HOMECRAFT SAUNAS

North America's most trusted sauna heater

Sauna Kit and Door Instructions

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Homecraft Sauna Kit Installation Guide

MY KIT HAS ARRIVED, WHAT SHOULD I DO FIRST?

Begin by going through the material pick list that was sent with your specific kit. If you did not receive a pick list, contact Homecraft immediately for assistance. Start by sorting all the sauna kit materials, identifying the different components of the sauna and familiarizing yourself with the part descriptions, before you begin building. Separate and identify the bench materials and set aside the Tongue & Groove (T&G) cedar for the four walls and the ceiling. Your kit has been specially designed for **horizontal** or **vertical** installation. **Be sure to confirm all the material before you begin.**

We supply sufficient cedar to cover the entire sauna room plus an additional 3%.

Tools and materials that would be helpful:

- Hammer
- Miter saw (electric is best). Ensure the matching ends of cedar boards are exactly 90 degrees for a good match, if not then trim square with the miter saw.
- Carpenter square
- Air powered brad nailer with supply of 1" or 1-1/4" brad nails. Rent or borrow one if you can.
- Stapler to fasten aluminum foil vapor barrier
- Scissors for cutting aluminum vapor barrier.
- 4 foot carpenter's level.
- Approx. 2 pounds of 1-1/2" finishing nails if you don't have a brad nailer
- 1-1/4" wood screws to fasten through the cross supports into the underside of the seat boards.
- 3-1/2" wood screws to fasten horizontal bench support into wall strapping or studs.

GENERAL SUMMARY BEFORE YOU BEGIN

Before putting any cedar tongue-and-groove boards on the walls:

- Make sure all your electrical rough-in boxes are installed per code. These boxes will be used to mount the sauna lights you want in your sauna.
- Make sure any necessary wiring is installed in the wall cavity and not run on the wall surface.
- Make sure the wire attaching the sensor to the control is installed properly in the wall cavity. Remember the sensor must come out of the wall directly over the heater and 2.5" from the ceiling.

Once you've confirmed that all in-wall work is complete, you can proceed with stapling the aluminum foil vapor barrier to the face of the wall and ceiling studs.

When the aluminum foil has been stapled to the studs, you should strap your walls horizontally, if you cedar is running vertically.

Ensure that you've applied strapping around the door frame, window frames, as well as any vent openings in the walls. For all wall hung heaters, be sure to install strapping behind where the sauna heater will go.

You will be fastening the heater brackets through the cedar, anchoring into the strapping behind the cedar. Also install strapping so the bench supports can be anchored securely through the cedar. Do NOT depend on cedar for anchoring or fastening purposes...cedar is a softwood and has very little holding strength.

NOTE:
b) Aluminum vapor barrier should have already been applied under the strapping before moving onto installing the cedar. (note: if you didn't do this you can staple the aluminum foil to the face of the strapping (furring) strips.
c) The door should also be installed before the cedar goes on the wall. Ensure that you've applied strapping around the door frame.

RADIANT VAPOR BARRIER DETAILED INSTRUCTIONS

We supply a generous amount of vapor barrier for your sauna. When installing, drape it loosely and overlap any joints with a generous amount of overlap (suggest: 3"-4" overlap). When exposed to the heat of the sauna, the aluminum will flex a little over time so allow for this when you're installing it. A suggestion for those customers wanting the very best installation - joints can be sealed using self-adhesive aluminum tape, or red 3M Tuck tape. (not duct tape).

APPLYING THE T&G (tongue and groove cedar)

Ceiling:

Start with the ceiling first. Nailing is usually done through the "tongue" of the cedar board, at an angle so the next board slips over the tongue without the nail shank impeding it. The cedar is applied perpendicular to the ceiling joists in the sauna room. If cedar is going to be applied parallel to the ceiling joists, then strapping will have to be installed to nail onto. The ceiling cedar boards can be cut 1\8" short for easier fitting. The last board to be installed should be ripped at an angle to allow it to "slip" into place. You can also rip the backside of the "groove" on a saw, so the last board simply needs to be placed in the gap, without fitting over the tongue of the previous board. Surface nailing with finish nails will be necessary on the last board.

Be sure to cut any butt joints accurately, for this purpose an electric mitre saw is one of the best tools. Do NOT trust the angle markings on a mitre saw - unplug the saw and double check the angle markings by locking the blade down into the kerf groove on the mitre saw and aligning the saw blade with a carpenter square resting against the back fence of the saw. This will show you the true "0" mark. Use this as your reference point for quality joints.

Walls:

The walls are lined next. It should be noted that a right handed person will find it easier to nail the T&G boards if they are installed vertically with the tongues pointing to the right, working your way clockwise around the room. (Counter-clockwise if you're left-handed) When planning the location of each T&G board, utilize the natural beauty of the color variation and grain in the western red cedar.
HINT: If you like you can leave a 1/4" gap between the T&G boards and the floor to prevent any water laying on the floor "wicking" up the boards.

The T&G is secured to studs or horizontal strapping. Installing the T&G is easier using 1-1/4" or 1- 1/2" finishing nails or brads in an airpowered "brad nailer" which can be rented or borrowed. When nailing the T&G, avoid nailing too close to the end of the board to prevent splitting the wood. Split boards can be prevented by drilling a small pilot hole if you are forced to nail near the end of a board. The nailing should also be done in a way so the nails do not interfere with the placement of the next board. Nails should go through the tongue of the board at an angle so the shank of the nail doesn't interfere with the groove of the next board sliding over the tongue and nail. The head of the nail should be covered by groove of the next board. Use a nail set to set the nail heads flush if nailing by hand.

Start in any corner, using your level to make sure your first board is "plumb", if it isn't you should do necessary trimming to get it perfectly straight and plumb. Some boards may not "bottom" completely onto the next board without some encouragement. Do NOT hammer, distort or "mash" the tongue of the board you are fitting. Instead use a short piece of T&G scrap and fit the tongue of this scrap over the board and hammer only on the nose of the scrap piece. This will force the next board completely over the tongue of the fastened board.

Rip the last board going onto a wall with a slight taper for easier fitting. The T&G going on the next wall will cover any gap. The last board of the fourth wall will need to be properly angled and fitted perfectly.

Finishing with a perfect fit in the last corner requires more finesse than the other corners.

All wall T&G boards should butt tight to the ceiling. Avoid having butt joints at the same level on adjoining boards, mix the lengths of boards on every new section so the eye is not attracted to joints unnecessarily. Think of laying hardwood flooring in a random pattern but on a vertical wall.

BENCH ASSEMBLY

Benchmaterial is composed of the different parts outlined in the diagram below:

1. The 2 X 4 bench rails (item C). These run the full length of the bench and have a groove (dado) running the full length of the board. Two "rails" are required for each bench, one at the rear and one at the front of the bench. The assembled bench rests on horizontal supports previously fastened through the cedar and into the framing you installed for this purpose. If your kit has bench material over 7 ft long, it will be supplied in 2 pieces. These longer benches are joined in the middle with material included in our kits.

2. The cross supports (item D): these run perpendicular to the 2x4 "rails" and fit into the grooves cut into the bench rails. We supply enough pieces so a "cross support" can be installed at the start of the bench, then 12" on center after that. Finish off with the final "cross support" at the end of the bench.

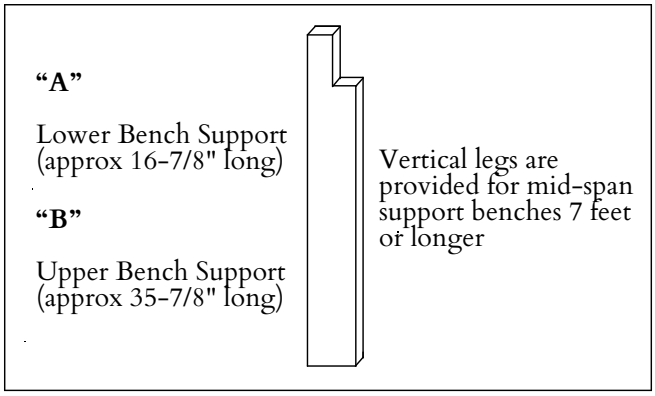
3. The seat boards (item E): these run parallel to the 2x4 bench rails and are installed with an airspace between each board. Depending on market availability, these can be either 1x3 or 1x4. Space the boards out evenly.

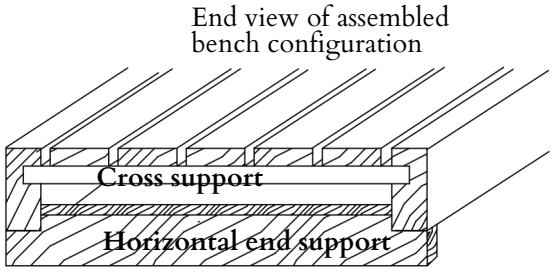
4. The legs (item A & B): these are vertical supports and have a notch at one end. These vertical legs are only supplied on benches 7 feet and longer as a midspan support, or if any bench is supplied in 2 sections.

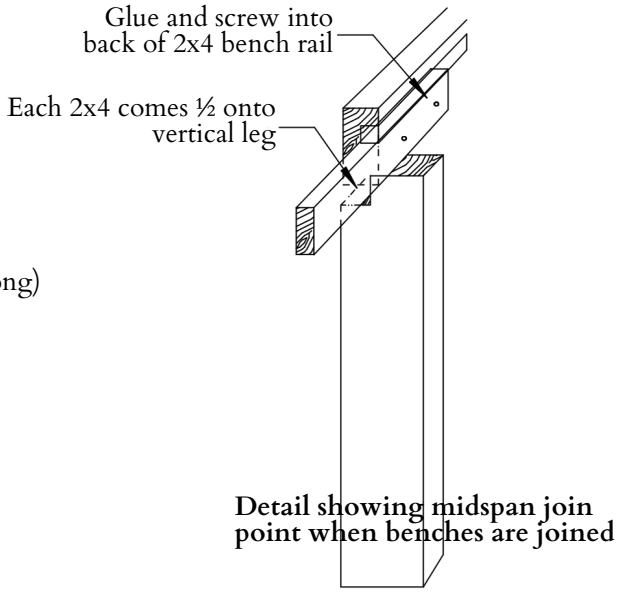
Assemble the benches after the walls are installed. **NOTE**: Benches are best assembled upside-down to ensure no fasteners will be visible after assembly. Fasteners can cause skin burns in the sauna if they contact your skin!

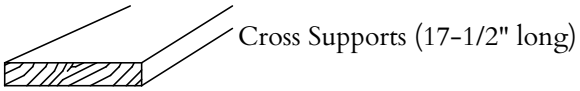
Assemble benches on a clean floor, preferably on cardboard to avoid marring the surface of the cedar seat boards. Measure the final dimension between walls where the sauna bench will be installed and cut the length of the 2x4 "rails" to 1/4" less than the length of the inside dimension of the walls.

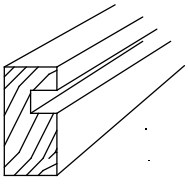
BENCH PARTS:

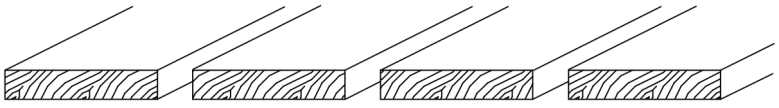




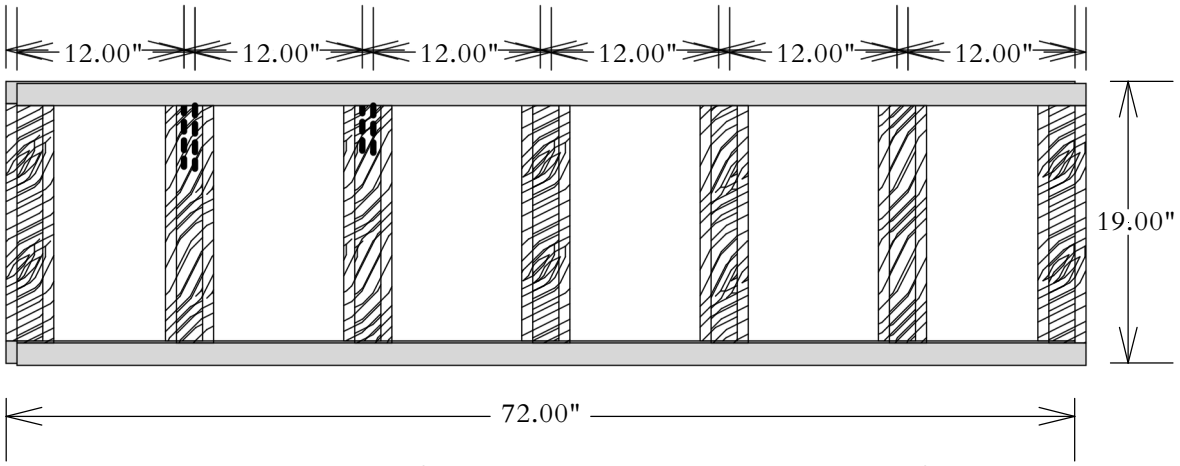






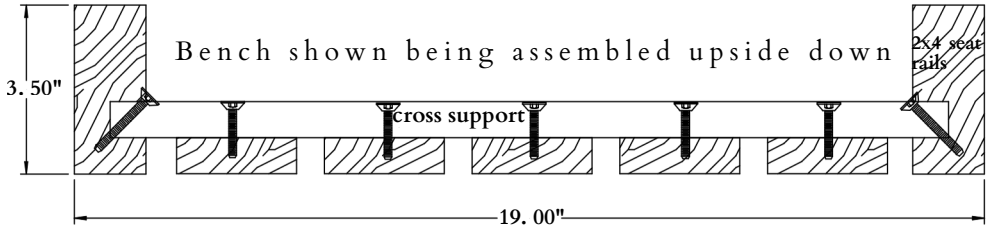


"E" Seat Boards (can be 1x3 or 1x4 boards)



Overhead view of 2x4 bench rails showing space of cross supports using a 6 foot long bench as an example

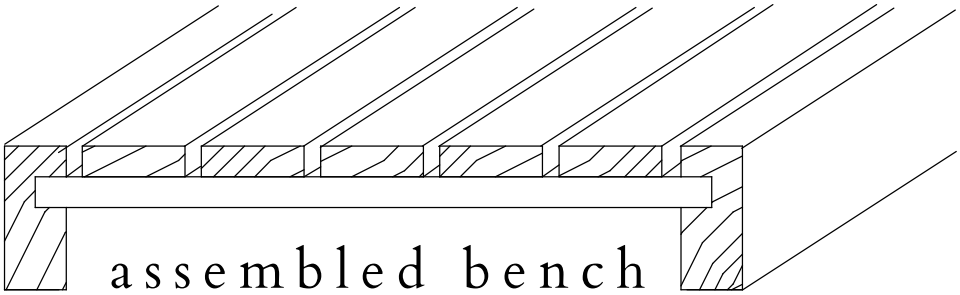
Using glue and wood screws, secure the cross supports to the 2x4 bench rails. Start at one end of the bench rails, then space the cross supports equally 12" on center. (Maximum distance between cross supports should not exceed 16") Assemble, taking care to keep the bench square, true and flat!



Layout the seat boards (these will be the boards you sit on) with an airspace between each board. Place the good side of each board face down. Lay the frame (this is the structure with the 2x4 rails and cross supports you've assembled to this point) carefully on top of the seat boards and secure the seat boards to the cross supports with glue and screws. Be sure the bench remains square and the seat board edges are parallel with the 2x4 rails. Use screws that are short enough that they won't protrude through the top of the seat boards! **HINT: Predrilling the screw holes will result in less likelihood of cracking as well as a stronger joint.**

All fastening is done from the underside of the bench. No fastening should be necessary from the top of the bench, however if done, the screws must be countersunk to avoid the possibility of a skin burn from a protruding metal screw head.

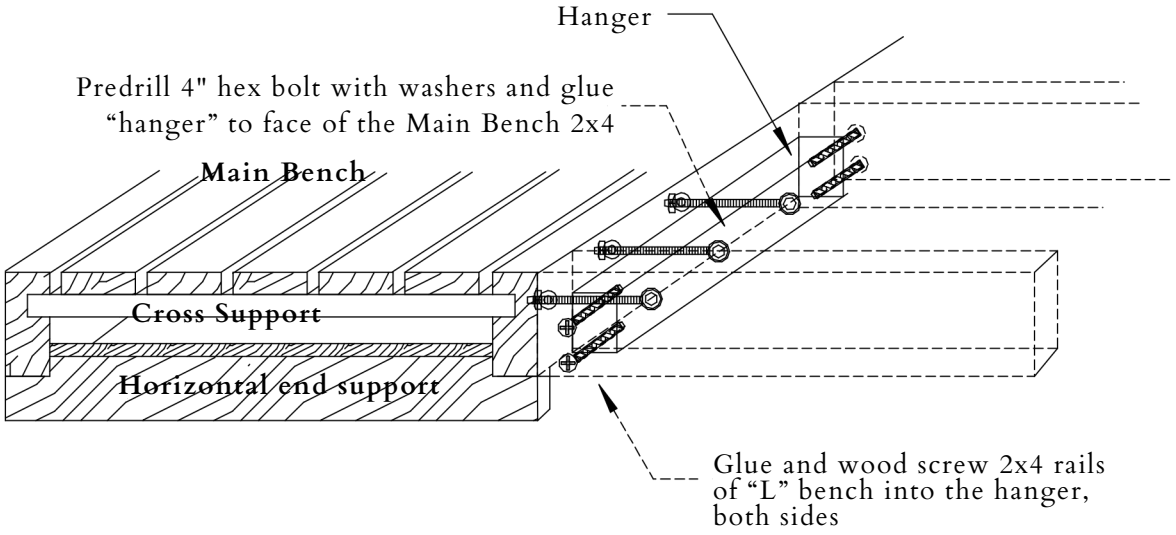
Benches are removable to facilitate cleaning, however if your sauna kit includes bench "L" exten- sions running at 90 degrees to the main bench, you may not have the option of removeable benches because of the extra fastening required to secure the adjoining benches.



assembled bench configuration

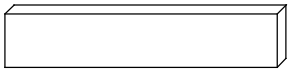
Optional "L" Sauna Benches

If your kit has optional benches running 90 degrees to the main bench, you must install the included "hanger" per the diagram below. The 2x4 bench rails of the perpendicular bench should also be glued and attached with wood screws to the hanger. The hanger is designed to fit exactly between the 2x4 bench rails.

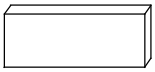


NOTE: HEATER GUARDS ARE MANDATORY ON ALL HEATERS AND MUST BE INSTALLED IN COMPLIANCE WITH PRESCRIBED CLEARANCES

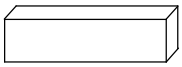
HSH HEATER GUARD SPECIFICATIONS



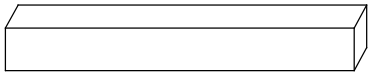
"A" 2 pcs @ 30" (front horizontals)



"B" 4 pcs @ 18" (side horizontals)

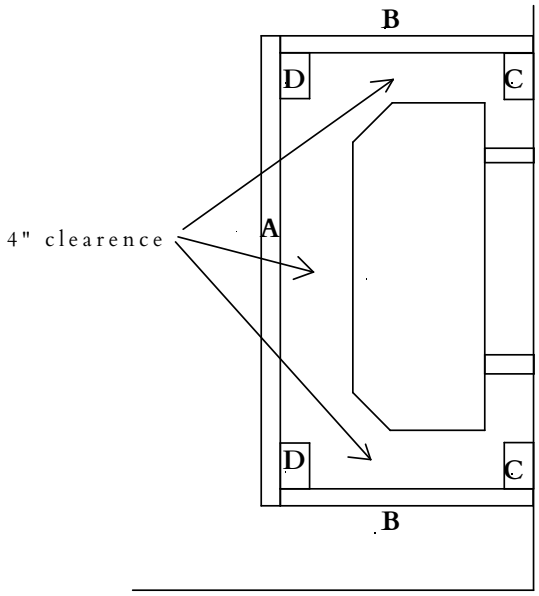


"C" 2 pcs @ 12" (wall verticals)

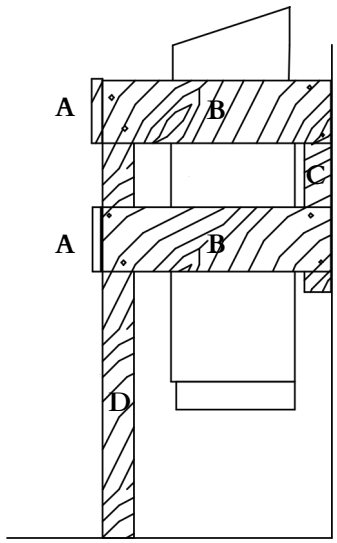


"D" 2 pcs @ 30" (front vertical main leg)

Overhead View

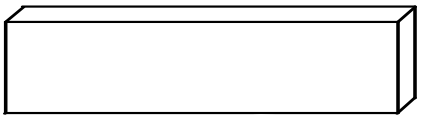


Side View

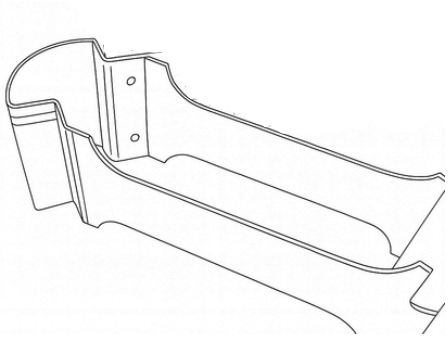


Heater guards are required around all sauna heaters.
HSH heaters require a **4"** air space to the guard on both sides and front.

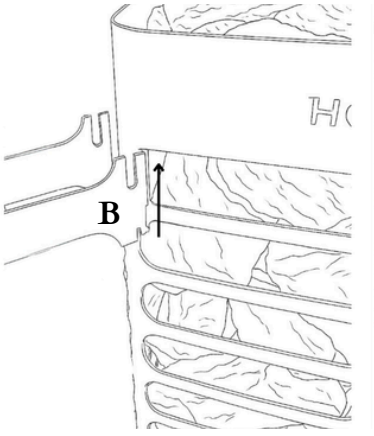
REVIVE HEATER GUARD SPECIFICATIONS



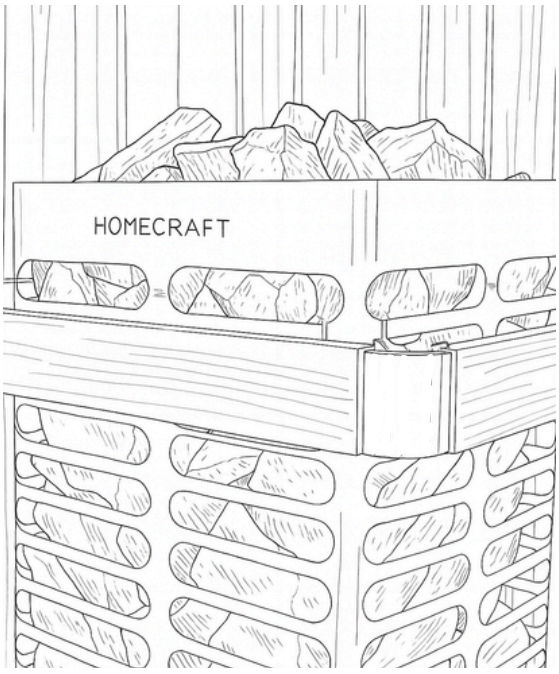
“A” 4 pcs @ 20"

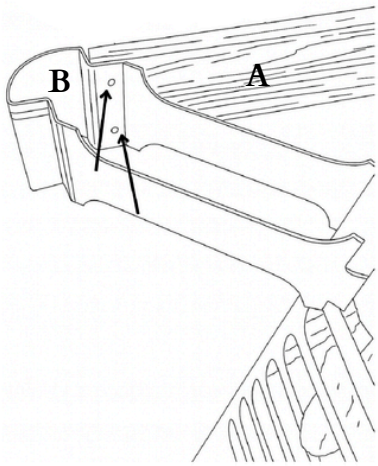


“B” 4 pcs, (metal braket)



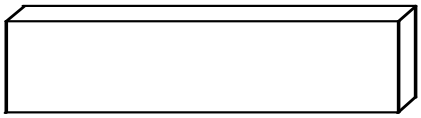
Step 1: Secure all four brackets to each corner of the heater. Ensure the long side is facing up.



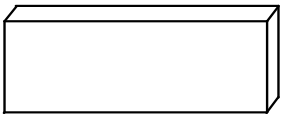


Step 2: Take the cedar planks and secure them to each side using a standard screw. (not provided by Homecraft)

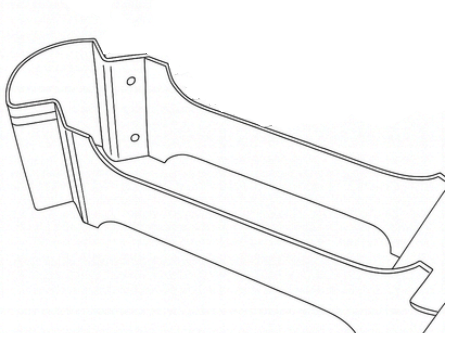
REVIVE SLIM HEATER GUARD SPECIFICATIONS



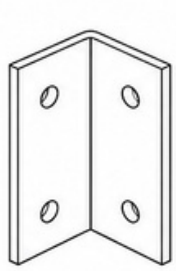
"A" 1 piece @ 18.5" (front horizontals)



"B" 2 pcs @ 14" (side horizontals)

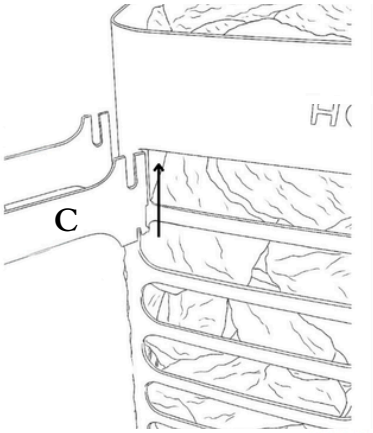


"C" 2 pcs, (metal brakets)

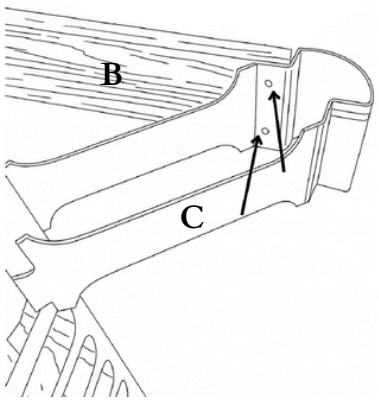


"D" 2 pcs (wall bracket)

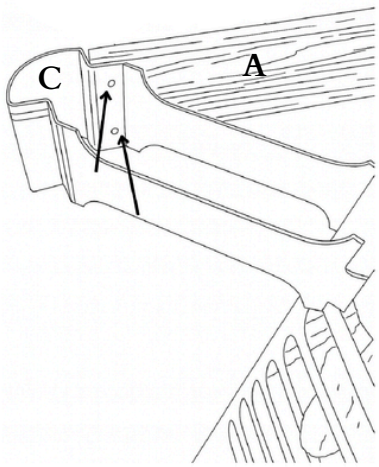
Step 1: Secure both brackets to each corner of the heater. Ensure the long side is facing up.



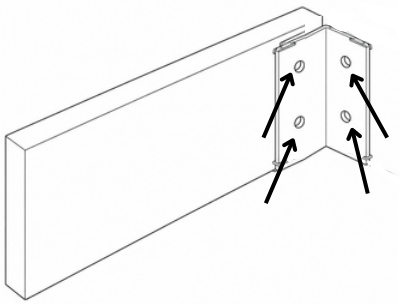
Step 3: Using the 14" side pieces, secure it to both sides of the heater.



Step 2: Using the 18.5" cedar plank, secure it to the front of the heater using a standard screw. (not provided by Homecraft)



Step 4: Attach the wall bracket to the cedar board at the wall location using a wood screw. Then fasten the bracket securely to the wall.



PLEASE NOTE IF YOU HAVE THE BACK BAFFLE INSTALLED YOU WILL NEED TO TRIM **"B"** ACCORDINGLY.

SAUNA DOOR INSTRUCTIONS

Please refer to the door installation instructions included in your package.

SPECIAL NOTES

When planning your sauna, note that the sauna door **MUST OPEN OUTWARDS**. Sauna doors **NEVER** use positive latching system as in regular doors. Roller latches, magnetic latches, and various automatic door closing systems are acceptable.

The standard sauna door is usually smaller than regular residential doors to minimize heat loss when opening and closing the door.

SAUNA ROOM VENTING

Proper venting and positioning of sauna vents is going to result in a more comfortable sauna experience. Ideally, intake and exhaust vents are placed in opposite positions in the sauna room.

Intake Air and Intake Vent Positions:
There are at least 2 options to provide intake air in any sauna.

Option #1: Air coming under entrance door.
This is the most commonly used, and assumes you want air coming into the sauna under the entrance door. For this reason our sauna doors are intentionally provided with a gap under the door. If you choose to keep the door threshold in place, this gap will be approximately 3/4". If you decide to remove the door threshold, this gap will be about 1-1/2".

Option #2: Air coming through a dedicated wall vent.
This is when you install a air vent in the wall solely to provide incoming air to the sauna. This air vent is usually installed below the sauna heater and has no sliding doors on it.

Exhaust air and Exhaust Vent Positions:

We recommend having an exhaust vent underneath the top bench, on the opposite wall from the heater to help draw the heat down in the room This vent is typically a 4–6-inch hole. Depending on the room size you may add a second exhaust vent up high diagonally from the lower vent.