



PREPARATION INSTRUCTIONS FOR THE SAUNA PRECUT KIT

WALLS AND CEILING

Pre Cut saunas have an inner wooden framework very similar to the framing of a closet. This framework may or may not support part of the house. But it does support wall coverings, windows, and doors. And it provides cavities for electrical wiring for the sauna heater and lighting. The wall frame generally consists of 2 x 4 or 2 x 6 wall studs placed vertically every 16 or 24 inches, from center to center. Extra studs provide nailing area and sturdy support wherever walls intersect, such as at corners. Framing material can be standard fir or spruce studs. Metal studs can also be used, but there will also need to be material attached to the studs as a nailing surface for the sauna material. The framing for Pre Cut saunas should equal the exact size of the sauna you are ordering. For example, if you order a 5' x 7' x 7' high Pre Cut sauna, your framing should be 5' x 7' x 7'. The optimal ceiling height of a sauna should be 7'. The cedar supplied for the sauna walls is installed horizontally or vertically depending on how you ordered it. If you install horizontally, then you can attach the cedar directly to the studs. If you install vertically, then you need a nailing surface such as blocking or nailers between the studs (fire-blocks), furring strips on the studs or you can just sheet the room with ½" CDX plywood. If blocking (fire-blocks) or nailers are being used you can space them evenly from floor to ceiling. The more used will provide a better nailing surface for the cedar. Just remember, if you are adding additional nailing material, the final rough nailing dimensions must match the size of the sauna ordered. The cedar supplied for the ceiling can be installed the same way as the walls. Be sure you also have a stud in each corner of the room to provide a nailing surface for trim.

DOOR AND WINDOWS

Windows have a single or double sill across the base, made up of 2 x 4's laid flat. Trimmer studs support each end of a header, and cripple studs fill in the areas above and below the openings. Wherever windows or doors openings occur along a wall, the regular studs are eliminated. Instead, a small beam, called a header, spans across the top of the opening, bridging the gap. The rough opening for both doors and windows included in your package will provided with your sales confirmation. A double top plate—two 2 x 4's or 2 x 6's laid flat—caps the top of the studs, locking the studs in position. This gives the wall rigidity and support and provides a backing for nailing-on wallcovering materials. At the wall's base, studs are nailed to a 2 x 4 or 2 x 6 sole plate to lock them to the floor.

INSULATION AND FOIL BARRIER

All walls and ceiling should be insulated. Insulation "R" values are dependent on the size of the framing studs that are used. Typically for a 2x4 framed wall, a minimum of R-11 is suggested. For 2x6 walls, generally R-19 –R-21. For the ceiling a minimum of R-13 is recommended. The ceiling is where much of your heat is lost, so if you have room for additional insulation this is a great place to add it (i.e. R-30). The type of insulation most commonly used for a sauna are fiberglass batting (faced or un-faced). Also a foil radiant barrier should be used to help reflect heat and make your sauna more efficient. This foil is included in your pre-cut sauna package and should be applied to the inside framing of the sauna.

INLET AND OUTLET VENTING

Every sauna should have inlet and outlet venting. Sauna heater manufacturers all specify this in their manuals. In cases where this will be difficult, consult with your salesperson for possible solutions. Generally, the inlet vent should be positioned at the base, or as close to the sauna heater as you can. The center of the vent opening should be approximately 8-9 inches off the floor when possible. You can use blocking between the studs to create a vent box. This vent will draw air from the outside area of the

sauna. The rough opening for your inlet should be 4" x 10" (will use vent grill here). The outlet vent should be on the opposite side of the sauna and preferably on a diagonal from the sauna heater. This outlet can be in the ceiling or high on one of the walls. The rough opening for the outlet should also be 4" x 10" (will use adjustable vent here). When open, this vent will draught air in from the lower inlet vent. The out-flow of air should be returned to the same space where the inlet vent draws from. If the outlet vent is in the ceiling, it is recommended to use an enclosed chase to avoid airflow from mixing with insulation. In many cases it works well to use a standard 4"x10" HVAC sheet metal boot that adapts to 4" metal pipe. Then run your pipe to the desired location. These items are readily available at your local home improvement store. When constructing an outdoor sauna, it is generally recommended that you install an adjustable vent for the inlet and the outlet, in order to better control air flow and minimize heat loss.

SAUNA HEATER

If using a wall-mount style heater, blocking between the studs should be used to support the appliance. The blocking heights will vary depending on the sauna heater manufacturer and model, so it's important to consult your manual prior to completing this step.

BENCHING

Blocking in the walls should be added for benching support where wall cleats are utilized. While benching styles vary in thickness, generally the center of the blocking should be centered at approximately 13 ¾" inches and 31" inches off the floor. This is to achieve approximately 18" in height to the top of your lower bench, and approximately a 36" in height to the top of your upper bench

FLOORING

Your flooring should be a surface that is easy to clean such as tile, vinyl, Linoleum or even concrete. Carpet, hardwood or wood products such as Pergo should not be used. A cedar slat "duckboard" flooring grid or Dri-Dek antibacterial rubberized flooring is supplied with most sauna kits. They lay on the top of your flooring in the walk area of the sauna. This flooring is designed so it can easily be removed at any time to enable you to clean your flooring underneath.

ELECTRICAL

Sauna heater and all lighting electrical rough-ins should be done before insulation and the sauna kit are installed. This should be done by a licensed electrician and must follow all local and or national codes. Supply for your specific sauna heater should be wired appropriately for the voltage, phase and size of your heater. Sauna heater controls can be built-in to the heater or be provided as a separate exterior mechanical or digital box. If an exterior control panel is used, then you need to accommodate for the additional wiring. All electrical information such as heater size, kilowatt output, amperage draw and voltage requirements are all provided in your heater's manual. The standard light fixture provided with the sauna kit is wall mounted and requires a separate 120v supply line into a single gang box (not supplied with sauna kit). This box should be mounted 6-8 inches down from the ceiling and should extend ½ inch beyond the stud (11/16" when that thickness of wall board is used). For the light, be sure and use wire rated for 90 degrees Celsius (194 degrees Fahrenheit) Other types of sauna lighting such as ceiling, recessed ceiling, low voltage and fiber-optic are also available.