do some work by hand, but be careful, don't cut too much. Study the Floor Plan carefully, pick and mark all the parts of a skirting board, so you would know exactly where each of it goes.

### DIAMOND SHAPE

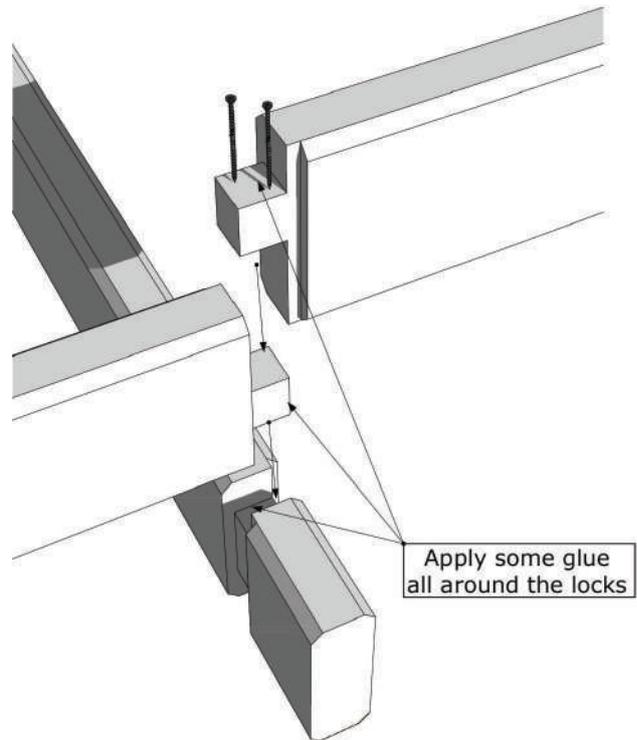
It is the very last part, which rises on top of the roof's triangle and grants the cabin its unique charm. It is fixed on top of the roof triangle and covers the connection of Apex Fascia.



## WALL LOG CONNECTION

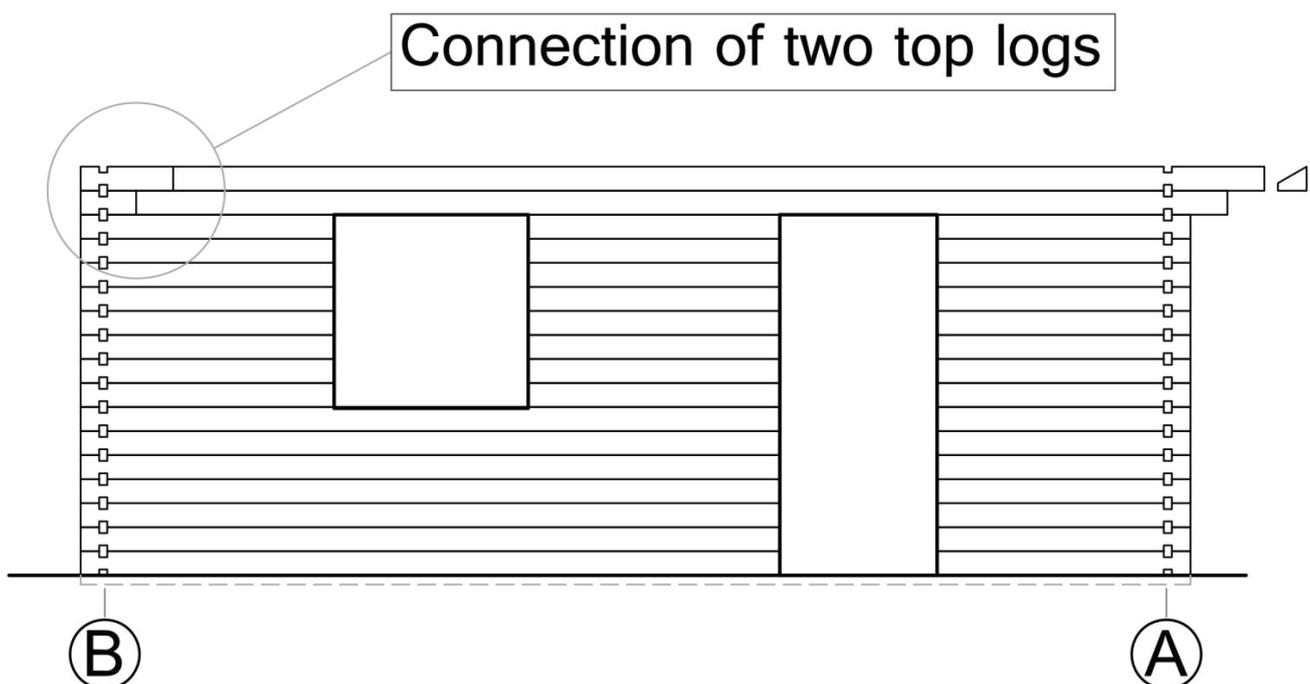
There are three main steps for a reliable connection:

1. Apply the wood glue around the locks where they will connect (see the picture)
2. Connect the locks, make sure that they have sat perfectly.
3. Screw those locks together, with two screws. Do it exactly as shown in the picture, screws can't be in one line with wood direction, because it might cause it to crack.

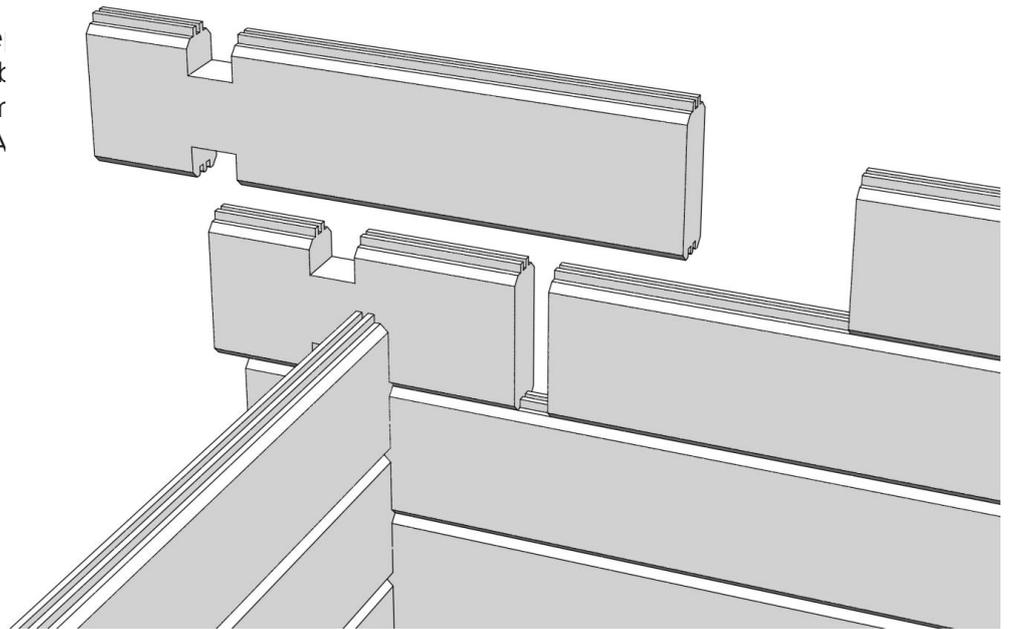


This technique applies to all the joints in your cabin.

## THE CONNECTION OF TOP LOGS



The lines on the top logs re type. All that's needed to k marked parts and put them another as shown in the A picture below).



## ROOF BEAM CONNECTION

**An important thing for a proper roof beam connection is SEQUENCE**

**1.** Find all the parts which are necessary to get the beams together

**2.** We recommend you to prepare your beams on the ground,

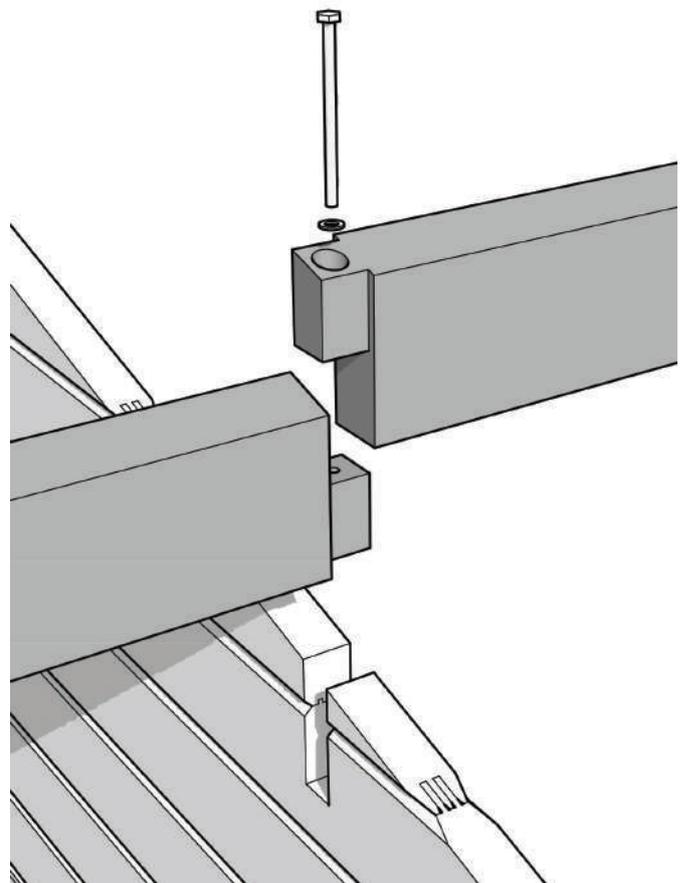
### **Before placing it on top of the roof triangle**

- Connect all the beam parts together, but don't screw them together yet.

- Make sure you are fixing it correctly in a straight line

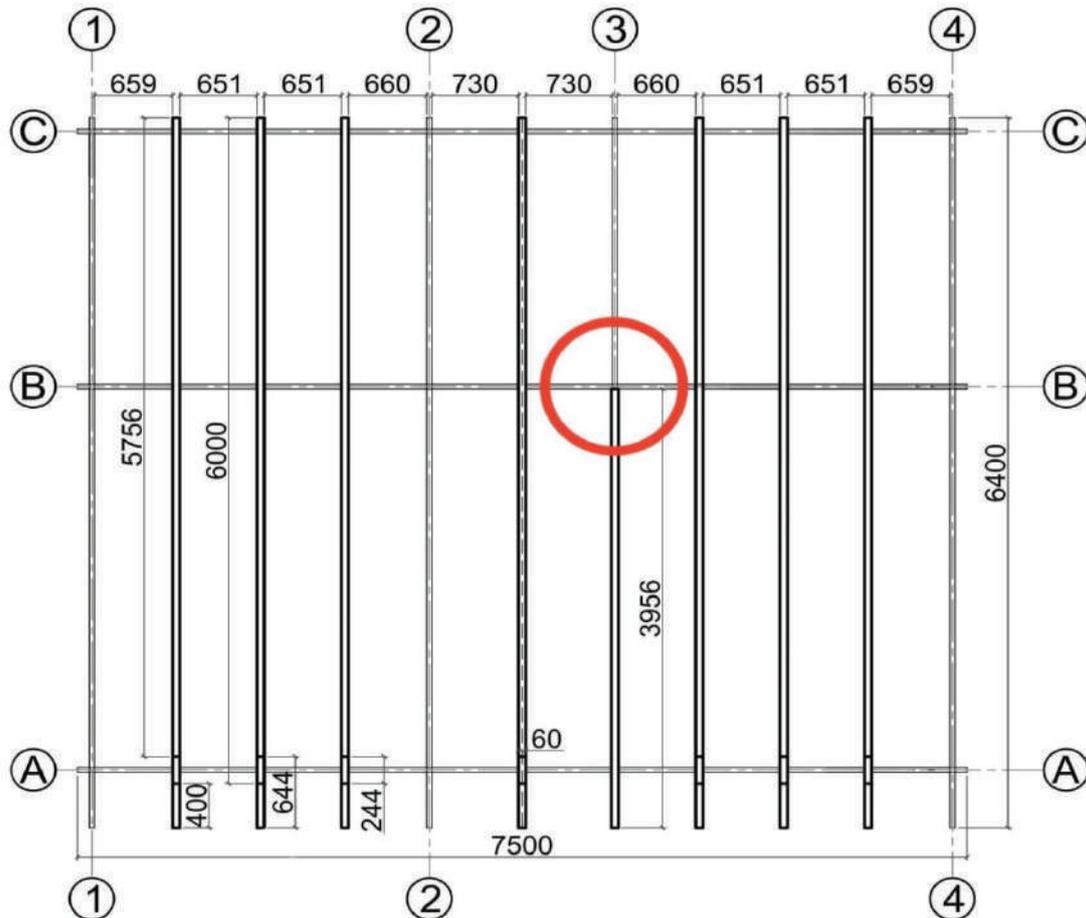
- Screw the beams together (see the picture how this is done)

**3.** Now it's time to put them on top of the roof triangle



## ROOF BEAM CONNECTION TO THE WALL

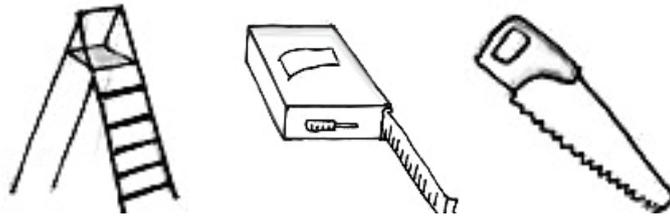
### Roof plan



For a situation like this, when all the beams in the roof plan stretch through the cabin, but one or more of them suddenly just stop after ‘hitting’ the wall, you must know a few things.

- The cabin is packed with beams of an equal length, as shown in the roof plan (**Do NOT cut** any beam to change their length).
- A short beam which leans to the wall holds part of the roof. Also, in that particular place the **roof will be supported by the wall.**
- This part requires **precise calculations** before starting the assembly, because there is a very thin line between a good job and a mistake that might add a few more unwanted hours to the whole cabin assembly process.

Tools that will be useful or necessary:

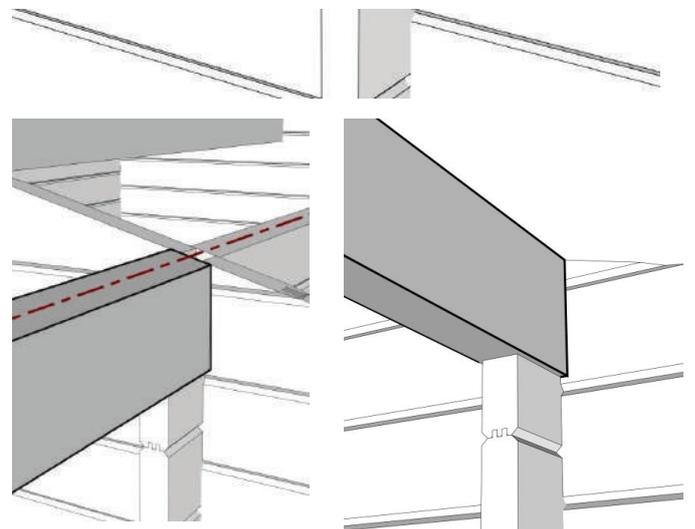
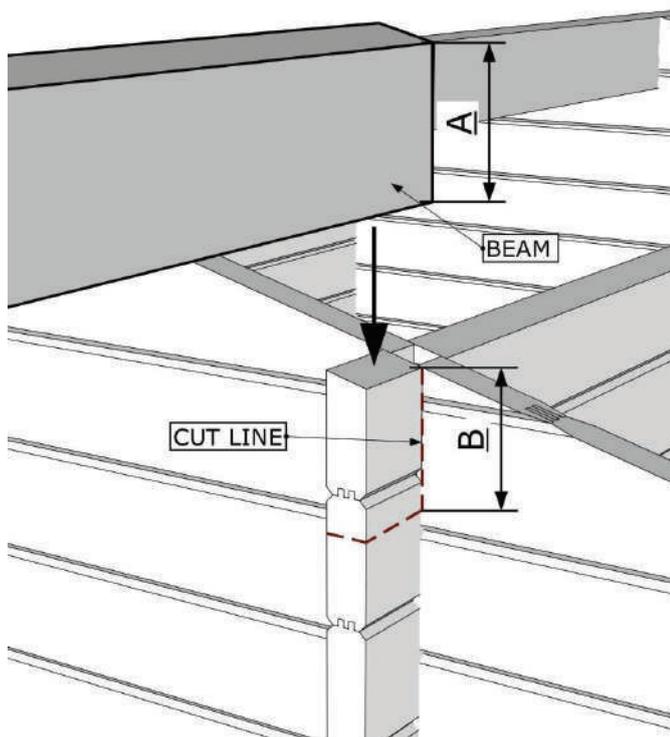


When the time comes for the roof beams, the shortest one should be the first one placed, because, while adjusting it to the right place and measuring the cutting line you might need to assemble and disassemble a few roof parts.

Measure carefully and draw the cutting line. The beam top should be smooth with the log, in order to make the assembly of the roof logs easier.

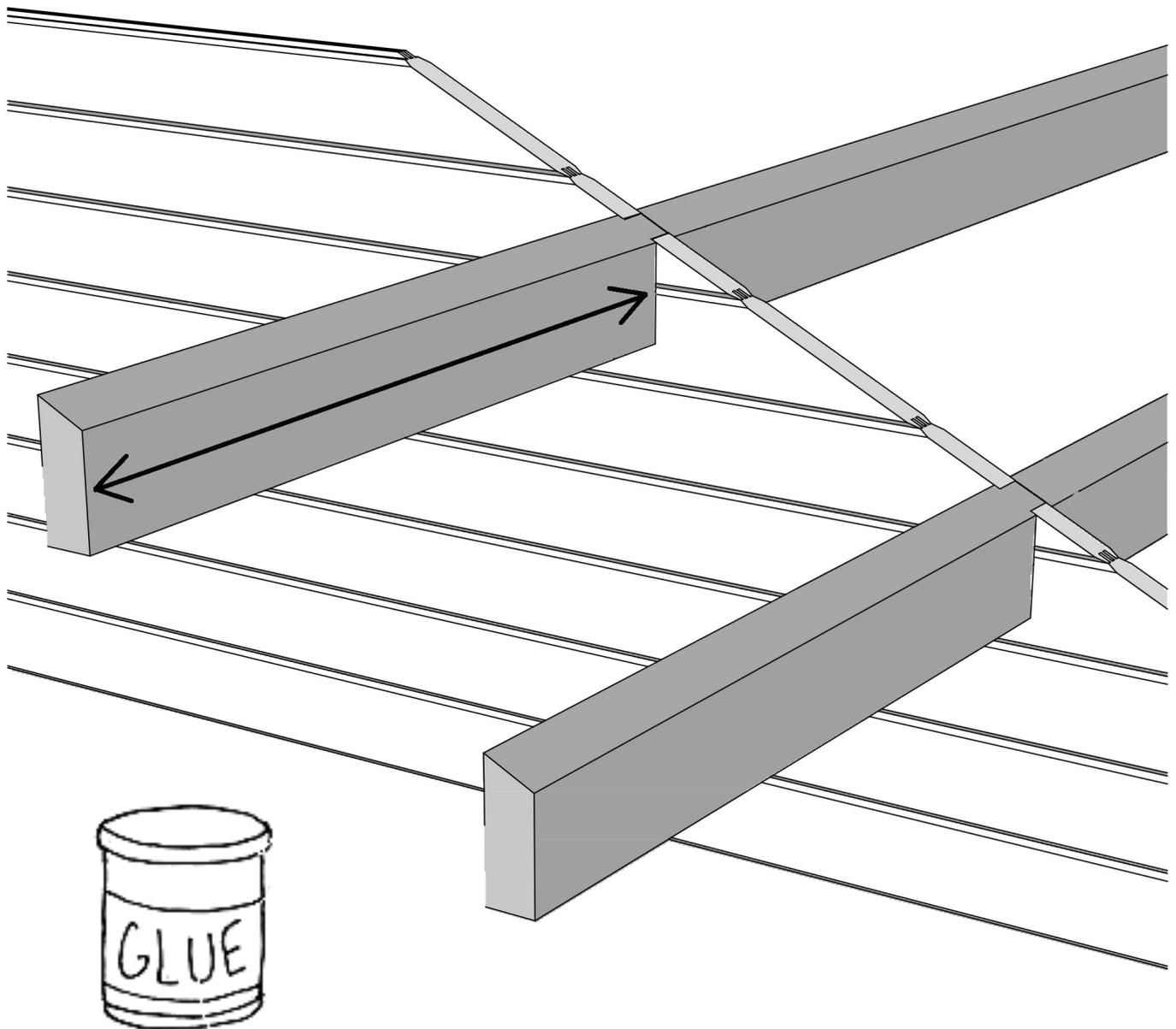
Do NOT cut the log which is on the wall, take the log down on the ground.

Gently slide the roof beam in to a newly prepared place. Knock it down with a rubber hammer if needed.



## RECOMMENDATION FOR A BEAM CONNECTION

For a strong and reliable beam connection, especially if you have the connection at the edge of your cabin, where the other end of the beam will be left floating in the air with no support from below (see the picture), we recommend to use some glue around the connection lock to strengthen it.

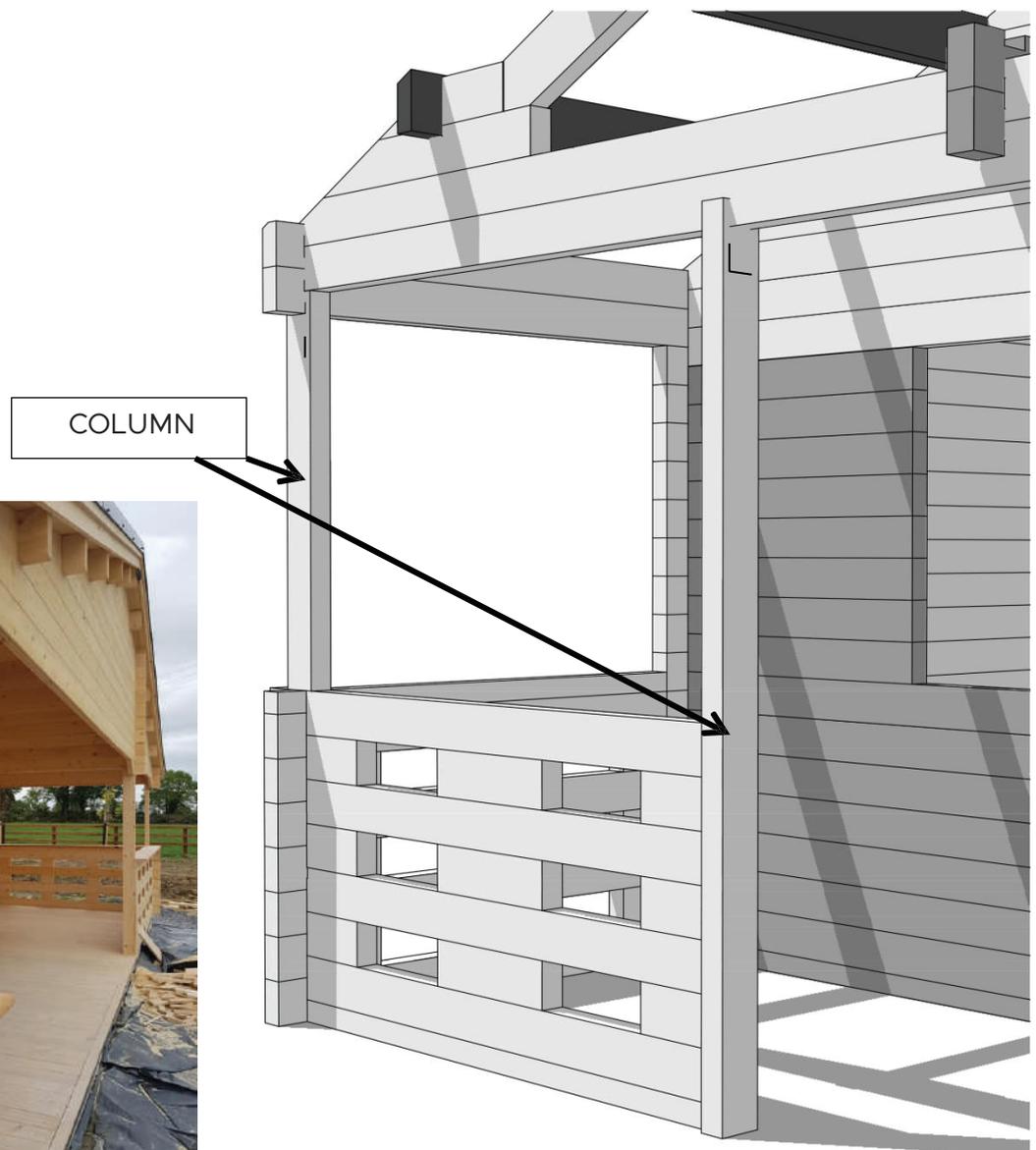


## COLUMN

The columns are used to support the structurally weakest points in your cabin. Because of the merger error variety, which occurs during the assembly process, the column comes in maximum length of 2227 mm.

After you reach the level where it should be mounted, carefully measure the length that will be necessary to support the structure.

**Tip:** Column cutting: it's better to cut less than more of the needed length, because when it's too long you can always shorten it but when it's too short... it's too short.



## THE DORMER

The dormer is a triangle shaped roof element, used mostly for cosmetic purposes. It comes in three parts: the front triangle, and two side triangles. Apex fascia are included as well.

There are a few things that should be known before assembling it. First of all it is made following the standard, so there might be a mismatch with the roof angle, which means that a saw and a pencil with the ruler will come in handy.

Another thing is the place on the roof. There are drawings that show its original place. But since it is only a decoration and it has no impact on

your cabin's structural strength, you can place it wherever you want.

Last, but not least: Apex fascia will have to be adjusted, because its length comes with a few spare centimeters.

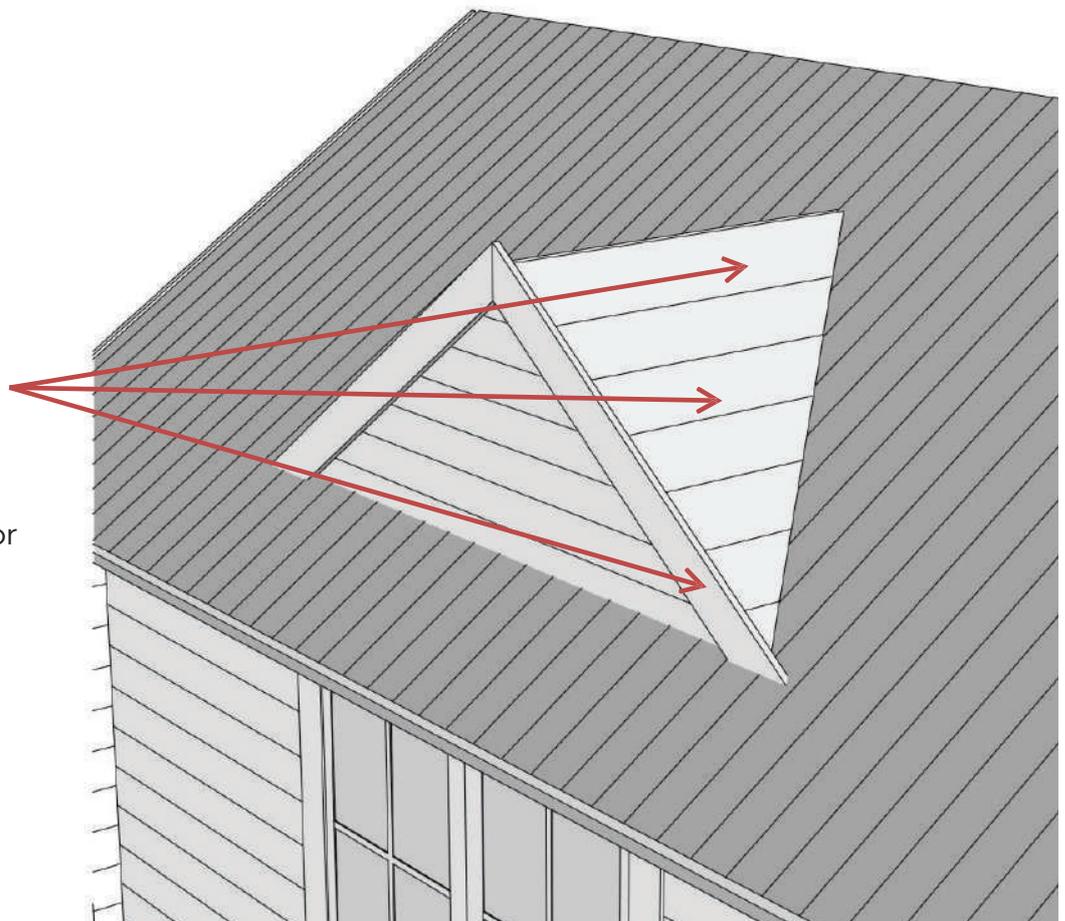
Finally - fixing. Just use the nails or screws to fix it on top of the roof logs.



Screw or nail the Dormer here

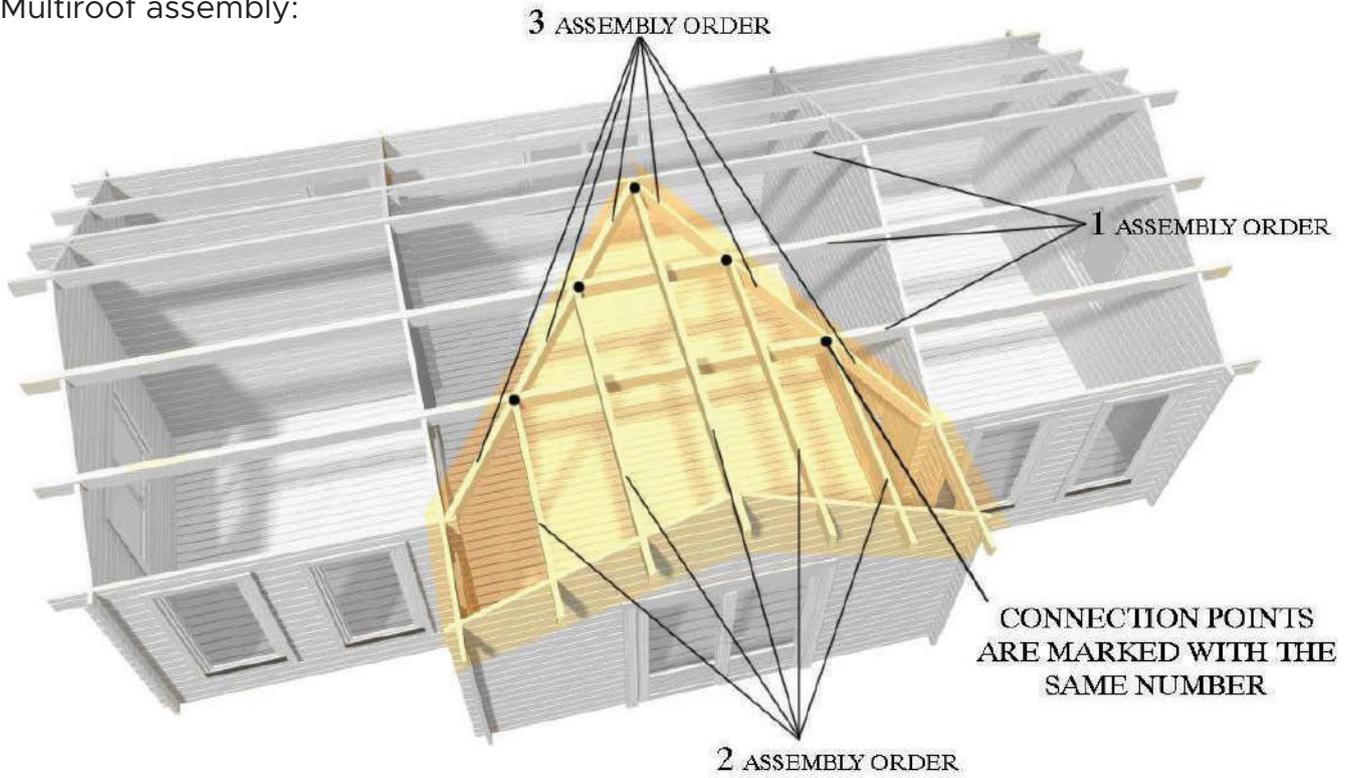
Use some more nails or screws if needed.

Fix it from both sides

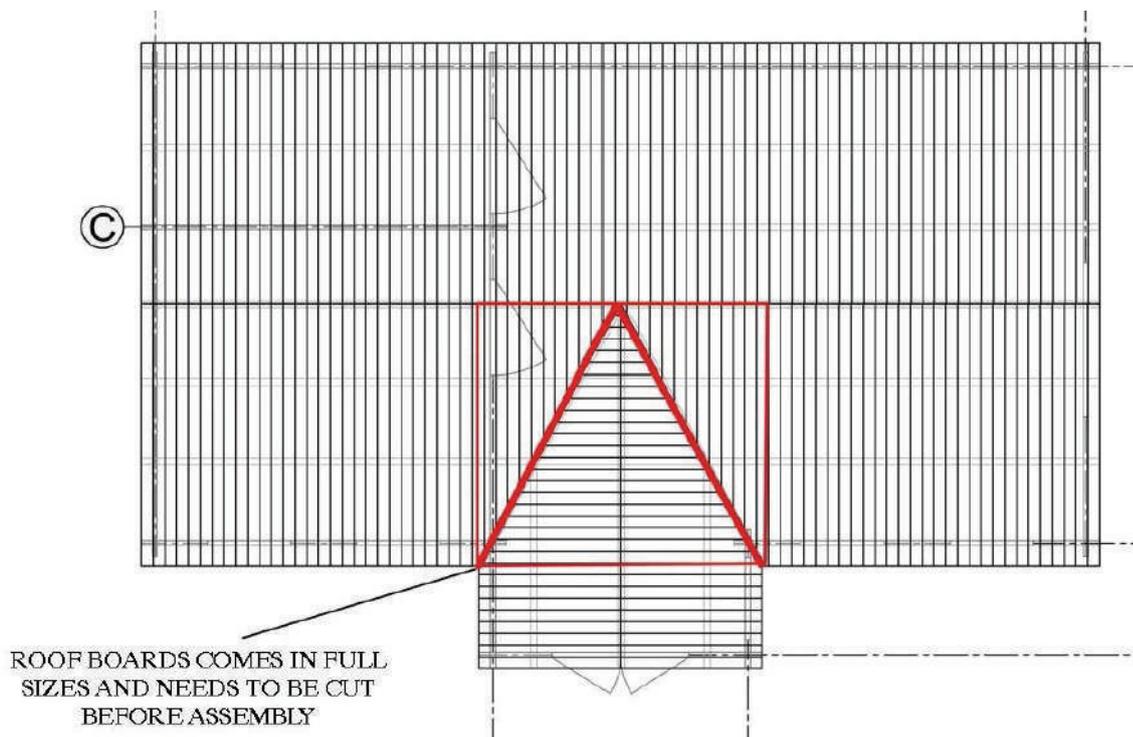


## MULTIROOF

Multiroof assembly:

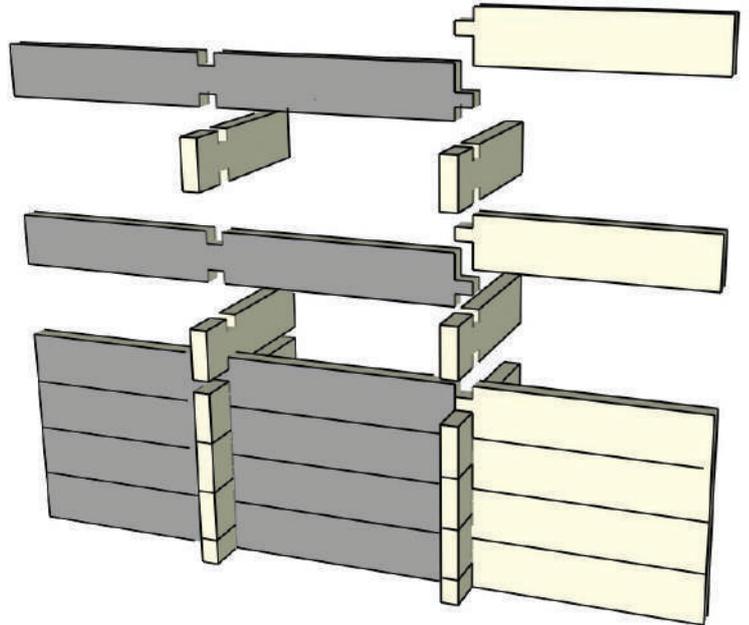
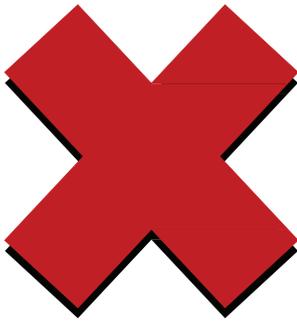


## MULTIROOF ROOF BOARDS:

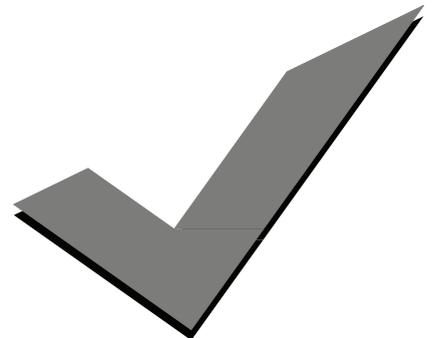
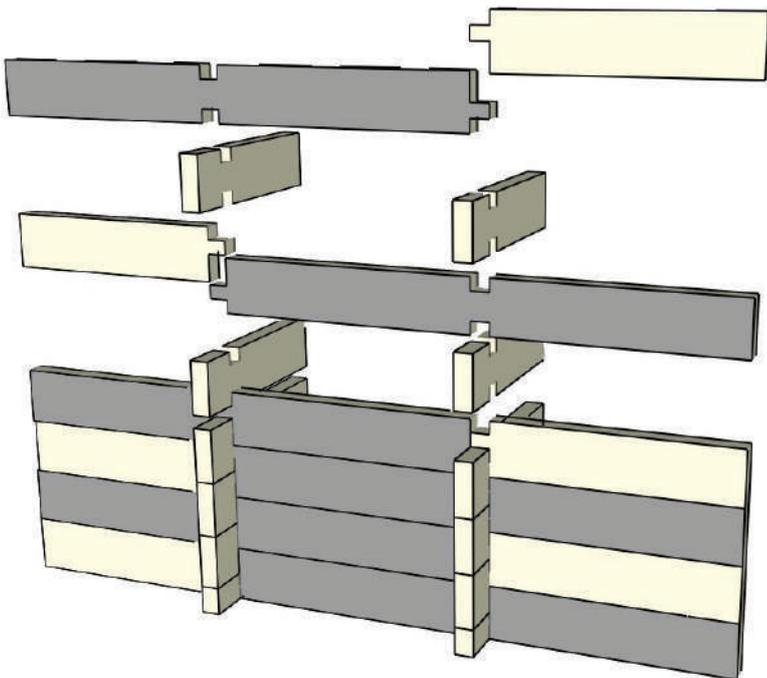


## LOGS LOCKING PRINCIPLE

Wrong way for locking logs

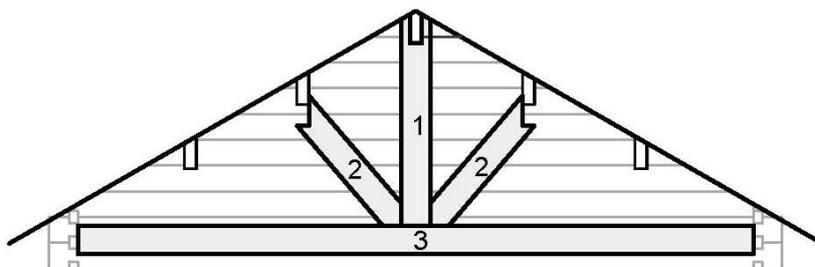


## RIGHT WAY FOR LOCKING LOGS

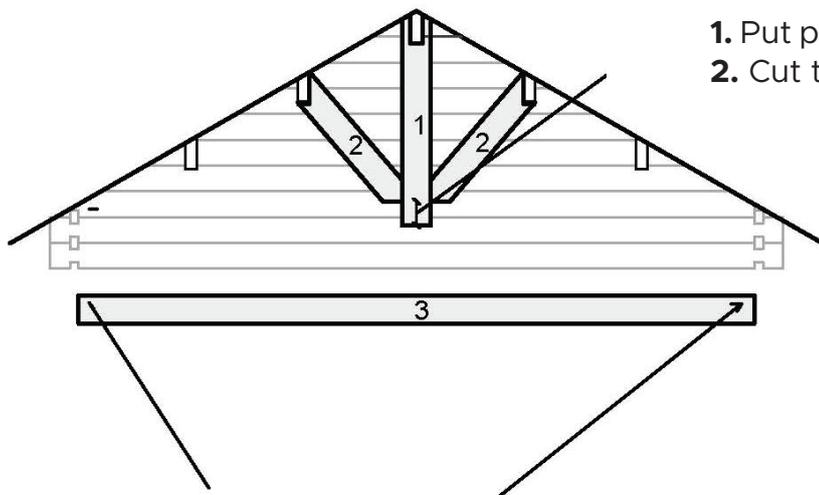


## ROOF DECORATION

Originally log '1' comes about 5 to 8 cm longer. Longer-lets you avoid any merge of error.



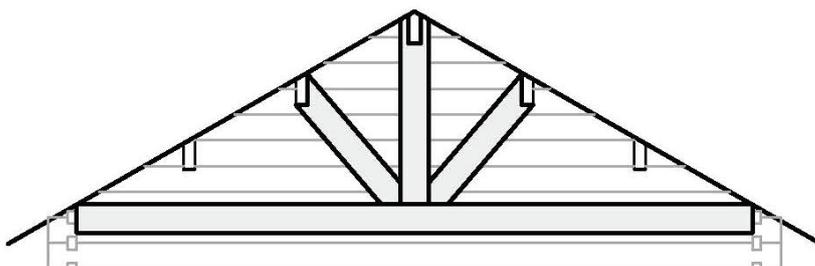
### 1. Assembly



1. Put parts 1 and 2 in to places near the roof.
2. Cut the extra length of 1 part.

Keep in mind that you might need to cut the edges of the part 3

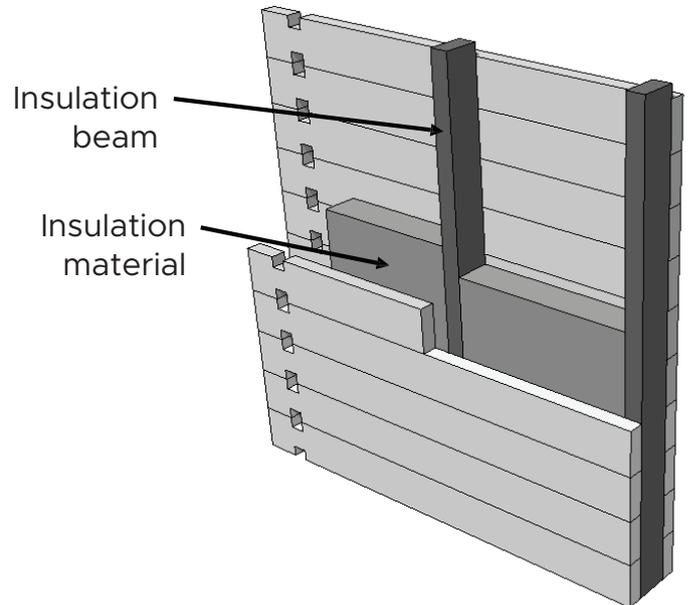
### 2. Assemble the decoration



## WALL INSULATION

**Note:** This applies only for Twinskin (double wall) style cabin

Double wall cabin comes with Insulation Beams used for insulation material separation (insulation materials are not included). Packed beams are all the same height letting assembly crew to cut needed height.



Install insulation during wall assembly



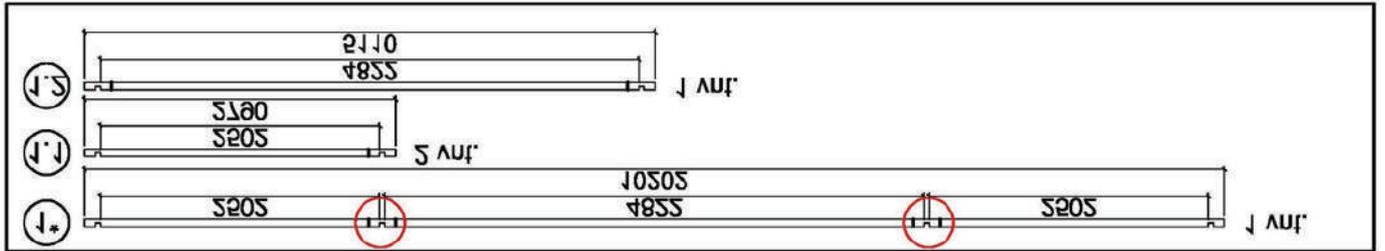
## ROOF INSULATION

If your cabin is with insulated roof, all the insulation beams will be included. Beams length will be already prepared. Use plans to install beams on first roof boards layer. It is recommended to mount Insulation beams on top of roof beams. After installation of insulation beams, add your insulation material (not included).

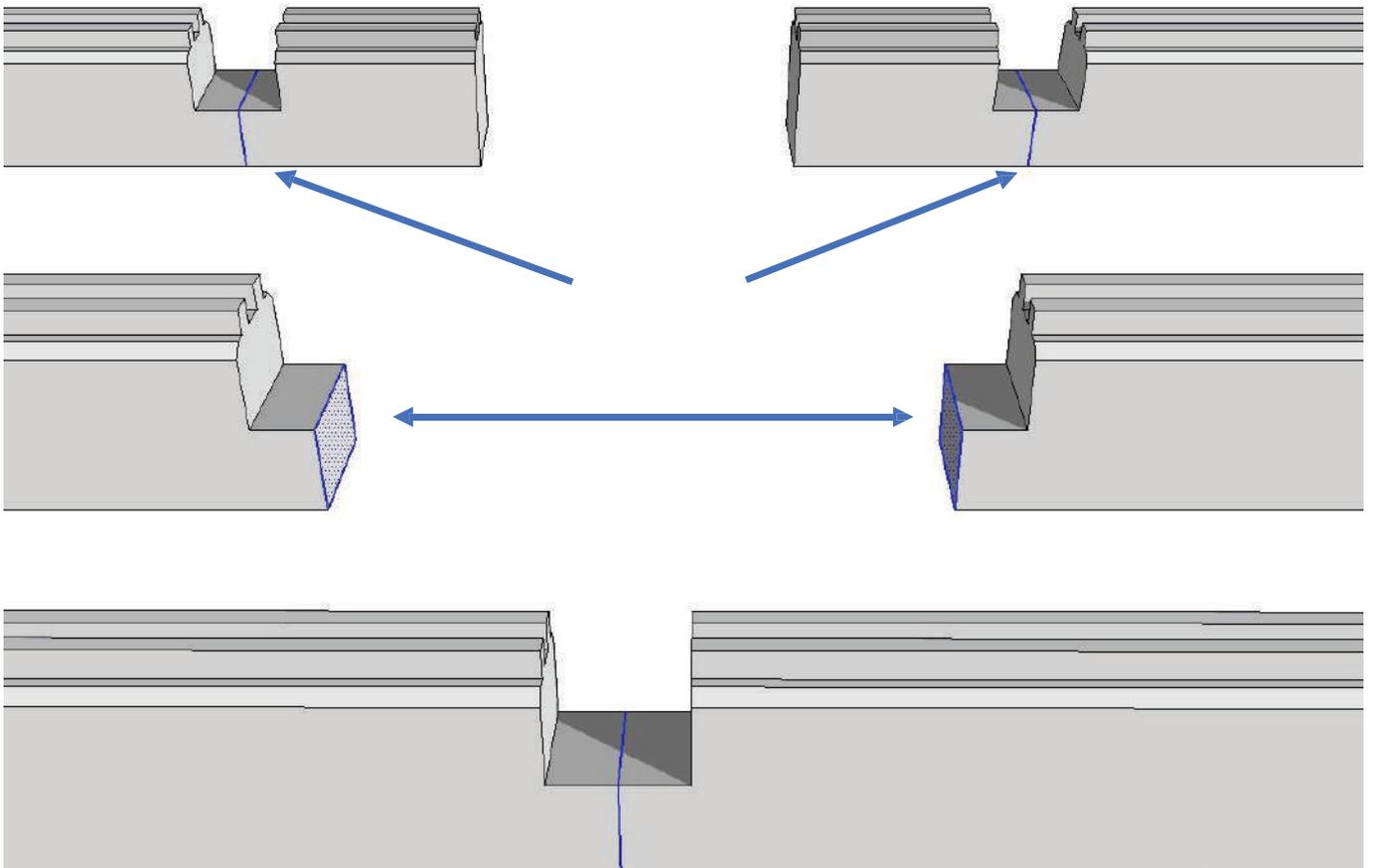


## HALF LOG CONNECTION

Due to avoid merge of error, half log with the connection comes uncut.



Lock will need to be formed by assembly crew:





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