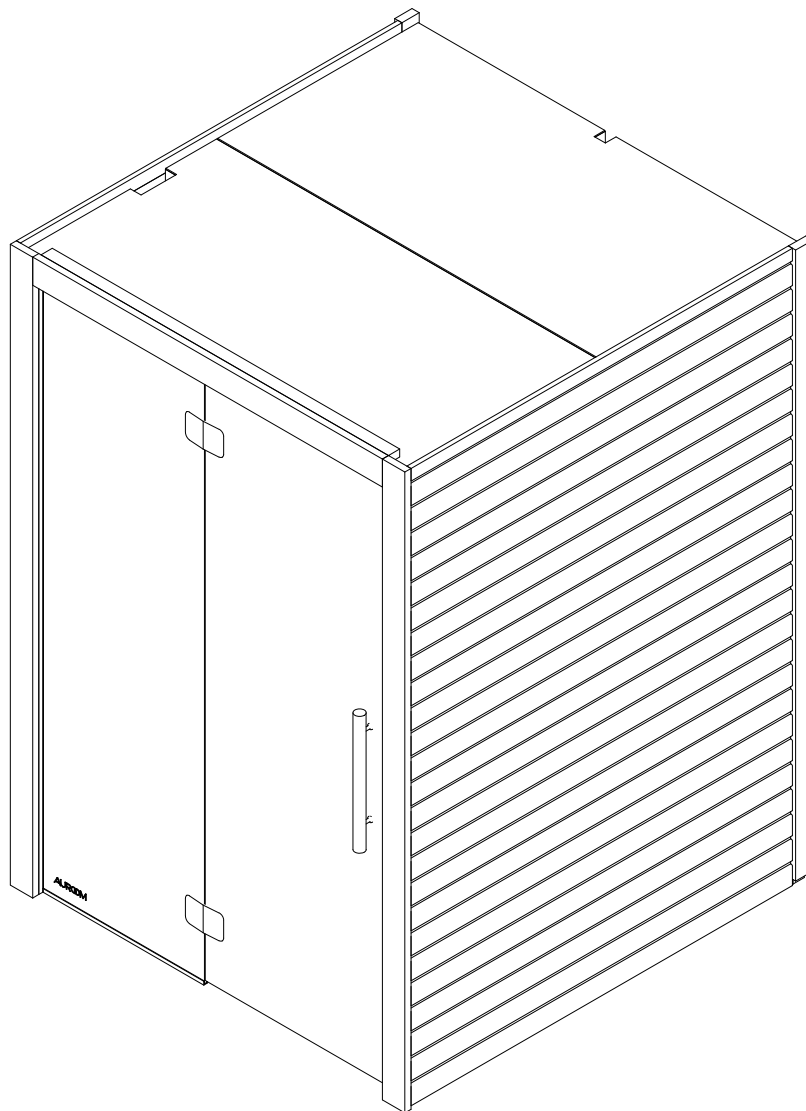


AUROOM
Our Saunas Your Wellness

Prefabricated sauna cabin
Dry finnish sauna cabin

INSTALLATION MANUAL
MODEL Cala Glass L 150x150 cm (60x60 in)



Package checklist

When opening the package, ensure that the package is intact. Handle the components with care during transportation and handling. It is important to observe and prevent any damage or scratches.

Package :

1. Baseframe (in 3 pcs.)
2. Wall element A1
3. Wall element A2
4. Wall element B1
5. Wall element B2
6. Wall element C1
7. Wall element C2
8. CP-3 (2 pcs)
9. Ceiling element 1
10. Ceiling element 2
11. Upper bench (frame + grid)
12. Lower bench (frame + grid)
13. Vertical supports for lower bench (2 pcs.)
14. Bench skirt
15. Backrest + holders (2 pcs.)
16. Floor grids (3 pcs.)
17. Heater guard
18. Horizontal bench supports (3 pcs.)
19. BF-1 & BF-2 - vertical corner frames
20. FF-1 & FF-2 -vertical glasswall frames
21. FF-3 - upper horizontal glasswall frame
22. Horizontal glasswall piece (above the door)
23. CP-2 - Vertical glasswall piece
24. Door glass
25. Window
26. Handle + hinges (2 pcs.)
27. Ceiling plywoods (5 pcs.)
28. 15x90 STP extra panels - (4 pcs.)
29. 28x90 SHP extra panels - (2 pcs.)
30. Sauna manual
31. Screw set
32. LED strip + cable
33. Transformer
34. LED receiver
31. Wireless lighting switch
32. Auroom accessories: bucket and ladle, thermo-hygrometer, sand timer, sauna hat, sauna pillow, aroma set

Assembly instructions

1. Preparations

- Sauna package must be stored in a heated and dry room.
- Prior to installation the package must be opened and stored for 48h to adjust to relative humidity of the room (22°C (72°F), 40-60% RH).
- Ensure the sauna model fits in the designated room with sufficient extra room for ease of installation.
- Clean the location of sauna with care in order to not damage any details, elements
- Room must be well ventilated and with water drain on or near the position of the sauna.
- Sauna is intended to be installed on a level surface to ensure proper installation and quality of the installed product.
- Adequate electrical supply must be ensured for electrical components of the sauna. Refer to user manuals of respective products.
- Electrical connections to the power grid and to the sauna may only be carried out by legally competent and certified specialist.
- Producer cannot be held responsible for any errors resulting from disregard to the levelness of substructure, inadequate storing conditions, inadequate power supply, unauthorized alterations to components or any other circumstances occurring from deviations described in this manual and/or good customs.

2. List of tools

- Water level
- Tape measure
- Power drill
- Rubber or plastic mallet
- Silicone gun
- TORX Driver Bit Set
- Screwdriver set
- Ladder
- Hammer

Installation of a sauna requires at least two (2) persons.

3. Installations

- Follow the instructions precisely.
- Always start from 1 and continuously move forward in an organized manner.
- Keep the installation site always clean and organized.
- This manual does not take into account any possible peculiarities of the installation site.
- Take care not to damage any components during installation due to dropping, dragging or careless handling.
- Special attention towards elements - they must be stored with care and kept away from any hard or sharp objects. Glasses are tempered and even smallest damages to the surface or corners can lead to concentration of stress and shattering of the glass.

1. Baseframe

1. Check substructure level. Sauna must be installed on a level surface.
2. Connect the base frame elements
3. Fix the elements with screws
4. Check baseframe diagonals for equality and right corners
5. Apply silicone under baseframe and fix in place

NOTE! If the sauna is to be moved after installation, silicone can be installed afterwards.

Figure 1a.

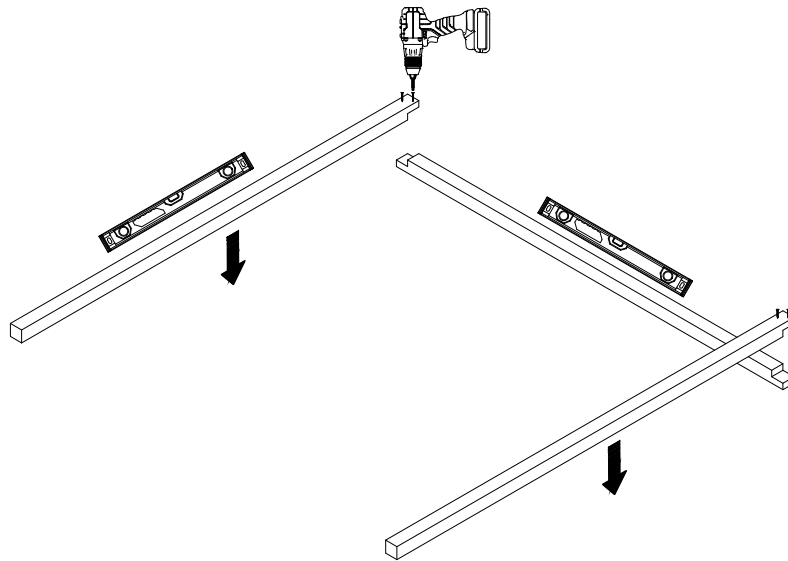
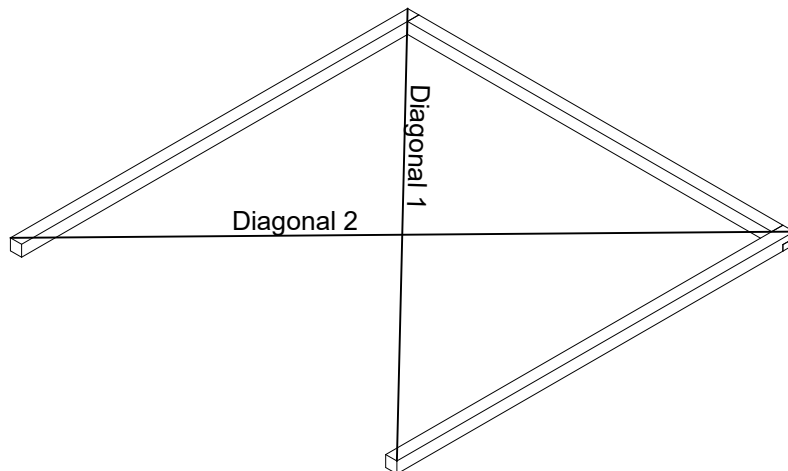


Figure 1b.



2. Wall elements

1. Start assembly by placing previously assembled elements A1 & A2 on stable baseframe.
2. Fix A1 & A2 elements with corner post CP-3 as indicated on Figure 2a, 2b.

Figure 2a.

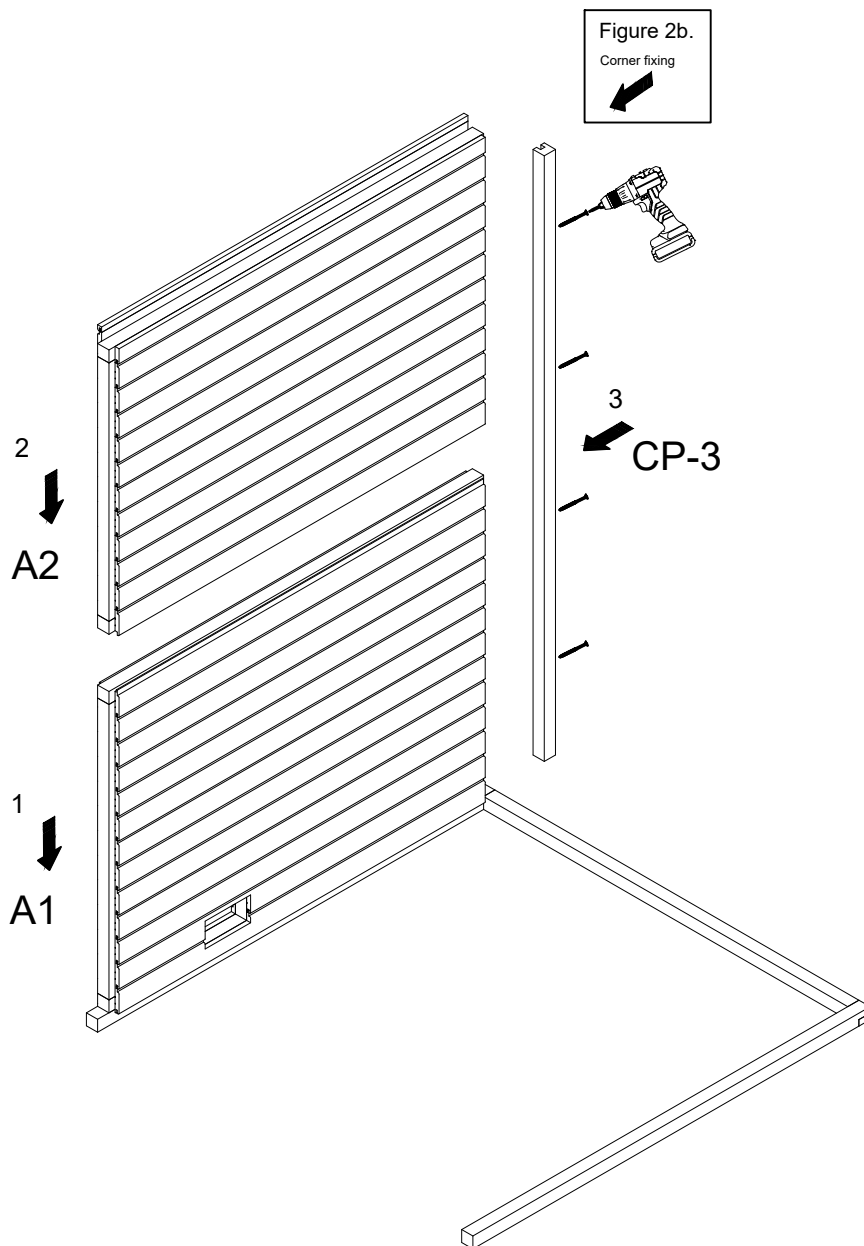
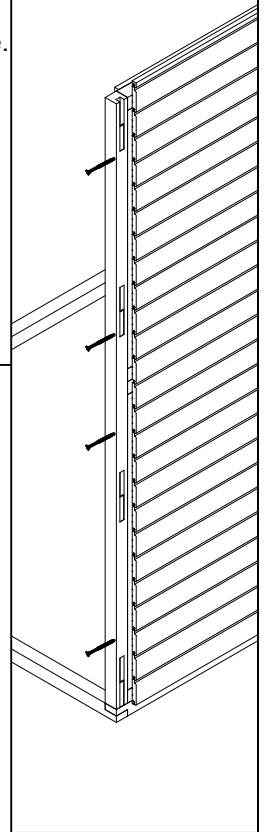


Figure 2b.
Corner fixing



2.1 Wall elements

1. Place previously assembled elements B1 & B2 on stable baseframe.
2. Fix B1 & B2 elements with corner post CP-3 as indicated on Figure 2.1a, 2.1b.

Figure 2.1a.

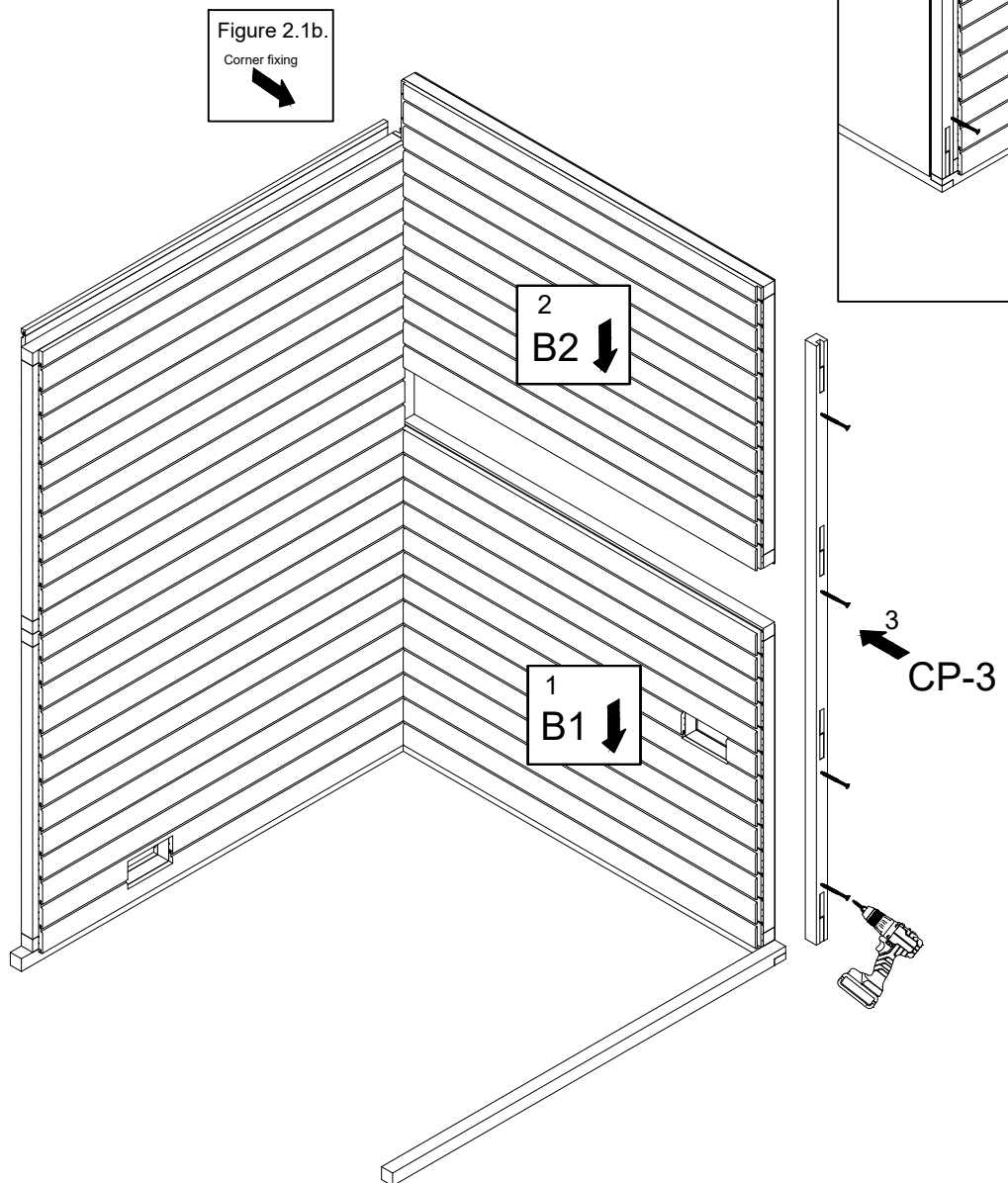
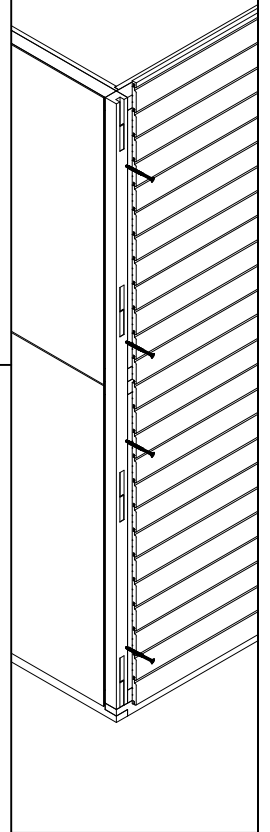


Figure 2.1b.
Corner fixing



2.2 Wall elements

1. Place previously assembled elements C1 & C2 on stable baseframe.
2. Fix C1 & C2 elements with corner post CP-3 as indicated on Figure 2.2a, 2.2b.

Figure 2.2a.

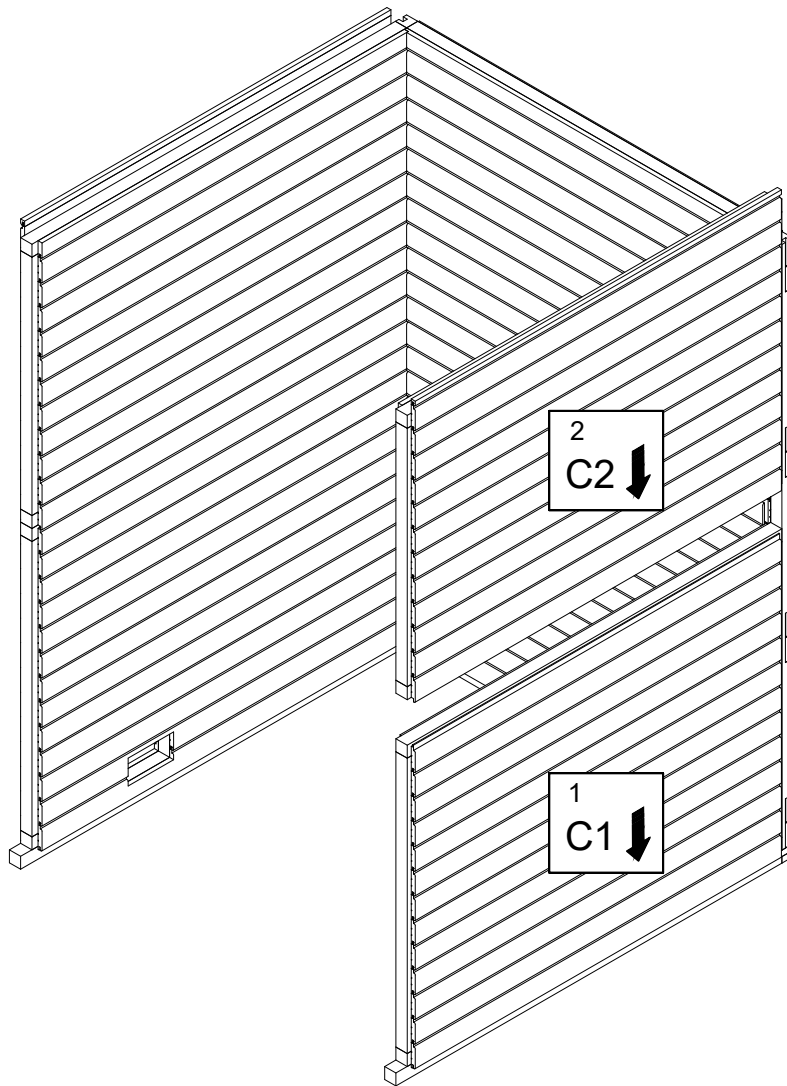


Figure 2.2b.
Corner fixing

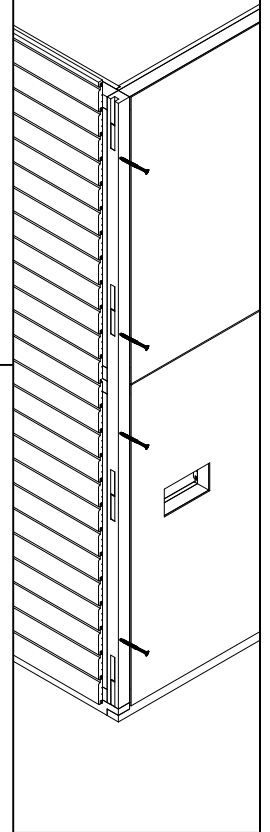


Figure 2.2b.
Corner fixing

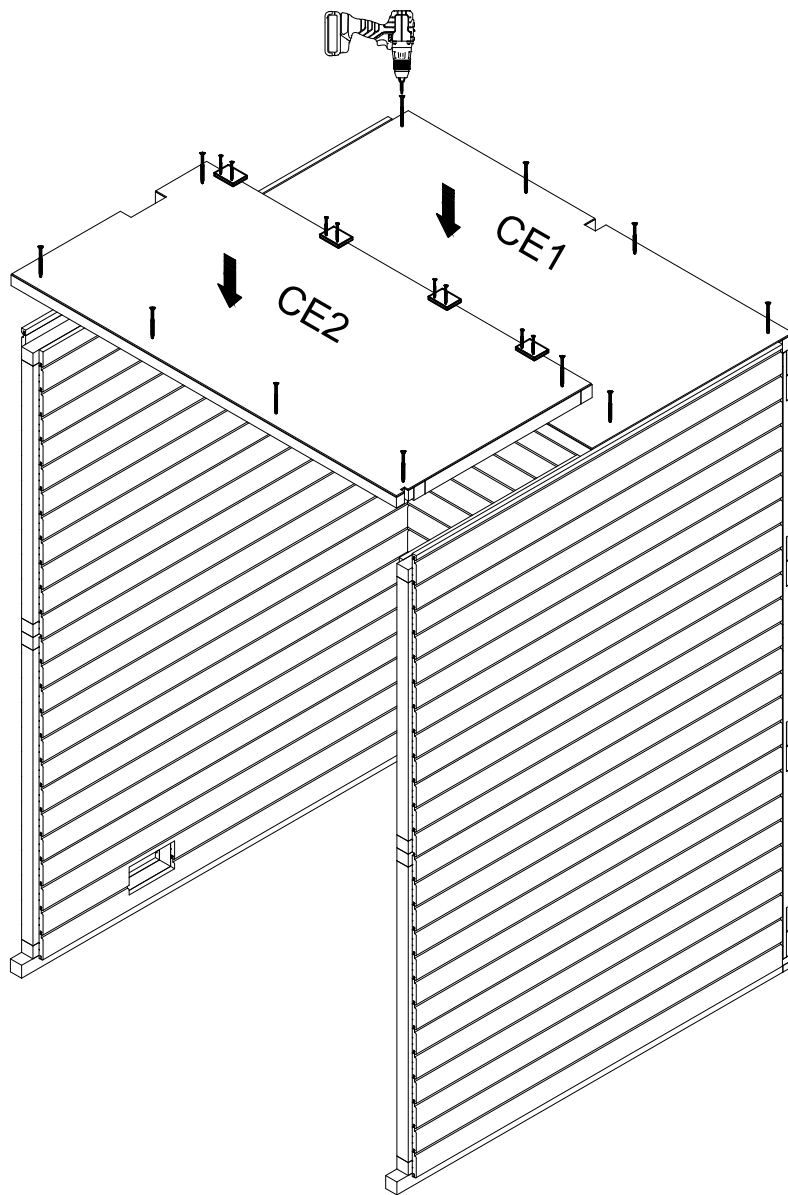


3. Ceiling elements

1. Place the first ceiling element on top of previously installed and fixed wall elements (Figure 3a). Check walls for vertical level. Ceiling element must sit flush with walls external layer and with no excessive gaps between internal panels. Fix with screws.
2. Place the second ceiling element on top of walls with approx. 10mm gap with previous ceiling and slide into place. Attach additional plywood support pieces on the joint between ceilings. Fix with screws around.

NOTE! Do not support elements on edge of previous installed element!

Figure 3a.



4. Bench support placement

1. Place bench supports in sauna, check for level.
2. Fix bench supports with screws.

Figure 4a.

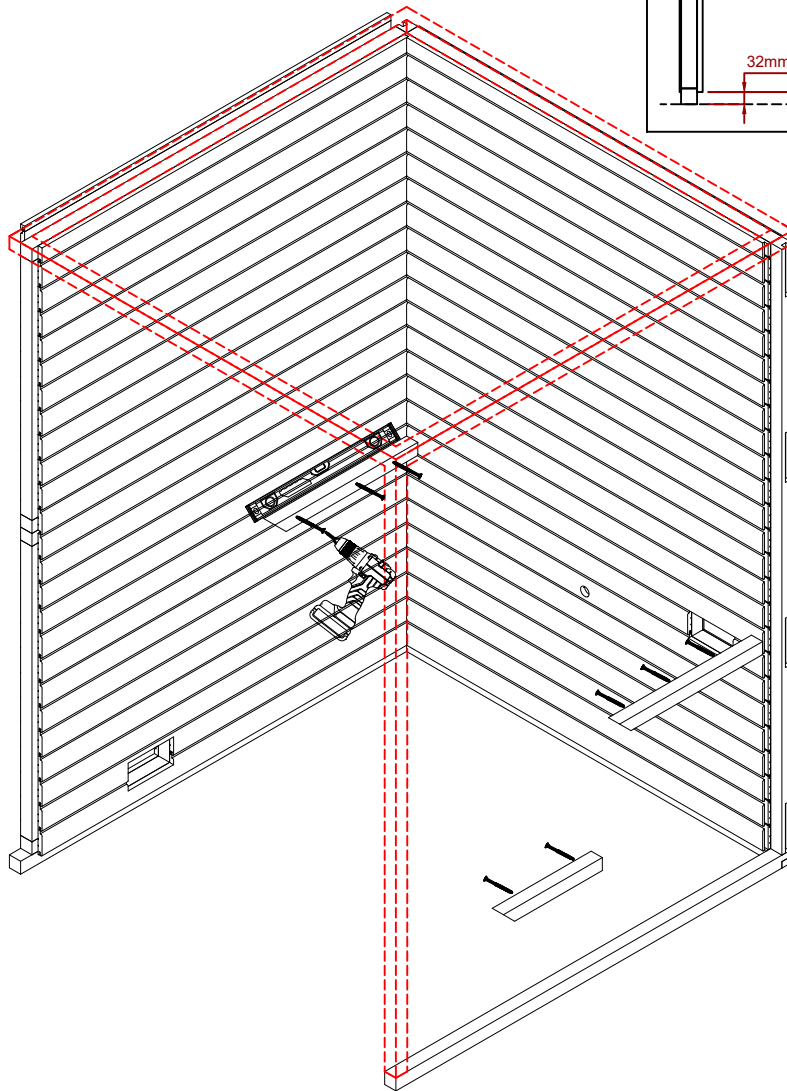
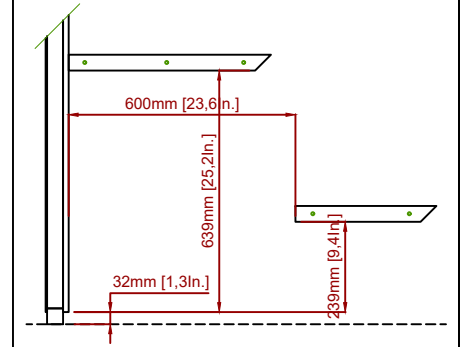


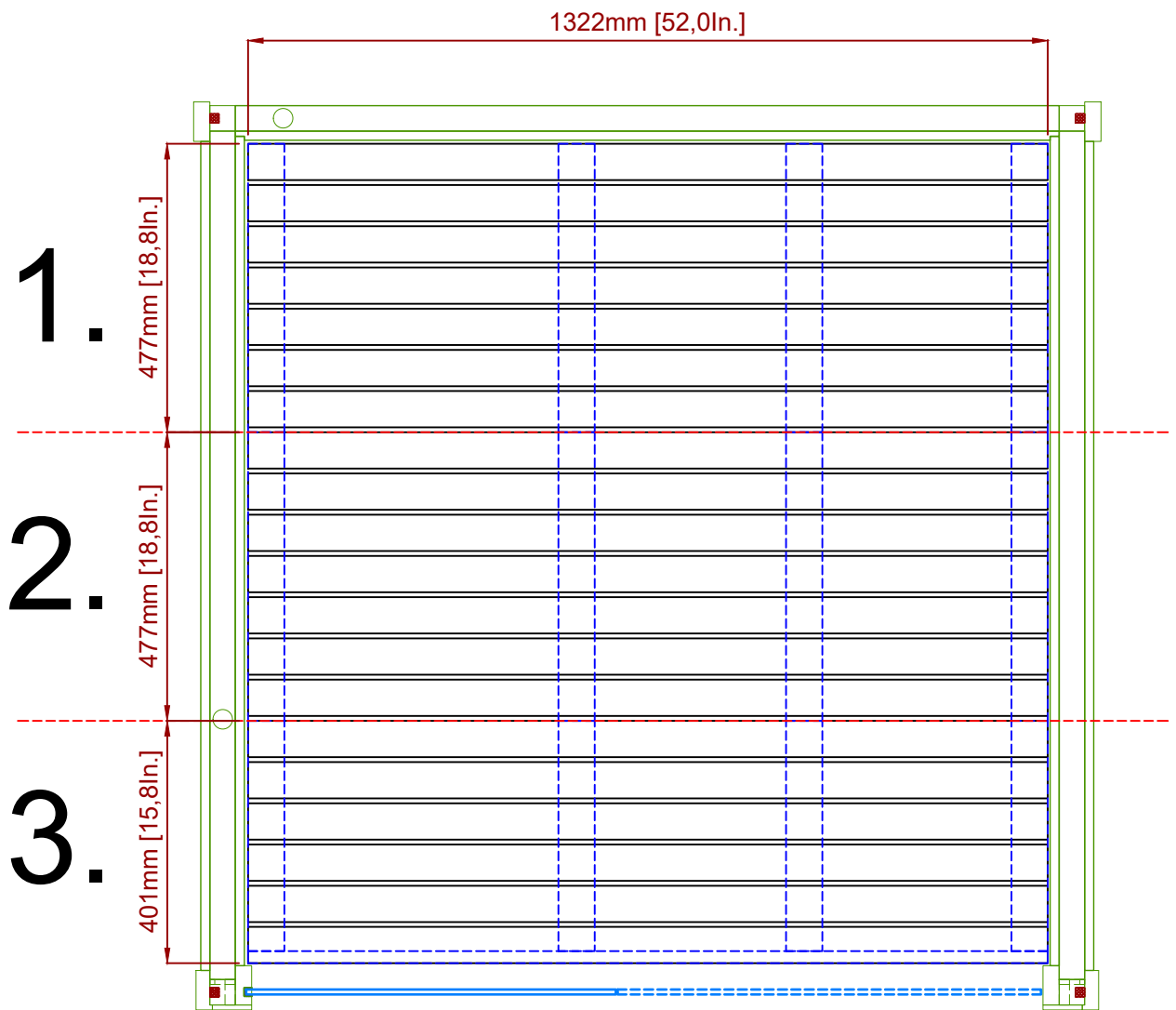
Figure 4b.



5. Floor grids

1. Place grids on the floor as indicated in the drawing.

Figure 5a.



6. Bench frames

1. Place upper bench frame and fix with screws.
2. Place lower bench frame and fix with screws.

NOTE! First fasten the screws on sidewalls, then backwall.

Figure 6a.

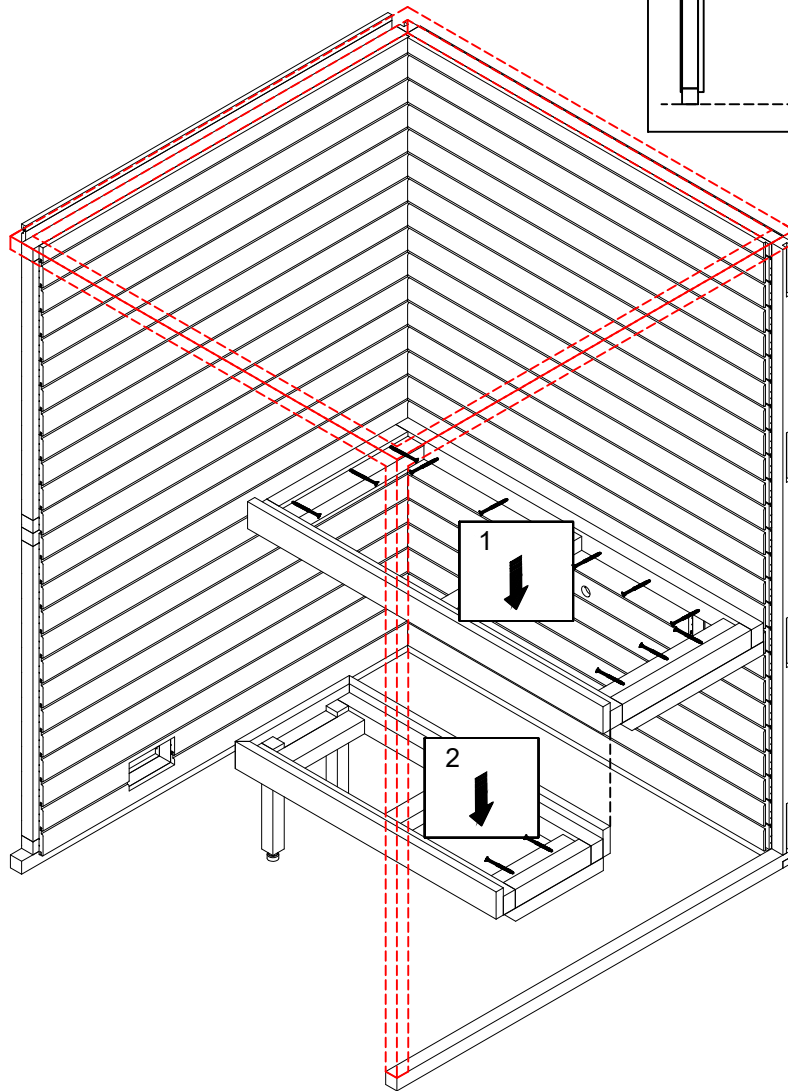
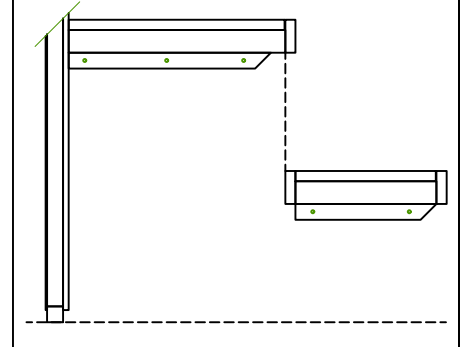


Figure 5b.



7. Backrest, Light

1. Fix holders on the wall
2. Place backrest on top of holders
3. Fix backrest to holders from top
3. Fix the led strip to the metal clips.

See the instructions for connecting the LED lighting at the end of the manual.

Figure 7a.

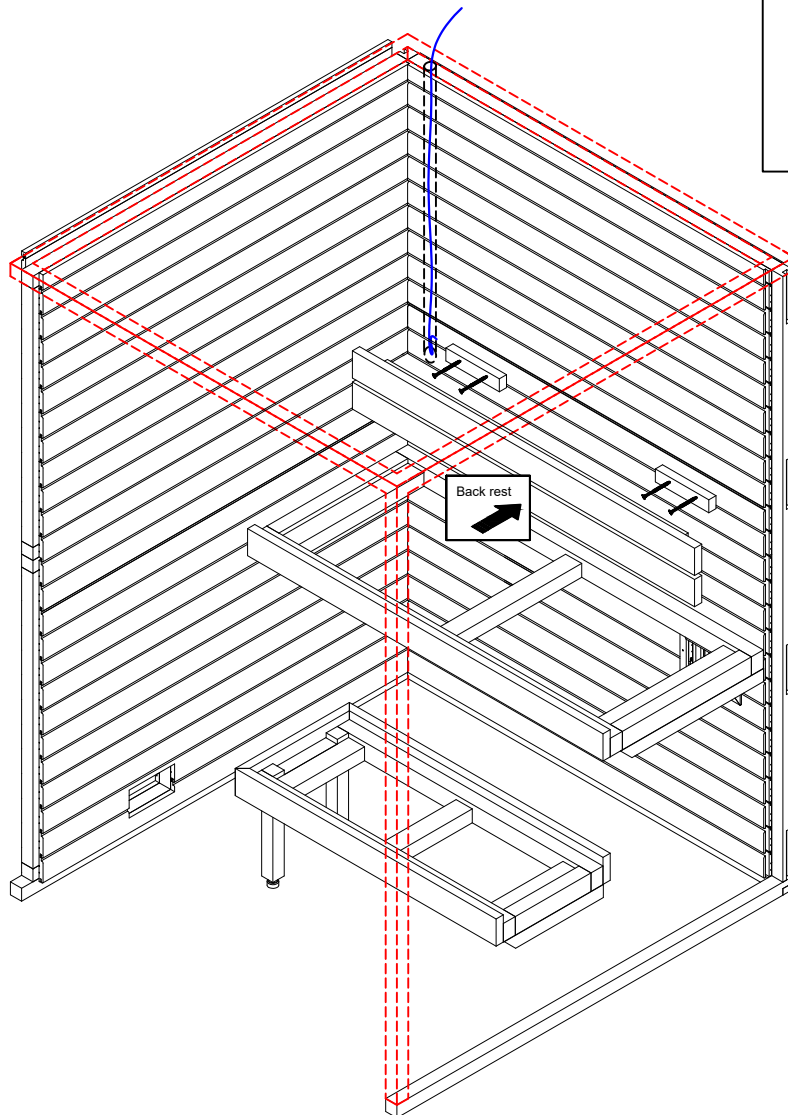
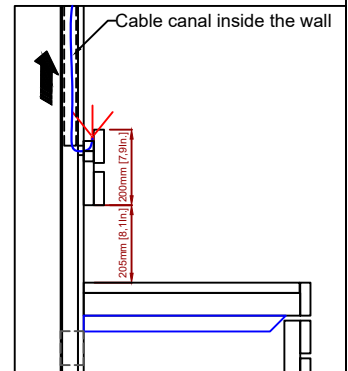


Figure 7b.

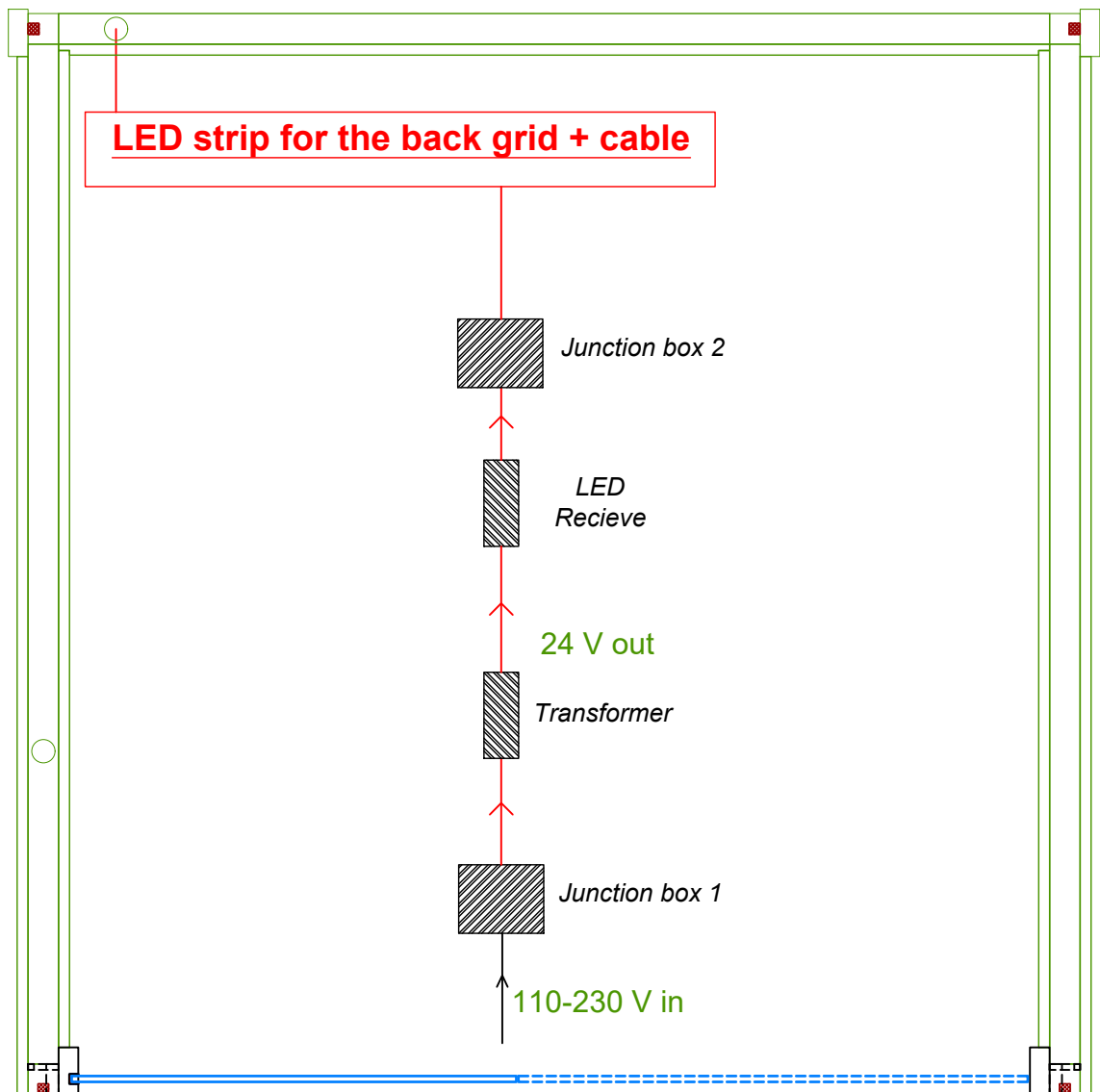


7.1 Electrical

1. Run cables through pre drilled holes in the walls to the ceiling

NOTE! ALL ELECTRICAL CONNECTIONS **MUST** BE MADE BY CERTIFIED ELECTRICIAN!

See the instructions for connecting the LED lighting at the end of the manual.



8. Bench skirt

1. Lift bench skirt in place and fix with screws (Figure 8b).

Figure 8a.

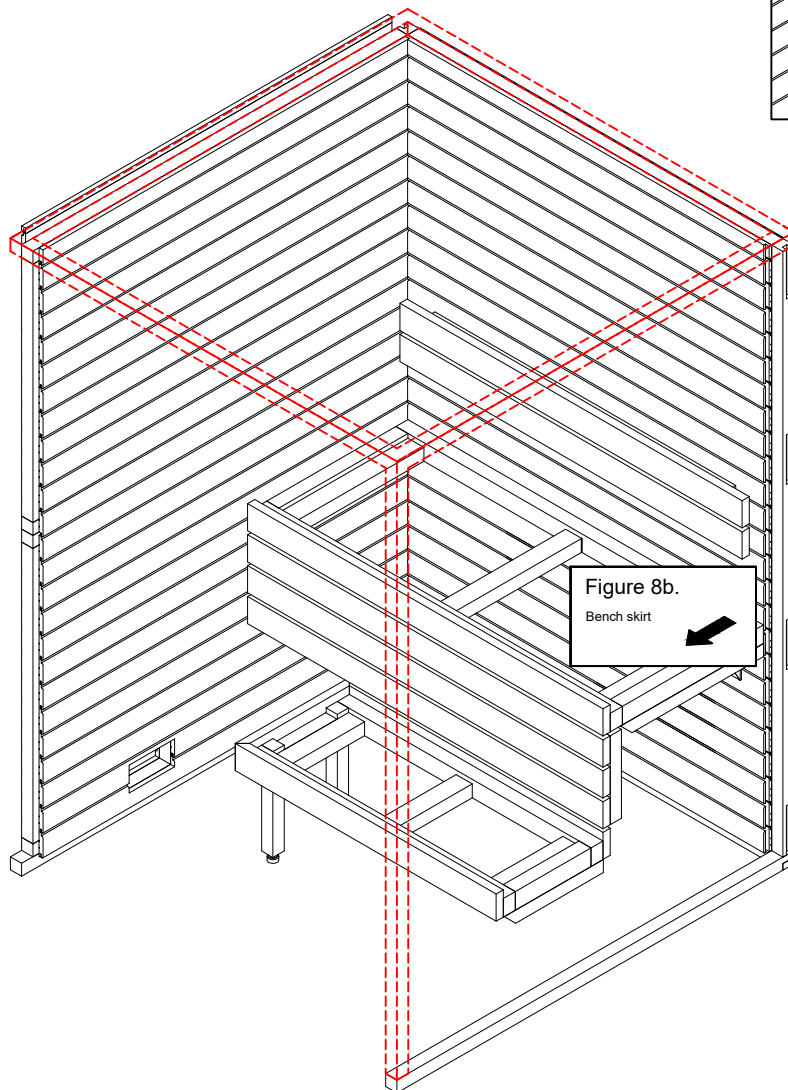
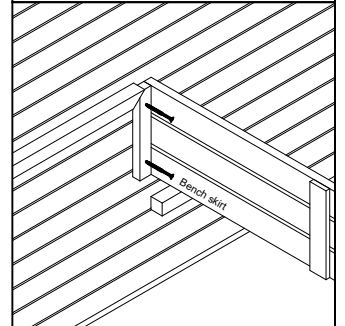


Figure 8b.

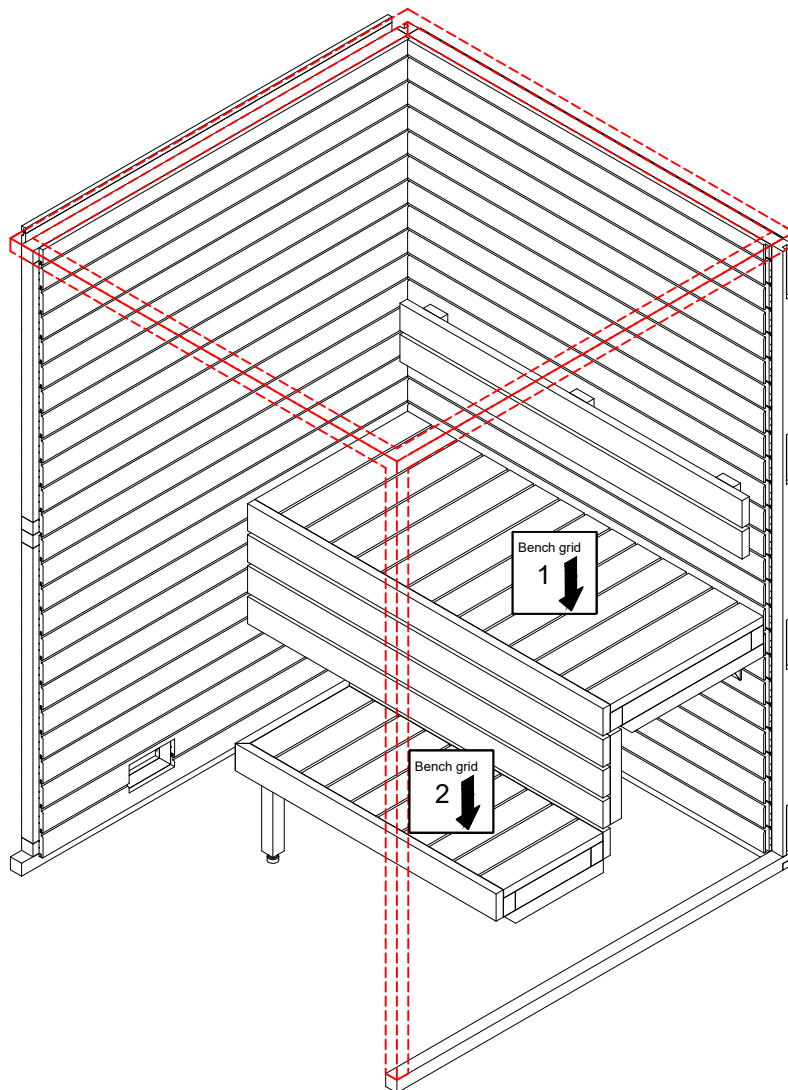
Bench skirt



9. Bench grids

1. Place bench grids on bench frames.

Figure 9a.



10. Glass wall

1. Apply stripes of silicone on respective lines of glass walls location. Length of stripe equals B (Figure 10a).
2. For silicone stripes distance from the wall check Figure 10b.

Figure 10a.

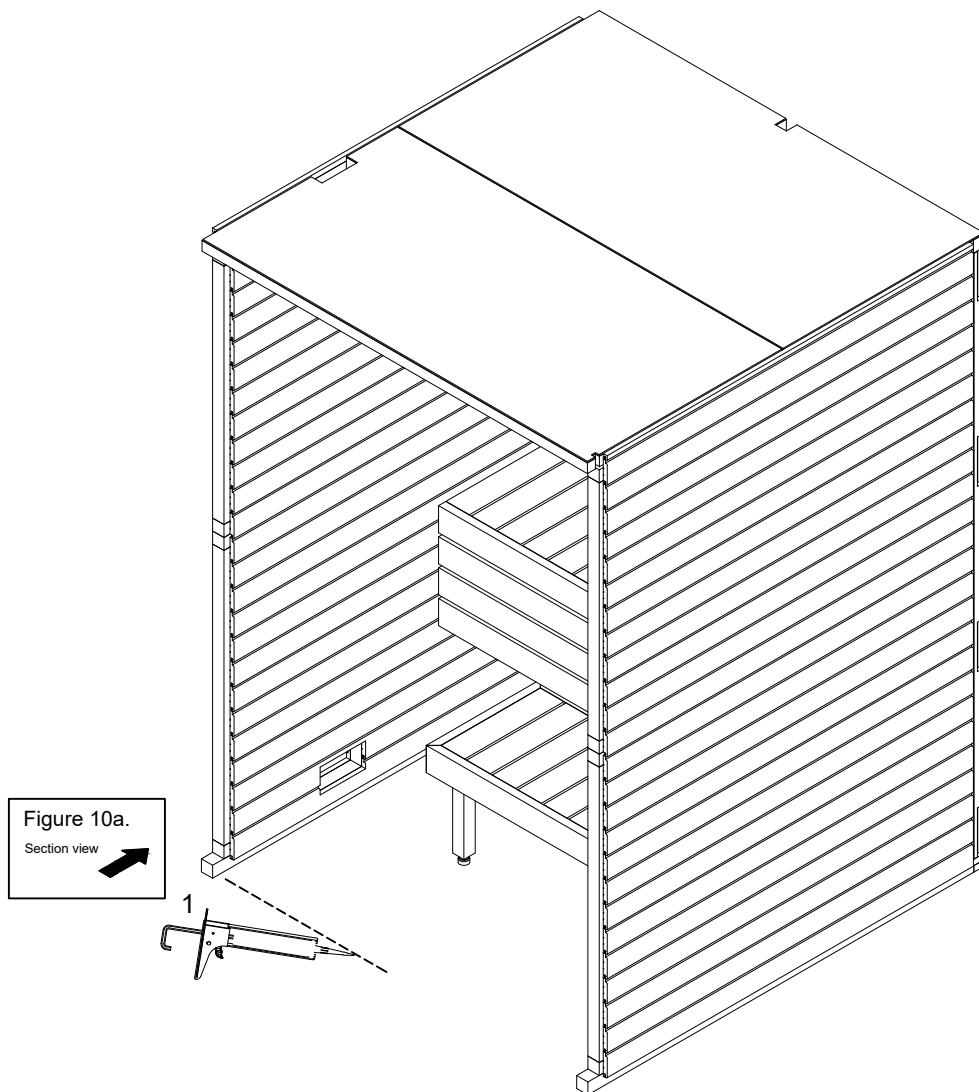
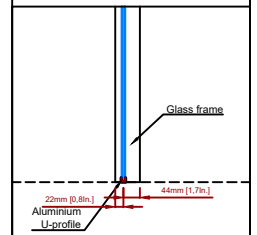


Figure 10a.
Section view

Figure 10b.

Section view

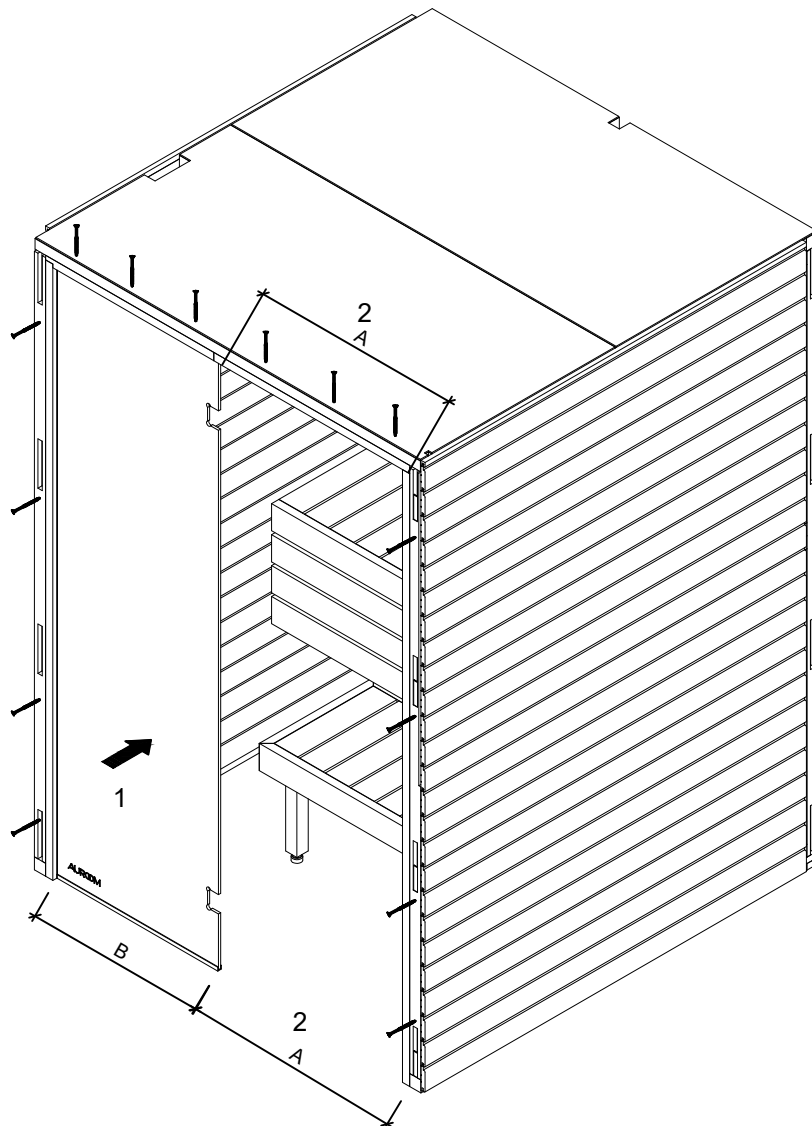


10.2 Glass wall

1. Lift the glass wall in place and fix with screws.
2. Check the distance (A) between installed walls. They must be equal ($A=A$) for the door to be installed.
3. Place the door upper wooden frame piece and fix with screws from top.

!NOTE! Make sure NOT to leave any gaps between glasswall elements and interior cladding!

Figure 10.2a.



11. Corner mouldings

Figure 11c
Multiclip view

1. Attach corner mouldings using multiclips Figure 11c.
2. Fix horizontal frame with screws from top

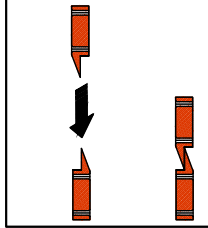
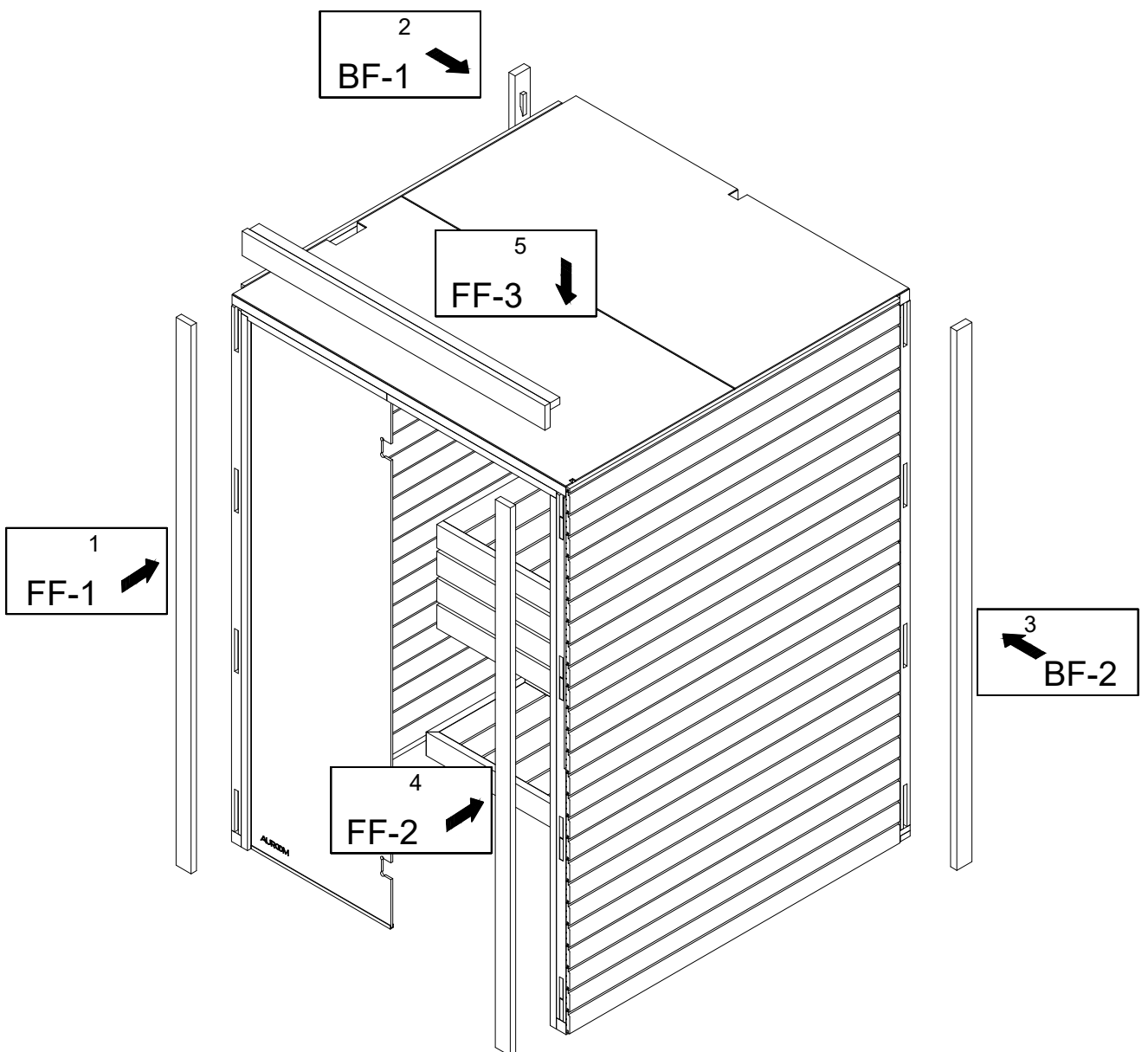


Figure 11a.



12. Door

1. Fit the hinges on door according to Figure 12c.
2. Fit the door to glass wall according to Figure 12c.
3. Fit the handle to the door according to Figure 12b.

NOTE! Door must not be supported directly to a hard (tiled, concrete or other) floor due to risk of shattering. Always when not installed rest the door on a protected floor. Do not remove protection material from door until it is finally and properly fitted.

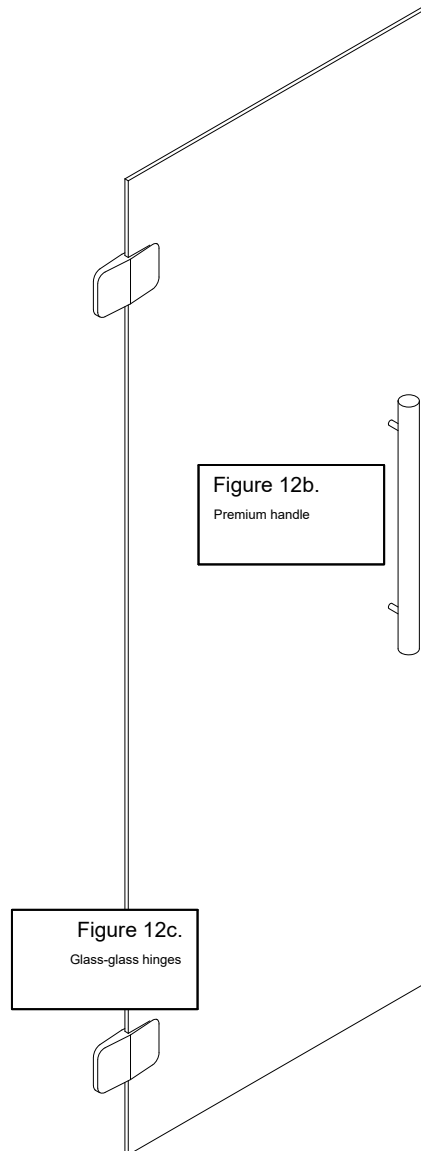


Figure 12b.
Premium handle

Figure 12b.
Premium handle

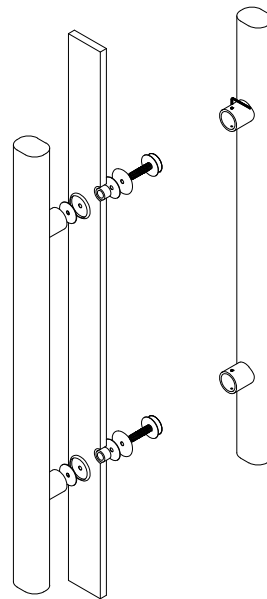
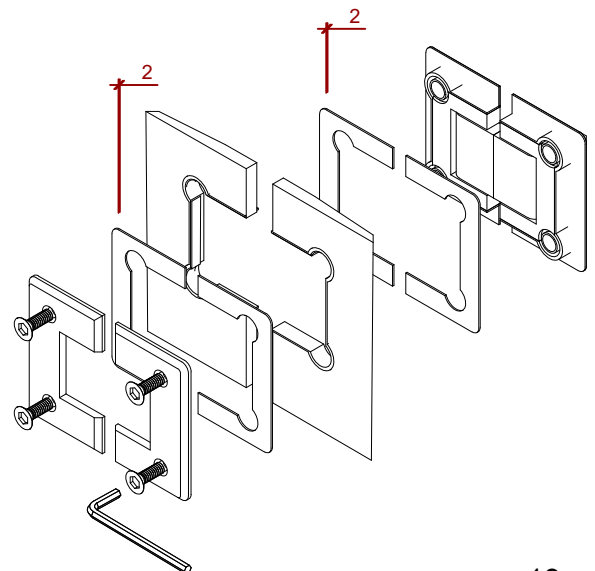


Figure 12c
Glass-glass hinges
Use 2mm washers for the hinges!

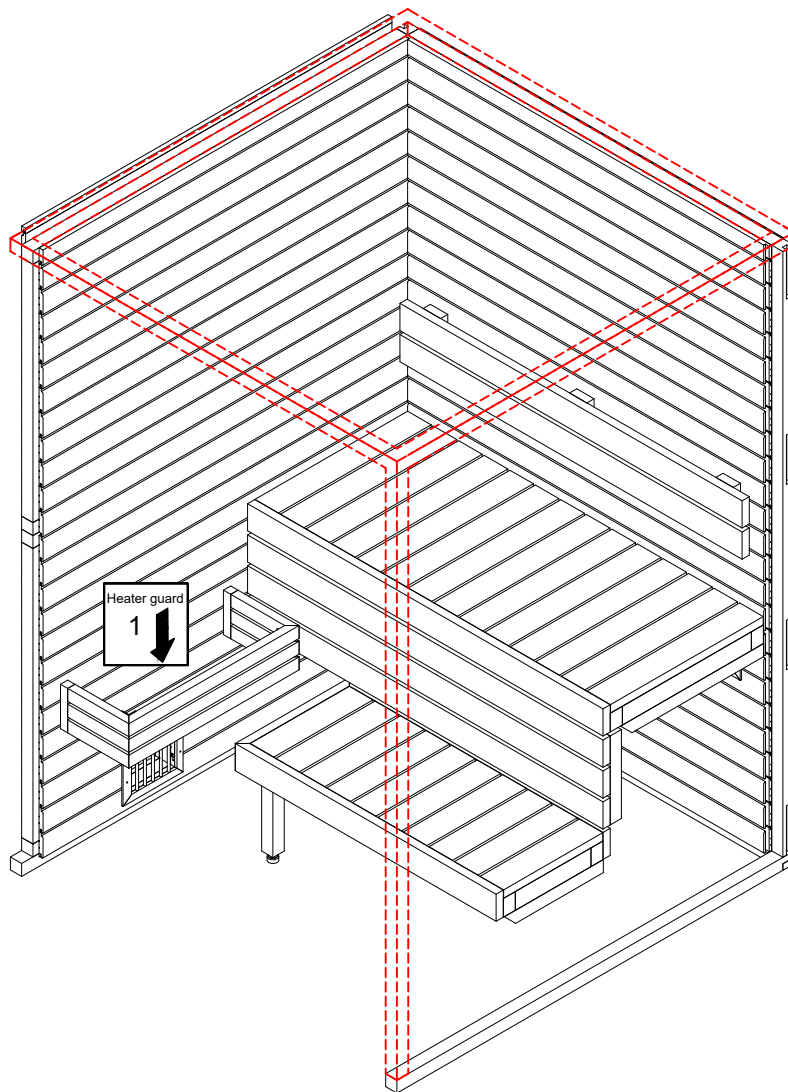


13. Heater guard

1. Fix heater to the wall.
2. Fix heater guard to the wall with screws.
3. Make electrical connections on top of the ceiling.

NOTE! Electrical connections must be carried out by a locally certified professional.

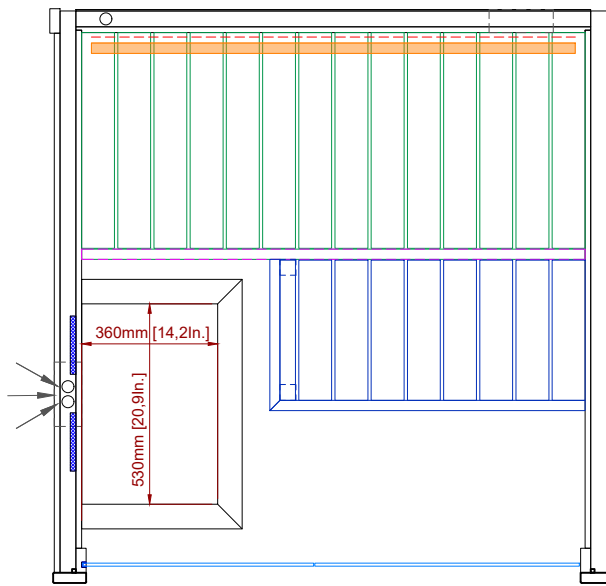
Figure 13a.



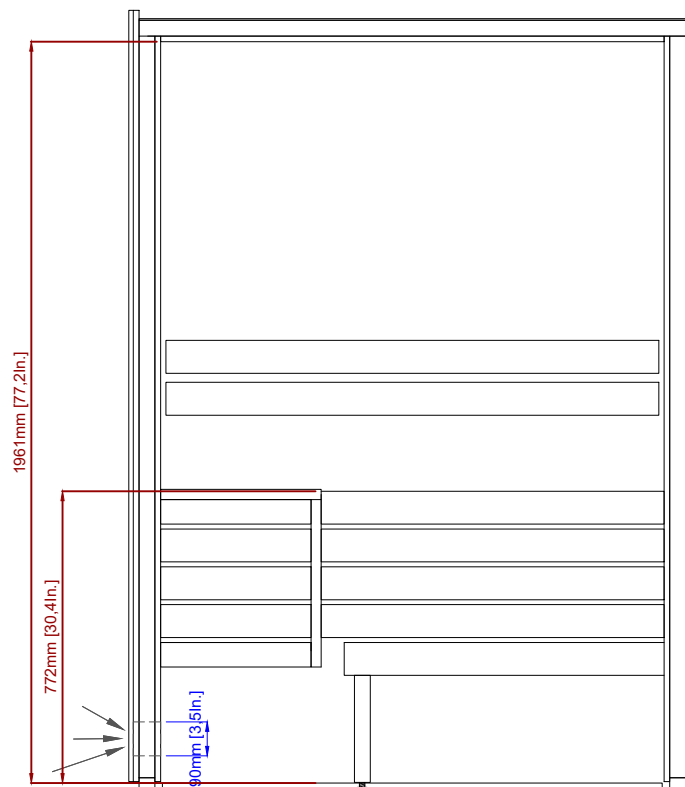
Safety distances

NB! Before installing the heater, ensure that the distances meet the minimum allowable requirements.
If the ceiling height does not meet the minimum required, heat protection must be installed.

TOP VIEW



SECTION

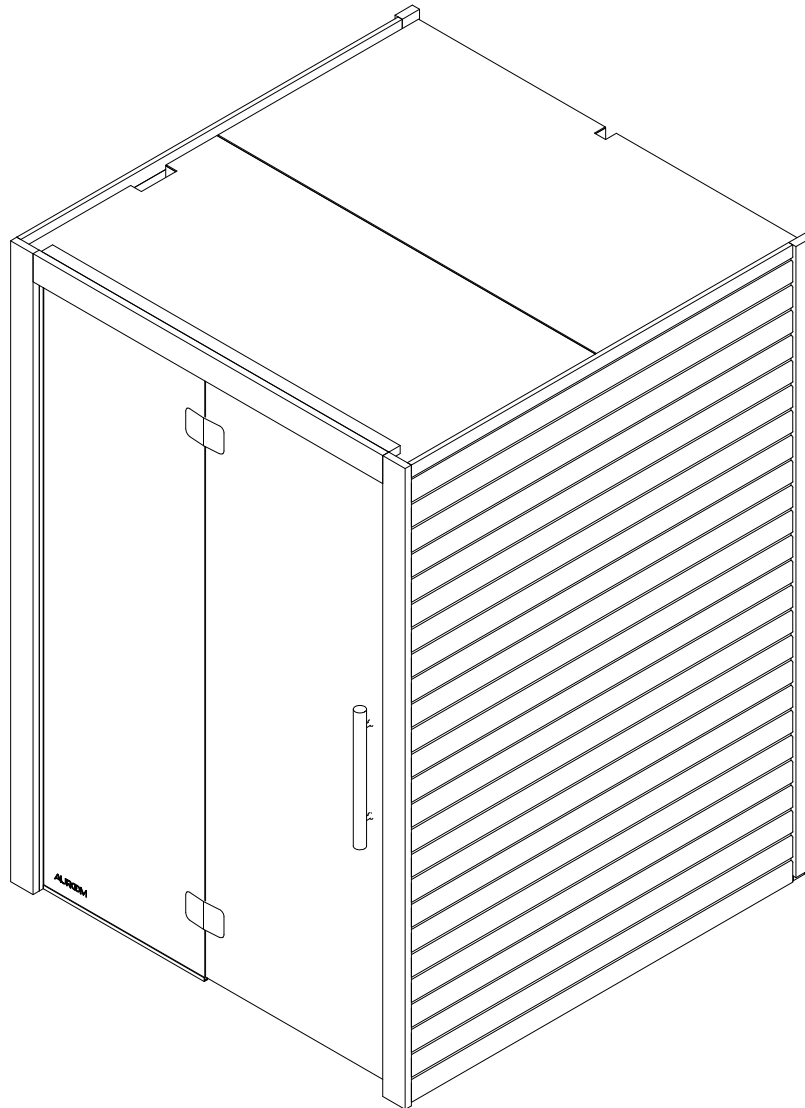


14. Completed sauna

1. Check the level of all elements.
2. Check the functionality of all moving parts.
3. If needed make adjustments on adjustable components.
4. Before using the sauna read AUROOM terms and conditions and user manual.

NOTE! Upon the first use sauna must be gradually and steadily taken up to normal operating temperature under constant supervision and afterwards thoroughly ventilated due to evaporation of various substances that might be present from production of the sauna and/or its components.

Figure 14a.



Instructions for use and maintenance of pre-built and pre-assembled indoor and outdoor saunas

1. General installation requirements

- 1.1. Your sauna should be installed by a professional installer.
- 1.2. The installer of the sauna must have familiarised themselves thoroughly with the manufacturer's warranty terms and the installation instructions of the purchased sauna.
- 1.3. The electrical components of the sauna may be installed and connected only by a person with the respective certified competence.
- 1.4. The wooden parts of the sauna must not be in permanent contact with water or the structures of the room.
- 1.5. The exterior surfaces of the sauna must not be directly exposed to excessive humidity.
- 1.6. The installation site must have proper grid connection readiness for supplying power to the electrical components of the sauna. Requirements applicable at the installation location (country).

2. On-site requirements - indoor sauna

- 2.1. Make sure adequate ventilation is ensured in the room to be used for installing the sauna to ventilate the humidity and warm air created by the sauna.
- 2.2. Fresh air supply for the sauna room and heater must also be ensured. Be sure to leave an air gap between the sauna structures and the boundary structures of the room. This is necessary to avoid formation of excessive condensation between the structures of both the building and the sauna that could damage them and shorten their lifetime. The manufacturer recommends ensuring a minimum distance of 50 mm (2 in).
- 2.3. The installation surface must be level and stable.

3. On-site requirements - outdoor sauna

- 3.1. The outdoor sauna is designed to be installed on a pre-prepared level and stable surface capable of bearing the load.
- 3.2. Safety distances - you must leave at least a two-metre clearance around the sauna, unless specified otherwise or provided otherwise by the local requirements for similar buildings.
- 3.3. If your sauna is delivered pre-assembled, the installation site must be accessible for heavy machinery.

4. Sauna heater and heating stones

- 4.1. Install the sauna heater according to the heater manufacturer's installation instructions.
- 4.2. Install the heating stones according to the heater manufacturer's instructions. Installation requirements for the heating stones may vary depending on the sauna heater selected. As a general rule, the heating elements of the heater must be covered with stones. Pouring water directly on the heating elements will shorten the life of the heater and pose a health risk (hot water splashes).
- 4.3. It is recommended to wash the heating stones with water before installation. This cleans the stones of any possible processing and production residues.
- 4.4. Using the heater without the stones is not allowed.

Instructions for use and maintenance of pre-built and pre-assembled indoor and outdoor saunas

5. Finishing/treating the wooden parts of the sauna with a protective agent
 - 5.1. Before using the sauna, all wooden surfaces must be treated with a suitable protective agent. The manufacturer recommends using sauna wax or sauna oil (paraffin oil).
 - 5.2. Depending on the installation method used for your sauna and the free space left in and around the sauna, the wooden surfaces can be treated before or after installing the parts but certainly before using the sauna.
 - 5.3. Treating the wood will extend the lifetime of the wood and your sauna, preserving its properties and appearance. Treated surfaces repel water and dirt and are easier to clean.
6. Taking the sauna into use
 - 6.1. Make sure all parts of your sauna are intact and functional after installation and before the first heating.
 - 6.2. First heating: slowly heat your sauna to a temperature of 100 °C (212 °F) under supervision, keep this temperature for two hours and let the sauna cool down slowly. The sauna must be well ventilated during the first heating - it is recommended to leave the door half-open. This is necessary to allow the wood protecting agent to be absorbed into the wood and any residues from production and processing to evaporate from the surfaces.
 - 6.3. Staying in the sauna during the first heating is not allowed - substances evaporating from surfaces may cause an unpleasant smell.
7. Using your sauna
 - 7.1. Use the sauna only for the purpose for which it was manufactured.
 - 7.2. Pour water only on the heating stones.
 - 7.3. Use the sauna in moderation - it stimulates circulation, relaxes muscles and cleanses.
 - 7.4. Rinse yourself with water between sauna sessions.
 - 7.5. It is recommended to drink mineral water after the sauna to replenish fluids.
8. General sauna maintenance
 - 8.1. After each use:
 - Wipe the bench with a damp cloth after.
 - Always remove pools of water from wooden surfaces.
 - If the design of the bench allows it, raise the platforms to an upright position to dry.
 - Let the heater run under supervision for approximately 20 minutes - wooden parts dry more efficiently this way.

Instructions for use and maintenance of pre-built and pre-assembled indoor and outdoor saunas

8.2. Once a year or as needed:

- Wash the horizontal (and, if necessary, vertical) surfaces of your sauna with a special sauna detergent. Use a soft brush or damp cloth and observe the instructions of the detergent.
- Stronger stains can be removed with fine-grained sandpaper. All treated surfaces must be treated with a protective agent.
- Repeat treatment of the wooden parts with a protective agent.
- Check the structures of the sauna (bench fastenings, wall connections) and, if necessary, tighten the fastenings.
- Have a competent person check the condition of the electrical connections and components.
- Check the functioning of the door and adjust it, if necessary and possible.
- Check the condition of the heating stones: when used intensively and especially as they age, they could emit stone dust that will accumulate on the wooden surface above and behind the heater. Replace the stones, if necessary.
- Do not use substances or working procedures not suited for washing the sauna.
- Washing wooden parts with running water is not allowed.

9. Maintenance of an outdoor sauna

- 9.1. Trees and bushes growing near the sauna and a shady location may cause mossing on the surfaces. Clean the surfaces with a soft brush and damp cloth, as necessary.
- 9.2. In areas with thick snow-cover, remove snow from the roof of the sauna. Do not allow more than 50 cm (20 in) of snow on the roof.

10. Wooden materials in the sauna

- 10.1. Wood is a natural material and subject to natural phenomena (differences in grain pattern, variations in tone, expansion and contraction due to heat and moisture).
- 10.2. Wood may develop cracks or deformations over time. This is natural and does not affect the use of the sauna. If in doubt, contact the vendor.
- 10.3. Thermally modified wood emits some scent during the first three heating periods.

11. Repair works

- 11.1. Damage to wood - scratches and dents up to 1 mm deep:
 - Clean and dry the surface thoroughly.
 - Sand down with 500 grit sandpaper or until dispersed.
 - Clean off dust and treat with a protective agent. The protective agent will even out the colour difference caused by sanding.

12. The following are not allowed in the sauna:

- 12.1. Drying clothes or other textiles. Evaporating humidity may damage the wood; and textiles placed near the sauna heater may pose a fire hazard.
- 12.2. Heating to a temperature higher than 115 °C (239 °F)- fire hazard.
- 12.3. Placing combustible materials on the sauna heater.
- 12.4.

Warranty terms for saunas and sauna products

Effective from 1.04.2022

1. definitions

1.1 **"Manufacturer"** is Auroom OÜ (registration code 14867010).

1.2 **"Product"** means a sauna or sauna product (including a sauna bath, sauna door or sauna accessory) manufactured by the Manufacturer for indoor or outdoor use, whether prefabricated or assembled.

1.3 **"Seller"** means an authorised reseller of the Manufacturer.

1.4 **"Customer"** is the person who has purchased the Product from the Seller for its intended use.

1.5 **"Defect"** means a failure or defect in the Product (including a manufacturing or material defect) that prevents the Product from being used as intended.

2. content and scope of the warranty

2.1 **"Warranty"** means the obligation of the Manufacturer to remedy Defects notified to it by the Customer or the Seller during the Warranty Period and caused by the acts or omissions of the Manufacturer, or to reimburse the Customer or the Seller for the costs incurred by the Customer or the Seller, with the prior agreement of the Manufacturer, in remedying such Defects. The method of remedying the Defect shall be at the discretion of the Manufacturer.

2.2 The warranty does not apply to third parties to whom the Customer has transferred the Product. A Customer who is not a consumer is not covered by the Warranty unless the Manufacturer has previously confirmed this to the individual Customer in a form that can be reproduced in writing. A Consumer Customer who has purchased the Product directly from the Manufacturer shall be subject to the warranty terms contained in the sales contract instead of the Warranty.

2.3 **The "Warranty Period"** is 2 years from the date of delivery of the Product to the Customer who is a consumer, but not more than 3 years from the date of manufacture of the Product. Unless the Customer or the Seller proves to the Manufacturer the date of delivery of the Product to the Customer, the Warranty Period shall be 2 years from the date of the conclusion of the sales contract for the Product with the Customer. If neither the Customer nor the Seller proves to the Manufacturer the date of conclusion of the sales contract for the Product with the Customer, the Warranty Period shall be 2 years from the date of manufacture of the Product. If the Manufacturer replaces a Product with a Defective Product, the Warranty Period shall be 2 years from the date of delivery of the replaced Product to the Customer. If the defective Product is repaired by the Manufacturer, the Warranty Period shall be 2 years from the date of repair in respect of the repaired Defect.

2.4 The Warranty does not cover:

(a) Defects that are not caused by the acts or omissions of the Manufacturer, including where (i) the Product has not been installed in accordance with its installation instructions; (ii) the Product has not been used in accordance with its instructions for use and maintenance; (iii) the Product has been stored in an unsuitable manner (including being exposed to the elements, high temperature fluctuations, or excessive humidity, being stacked, etc.); (iv) the Product has been damaged during installation or use; (v) the Defect has been caused by the use with the Product of equipment or components other than those supplied by the Manufacturer, or by a failure of such equipment or components; or (vi) the Defect has been caused by force majeure, unforeseeable events or extraordinary weather conditions (e.g. vandalism, fire, flood);

(b) natural wear and tear that occurs during the intended use of the Product;

(c) naturally occurring and expected characteristics of wood materials (differences in wood grain, knots, slight variations in tone) and phenomena that occur naturally during use of the Product (shrinkage and expansion due to temperature and humidity, moderate deformation) and the visual disturbances they may cause; nor

(d) Defects (including transport damage) that would have been detectable by visual inspection prior to installation of the Product.

Warranty terms for saunas and sauna products

Effective from 1.04.2022

2.5 The Warranty does not apply if:

- (a) the Customer has not notified the Seller or the Manufacturer within 2 months of becoming aware of the Defect;
- (b) the Seller has failed to notify the Manufacturer within 2 weeks of the time at which it became aware or should have become aware of the Defect;
- (c) the Customer or the Seller has knowingly provided false information about the alleged Defect;
- (d) the Seller has not paid in full the invoice submitted to it by the Manufacturer for the defective Product;
- (e) the Customer has continued to use the Product after the discovery of the Defect without the prior consent of the Manufacturer in a form that can be reproduced in writing; or
- (f) the Product has been in public use or in similar conditions of heavy use without the prior written consent of the Manufacturer.

2.6 Equipment installed in or accompanying the Product and supplied by the Manufacturer is covered by the warranties provided by the manufacturers of such equipment and brokered by the Manufacturer.

3. submission and handling of a warranty claim

3.1 Upon discovery of a defect, the Customer must immediately cease using the Product and submit a warranty claim to the Seller. If it is not possible to submit a warranty claim to the Seller or if the Seller does not respond, the Customer may submit a warranty claim directly to the Manufacturer.

3.2 The warranty claim must contain at least the following information: the name of the Customer; the address where the Product is located; the name and contact details of the person making the warranty claim; the Product's product code or name and, if available, serial number; the date of delivery of the Product to the Customer or, if unknown, the date of sale of the Product to the Customer; a description of the Defect; and the Customer's preferred remedy.

3.3 The warranty claim must be accompanied by: a copy of the document certifying the date of delivery or sale of the Product; photographs in general plan and close-up showing the Defect in good quality.

3.4 The manufacturer will reply to the warranty claim as soon as possible, but no later than two weeks from the receipt thereof. If the Manufacturer is unable to establish on the basis of the information contained in the warranty claim that the Defect is covered by the Warranty, the Manufacturer may require the person making the warranty claim or the Seller to provide further evidence and explanations. In the case of a Defect covered by the Warranty, the Manufacturer shall inform the person making the claim of the manner and time for remedying the Defect.

4. final provisions

4.1 The granting of the warranty is without prejudice to the Customer's statutory rights, including the right to exercise against the Seller all remedies available to it under the law.

4.2 Without limiting the Manufacturer's liability under the law for defective Product, the Manufacturer shall not be liable for any consequential damages that the Customer, the Seller or any third party may incur in connection with the use of or inability to use the Product.

4.3 The Seller may provide additional warranties to the Customer in its name and for its account. The Manufacturer shall not be liable to the Customer for the performance of such warranties.

GLASS HANDLING, STORAGE AND THE ABC'S OF CLEANING

HANDLING AND STORAGE

1. Taking precautions is generally always cheaper than correcting mistakes later.
2. It is recommended to remove stickers and spacers from the glasses as soon as possible.
3. It is recommended to use suction cups to lift large glasses.
4. When storing both tempered and non-tempered glass for a long time, the supporting edge of the glass must rest on a dry and softened surface (e.g., plastic, cardboard, rubber) - the edges of the glass must not be supported directly on the floor or the ground.
5. When storing several glasses at the same time, there must be spacers between the tempered glasses. Non-tempered glasses of the same size can be supported against each other, in the case of non-tempered glasses of different sizes, pieces of cardboard must be placed in between.
6. Glasses must be stored in a dry and well-ventilated room away from direct sunlight.
7. The storage conditions are important, because if water gets between the glasses (for example, as precipitation from above or evaporating from the bottom), soda starts to separate from the inside of the glasses, as a result of which they form on the surface of the glass white spots that cannot be removed. Such glasses belong to disposal.
8. The corners are the weakest point of the glass, so they must be protected with special attention. The glass must also be protected from the dangerous effects of the external factors listed below.

DANGEROUS EXTERNAL FACTORS FOR GLASS

Construction	First, any glass must be protected on the construction site, where chemical and mechanical factors can permanently damage the glass surface. In the case of glasses in the vicinity, constant air exchange is maintained, the glasses can be covered with a polyethylene film. If there is no air exchange, and the glasses are covered with polyethylene film break due to thermal stress.
Stickers and spacers	The adhesive on stickers and caps hardens under the influence of solar radiation. If the adhesive contains basic (pH=7.1-14) particles, the result may be a matting of the glass. If the adhesive contains acidic (pH=0-6.9) particles that are not visible on the glass damage, but the damage has been caused by the normal aging process of the glass.
Silicones	Chemically and sandblasted frosted glasses must not contact silicones with containing substances, because this way the surface of the glass becomes transparent and needs replacement.
Wall mixes	During of normal hardening, masonry mixtures often release alkaline (pH=7.1-14) particles that can damage and dull the surface of the glass. Petrified mixture removing it from the glass results in scratching the glass surface.
Concrete splashes	Washing off fresh concrete with plenty of clean water can damage the glass save. On the other hand, removing the dried concrete will scratch the surface of the glass and means replacing the glass.
Acid wash	Hydrochloric acid is used to clean brick and concrete surfaces, which can damage reflective surface coatings and glass missile silicones. Acid washing must be carried out before glazing.
Welding and cutting sparks	If these sparks fall on the surface of the glass, the surface of the glass is permanently damaged and needs to be replaced. Therefore, welding and cutting work is important avoid near glass.
Storage of other materials opposite the glass	Different materials against the glass can scratch the surface of the glass – especially glasses with a reflective coating are sensitive in this regard.
Metal constructions	Aging details of constructions secrete oxides (tin, copper, iron, zinc), which can get on the glass surface with both rain and washing water. Oxides can permanently damage the surface of the glass and the glass must be replaced.
Large temperature fluctuations	As a result of excessively large temperature differences, a large internal stress occurs on the glass, as a result of which the glass cracks, i.e. a thermal break occurs. Thermal

	breakage occurs when the temperature difference on the surface of untempered glass is approx. 40-50 °C (104-122 °F). To prevent thermal breakage, it is recommended to temper the glass, because tempered glass can withstand temperature differences of approx. 150-200 °C (302-392 °F) .
Organic mastics	They can secrete emollients, oils and solvents, which stick very strongly with a glass surface. Organic mastics do not have to be harmful to the glass in direct contact with the glass - it is enough if water with residues flows over one glass on the surface of other glasses.
Running water	If water flows over cement, concrete, plaster before reaching the surface of the glass, organic coatings or mastics, residues remain on the surface of the glass. Scraps and glass a chemical reaction can occur between the surfaces, damaging the glass surface.
Hard water	The minerals in the water settle on the surface of the glass and stick to it strongly. Leaving the dried residues of minerals untreated, their later removal turned out to be impossible and the glass must be replaced.
Air pollution	Air pollution can contain various chemicals, especially in the case of (acid) rain adhere strongly to the glass surface. Leaving air pollution unremoved can create a chemical reaction on the surface of the glass to produce matte spots.

GLASS CLEANING

1. Glass should not be cleaned in direct sunlight.
2. The glass cleaning intervals directly depend on the environment surrounding the glass and the degree of soiling of the glass.
3. Glass cleaning includes washing, rinsing and drying.
 - 3.1 Glass cleaning starts with removing abrasive particles such as dust with clean water.
 - 3.2 Then use a soft cloth, towel or sponge to apply the cleaning agent to the glass using circular motions and applying medium pressure.
 - 3.2.1 When cleaning satin glasses (i.e., frosted glasses), it must be remembered that even if only one spot on the glass is dirty, the entire surface of the glass must be cleaned (to avoid halo formation). Do not use when cleaning frosted glasses excess pressure.
 - 3.3. Rinse with plenty of clean water.
 - 3.4. Use a clean, soft cloth, towel or sponge to dry the glass.
 - 3.5. After cleaning the glass, it is also important to remove the residues of water and cleaning agents from the slats, seals and frames in order to prevent damage to these parts.

REMOVAL OF DIFFERENT STAINS FROM GLASSES

1. Grease stains, oils, fats and various sealants - stains can be removed with a cleaning agent that contains a small amount of alcohol. After using the cleaning agent, be sure to rinse the glass clean with plenty of water.
2. Paints, cement, concrete mix - stains must be removed from the glass as soon as possible, i.e., before they dry, with plenty of clean water.
3. For small and difficult-to-remove dirt residues, a razor blade can be used with extreme caution, keeping it at a right angle to the glass.
4. The stains cannot be removed by sandblasting from frosted and satin glasses, because the surface of the glasses is permanently damaged and needs to be replaced.

Led strips installation

Always use certified electrician!

Install the lighting before attaching the benches and backrest.

Pull the led strip cables through the pipes to the ceiling.

Attach the led strips to the clamps.

List of tools:

Pull cable



Insulating tape



1. Insert the pull cable to the pipe.



2. Catch the end of the cable through the Led hole.



3. Tie insulating tape tightly around the LED cable. NB! not around the LED strip.



4. Gently pull the cable up.



5. Do not remove the tapes. That way it won't get in the way during installation.



6. When installing on the back rest, do not grab LED strip.



5. Grab the cable if necessary.



6. Attach the led strips to the clamps.



7. Do not press the beginning of the LED strip into the clamp.


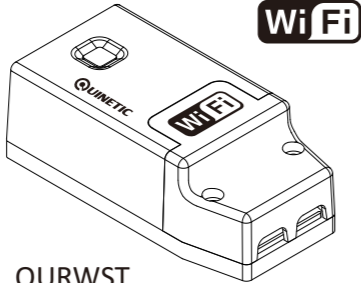
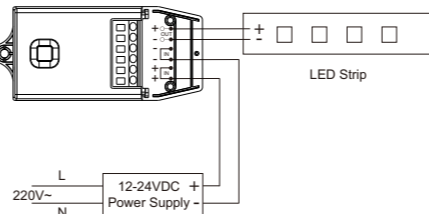




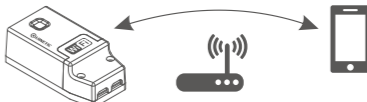


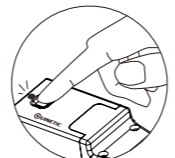
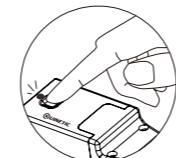
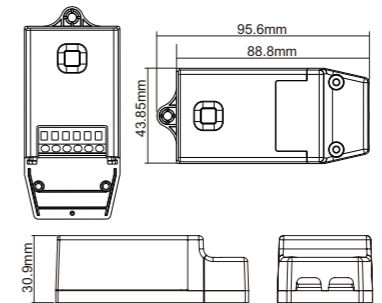
8. Correctly installed LED strip.



QURWST

WiFi Dimming Controller Instructions 80*60mm

 <p>LED Strip WiFi Dimming Wireless Receiving Controller</p> <p>Installation Instructions</p>  <p>QURWST</p> <p>Read all instructions before installation</p>	<p>Specifications</p> <p>LED Strip WiFi Dimming Wireless Receiving Controller Technical Specifications:</p> <p>Product Code: QURWST Operating voltage: DC12-24V Output voltage: DC12 - 24V Working environment temperature: -20°C - +55°C Control distance*: 80m outdoor, 25m indoor Capacity: Up to 10 switches can be paired with one controller</p> <p>Control method: WiFi through Device APP (search "Kinetic Switch" in store) and pairing with Quinetic Wireless Switch (see instructions)</p> <p>Dimming range: 0-100% IP Rating: IP20 Communication method: RF433MHz & WiFi2.4 Ghz</p> <p>Integrated push-in terminals for quicker installation</p> <p>Control Load: 9A Maximum Load: 108W / 12V & 216W / 24V LED Strip</p> <p><small>*Distance comes from Quinetic laboratory test results. The actual distance in practical use might vary due to environmental difference.</small></p>	<p>Wireless receiving controller installation</p> <ol style="list-style-type: none"> 1. Ensure that the power is turned off before installation. 2. The wireless receiver/controller line input should be connected using live and neutral cables from a 12-24V DC power supply. 3. Output lines should be connected to a LED Strip load as per wiring instructions. 4. Use the double-sided adhesive tape or screw to fix the wireless receiving controller. <p style="text-align: center;">Wiring Instructions</p> 	<p>Smart Device APP Download:</p> <p>The free Kinetic Switch App is required to operate your WiFi controller. Ensure your iOS / Android device is connected to the internet using a Wi-Fi network.</p> <p>Method 1:</p> <ol style="list-style-type: none"> 1. Open the App store/Google Play on your phone. 2. Search for "Kinetic Switch" in the App store or Google Play. 3. Download the Kinetic Switch App to your phone. <div style="display: flex; justify-content: space-around;">   </div> <p>Method 2: Or you can download the app using the QR codes below:</p> <div style="display: flex; justify-content: space-around;">   </div> <p style="text-align: center;">IOS Android</p>	<p>Device pairing*:</p> <p>The initial setup must be performed using your Wi-Fi network. Both the phone and the controller must connect to your network. Once it has been set up you can control your Wi-Fi device via Wi-Fi or 3G/4G from anywhere in the world.</p> <ol style="list-style-type: none"> 1. After downloading the APP follow the prompts to register the account. 2. Turn on power to the controller and follow the steps on the APP to set the receiver to rapidly blink. 3. Follow the prompts to select the controller model for quick pairing.  <p>Using Amazon Alexa/Google Home to control your WiFi Controller</p> <p>Note: We would recommend naming the devices in your Kinetic Switch app something that is easy for Alexa or Google Home to understand.</p>
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<p>In order to integrate the Kinetic Switch app with Amazon Alexa/Google Home you need:</p> <ol style="list-style-type: none"> 1) Amazon Alexa APP / Google Home APP 2) Amazon Alexa / Google Home account (users need to register their own account) 3) Echo, Echo Dot, Tap or other Amazon voice-operated devices. 4) Google Home, Google Home Mini or other Google voice-operated devices. <p>Enable Smart Life skill/action in your Alexa / Google Home APP</p> <p>Search for "Smart Life" skill and add it to the Alexa APP "Smart Home" skills. For Google Home search for "Smart Life" action and add it to Home Control. Enable the skill/action in your Alexa/Google APP and input the name and password used to register the Kinetic switch APP to link it with Alexa/Google APP.</p> <p>Voice control can be used now to control the Wifi device such as follows: "Alexa/Ok Google, turn on/off [kitchen light]" "Alexa/Ok Google, set [bed light] to 50 percent" "Alexa/Ok Google, brighten/dim [bedroom light]" "Alexa/Ok Google, turn on [phone charger]"</p>	<p>WiFi controller switch pairing method*:</p> <p>Dimming Wireless Quinetic energy switch and dimming WiFi wireless receiving controller can be paired with any combination: a controller can be controlled by a maximum of 10 separate switches, a switch can pair an unlimited number of controllers.</p> <p>The range of a switch may also be extended by using a second controller and putting it into "Bridging Mode". In order to extend the distance, the second controller must be paired with the switch and located between the switch and the controller that is out of range. The Bridging Mode can be enabled on the second controller by following the pairing steps below (Code Pairing Steps No.6). Once the second receiver is in Bridging Mode and paired with the switch it will forward the signal from the switch to the controller situated outside of controlling range.</p> <p>Code pairing steps:</p> <ol style="list-style-type: none"> 1. Press the function button for 3 seconds and the indicator light begins to flash slowly. Release the button to enter the single pairing state. 2. Press the wireless kinetic energy switch and the indicator light on the controller will go out, which means that the pairing is successful. 	<div style="display: flex; justify-content: space-around;">   </div> <p>Press for 3 seconds to enter program mode Press for 15 seconds to clear memory</p> <ol style="list-style-type: none"> 3. Pressing the switch quickly will turn the light ON/OFF. Keep the switch pressed to dim the light to the desired level. While the switch is pressed the lights will go down from 100%-0% and then will go up 0-100%. **Please note that the dimming range of the controller is slightly shorter when manually operated by the switch compared to the APP dimming range. 4. If you need to add more switches to the same controller repeat the above process; each controller can store up to 10 switches, pairing in formation. 5. Single, double and triple switches follow the same pairing method. 6. In order to put the controller in to bridging mode press the function button for 7 seconds. 	<p>The indicator light will pulse continuously to indicate a successful "bridge". The bridging mode can be toggled off using the same pairing steps.</p> <ol style="list-style-type: none"> 7. If the controller indicator light continues to pulse the controller will still function normally even if used with a single switch. 8. To clear the controller stored pairing information press function button for 15 seconds until the indicator light goes out - the pairing information will be deleted. <p>Precautions:</p> <ol style="list-style-type: none"> 1. The wiring must be done in accordance with the method of installation illustrated. 2. Please note the maximum load of an individual controller. Exceeding this maximum will result in blowing the fuse. 3. The controller has a non-replaceable internal fuse. 4. Do not short-circuit, it may cause permanent damage to the receiving controller. 5. The controller will remain "OFF" after a power cut until reactivated by a switch, saving energy, reducing fire risk and protecting your appliances. 6. Damage caused by incorrect installation and operation are not covered under warranty. <p>Troubleshooting:</p> <ol style="list-style-type: none"> 1. If pairing does not work first check if the indicator is lit. Re-pair in case the pair is lost after power failure. 2. If the receiver does not respond check the LED indicator. If this does not light check the power supply, 	<ol style="list-style-type: none"> 2. WiFi internet pairing fails: confirm the light is flashing quickly (twice per second). If not, please set the light to flash quickly according to connect WiFi method. The router, receiver and phone should be as close as possible (within 5 meters). 3. The receiver is offline in APP: Router connections might reach the upper limit. Some routers allow a maximum of 15 devices. In this case please upgrade the router and close the devices which are not needed.
<p>Dimensions:</p>  <p><small>*For more information about phone APP pairing, instructions and troubleshoot please visit www.tlc-direct.co.uk website.</small></p>				



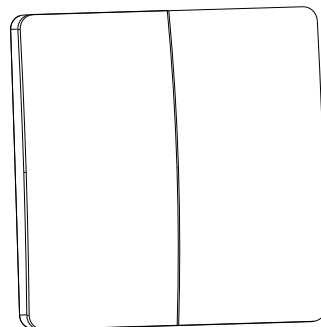
Dimmable Kinetic Weatherproof Wireless Switch - White

Installation Instructions



Self Powered No Radiation No Maintenance No Wiring Durable Cost Saving

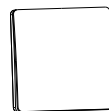
Read instructions carefully before installation



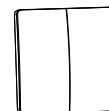
Product Description

IP67 rated. Its push button style allows for both an on-off option or a dimmable action depending on the Quinetic controller used to pair it with. The switch utilises macro-energy technology, thus is wireless and has no requirement for batteries or another power source.

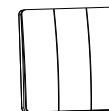
Available Models



1 Gang White
QUWS1W



2 Gang White
QUWS2W



3 Gang White
QUWS3W

Specifications

Product model: QUWS

Switch Type: Push button switch

Number of keys: 1-3 keys

Power mode: Kinetic energy self-power (no battery)

Operational life: 200,000 switchings

Operating frequency: 433MHz

IP Rating: IP67

Control distance*: 80m (outdoor) 25m (indoor)

Control Method: Pairing with Quinetic Controller

Installation: Permanently fixed or placed on wall using self adhesive 3M tape (supplied)

Working Temperature: -10°C ~ +40°C

Warranty: 3 Years

* Distance comes from Quinetic laboratory test result. The actual distance in practical use might vary due to environmental difference.

Every Quinetic product has passed a strict quality inspection before it leaves the factory. Quinetic provides 3 years warranty if installed & used in accordance with these instructions. Within the 3 years warranty period, Quinetic will be responsible for the repair, free replacement of parts or entire product.

Weatherproof Protection

This switch is IP67 rated & can be used externally. Do not install underwater.

Dimmable Quinetic Weatherproof Switch Operation:

The dimmable Quinetic IP67 switch must be paired with the dimmable Quinetic controller (see controller instructions for more details about pairing).

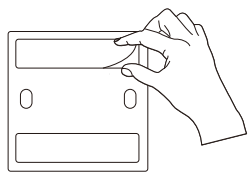
Pressing the switch quickly will turn the light ON/OFF. Keep the switch pressed to dim the light to the desired level. While the switch is pressed the lights will go down from 100%-0% and then will go up 0-100%.

The switch can also be paired with a non-dimmable controller for on/off use only.

Switch Installation

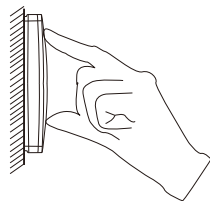
Method 1:

Use the double-sided adhesive tape supplied to mount the switch on a stable, smooth and clean surface such as glass, marble and ceramic tiles.



1

Attach double-sided tape to the back

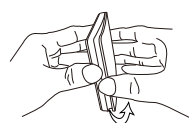


2

Stick the switch on a clean surface

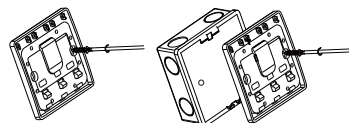
Method 2:

Carefully open the switch panel as shown in the figure below and fix the switch on the wall using screws or fix the switch on an existing wall box.



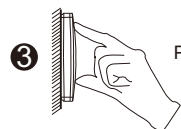
1

Carefully open the switch panel



2

Fix on the wall using expansion screws or on an existing wall box



3

Press the key panel back to the base

Troubleshooting

After pairing if the switch only turns a light OFF or only dims, unpair by pressing the controller pairing key for about 10 seconds until the indicator light goes off.

Pair again following the controller instructions and check for correct operation.

Dimensions

