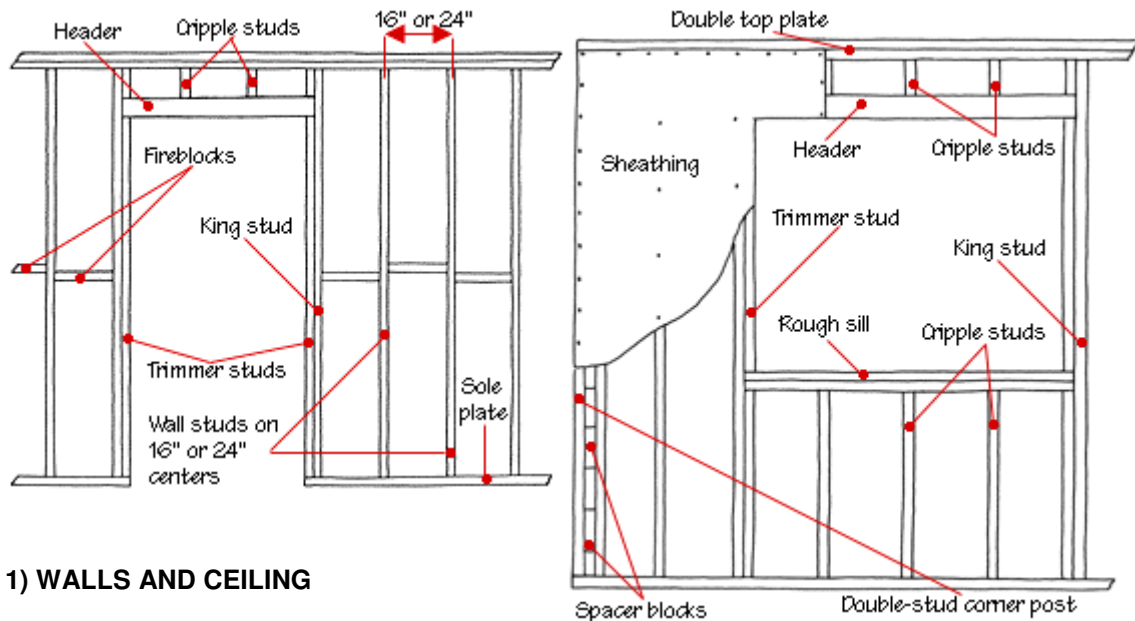


## Pre Cut Sauna Preparation



### 1) 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), fir-strips on the studs or you can just sheet the room with 1/2" 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.

## **2) 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 the door should be 2 inches larger than the door size ordered. The rough opening for windows ordered with the sauna should be ¼" larger than the window size.

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 wall-covering 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.

## **3) 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. Types of insulation commonly used for a sauna are fiberglass batting (faced or un-faced) or rigid foam. Also a foil radiant barrier should be used to help reflect heat and make your sauna more efficient. This foil should be applied to the inside framing of the sauna.

## **4) INLET AND OUTLET VENTING**

Every sauna should have inlet and outlet venting. But there are some cases in a residential sauna where there may not allow space for venting. The inlet vent should be positioned directly underneath, or as close to the sauna heater as possible. The center of the vent opening should be approximately 8-9 inches off the floor. 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 vent grilles are 9 5/8" wide x 4 ½" high. The rough opening should be 7 ¼" x 3". 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. 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. The sliding adjustable vent is 16" wide x 4 ¾" high. The rough opening should be 7" x 2 ¾".

## **5) SAUNA HEATER**

Blocking between the studs should be used to support the sauna heater. The blocking heights for the Tylo sauna heaters are as follows: For Tylo 2/4 and 7 model heaters, the center of the blocking should be at 15 ½ inches and 25 inches off the floor. For Tylo 8 model heaters, the center of the blocking should be at 17 inches and 27 inches off the floor. For Tylo 11 and 16 model heaters, the center of the blocking should be at 17 inches and 29 inches off the floor. The Tylo 2/4, 7 and 8 model heaters are 18 inches wide and the Tylo 11 and 16 model heaters are 25 ½" wide. So be sure enough blocking is installed to accommodate the appropriate heater.

## **6) BENCHING**

Blocking for added benching support should be used if installing 1" x 4" or 2" x 4" style sauna benching. The center of the blocking should be at 13 ¾ inches and 31 ¾ inches off the floor. If you wish to install the benching at a different height, you will have to move the blocking accordingly.

## **7) FLOORING**

Your flooring should be a surface that is easy to clean such as tile, vinyl, Linoleum or even concrete. Carpet, hardwood or simulated wood products such as Pergo should not be used. A cedar duck-board flooring grid or plastic dri-dek are supplied with all sauna kits, and sit on 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.

## **8) 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 the Tylo sauna heaters should be wired for 120v, 208v or 240v, depending on the size and kilowatt output of the 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 the Tylo sauna heater 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. Other types of sauna lighting such as ceiling, recessed ceiling, low voltage and fiber-optic are also available.