

LK FLOATING BENCH SAUNA KIT

"Floating Bench" option is available only with LK Plus kits.

Floating benches refer to a bench with no visible floor supports.

Bench tops are 1x4 cedar as opposed to the standard 2x4 bench tops.

Bottom Bench extends fully under top bench. Top=20", Bottom=36"

YOU SUPPLY:

You provide the 2x6 SPF studs to frame bench.

We supply the USP inverted Joist hanger, lumber loc screws and driver bit.

WE SUPPLY:

- 1 x 4 Select, Clear cedar for bench tops.
- Joist hanger
- Lumber Loc Torx 20 screws
- Torx 20 driver bit





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LK FLOATING BENCH STYLE SAUNA LINER KITS

INCLUDES 1x4 CEDAR BENCH TOPS. (SPRUCE BENCH SUB-STRUCTURE BY OTHERS)

*** BEFORE YOU BEGIN: READ ALL THE WRITTEN AND DRAWN INSTRUCTIONS AND REVIEW THE MATERIAL LIST ***

Remember the old carpenters proverb: "Measure Twice, Cut Once.

*** SPECIAL NOTE FOR CONTRACTORS: ***

We realize you already possess the skills to build the sauna and you may choose not to read these instructions. At the very least, make sure you carefully review the material list before you begin cutting.

Material is supplied in specified lengths for particular uses.

Confirm cedar direction on ceiling.

The kit has been counted twice before it leaves our factory. 95% of the time, "shortages" are a result of certain pieces being cut incorrectly, leaving a shortfall elsewhere.

CEDAR GRADING AND SELECTION:

Clear cedar kits use the finest "Grade 'A' & Better" tongue & groove cedar for lining material. But even with this top grade, you may find certain boards that you do not like. Pre-sort your sauna kit to find this material and make an effort to "hide" these boards. Install these boards behind the bench where they will not be visible. In the case of front wall boards, cut them so that you can hide less attractive boards behind the heater.

Knotty cedar kits use STK (Select Tight Knot) boards for cedar lining. Bench tops are always Clear cedar

The cedar is finished on two sides to give you more flexibility in selecting the face you prefer. When assembling benches, select nicer side to be bench top.

YOUR SAUNA DETAILS

Material List itemizes lengths provided and for which wall (based on quotation and order placed).

Do NOT reassign or reallocate material without first speaking with us.

The material supplied for ceiling is clearly indicated.

If the material delivered does not correspond to your sauna design or layout, contact us before you install. Do not cut down boards intended for something else. We will not provide additional material in these circumstances.

FRAMING:

This instruction manual has no details for general framing. It is assumed that you possess basic carpentry skills to install this kit and have the know-how to frame the walls and hang a door.

The instructions note blocking as required to support the benches and heater.

Use 2 x 4 kiln-dried SPF (spruce, pine, fir) studs to frame the walls and ceiling. Use 2 x6 SPF for bench sub-structure

Standard framed height is 83-1/2". (Check material list to confirm your sauna height as ordered.)

Provide extra blocking for heater mounting brackets and joist hangers. (See drawing #1,3,4).

See Material list for your door rough opening.

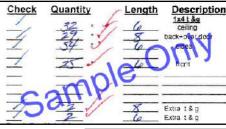
Frame the walls at 16" on center. If the walls are already framed and you wish to change the direction, they should be strapped using 1 x 2 spruce strapping at 16" on centre.

FRAME SIZE:

Frame sauna to to size ordered (see material list).

For example, if sauna is 5' x 7', frame walls to 5' x7'. Actual sauna interior will be about one inch smaller.







VENTING: (see vent drawings #1, #6 & #7)

Sauna venting does not mean exhaust venting as you would for a shower. The purpose of venting is to optimize sauna function. To pull hot air from heater and drag it to the far corner.

Inlet and outlet vents should be on opposite sides. They should not be on same wall.

Sauna venting goes from inside house to inside house. Do not vent to the outdoors.

(Outdoor saunas present an enigma. In general, for outdoors, you have access to all walls after the fact. You could choose not to install vents initially, with the knowledge that it may be required later).

One outlet slide vent cover is included with kit.

Inlet vent is typically a series of holes drilled through cedar lining. The heater conceals the holes. (An

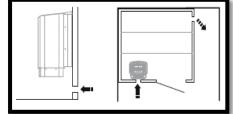
optional cedar grill may be provided if ordered.) If there is gap under door and heater is

close, the door gap can act as the inlet vent.

Exterior grill NOT included. Use painted aluminum (or other) to match exterior decor. Our outlet vent requires 4.5" x 4.5" opening. Most use spruce studs to box opening. Inlet area should be 19 square inches.

Sometimes, what is outside the sauna can limit the ability to easily install simple vents through the wall. In such cases, it may be possible to duct over drop ceiling and vent to an open indoor area.





Poor ventilation can lead to:

- Insufficient heat at benches further from heater.
- Sauna heater integral high limit switch "tripping" because heat is trapped.

DOOR: (See pages #8)

See Your Material List to Verify "YOUR" Door selection and Rough Opening.

Frameless Glass door rough opening is 27-1/2" x 76-1/2 to finished floor.

Allows for the 74" jamb and the 1-1/2" spacer with gap to install below jamb threshold. (Door = 24" x 72")

Cedar Framed Insulated Glass door rough opening is 26" x 76-1/2" to finished floor. (Door = 24" x 74") There is gap under door to allow for a back-up air inlet.

Jamb Extension: (see drawing #8a)

1x2 trim provided for jamb extension where required. Required with frameless glass doors and 11/16" lined kits.

See electrical wiring drawings packed with selected heater/control.

The Wiring Should Be Done Only By A Qualified Electrician.

Electrical rough-in wiring should be done at this time. Wire size and wire pathway is dependent on heater model and size. If using an outside control (not built into the heater), the thermostat should be installed at this time. Install on the wall outside the sauna with the sensing bulb located as indicated in heater instruction manual.

Tylo Sport & Saaku: Supply wire to heater. Controls on heater. Sensor built into heater.

Tylo Plus or Combi with Pure or Elite control: Supply wire to heater.

Sensor from heater to 1" down from ceiling, 3" from the edge of the heater, (NOT in corner). Note: Control cable is 15', from bottom of heater to control location. (50' available as option.)

Sauna Craft Controls: (TPT3 or EL13) 3-gang box provided with control for installation outside sauna. Controls are line voltage. Locate the sensing bulb 1" maximum down from the ceiling 1'-2' away from the heater.

For heaters up to 6kw, Supply wire goes first to control and then from control to heater. For heaters 7.5 kw and larger there is a magnetic contactor and additional wires for the control circuit (field supplied)

Standard light fixture included is surface mounted marine light. Wall mount recommended Requires octogen electrical box (not included)

Light has a separate 120-volt power supply. Light switch is not provided.

If you have Tylo with Plus or Elite control, you can direct 120v through heater and use control to operate light.

Optional recessed ceiling lights may be used in place of wall light

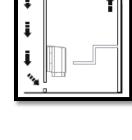


The walls and ceiling should be insulated in the with 3 1/2", R-12 fiberglass insulation. Rockwool can be used as well.

FOIL BARRIER:

Install aluminum foil. Staple to the inside edge-face of studs over the insulation. Overlap the seams approximately 3". If paper backed, install with "shiny" side facing into the sauna.

DO NOT TAPE SEAMS. The foil is intended more as a heat reflector than vapor barrier. Taping seams can impede air flow. (If seams are taped, properly installed sauna vents are imperative.)





TONGUE & GROOVE LINING: (see drawing #1 & #5)

While not required, most choose to line the ceiling first.

Before you begin, examine all the pieces of tongue and groove cedar. You may find certain boards that you do not like, whether it is due to a knot or color. Make an effort to "hide" these boards. Install these boards behind benches or heater where they will not be visible.

Kit come with several extra pieces of t & g cedar at no additional charge.

Use the specified lengths of tongue and groove cedar (see "Material Packing List"). Cedar generally comes 1/4" below the foot. You are expected to trim each board to fit. Nail through the tongue only in order to conceal all nail heads (Blind nailing - see drawing #5).



The cedar wall pieces should be left about 1/2" off the floor. If a tile baseboard has been installed, you start above the base. Start at the floor and work your way up. Ensure the first board is level. Check the level every 4-6 boards. The first cedar piece should be installed with the tongue facing up. There is up to a 1/32" variation in width. Corners may not line up perfectly. Corner molding is supplied.



VERTICAL LINING: (see drawing #2)

The cedar wall pieces should be left about 1/2" off the floor. If a tile baseboard has been installed, you can start above the base or overlap it. Corner molding is supplied.

EXTERIOR:

NOT included unless ordered as option. For exterior walls: drywall or paneling may be used to match your decor.

BENCHES: (See Drawings #9-#13) for bench assembly details).

Clear cedar 1 x 4 boards for the bench TOPS.

Bench GIRTHS (sleepers) are 1x4 knotty

BEFORE DOING ANY FASTENING, select the boards to make sure the BETTER side of the board comes out on the sitting surface. While you build the benches, the better side will be faced down because you are fastening from the bottom. (That way you do not get any nails showing up on finished surface.) Use the 1-1/4" nails supplied.

If the sauna is 5' or more deep, the top bench is 20" wide and bottom bench is 36" wide. If the sauna is under 5' deep, make the bottom bench 28".

BENCH SUPPORTS: (for Floating bench tops) NOT INCLUDED

BENCH FRAMING FOR FLOATING BENCHES IS NOT PROVIDED. YOU PROVIDE YOUR OWN 2X6 SPF (spruce,pine,fir) TO BUILD BENCH SUB-STRUCTURE.

WE PROVIDEE CEDAR FOR BENCH TOPS.



BENCH GIRTHS: (drawing #11) (Knotty Cedar) Girths nailed from bottom of bench Fasten bench girths 1' on center

Top girth is 19-14" Bottom girth is 35-1/4"







"L" SHAPED RETURN BENCH:

Where there is only a single tier, L"- shaped return bench along the side wall, it is typically installed as a top bench.

For an "L"- bench, the bench framing is installed as for standard benches.

Fasten one joist hanger to wall.

Fasten other joist hanger to face of main bench.

If you are planing L-bench with your own frameless glass front wall, your contractor will need to supply or fabricate angle iron support for open end of bench *where it meets glass) (drawing #13)



HEATER:

Sauna Craft heaters (up to 9kw) can be mounted in the corner or on a straight wall. Generally, the least amount of space is occupied by mounting the heater on the wall, 2" from the corner.

Tylo and Saaku heaters can only be mounted on a straight wall.

GUARD RAIL: (See drawing #14)

Use the 2x2 for the vertical posts and the 1x3 for the horizontal rails.

Tylo Heaters have a cool-touch shell & some choose not install guard. However, a guard is provided for you and it is recommended that you install it.

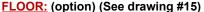
<u>FASTENERS</u>

1-1/4 finishing galvanized nails for t & g lining and bench tops Treat deck screws.

Floating Bench Hardware

Joist hangers. Typically 2x6. May be 2x4 for benches 6' or shorter. "Lumber Lok" screws to fasten joist hangers.

T-20 torx bit for Lumber Lok screws.



Use 1x4 cedar, square edge laid over 1x4 knotty cedar sleepers. Top boards should be spaced 1/2" apart. The sleepers should be placed at 1'-0" on centre.

WINDOW TRIM: (option) (See drawing #16)

Use 1X3 square edge cedar fro glass stops and casing

BACKREST: (option) (See drawing #17)









HOW TO TAKE A SAUNA

- 1. Start with a brief shower using warm water and soap. Rinse thoroughly. Do not towel dry.
- 2. Enter the pre-heated sauna 80°-90° C⋅ (176°-194° F) Relax and allow your body to perspire freely in the soft dry heat. Do not throw water on the rocks in this first session. Do not expect to begin and finish your sauna in a few minutes. Even in the extreme heat of a sauna, it takes time for your body temperature to rise and for you to begin to perspire freely.
- 3. Cool off with a cold shower.
- 4. How long you stay in the sauna is up to you. It depends on your comfort level. It is not an endurance test. People often start at 5–10 minute intervals and work up to longer periods.
- 5. Re-enter the sauna. Sprinkle water on the hot rocks to bring up a little steam and increase the humidity. This will increase the feeling of heat and assist the perspiration process. If you like add a few drops of scented essence such as eucalyptus into the water you splash on the rocks. It will disperse throughout the sauna.
- 6. Take a cold shower. Repeat the sauna/cold water cycle as often as you desire.
- 7. Dry yourself completely. Then sit or lie down, letting your body relax.
- 8. Dress and have a light sauna snack.

NOTE: When used for the first time, you will notice smoke coming off the heater elements. This is normal. Leave the door open and allow the sauna to run about 20 minutes.

For additional information:

SAUNAFIN SAUNA & STEAM 115 Bowes Road, Unit #2, Concord, Ontario L4K 1H7 Phone: (905) 738-4017

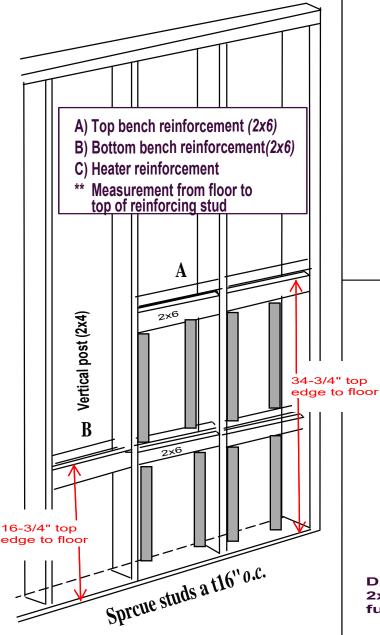
Inlet Vent (wol) **Guard fence** Sauna Craft Heater Marine Light (typically wall mounted) 3-1/2" R12 fiberglass insulation (not included) Door pre-hung on jamb Heater reinforcing studs. 2" x 4" flush inside. (see drawing #3 for detail) Inside door casing 2" x 4" studs, 16" O/C (not included) Vapor barrier Lower bench - Upper Bench Frame Blocking (see drawing #3 for details) T & G cedar Reinforcing studs are imperative. Upper & lower bench reinforcing studs. 2" x 4" flush inside. Outlet Vent (hgih) X 2" x 4" joists, 16" O/C (not included) N DO Foil vapor barrier See Drawing #3 for blocking position T & G cedar Heater Heater **Guard Fence** 3-1/2" R12 fiberglass insulation Heater reinforcing framing. (not included) Check material list for direction of cedar on ceiling Bottom: 36" Standard Top: 20" Standard <u>1</u>8 18 83-1/2"

HORIZONTAL LINING IS STANDARD. CHECK YOUR MATERIAL LIST TO CONFIRM YOUR SAUNA LINING

Note: This drawing is generic and does not necessarily reflect your exact sauna. Check your Sauna Material List for specifics on your sauna.

REINFORCING STUDS for FLOATING BENCHES and HEATERS

Bench Blocking

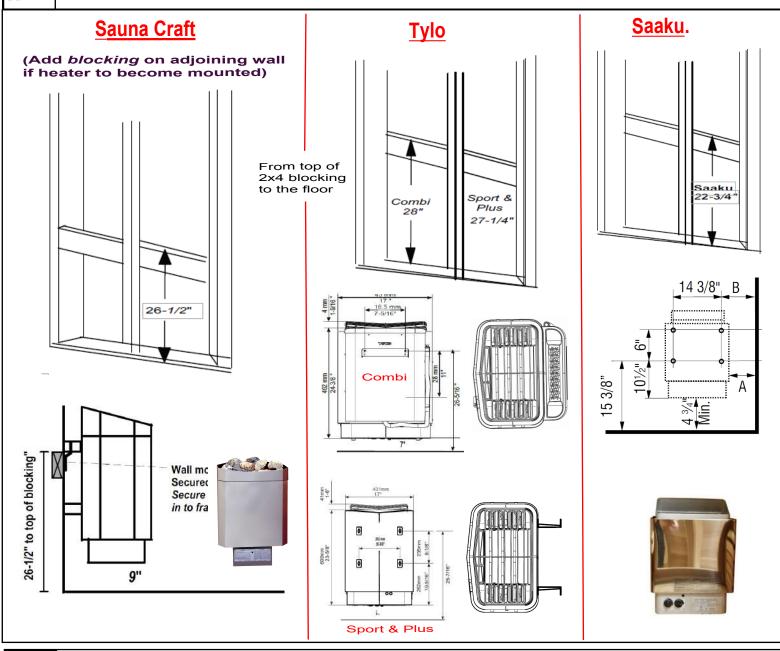


Bench Blocking



Double plate 2x6 blocking with 2x4 vertical reinfocing posts to carry full bench load.

REINFORCING STUDS for HEATERS

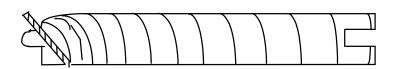


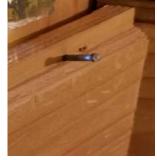
#5

Tounge & Groove Hidden Nailing

1-1/4" galvanized finishing nails for lining (supplied)

Many prefer to use their own brad nail gun. Nail through tongue. And hide inside groove.







Vent Details

A NOTE ON VENTING:

Proper sauna venting is an important part of sauna heater operation and to effectively heat the sauna room. Sauna ventilation is passive. There is no mechanical fan. It is not part of the HVAC or bathroom exhaust.

<u>INLET</u> goes low behind heater (usually on front wall). Typically, it is simply holes drilled through cedar on sauna side.

Fixed cedar grill (in lieu of holes) is available as option.

Exterior has aluminum grill (not included) to match exterior decor.





OUTLET located high on wall diagonal from inlet Cedar slide cover on outlet (sauna side).

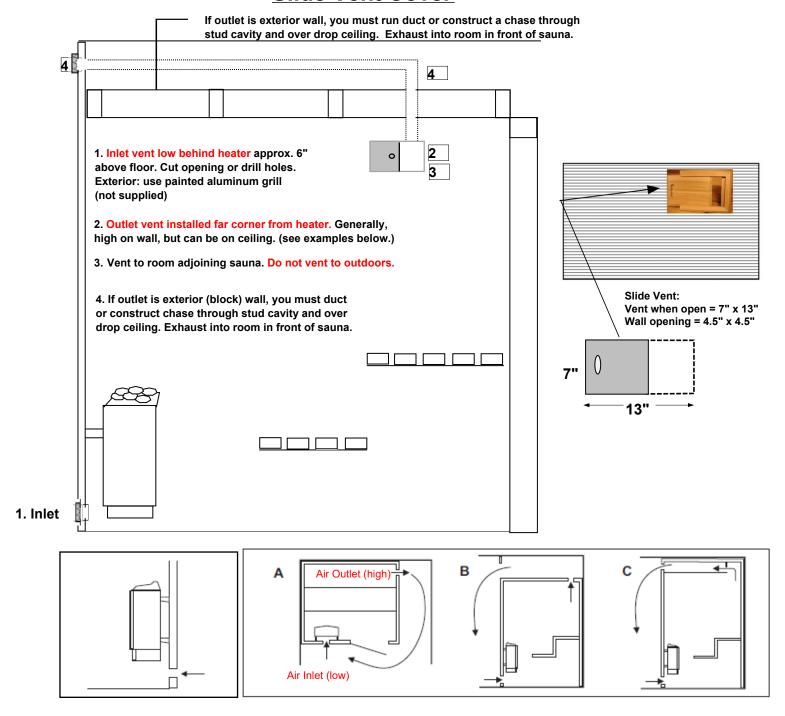
Exterior has aluminum grill (not included) to match exterior decor.





Exterior Grill:
Not Included
Select to match your decor

Slide Vent Cover



The inlet vent should be driven straight through the wall directly below the center of the heater.

The cross-section of the vent for a wall mounted sauna is approx. 19 sq.in.

For larger saunas approx. 40 sq.in

Position the air inlet and outlet vents as far away from one another as possible (diagonally opposite). The outlet vent should be located high on a wall or in the ceiling, and should have the same cross-section area as the inlet vent. Spent air should always be led back into house — it should not be discharged directly to the outside. Do not install inlet and outlet vents on same wall.

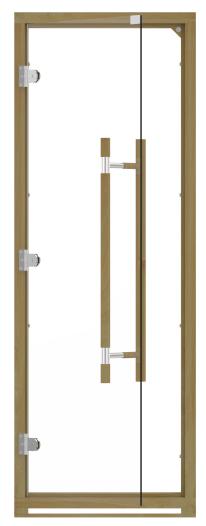
Bad ventilation can be worse than no ventilation.

- A: Outlet vent through the sauna wall (seen from above). The vent is placed high up, near the ceiling.
- B: Outlet vent through the cavity above the sauna ceiling (seen from the side).
- C: Outlet vent through a drum under the ceiling in the sauna (seen from the side). The outlet duct should be placed at an angle between the ceiling and the wall. The drum can be built of wooden panelling and have the same area as the outlet vent.

Inlet: If drilling holes for inlet, must equal specified sq inch requirement. Six 2" or eight 1.75" holes are sufficient.

SAUNA DOORS

NOTE: Rough Opening means above "finished" floor; i.e. above tile



Frameless

R/O=27-1/2" x 76-1/2 incl bottom spacer with gap

(Hinge is reversible)





Trim/Double Header

If you don't use frameless door bottom spacer, or door is shorter than R/O for another reason, you can "double case" header





Tips

If you don't want to see scres on jamb, you can screw behind stops



After installing door, replace center screw on each hinge with longer screws provided with kit



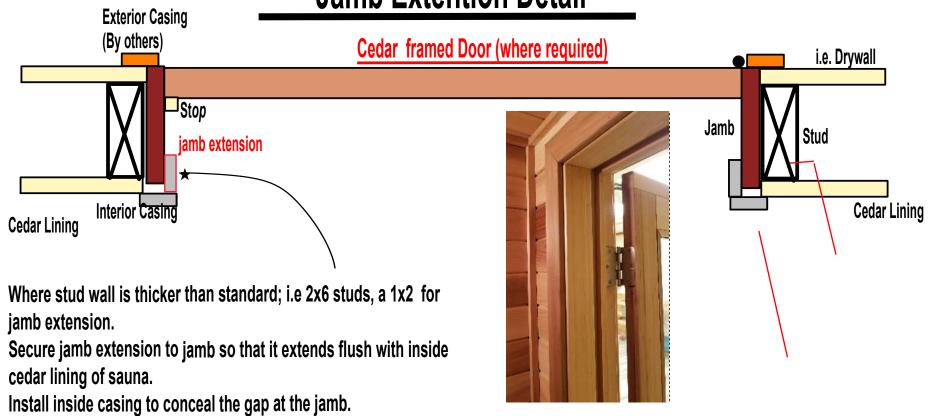
Cedar Framed Insulated Glass

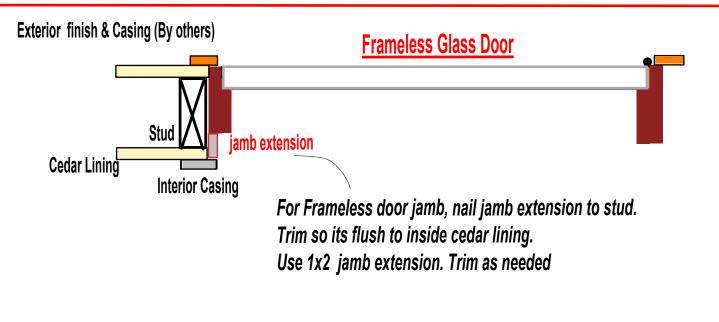
R/O=26" x 76-1/2 gap under door (non-reversible)

NOTE: Gap or spacer can be deleted if you have effective cross ventilation as detailed in manual

NOTE: We do provide instructions for how to hang a door. That is not something unique to saunas. We assume installer is familiar with how to shim, square and secure a door in place. If not there are numerous YouTube video demonstrations.

Jamb Extention Detail





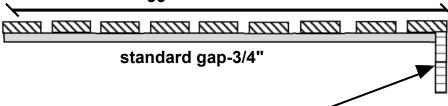


BENCH CONSTRUCTION - 1X4 OVER 1X4

(For Floating benches, sitting on 2x6 spruce joist)

1 x 4 s4s clear (square edge), cedar bench tops over 1x4 s4s clear cedar sleepers.





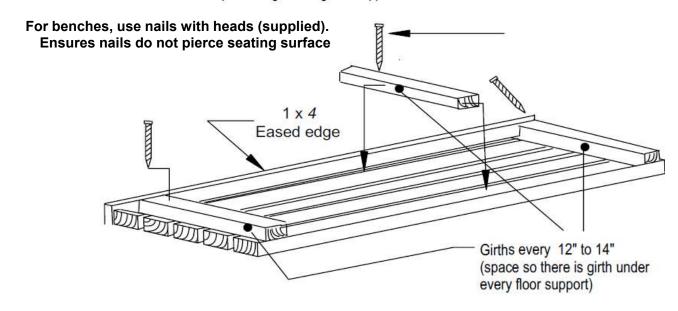
* 1 x 4 t&g eased edge (rip to fit) Install eased edge after the fact. Nail to 2x6 joist

#10

BOTTOM VIEW OF BENCH

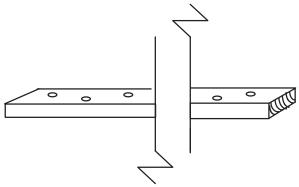
NOTE: Fasten girths from bottom to avoid exposed nails on sitting surface

Be carefull not to nail through seating surface. We recommend
carpernter's glue along with supplied nails.



BENCH CLEAT & GIRTH FOR ALL BENCHES

1"x4"BENCHGIRTH (knotty cedar)



Girths approx. every 12" Space o that there will be girth over each joist cross-blocking





Floating Sauna Bench 1x4 (clear) tops over 1x4 girth over 2x6 Spruce joist (on edge). 2x6 sitting on Joist Hanger

Bench Sub-Structure (joists) By Others - We provide joist hanger & screws)



1x4 tops over 1x4 sleepers.

Standard gap is 3/4". However, we include one extra board per tier to use if you wish to reduce the gap.

2x6 SPF (spruce) edge (supplied by others

2@ 1x4 s4s (trim as required

double plate of 2x6 with vertical 2x4 to transfer load to floor.



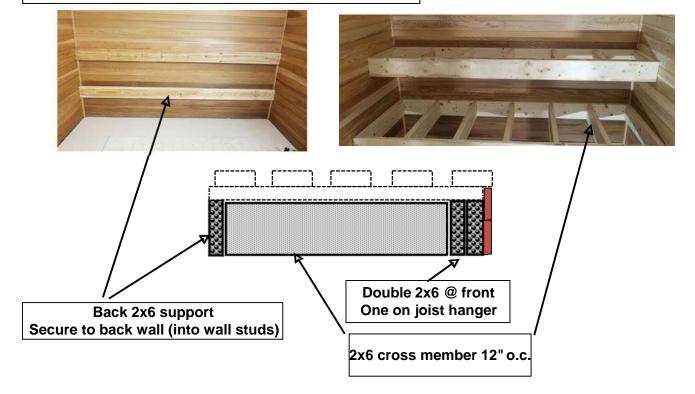
Secure joist hanger through cedar in to 2x6 blocking
Attach one 2x6 to joist hanger
(using Lumber Loc screws & bit provided)
Attach second 2x6 to face for additional support





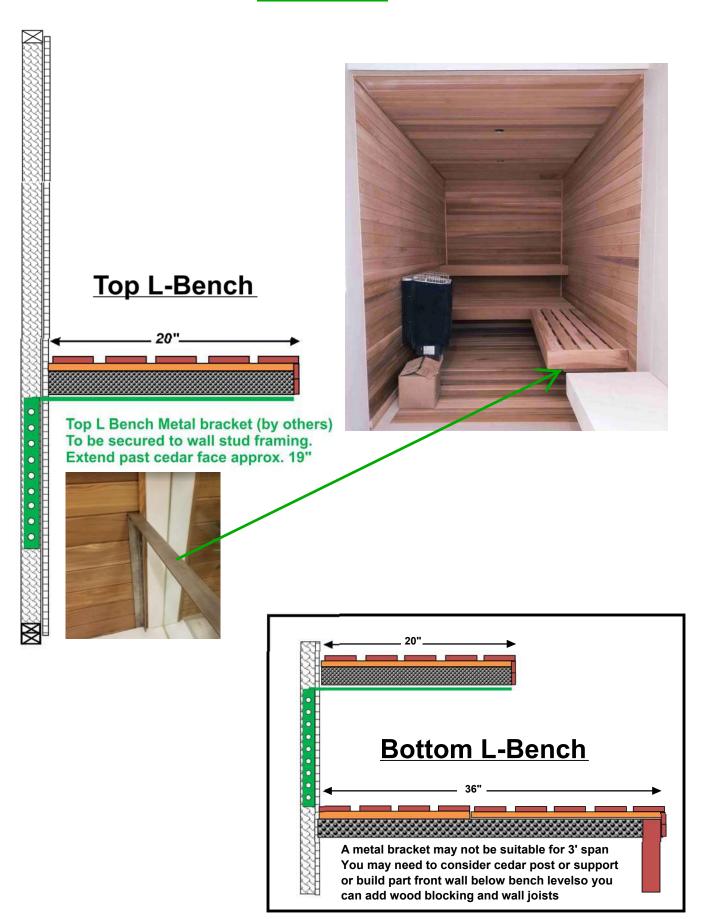


Back 2x6 to fastened through cedar in to vertical studs (blocking not required)



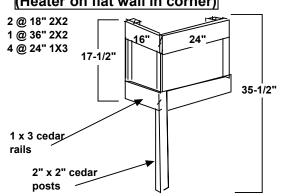
Open Ended Bench Metal Support

(By Others)

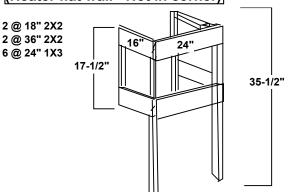


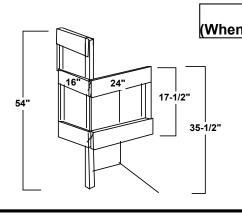
HEATER GUARD FENCES

2S Two Sided (Heater on flat wall in corner)



3S Three Sided (Heater flat wall - Not in corner)

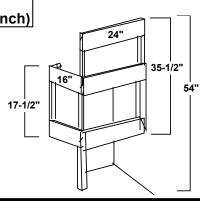




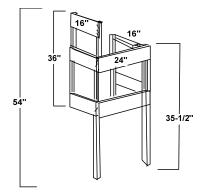
2S-H High Sided (When heater is close to top bench)

HIGH SIDE HEATER GUARD FENCE

- 1 @ 18" 2X2 1 @ 36" 2X2
- 1 @ 54" 2X2
- 1 @ 24" 1X3



3S-H High Sided (When heater is close to top bench)



- 1 @ 18" 2X2 2 @ 36" 2X2
- 1 @ 54" 2X2
- 7 @ 24" 1X3

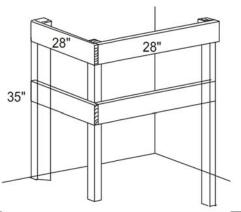
FLOOR STANDING

2S-FM

- 3 @ 36" 2X4 posts
- 4 @ 36" 1X4 s4s

3S-FM

- 4 @ 36" 2X4 posts
- 6 @ 36" 1X4 s4s







2 & 3 sided



High sided

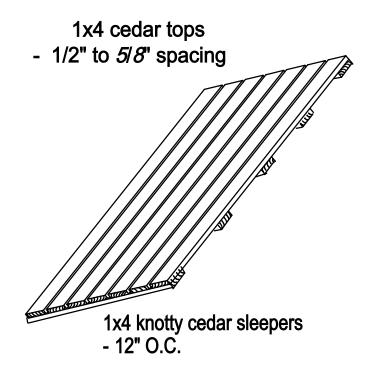




3 sided for floor standing heater



OPTIONAL1" x 4" DUCKBOARD FLOOR (where ordered)

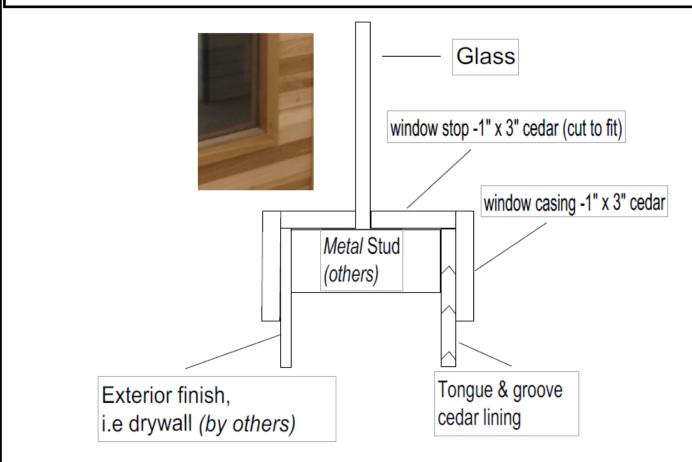






#16

OPTIONAL CEDAR WINDOW TRIM (where ordered)



DESIGNER BACKREST (optional)

DESIGNER BACKREST



Walls and backrest all from Clear cedar
Color variation is normal and expected with cedar



1x4 & 1x2 s4s cedar tops.

1x4 x 12" s4s cedar sleepers

Assemble backrest from back, so nicer surface is facing front.

Nail using 1" nails with heads provided

Approx. 5/8" gap between bench tops for 12" height. Sleepers approx. every 2'.

Tip: Nailing backrest to wall looks nicer.
Screws are more visible