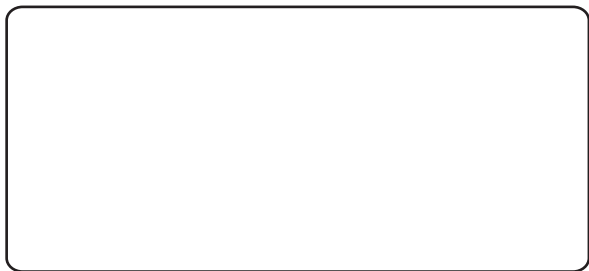


Important! Keep this.

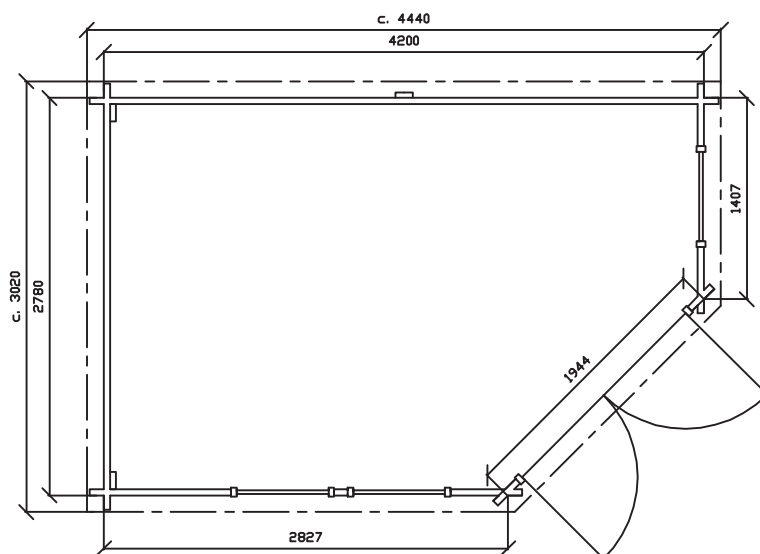
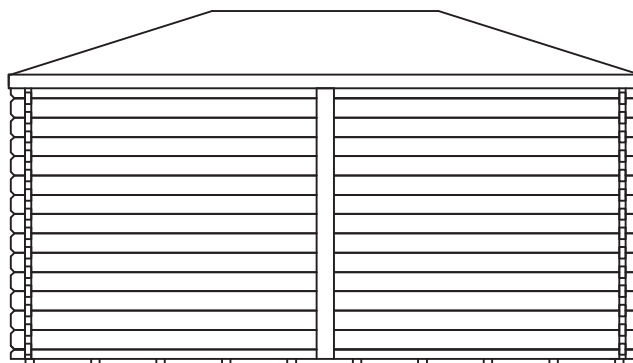
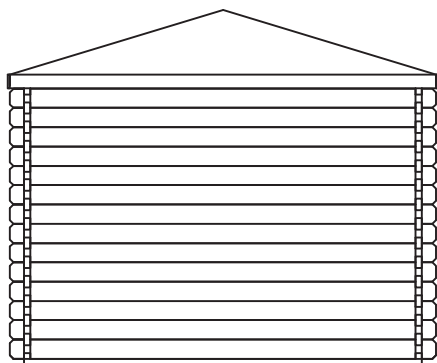
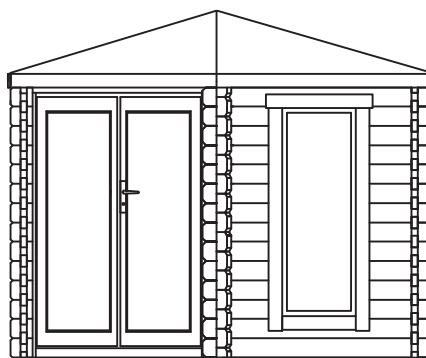
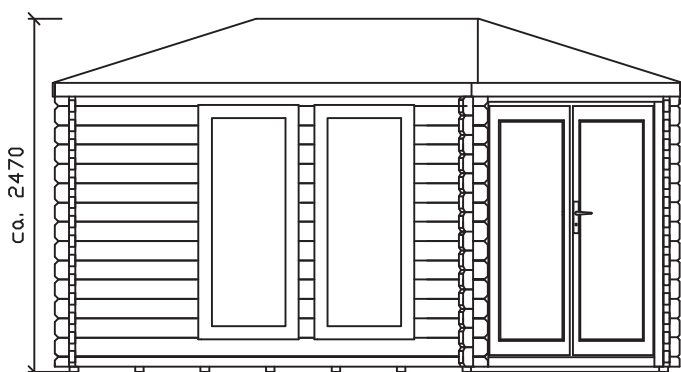
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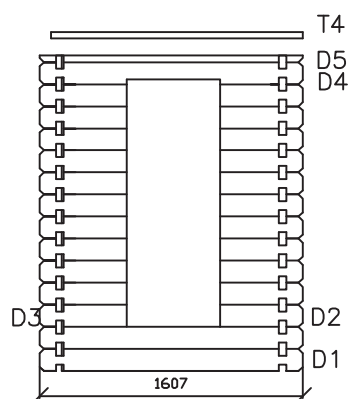
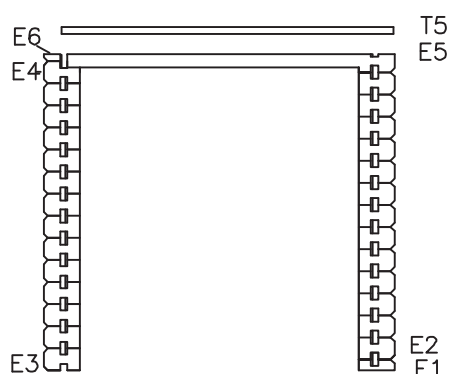
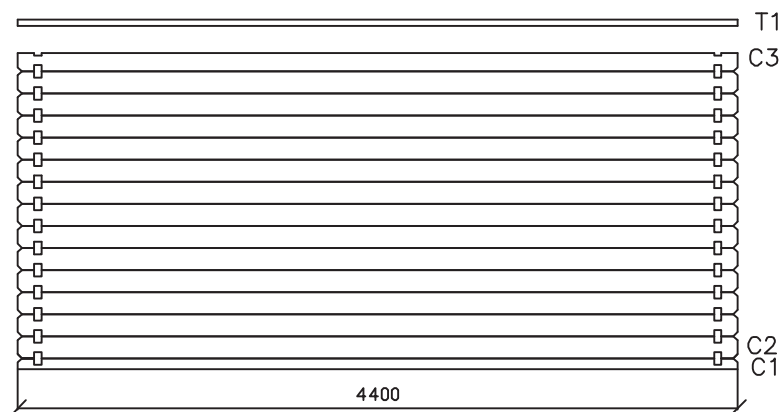
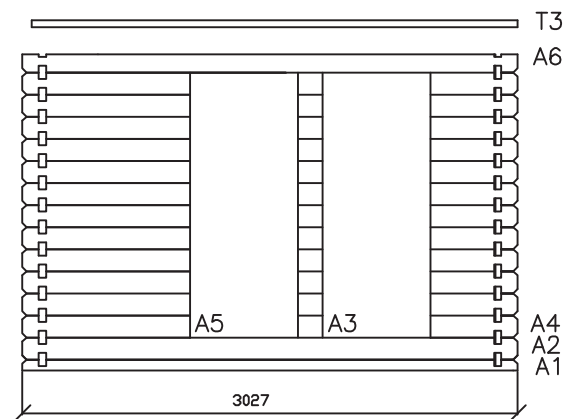
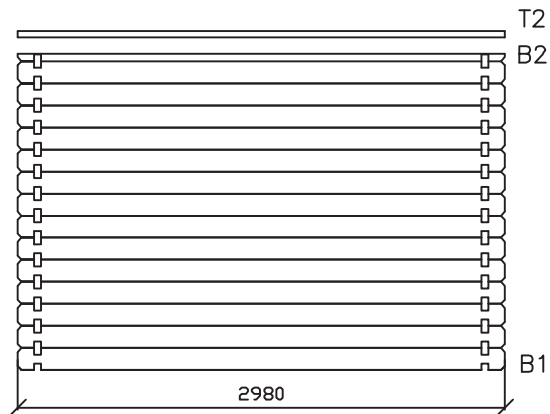
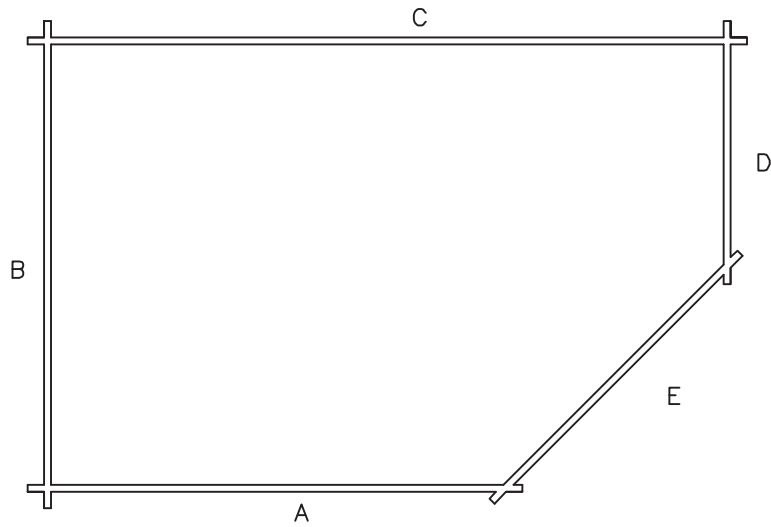
# Lillevilla 504

2780 mm x 4200 mm / 44 mm



# Lillevilla 504

2780 mm x 4200 mm / 44 mm



**2780 mm x 4200 mm / 44 mm**



screw 5x90

T4

T2

T5

T3

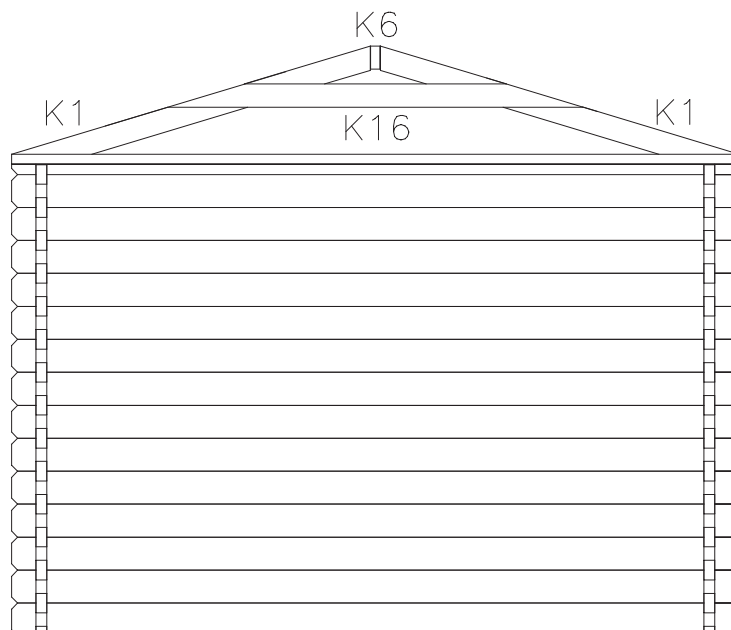
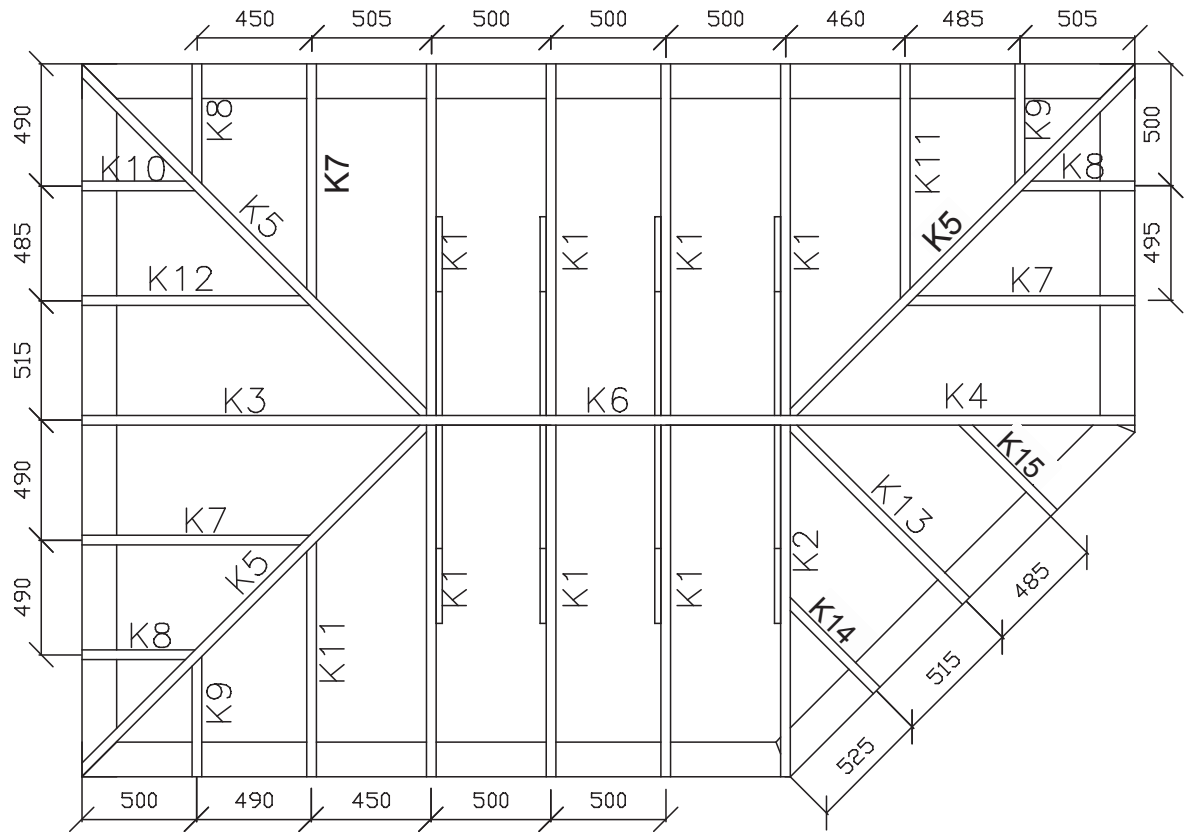
**Read through the whole manual before you start building your cabin.**

# Lillevilla 504

2780 mm x 4200 mm / 44 mm



Roof beams



# Lillevilla 504

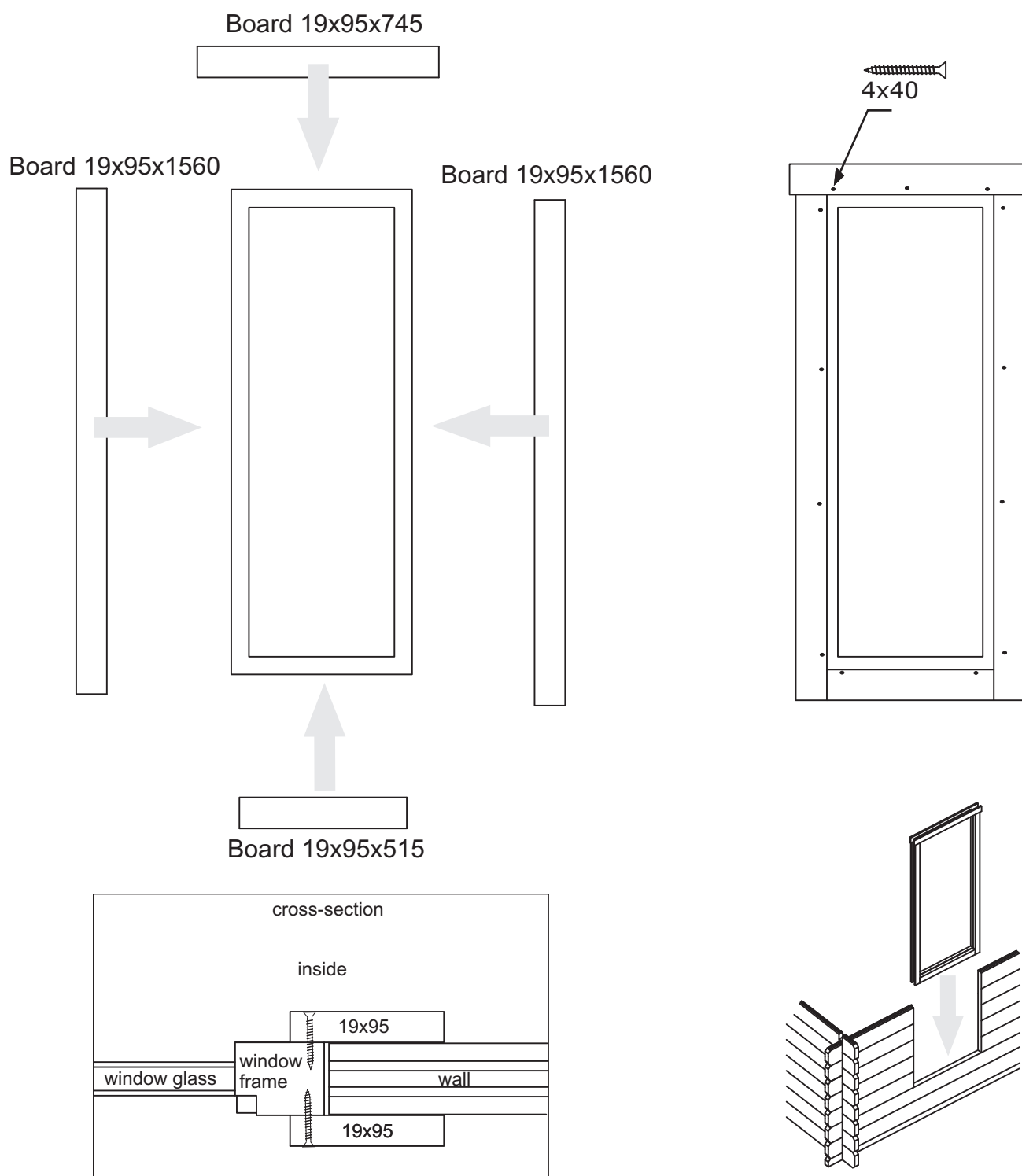
2780 mm x 4200 mm / 44 mm



## Type R7 window frame

Fix the boards to both sides of the window frame with 4x40mm screws and with glue (glue not included) as shown in the drawing below.

Pre-drill before screw!



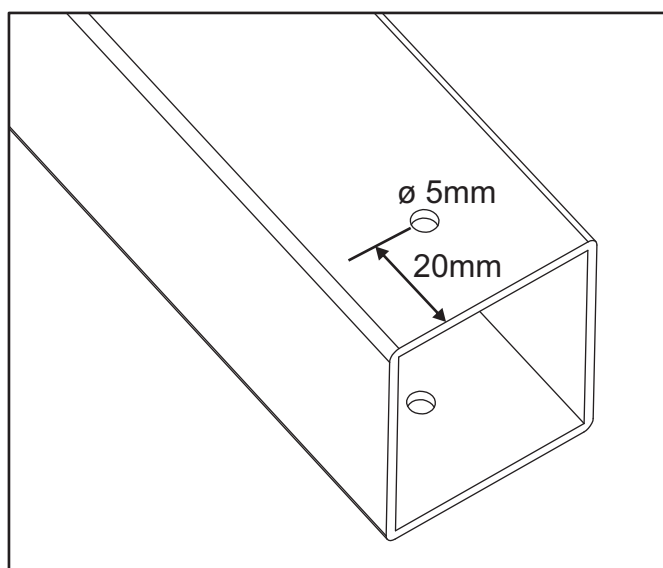
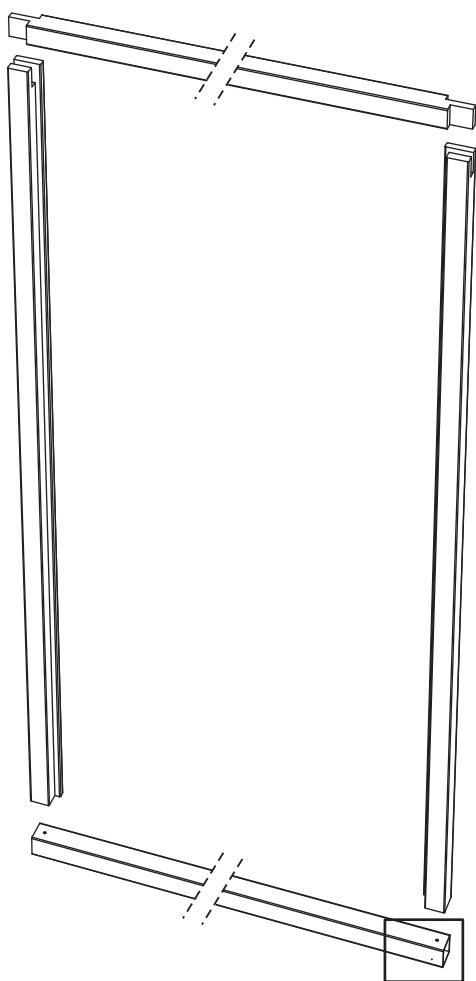
# Lillevilla 504

2780 mm x 4200 mm / 44 mm

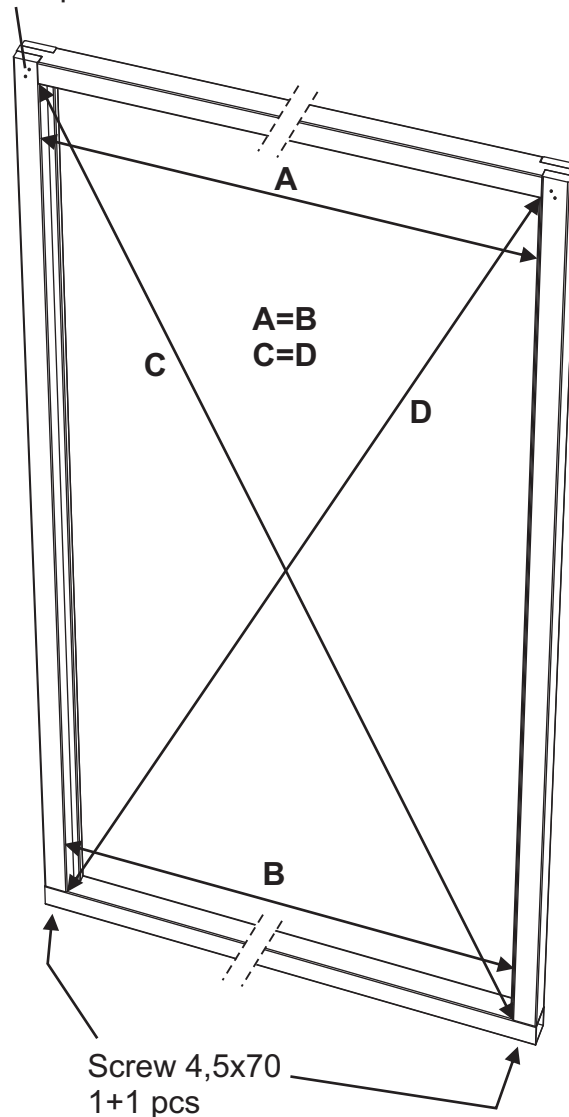


## Door frame

Drill 5mm holes to the aluminium profile and put the door frame together by using nails and screws as shown below. Check the measurements and adjust if needed.



Nail 1,7x45  
2+2 pcs



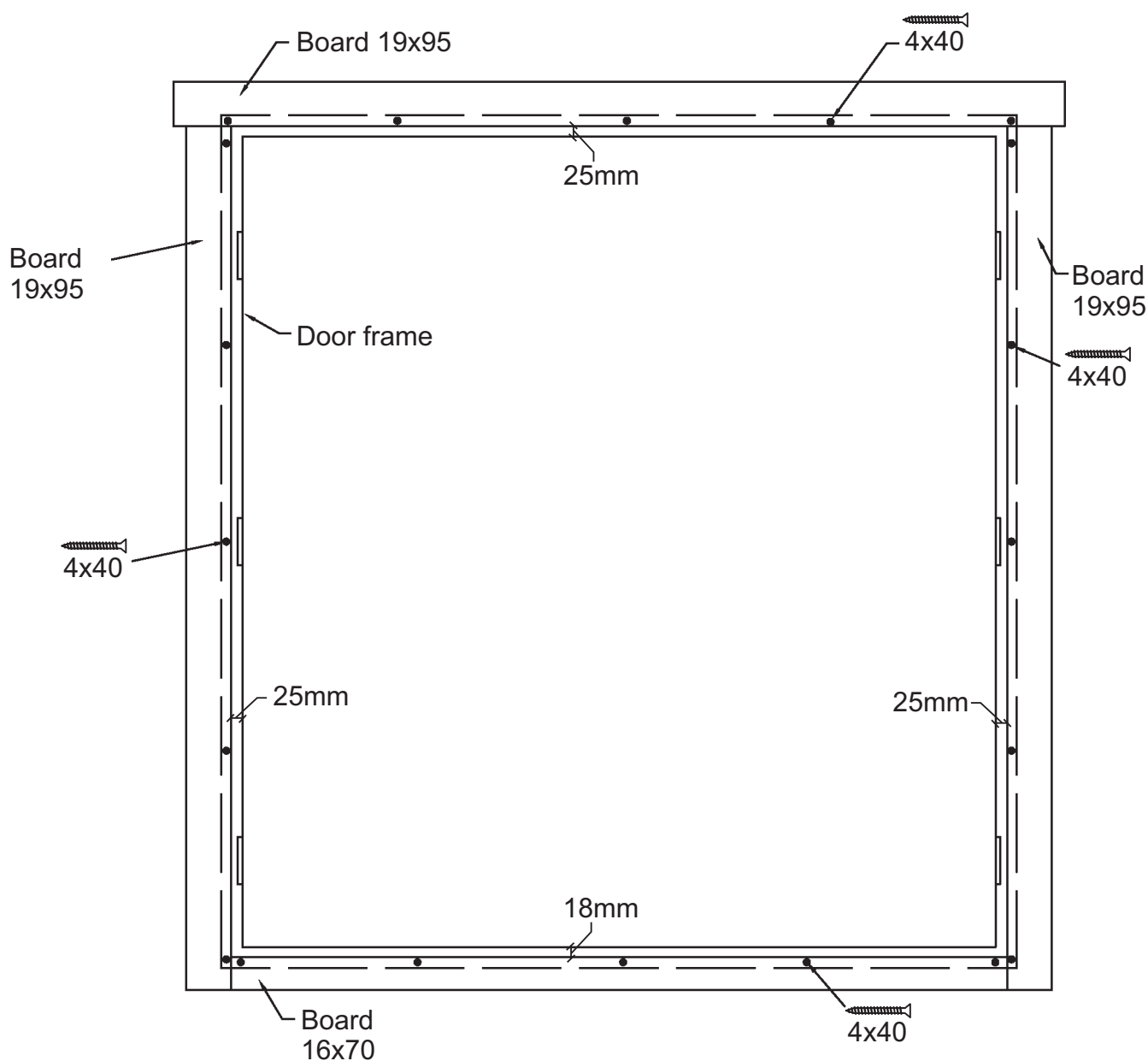
Screw 4,5x70  
1+1 pcs

# Lillevilla 504

2780 mm x 4200 mm / 44 mm



Fix the boards to both sides of the door frame with 4x40mm screws and with glue (glue not included) as shown in the drawing below. Pre-drill before screw!

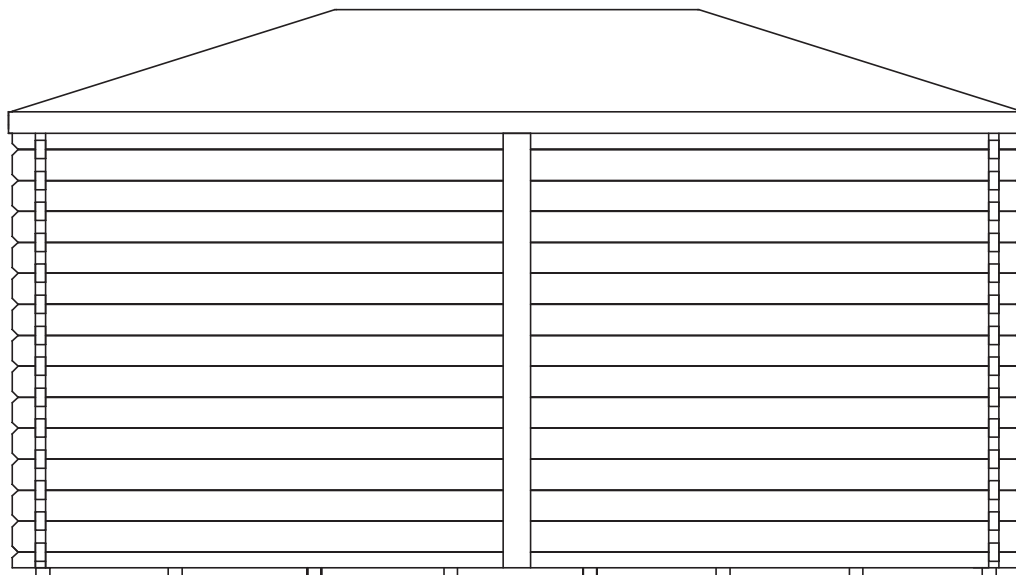
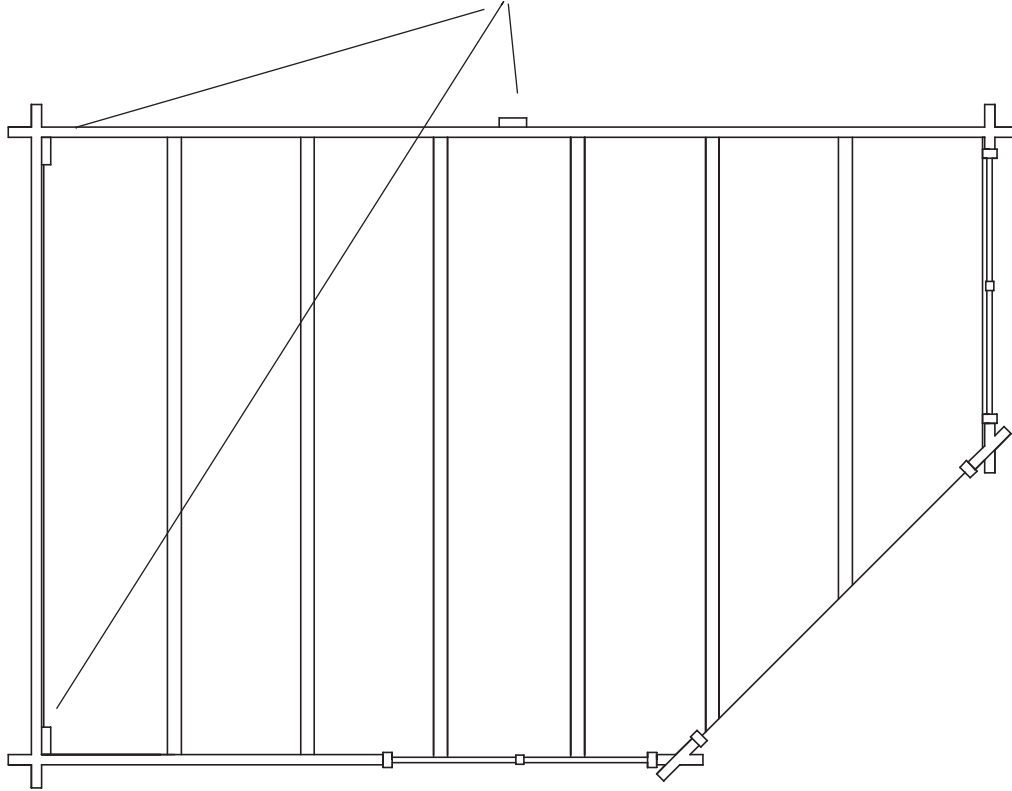


# Lillevilla 504

2780 mm x 4200 mm / 44 mm



Assembling the wall supports



Screw 4,5x70 to  
every wall log



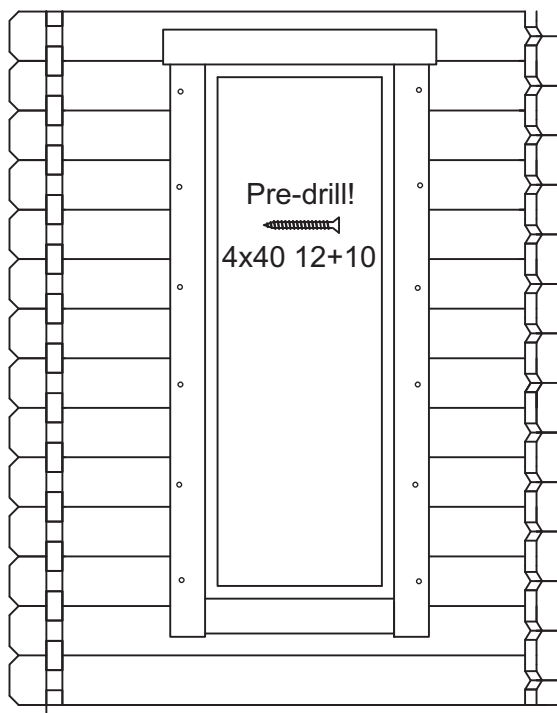
# Lillevilla 504

2780 mm x 4200 mm / 44 mm

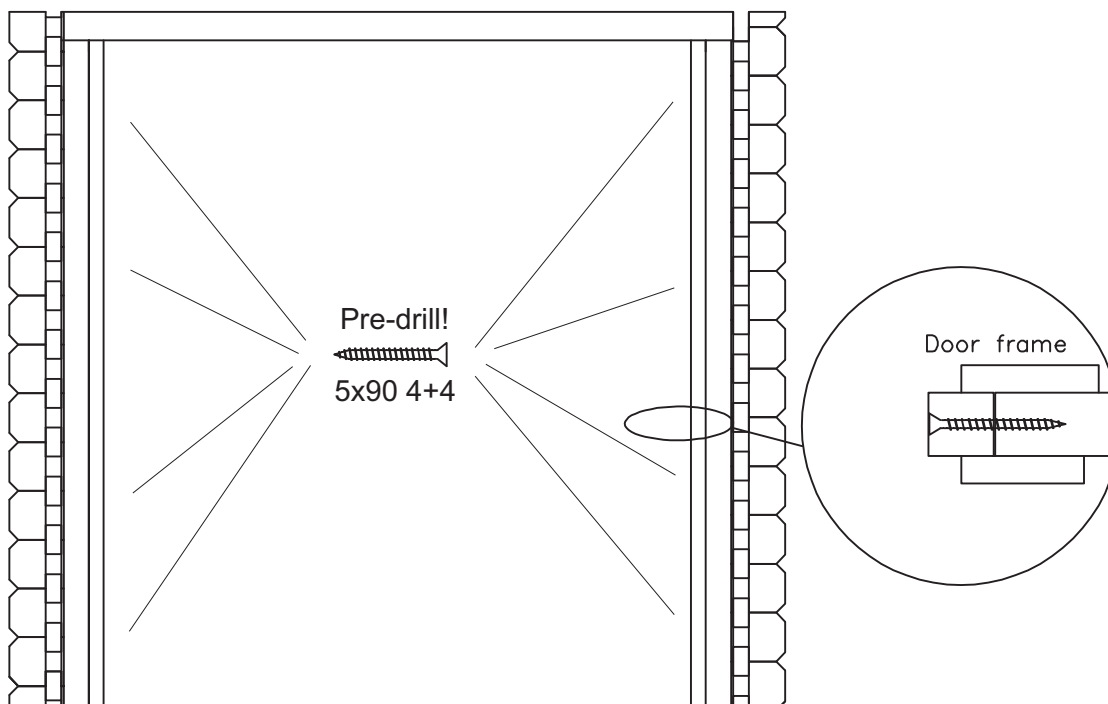


Type R7 window

Fix the boards to every other log from inside and every other log from outside.



Door frame



# Lillevilla 504

2780 mm x 4200 mm / 44 mm

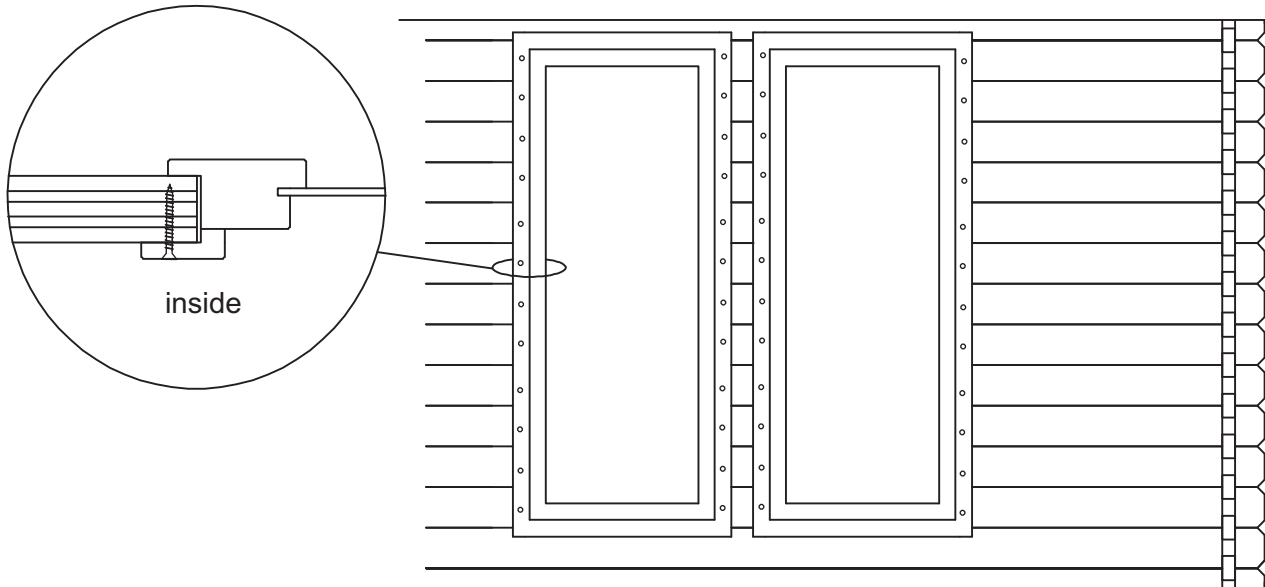


Screw 4x40 to  
every wall log

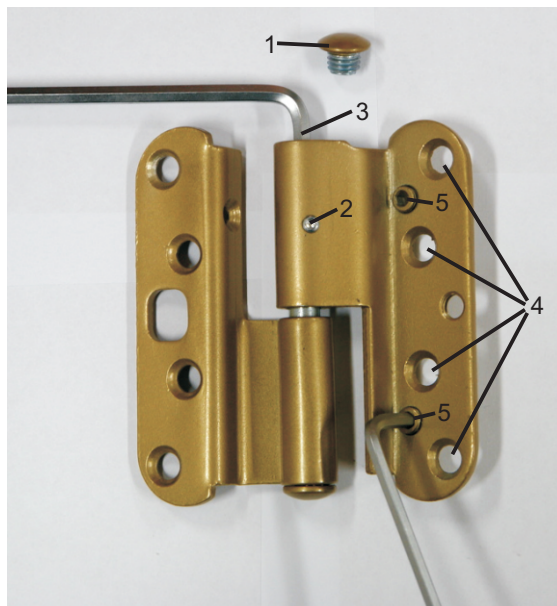
Pre-drill!

4x40 24+24

Type E14 window



## Adjusting the door hinges



### Adjusting vertically

First screw off the covering hat of the hinge (1). Loosen the fixing screw if there is one (2). The door is lifted upwards by turning the adjustment screw clockwise with a hexagonal key AV5 (3). Adjust the hinges so that both of them are carrying the weight of the door. Finally, tighten the screw (2) and screw the covering hat in place.

### Adjusting sideways

First loosen the fixing screws of the hinge of the door blade with a couple of turns (4). The door moves to the lock side by turning the adjusting screws (5) with a hexagonal key AV4 clockwise. It is important to adjust all the screws so that the hinge will be in correct position. When finished adjusting, tighten the fixing screws (4) again. The accessories bag contains extra adjustment plates for extra sideways adjustment needs.

# Lillevilla 504



Part list 1 / 2

2780 mm x 4200 mm / 44 mm

Part	Dimension in mm	Pieces	Mark	Control
Log	44 x 67 x 3027	1	A1	
Log	44 x 135 x 3027	1	A2	
Log	44 x 135 x 150	12	A3	
Log	44 x 135 x 532	12	A4	
Log	44 x 135 x 1025	12	A5	
Log	44 x 110 x 3027	1	A6	
Log	44 x 135 x 2980	14	B1	
Log	44 x 43 x 2980	1	B2	
Log	44 x 67 x 4400	1	C1	
Log	44 x 135 x 4400	13	C2	
Log	44 x 110 x 4400	1	C3	
Log	44 x 135 x 1607	2	D1	
Log	44 x 135 x 504	11	D2	
Log	44 x 135 x 532	11	D3	
Log, cut-out for window	44 x 135 x 1607	1	D4	
Log	44 x 43 x 1607	1	D5	
Log	44 x 67 x 220	1	E1	
Log	44 x 135 x 220	13	E2	
Log	44 x 135 x 220	13	E3	
Log	44 x 135 x 220	1	E4	
Log	44 x 110 x 2030	1	E5	
Log	44 x 43 x 100	1	E6	
Roof beam	45 x 95 x 1535	7	K1	
Roof beam	45 x 95 x 1535	1	K2	
Roof beam	45 x 95 x 1495	1	K3	
Roof beam	45 x 95 x 1495	1	K4	
Roof beam	45 x 95 x 2070	3	K5	
Roof beam	45 x 95 x 1550	1	K6	
Roof beam	45 x 95 x 1015	3	K7	
Roof beam	45 x 95 x 515	3	K8	
Roof beam	45 x 95 x 525	2	K9	
Roof beam	45 x 95 x 500	1	K10	
Roof beam	45 x 95 x 1040	2	K11	
Roof beam	45 x 95 x 985	1	K12	
Roof beam	45 x 95 x 1130	1	K13	
Roof beam	45 x 95 x 600	1	K14	
Roof beam	45 x 95 x 600	1	K15	
Roof beam support	26 x 95 x 1700	4	K16	
Wall plate	40 x 145 x 4400	1	T1	
Wall plate	40 x 145 x 2980	1	T2	
Wall plate	40 x 145 x 2972	1	T3	
Wall plate	40 x 145 x 1540	1	T4	
Wall plate	40 x 145 x 2030	1	T5	
Wall support	40 x 120 x 1910	3	T6	

All measurements approximately.  
We reserve the right to make technical changes.

# Lillevilla 504

2780 mm x 4200 mm / 44 mm



## Part list 2 /2

Part	Dimension in mm	Pieces	Mark	Control
Fascia board	19 x 95 x 4500	1	T7	
Fascia board	19 x 95 x 3100	2	T8	
Fascia board	19 x 95 x 2100	2	T9	
Foundation beam	36 x 60 x 2780	10	KI1	
Foundation beam	36 x 60 x 1400	1	KI2	
Floor board	21 x 87 x 4107	31	L1	
Skirting board, running meters	20 x 30	31m	J1	
Roof board, running meters	16 x 87	190m	KA1	
Door, type D6, right	84 x 817 x 1740	1	O1	
Door, type D6, left	84 x 810 x 1740	1	O2	
Door frame, right side	45 x 56 x 1771	1	O3	
Door frame, left side	45 x 56 x 1771	1	O4	
Door frame, top side	45 x 56 x 1697	1	O5	
Aluminium profile for door frame	45 x 45 x 1697	1	O6	
Board to door frame, inside	19 x 95 x 1800	2	O7	
Board to door frame, top, inside	19 x 95 x 1900	1	O8	
Board to door frame, outside	19 x 80 x 1840	2	O9	
Board to door frame, outside, top	19 x 95 x 1810	1	O10	
Board to door frame, outside, down	16 x 70 x 1655	1	O11	
Window, type E14	657 x 1595	2	I1	
Window, type R7	558 x 1496	1	I2	
Board to window frame, sides	19 x 95 x 1560	4	I3	
Board to window frame, top	19 x 95 x 745	2	I4	
Board to window frame, down	19 x 95 x 515	2	I5	
Screws, nails etc.	1 pack	1	T10	
Piece of log for fitting	44 x 65 x 250	2	T11	

All measurements approximately.  
We reserve the right to make technical changes.



## GENERAL INSTRUCTIONS FOR BUILDING UP THE LILLEVILLA

Dear Lillevilla owner,

Thank you for choosing the light log cabin building from Luoman Puutuote Oy. These general instructions concern all our light log items of 19, 21, 28, 34 and 44mm. Please read the instruction manual carefully in full before beginning the installation and keep the instructions for further reference. Drawings of wall constructions and part lists are specific to each model's own separate instructions.

In a case of reclamation, please inform your dealer about the specific guarantee number of your cabin. You can find this code on the package and on the first or last page of the instruction manual. Unfortunately, without this guarantee number we cannot handle your reclamation!

NOTE: Luoman Oy reserves all the rights to the photos, drawings, building instructions and other technical information. Using or forwarding them for competitive purposes is forbidden and will be followed by legal action.

Luoman Puutuote Oy has a Chain-of-Custody system, which is certified by DNV Certification Oy/Ab ([www.dnv.com](http://www.dnv.com), certificate 2149-2005-SMS-HEL-DNV). At [www.luoman.fi](http://www.luoman.fi) we present the share of certified wood raw material in your cabin. Our company is a holder of the PEFC logo license PEFC/02-31-82.



## 1. Storage of cabin package at the site, sorting and checking parts

Machined logs and other parts have been protective wrapped. If the item will not be immediately constructed, it should be kept indoors or otherwise well protected until ready to be installed. The package should be kept away from the ground to avoid absorbing moisture and stored on a level base.

Building instructions include a parts list and drawings of the wall construction.

Please check the contents in full with the help of the parts list and contact your retailer immediately if something is missing or defective.

Please sort the parts near the planned building area leaving enough space for working (Drawing 1).

## 2. Planning permission

Please check with your local building authorities if planning permission is required before beginning construction.

Note: Some building knowledge and experience is required when erecting a Lillevilla. If necessary, please ask for advice or help from someone professional.

## 3. Foundation

The most important aspect of the construction is the foundation. This must be flat, completely level and devoid of any movement. Take care when building on areas where the ground retains water.

In all cases a concrete raft foundation is preferred (Drawing 2) this spreads the constructions' load over a wide area and suits all ground types. Your retailer can advise an alternative foundation method should a raft not be possible.

The foundation for the optional terrace must be level with the base for the cabin and be prepared carefully. When erecting a model equipped with threaded rods, before making the foundation please read section 9 Protection against storm.

## 4. Building up

### 4.1. Foundation timber

Begin the construction by assembling the foundation beams at equal distances apart (unless otherwise specified) across the area of the base according to the separate foundation drawing. Fasten them to the foundation, for example with angle irons (excluded). Foundation beams are protection treated but it is advisable to add a roofing felt strip (excluded) or another insulator between the foundation and the beams to stop moisture from the foundation penetrating the timber.

The outermost foundation beams should finish nearer each other than the log walls (Drawing 4). There are two important reasons for this. 1. Rain water won't wet the point of contact of the foundation beams and the lowest logs. 2. The outermost foundation beams offer support for the edge of the floor.

### 4.2. The cabin without floor

If your cabin excludes a floor and you are building the log frame directly onto brick/blockwork, please add a felt

bitumen strip between the undermost log and brick/block. Additionally the brick/blockwork should be 5-10mm smaller than the log frame so that rain water falling along the walls won't wet the point of contact at the lowest log.

### 4.3. Building up the log frame

When building up the log frame please use the wooden blocks for assembly, these are marked with the letter X. Place the block on top of the log tongue and hit the assembly block so that the log goes to the bottom (interlock). Use only slight knocks to avoid breaking the logs. If the log doesn't easily fit into place, check that it is straight on the groove joint of the lower log. The logs are machined accurately and should require little force when assembling.

Begin building the log frame by installing the undermost log layer on top of the foundation beams. Note: Assemble the tongue joints upwards. Check the diagonal measurement of the log frame (Drawing 5) and then fasten the lowest logs into the foundation timber with nails or screws (Drawing 6). Remember to pre-drill to avoid splitting the log. If the cabin excludes a floor and foundation beams, fasten the log frame to the brick/blockwork with angled brackets (excluded).

Continue building up the walls one log layer at a time according to the wall construction drawings. **Note: when building a cabin including both drilled and un-drilled logs of the same length, they must not change position by mistake otherwise you will not be able to install the threaded rods.**

## 5. Installing the door and window

### 5.1. A single door

A single door has usually been pre-assembled in its frame. The frame including the door will be slipped into its place from the upper side of the opening (hinges outside), Drawing 7. Door frames are machined so that the logs fit into the channel on the sides. If the frame does not easily go into its place, check that the log ends going to the groove are straight. You can gently knock the frame into place using a hammer and assembling block to avoid breaking the frame. Fasten door handles and check that the door is functioning properly. Fit the lock by sliding it into place, aligning the holes for the fastening screw. Tighten screw initially by hand ensuring that you do not cross the thread.

## 5.2. Double door

The frame of the double door is packed as parts and must be assembled before installing (Drawing 8a and 8b). Fasten the side and the top part of the frame together by nailing or screwing at the corners. Make sure that the joints of the frame are properly fastened without showing gaps. If there is a metal threshold, screw it to the bottom end of the frames sides. Note: The distance between sides of the frame must be exactly the same at the top and the bottom. Fit the frame from the upper side of the opening in the same way as the single door. Check the diagonal measurement of the frame and lift the doors onto their hinges. Fasten the door handles and check that the doors are functioning properly. Fit lock as instructed for single door.

### 5.3. Remarks about doors

Note: It is very important that the cabin and the door frame are completely level to allow the door(s) to function properly. The log under the door frame cannot always be produced to sit completely level, so take this into account when assembling the door frame and if needed add some packing. Then nail the side frame to the lowest log only so that you do not impede the settlement of the building.

Because timber expands and contracts with changes in air moisture content, it is sometimes necessary to adjust the

door hinges by turning them inward or outward, depending on the situation. For example, if the door seems to be too big compared with the frame, rotate all the hinges inward.

#### 5.4. Assembling the window

Windows are slid into place from the upper side of the opening in the same way as the door. Screw the window handle in place and check that the window is functioning correctly. **Note: Be careful to install windows the right way up. Windows assembled upside down will fall from the hinges when opened.** Some windows are to be assembled with hinges at top. Avoid opening such too much, because it might also loosen from the hinges.

#### 5.5. Settlement allowance above the doors and windows

When building up the walls, you will note that there is a few centimetres space above the door and window (Drawing 9). Because wood is a living material, it shrinks in dry conditions (log frame goes down) and expands due to moisture (log frame rises). That is why the allowance for sinking is so essential – it lets the walls move without damaging the construction. The space is hidden with cover board nailed only to the frame of door/window. Never nail it to the log; this would prevent the natural movement of the log construction. For the same reason frames of doors and windows are not to be nailed to the log wall at any other place, other than the lowest log (the only exception is models having 19mm wall thickness, please see chapter 9. Protection against storm).

### 6. Gable triangles and supports of the roof (purlins)

Please note that the uppermost logs of the side walls are bevelled to follow the inclination of the roof and they don't have a timber blocking on their upper side. When the walls are complete you will need 2-3 persons to install the gable triangles. Check that the side walls are vertical; sometimes they need to be pushed slightly inwards to get the gable triangle to fit. **Ensure that the gable triangles are not left unsupported before installing the ridge purlin.** The purlin should be slid into the notches of the gable triangles so that the upper edge is flush with the edge of the triangle. Other purlins can then be installed in the same way, then pre-drill and nail the gable triangles to all the purlins. Screw the uppermost side wall logs to the gable triangles using 2 screws/corner (pre-drill!). Drawing 10.

#### 6.1. Gable triangles consisting of several parts or separate logs

Gable triangles for some models consist of several parts or separate logs (please see the drawings of wall construction). Assemble the gable triangles following the drawings and fasten the parts together with 100mm nails (countersink nails 1-2mm into the logs).

### 7. Floor

These instructions are for cabins including floorboards and foundation beams: Floorings have been planed to profile. They have tongue-and-groove joints and the back side is bevelled and has two furrows. It is normal that the back side has wane on it. It is not a defect but a characteristic of the product, normally boards will have only one face side.

Begin assembly by fixing the first floorboard with the bevels and furrows downwards onto the foundation beams with the groove joint towards the wall (leave about 5mm space between the wall and the floorboard). Mark with a pencil the centres of the foundation beams on the bottom of the wall log. This makes it easier to find the nailing line. Put all the floorboards in place. Note: Flooring will expand and contract depending upon the amount of



When the floorboards are in place, follow the marks you made on the walls and nail the floorings to the foundation timber (Drawing 4). Using a line or board may help. Fasten the skirting boards to the wall and not to the floor. Protect the floor immediately upon completion to keep it clean.

## 8.1. Installing the roof boards

Roofboards have the same profile as floor boards; lightly bevelled edges on the front and visible side (assembly downwards) and bigger bevellings and furrows on the back, invisible side (assembly upwards).

Drawing 11. Begin nailing the roof from the front. Fix the first boards on both sides of the roof and make sure that they sit flush with the edge of the purlins. Nail the boards both to the side walls and all purlins. Leave 1-1.5mm space between each roofboard to allow them to expand and contract with moisture. Use the centre line of the ridge purlin as a guide to keep the roofboards straight. Measure and trim the last roofboard to fit flush with the ends of the purlins. Trim cut the bottom line of the roof straight. Then fix the fascia boards according to Drawing 12A.

## 8.2. Covering material for roof

Fascia and barge boards should be installed after the roof covering is fitted (Drawing 12B). If the cabin model includes two sets of fascia boards, install the widest first followed by the narrower ones.

If roofing felt is included, measure the length of the roof and cut the exact same length from the felt. Fasten the first length carefully to the eaves (Drawing 13). You can leave the edge of the felt about 0.5-1 cm over the eaves, but do not bend the felt. Overlap the next felt strips a maximum of 30mm and do the same on the other side of the roof. Finally, install the felt strip on top of the ridge. **The roofing felt included in the delivery is for temporary use only and it must be replaced with suitable covering material, for example, shingles within six months.**

Drawing 14. The bitumen shingles are to be attached directly to the roof boards. They should be fitted when the



### 9.3. Threaded rods

Drawing 17. If threaded rods are included, slide them into the ready drilled holes in the corners of the building according to the drawing (nut and washer to both ends). Please take care that the upper end of the threaded rod is below the level of the gable triangle so as not to impair the level of the roofboards. Check the nuts regularly and tighten lightly when needed. It may be necessary to loosen the nuts a little to allow the expanding timber to rise when the weather is damp, otherwise the walls will try to bow out in the centre of the building.

When the house frame settles, it is possible that threaded rods may touch the ground and begin to push up the roof. Note this point when installing the foundation and ensure you have adequate space between the base and the bottom of the rods, otherwise the rods may need to be shortened.

## 10. Assembling the terrace (optional)

Begin by fastening the foundation beams (T14) in place in the same way as you did with the building itself. The short foundation beams (T15, if included) should be placed under the parapets at the sides of the entrance to the terrace. They also act as a base for the first floorboard.

The two half logs (T5) should be assembled on the outermost foundation beams so that the logs overhang the edge of the beam making it possible to fasten the ends of the terrace boards to the foundation beams, in the same way as the cabin floor. Install the parapet logs according to the drawings, then set the floorboards (T16) at an even distance apart (1 cm between each board) on the foundation beams. When they are all spaced out evenly they can be nailed. It is normal that the bottom of the floorboard has wane on it. This is not a defect but a characteristic of the product. Boards will normally have only one good side. The short floorboard belongs between the two parapets, in the entrance to the terrace. Note: If threaded rods are included, it is advisable to screw the first three floorboards next to the cabin so that they can then be removed easily to adjust the nuts of the rods.

Screw the parapets of the terrace to the floor using the angle irons (T13). Then finish the parapets by fastening the balustrades (T9, T10) to them and assemble the U-profiles (T11) to both sides of the entrance. Fasten the facing plank (T18, if included) in front of the foundation timber. Finally, fasten the parapets to the building with four T12 boards.

## 11. Finishing of the building

### 11.1. Window crosses

If the window crosses of your model are unfastened, please nail or screw them to the door/window. Pre-drill small holes about 1 cm from the end of the cross and fasten the crosses carefully (Drawing 18). Note that about 10mm of the glass reaches into the door/window frame.

Most models have readily assembled crosses fastened with plastic cleats. These can be unfastened for washing the glass.

### 11.2. Equipment for keeping the window open

Some models include equipment for keeping the window open. The installation instruction is in the bag of accessories.

### 11.3. Protection plastic of plexiglass

Windows and doors of some models have plexiglass. They have protective plastics to avoid scratching during the production process. Remove them after assembling the window/door.

## 12. Protection treatment

Treatment must be performed immediately after erecting the cabin. Please follow the instructions from the treatment manufacturer. The best result will be achieved in dry conditions when the temperature is over + 5 C. Treatments both in and outside must be renewed regularly following the manufacturers instructions. Follow carefully the condition of the south side wall as ultraviolet radiation affects it more than the other walls.

Despite treatment, moisture can get in through corners, knots, splits and joints of the parts. This can be prohibited with silicon. Note: split knots of light log cabins can allow protection material to bleed through to the inside. Water is absorbed into the wood construction easiest through the ends of the logs and the ends of the fascia boards, so treat these areas often and with care. Other timber parts being under heavy strain of weather and wear include wind covering boards, parapets and facing planks of the terrace. These should be treated often, yearly if necessary.

Protect the floor of the terrace during the treatment of walls. Also treat the internal floor with lacquer or paint before use.

## 13. Care and maintenance

Safe long-term use of the building requires regular checking, possible reparation of the fastenings and inspecting the condition of the parts. Pay particular attention to the roof construction, covering material, doors and windows, foundation fastenings, the protection against storm and surface treatment. Failure to perform regular maintenance can cause damage to the building or a safety risk to the user.

Regularly inspect the condition of the exterior treatment and re-new it when necessary. Inspect the bottom of the doors, windows and their frames, end surface of timbers and parts stressed by hard wear.

Check the functioning of doors and windows and adjust hinges when required. Check the silicon seals of doors and windows, renewing when necessary.

It is very important to make sure that underneath the cabin is well ventilated.

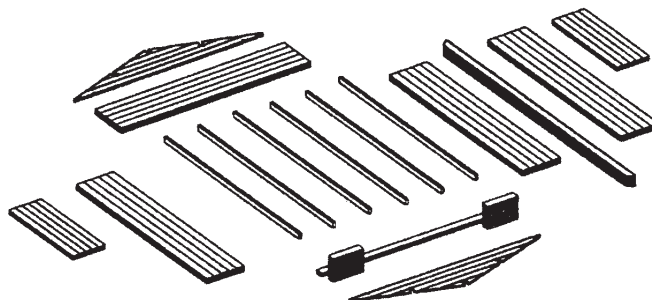
## 14. Some tips for possible problematic stages

If the doors or windows do not seem to fit correctly in the opening, check the level of the foundation and the level of the building. These components will not function properly if they do not sit level, if necessary pack up the low corner to correct this fault.

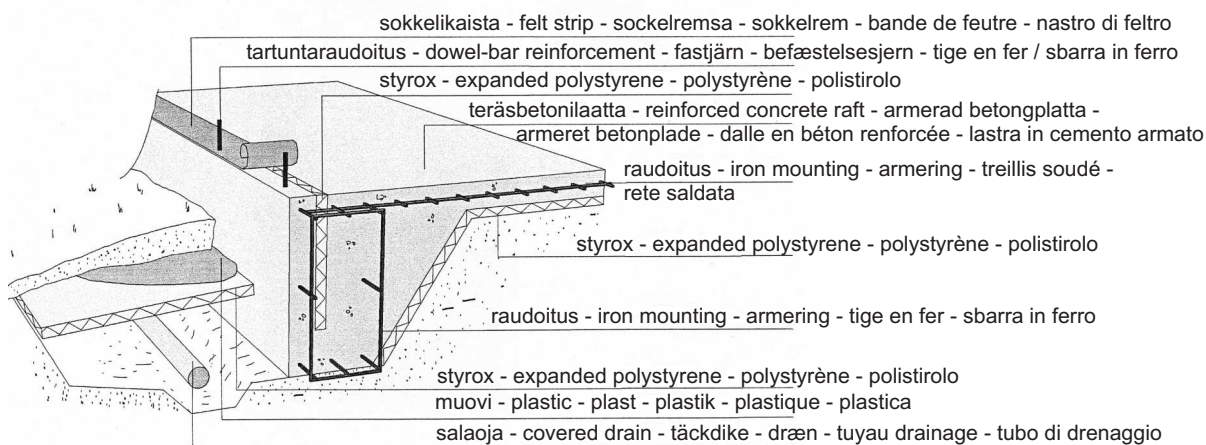
If the side and end walls are at different heights when they are completed, check that all the logs are down correctly in their tongue-and-groove joint. You can rectify this by lifting the uppermost log of the lower wall to the right level and by fastening it to the log of the connecting wall. Then knock the lower logs up one by one and even out the spaces.

This is not a machining fault, it is due to the moisture content of the timber and will rectify itself in due course.

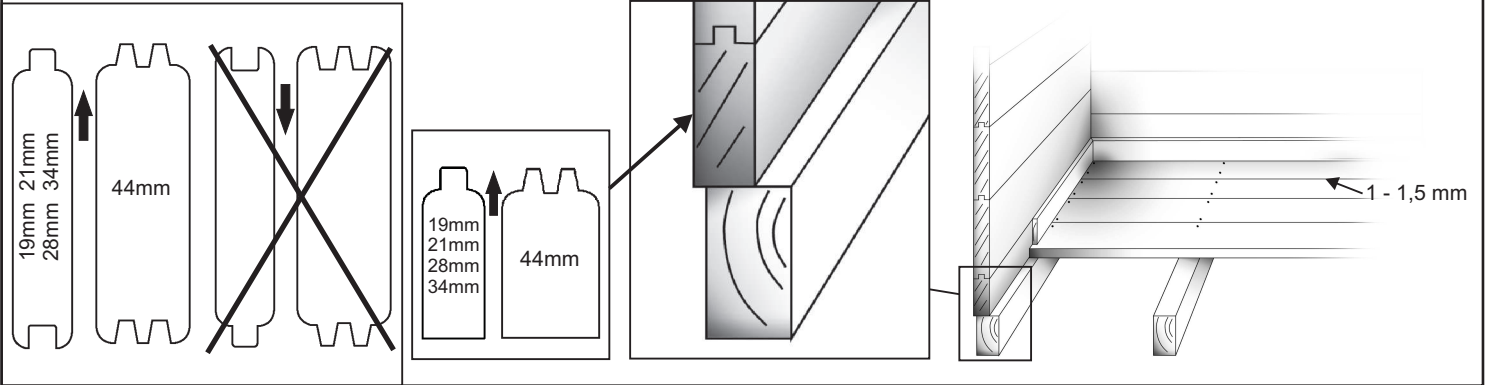
1. Osien lajittelu - Sorting the parts - Sortering av delarna - Sortering av delene - Le tri des pièces - Selezione dei pezzi



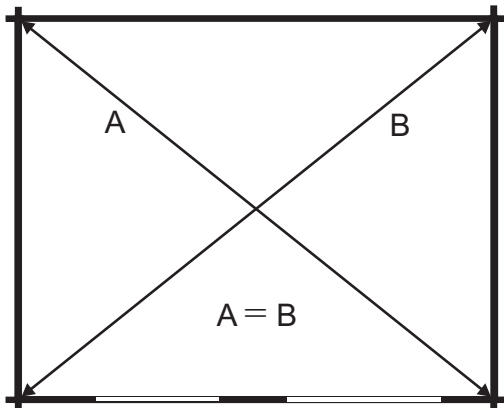
2. Laattaperustus - Concrete raft foundation - Betonggrund - Betonfundament - Les fondations avec la dalle -  
 Le fondazioni con una lastra di cemento



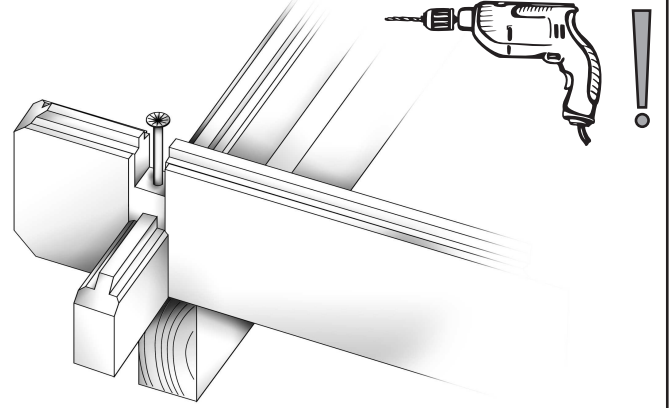
- 4. Hirsien asennussuunta, perustuspuiden asettelu ja lattian kiinnitys - The assembling direction of logs, foundation beams and assembling of the floor - Monteringsdirektion av väggtimren, grundbalkarna och montering av golvet - Vægbrædderne, fundamentbjælkerne og montering af gulvet - La pose des solives et la fixation du plancher - La posa delle travi di fondazione - Prusside paigaldussuund, vundamendiprusside paigaldus ja põranda kinnitamine**



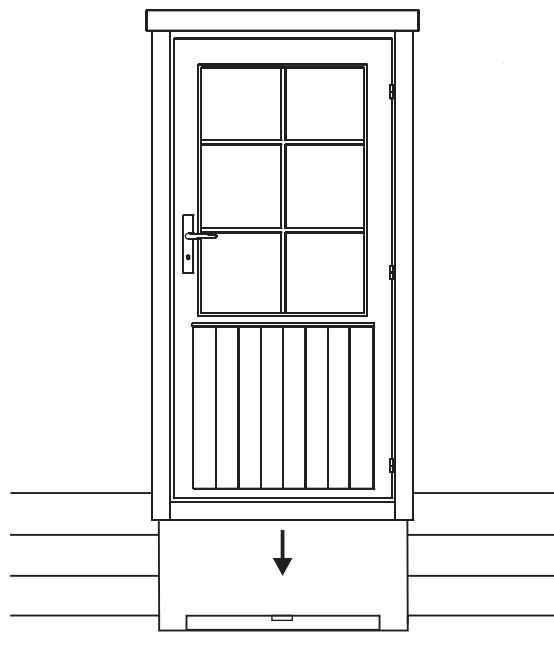
- 5. Kehikon ristimitan tarkistaminen**  
 Checking the diagonal measurement of the log frame  
 Kontroll av diagonalmått hos timmerramen  
 Krydsmåling af bjælkerammen  
 Control de diagonal de la structure  
 Controllo diagonale della struttura



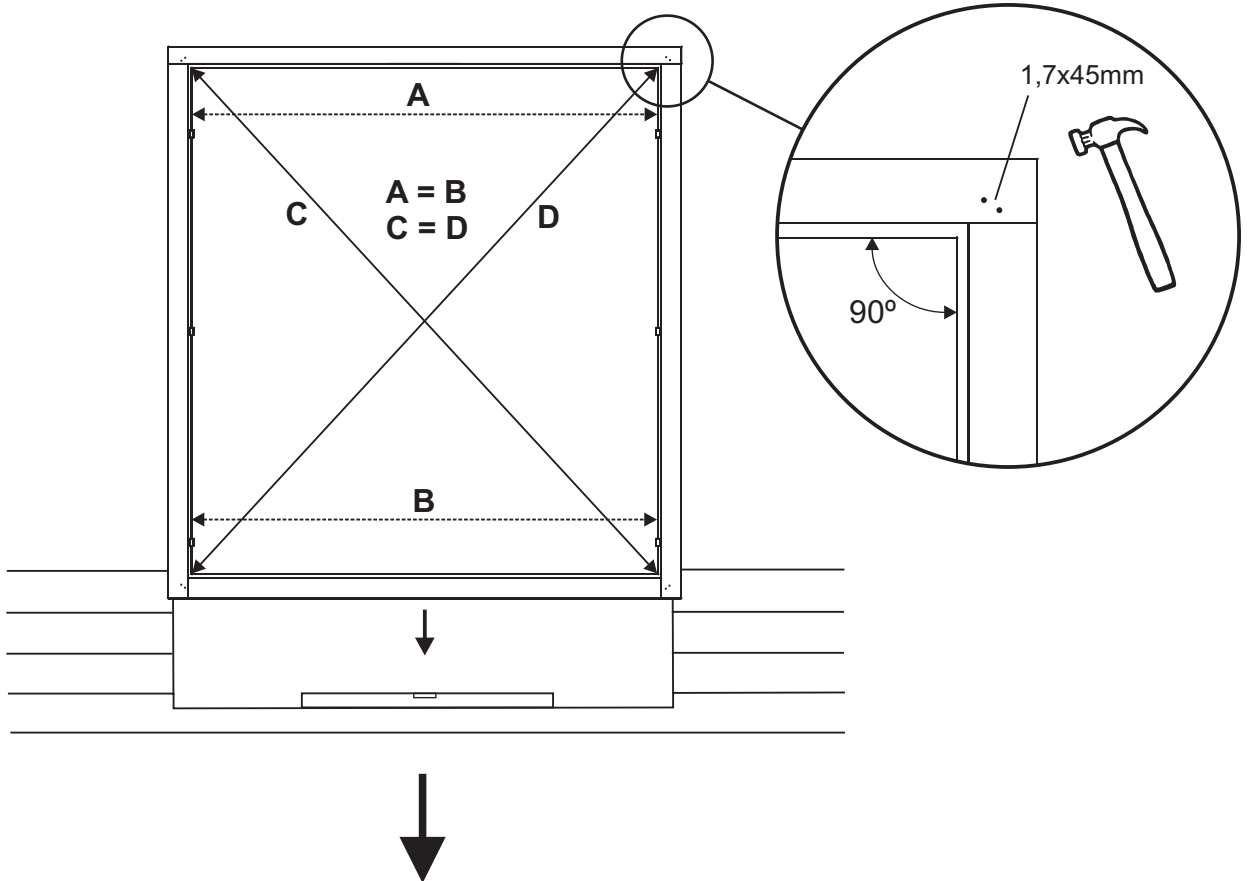
- 6. Alimpien hirsien kiinnittäminen**  
 Fixing the lowest logs  
 Fästning av det första timmervarvet  
 Fastgørelse af de nederste bjælker  
 La pose des premiers madriers  
 La posa dei primi tavoloni



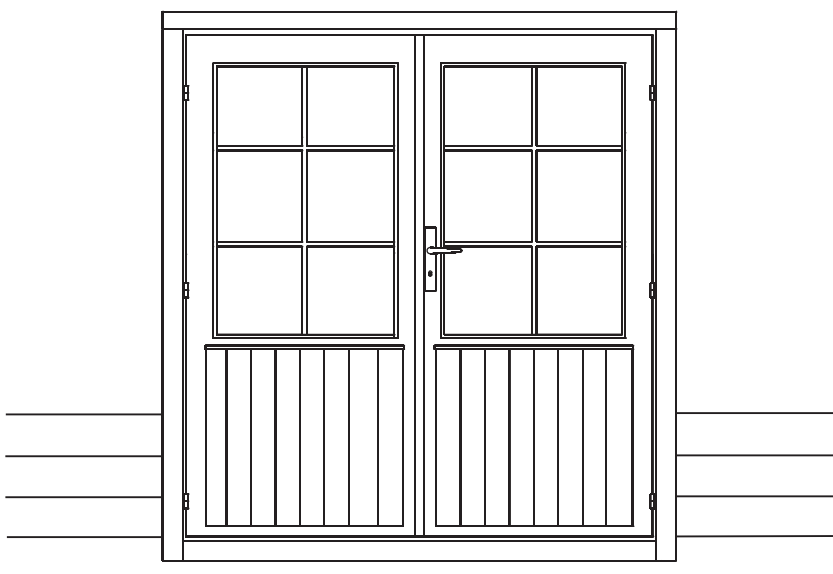
- 7. Oven asentaminen - Assembling the door - Montering av dörren - Montering af døren - La pose de la porte - La posa della porta**



8a. Parioven karmien asentaminen - Assembling the double door frames - Montering av dubbeldörrens karm  
Montering af fløjdørens karme - La pose du cadre de double porte - La posa del telaio della doppia porta

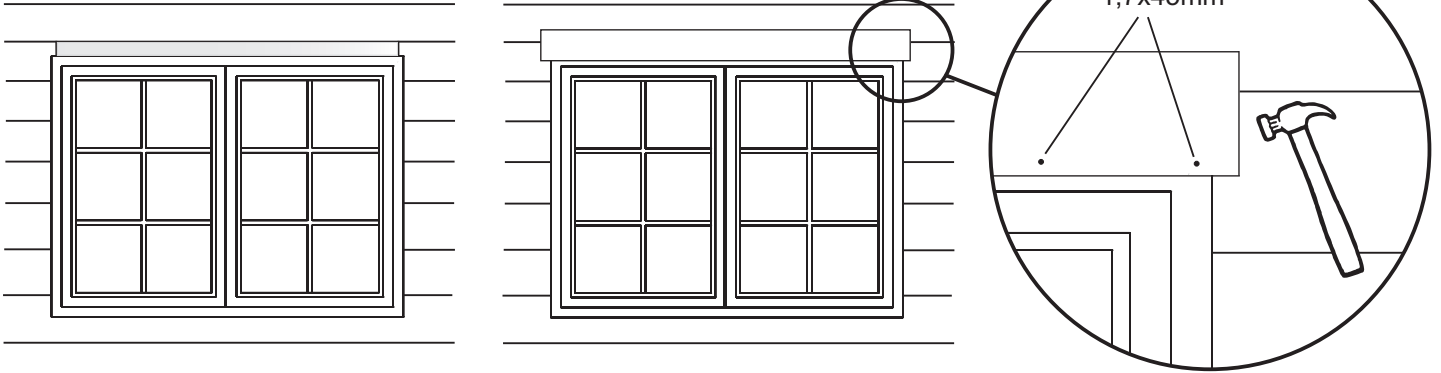


8b. Parioven asentaminen - Assembling the double door - Montering av dubbeldörren - Montering af fløjdøren -  
La pose du double porte - La posa della doppia porta

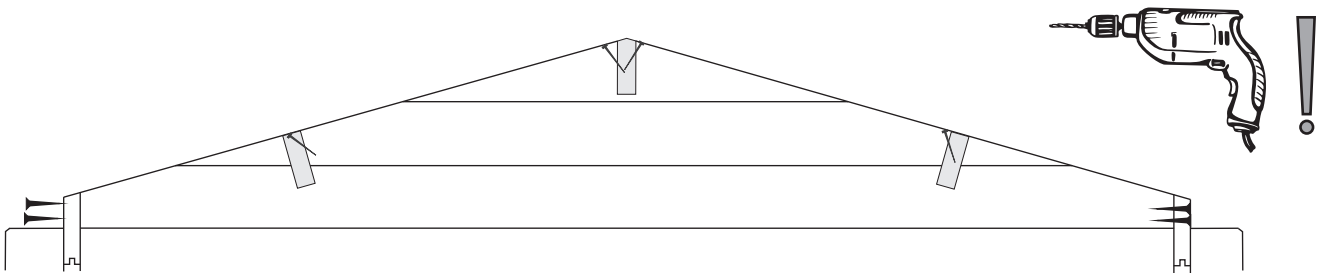
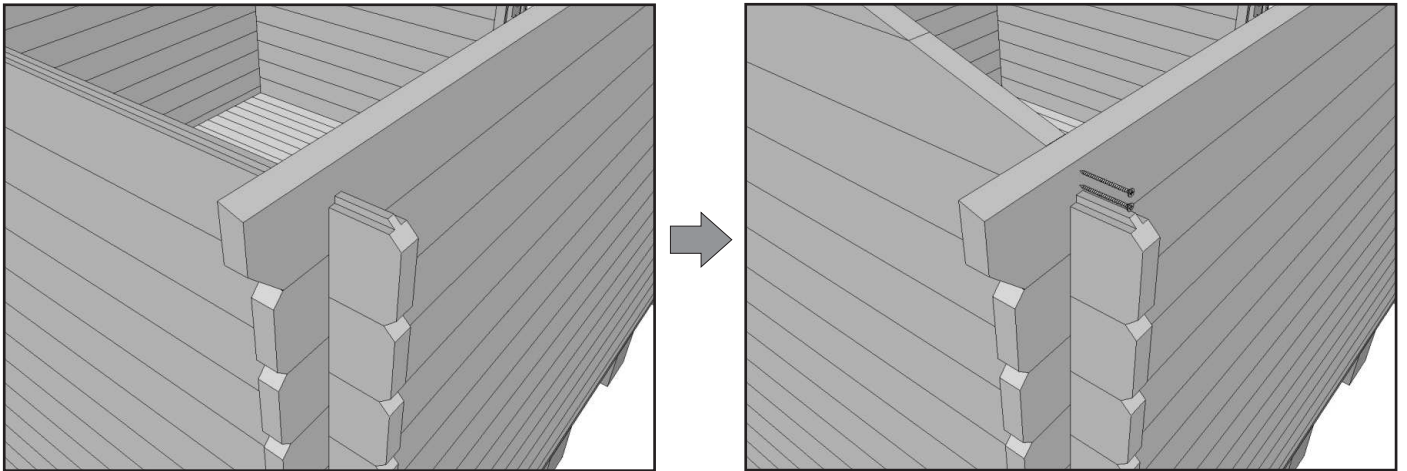




9. Painumavara ikkunan/oven päällä ja peitelaudan asentaminen - Space for settling above window/door and assembling the covering board - Sänkingsmån ovanför fönster/dörr och montering av täckbrädan - Plads til sætning over dør/vindue og montering af dækplade - L'espace dessus de la fenêtre et de la pose du couvre joint - Lo spazio sopra la finestra e la porta ed la posa delle copri giunture

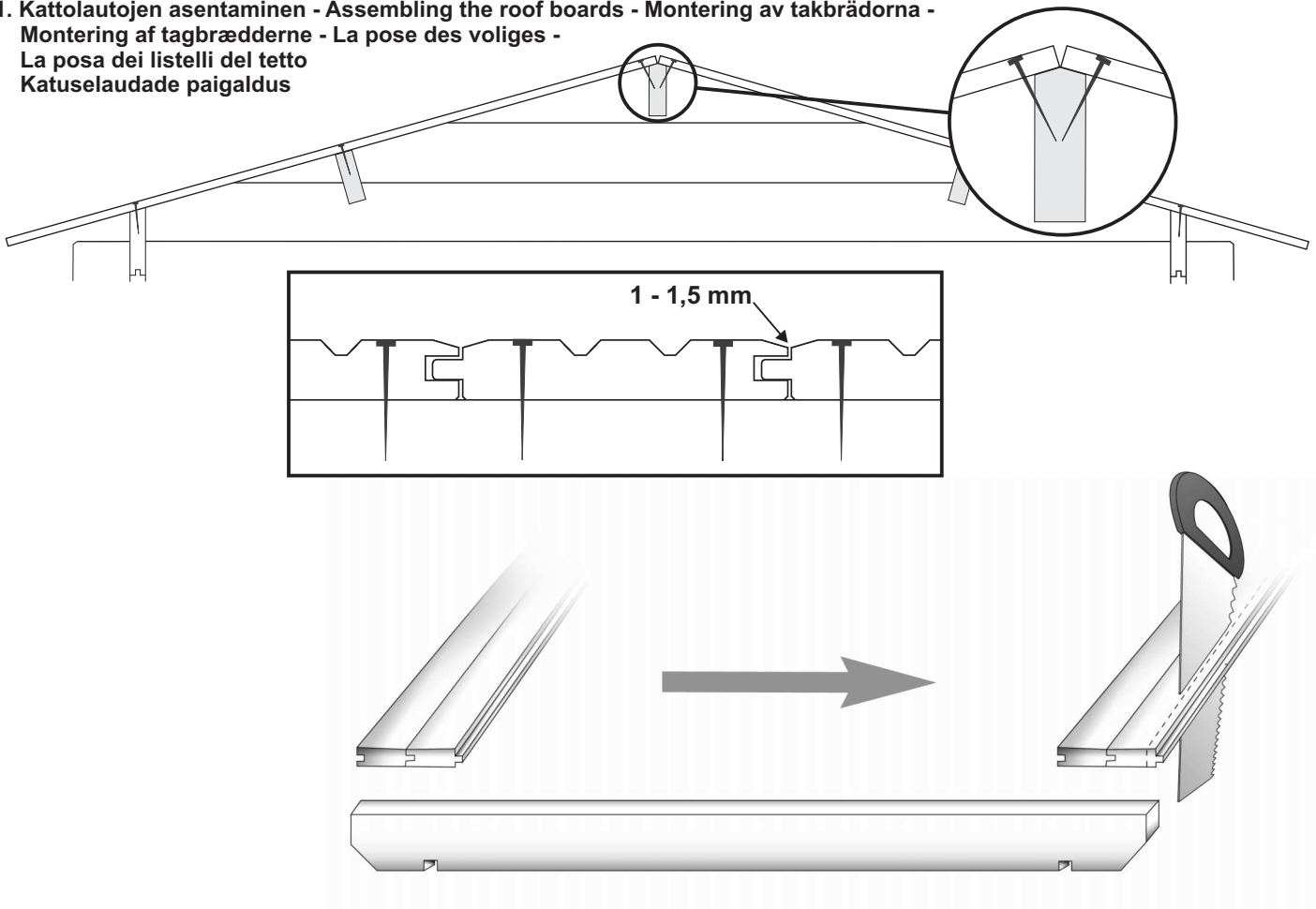


10. Päätyskolmio, sivuseinien ylimmät hirret + kurki/vierrepuut - Gable triangles, uppermost logs of side walls + purlins - Gaveltrianglarna, översta väggtimren på sidoväggarna + takbalkarna - Gavltrekanterne, øverste sidevægsgbjælker + tagbjælkerne - Le pignon, les dernières madriers + la panne faitière + les pannes intermédiaires - Il frontone o testata, le ultime tavolette delle pareti laterali + l'arcareccio del colmo +travi principali

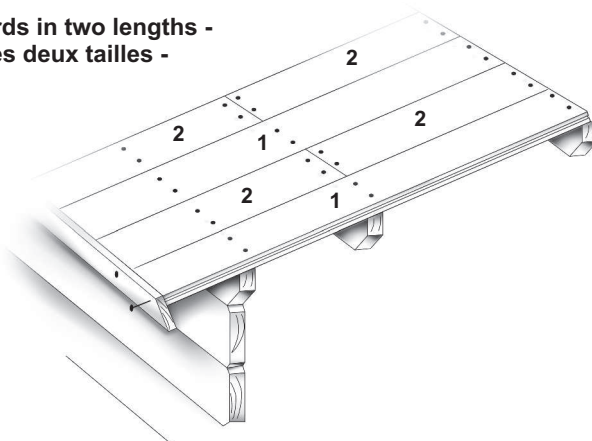




11. Kattolautojen asentaminen - Assembling the roof boards - Montering av takbrädorna -  
Montering af tagbrædderne - La pose des voliges -  
La posa dei listelli del tetto  
Katuselaudade paigaldus

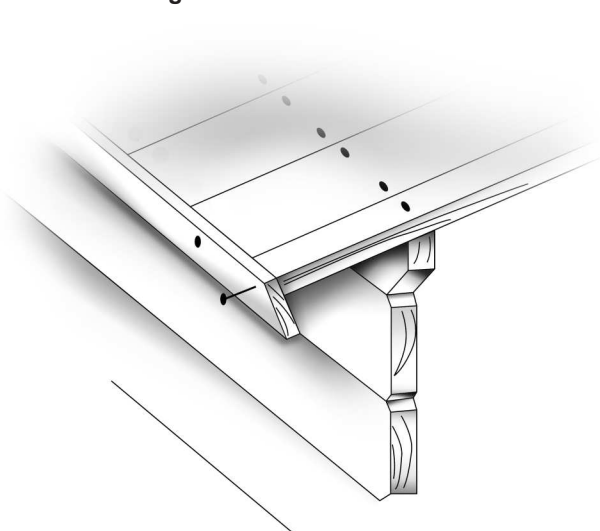


**11a. Kattolaudat kahta pituutta - Roof boards in two lengths -  
 Takbrädorna i två längder - Les voliges deux tailles -  
 Tavolette per il tetto due misure**

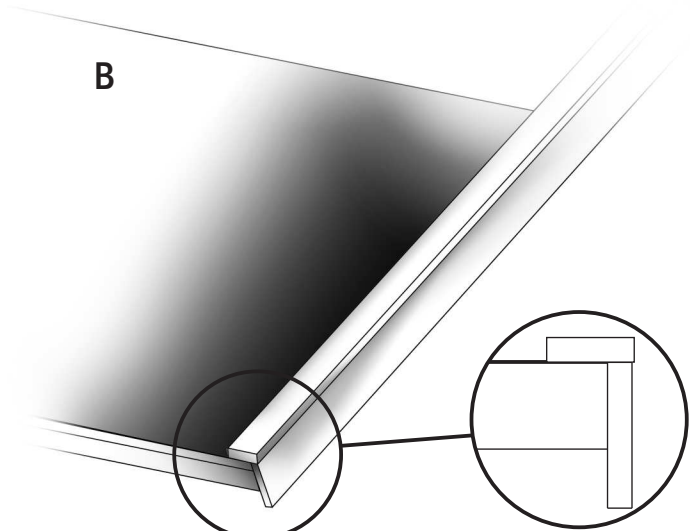


**12. Rästslautojen asentaminen - Assembling the fascia boards - Montering av gavel- och takfotsbrädorna samt  
 vindskivorna - Montering af sternbrædder og dæklister - La pose des planches de rive - La posa delle assi di  
 rivestimento della grondaia**

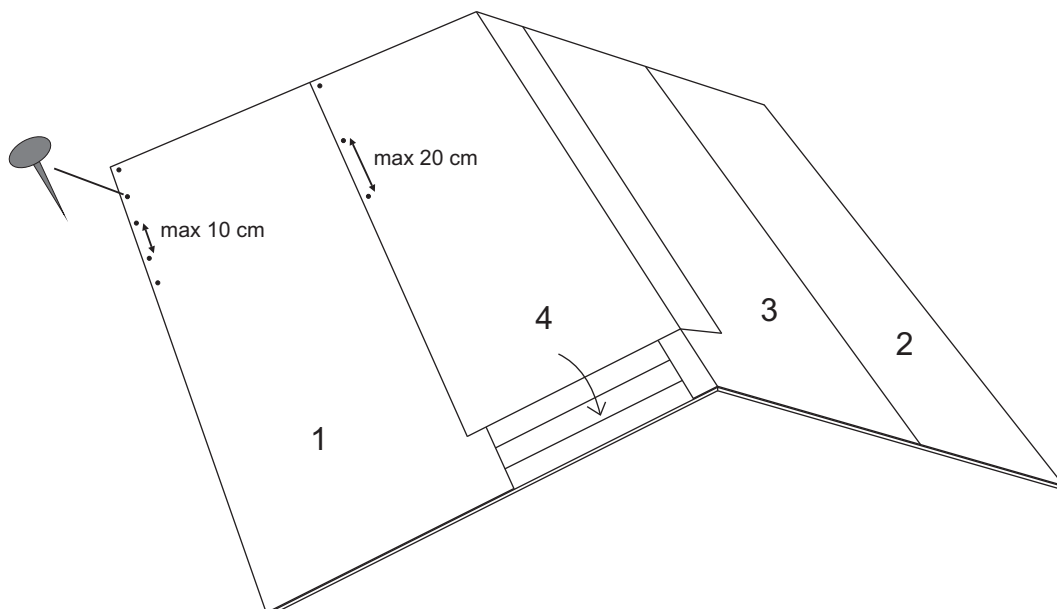
A



B

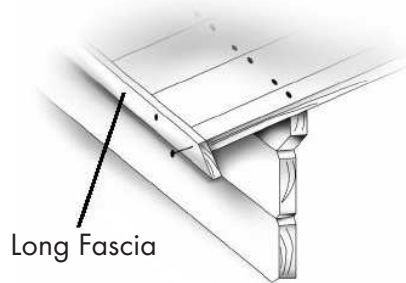


**13. Rullahuovan asentaminen - Installing roofing felt - Montering av takfilt - Pålægning af tagpap -  
 La pose du feutre bitume - La posa della guaina feltro bitumato**

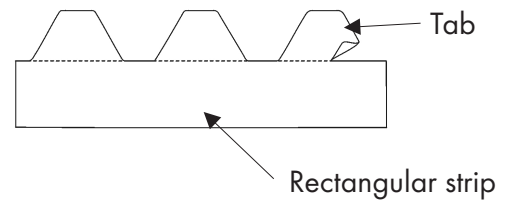


14. Palahuovan asentaminen - Installing roofing shingles - Montering av takplattor - Montering af shingles-plader -  
 La pose des shingles - La posa delle tegole bitumate (shingles)

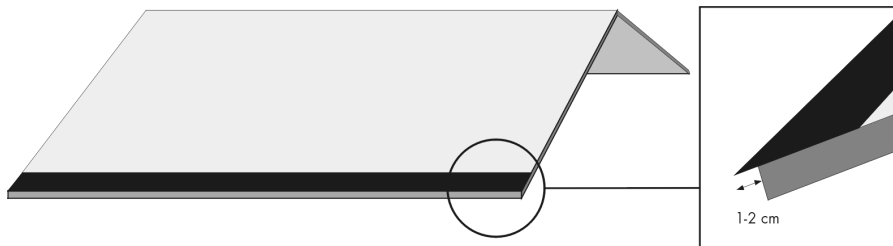
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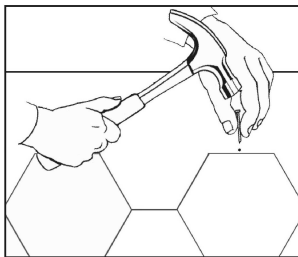
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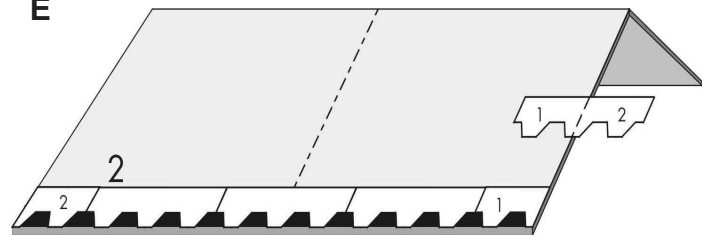
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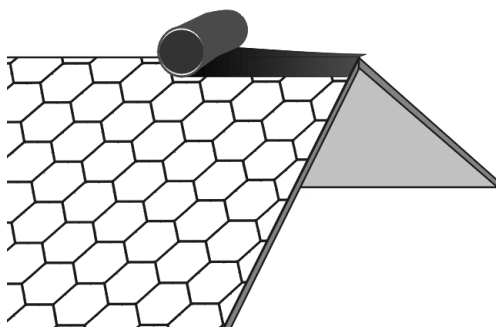
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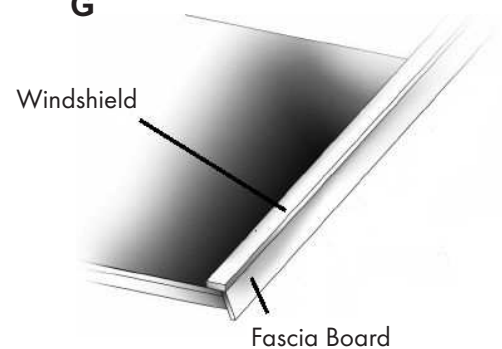
E



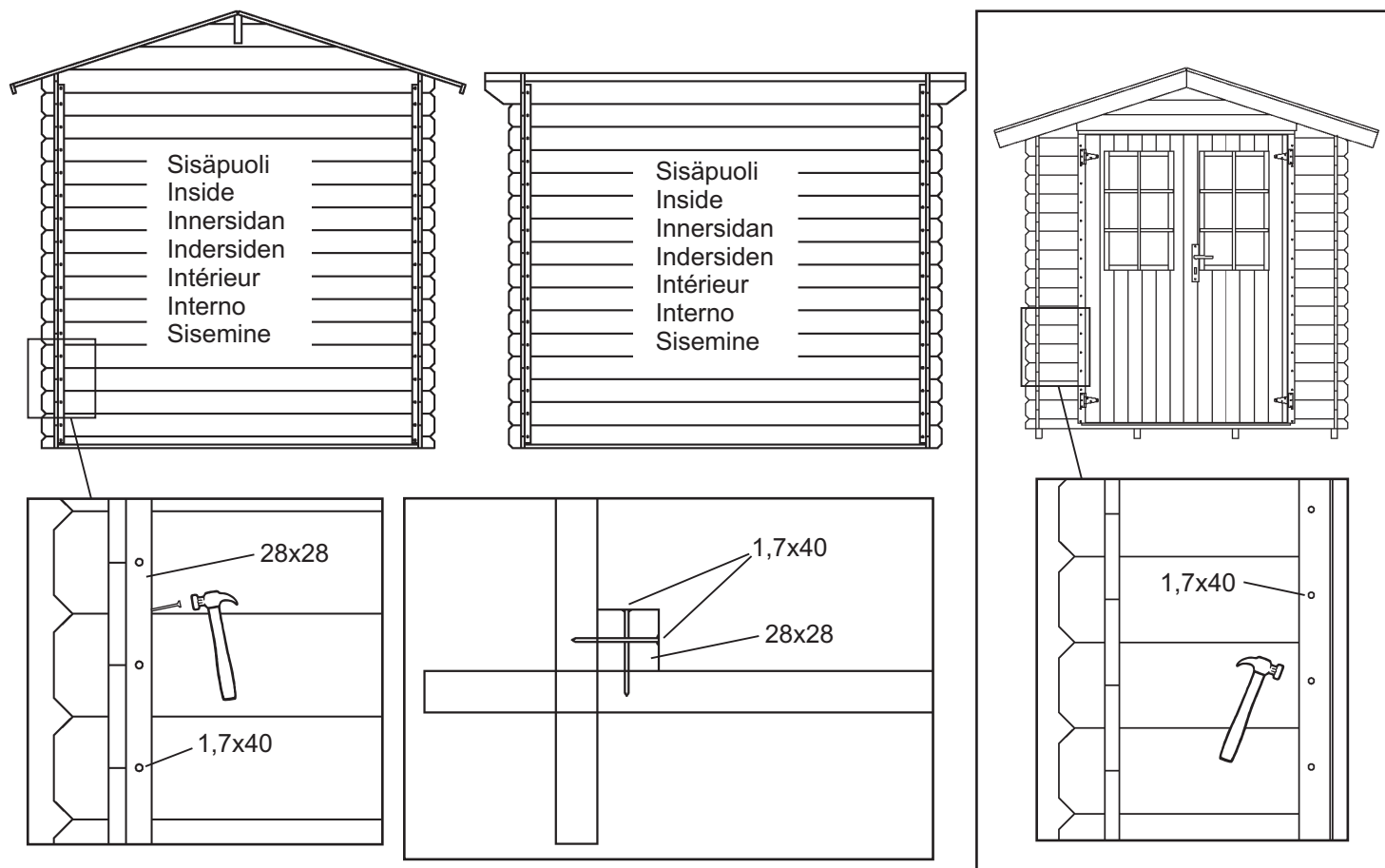
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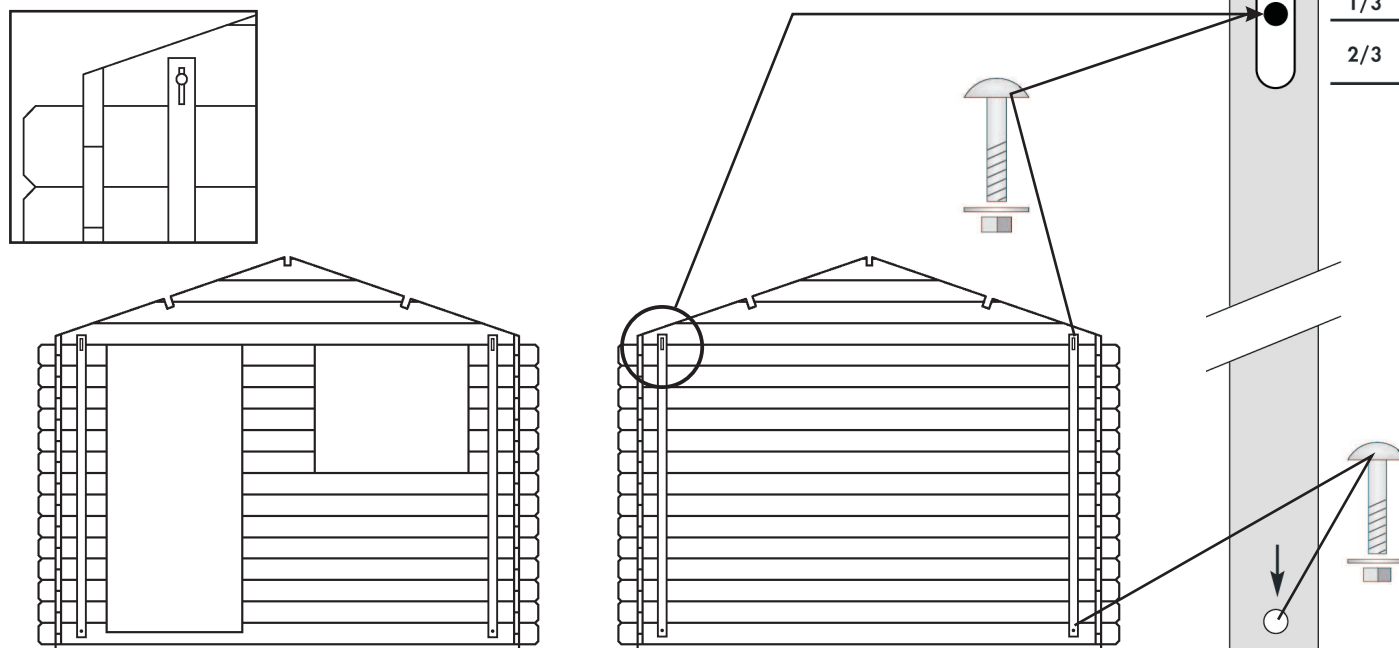
G



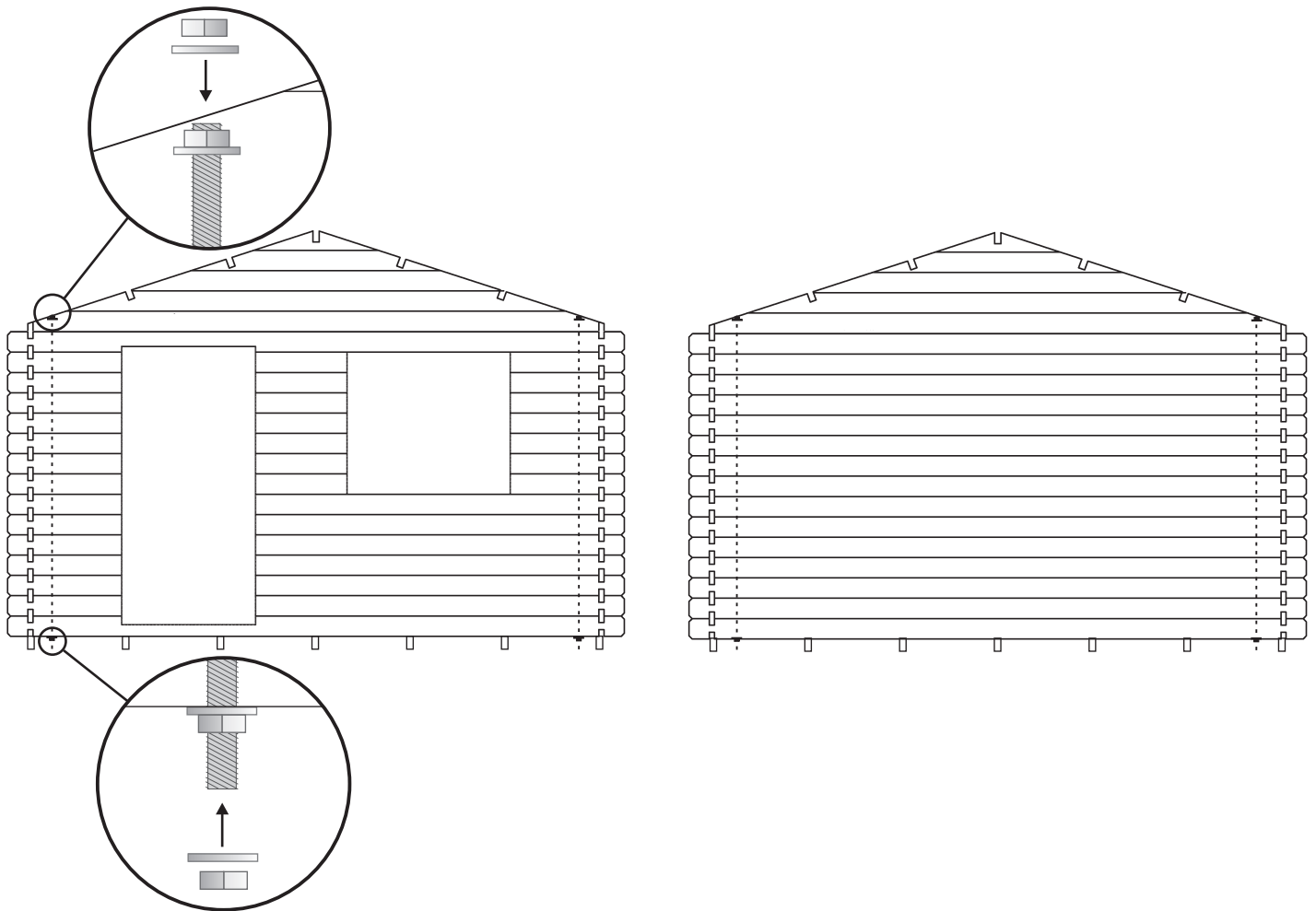
**15. Myrskylstat 19 mm mökeissä - Storm battens in 19 mm cabins - Stormlisterna på 19 mm stugor - Stormlisterne i 19 mm bjælkehuse - Lattes de tempête dans les abris 19 mm - Listelli di tempesta nelle casette 19 mm - Tormiliistud 19 mm aiamajades**



**16. Myrskylstat 21 - 44 mm mökeissä - Storm battens in 21 - 44 mm cabins - Stormlisterna på 21 - 44 mm stugor - Stormlisterne i 21 - 44 mm bjælkehuse - Lattes de tempête dans les abris 21-44 mm - Listelli di tempesta nelle casette 21-44 mm**



17. Kierretangot - Threaded rods - Gängstängerna - Gevindstænger - Tige filetée - Puntone di fissaggio



18. Ikkunaristikot - Window lattice - Fönsterspröjs - Vinduessprosser - Les croisillons des fenêtres -  
 Le traverse in legno delle finestre

