

“SIMPLIFIED INSTRUCTION MANUAL” FOR TYLO DELUXE 11

with

TS-30 CONTROL

or

CC10, CC50 or CC100 CONTROL (Relay Box required with CC)

Control is mounted outside sauna (generally next to door).

This unit specific instruction is provided as a courtesy to help clarify the installation of this particular heater. You should consult the full instruction manual packed with your Tylö heater before installation.

NOTE: Comments in red offer alternate information based on our own experience.

TYLO HEATER SPECIFICATIONS

| MODEL | VOLTS/ / PHASE | KW Output | AMPS/ /BREAKER | WIRE | MINIMUM / MAXIMUM CUBIC FEET | |
|-----------|-------------------|--------------|-------------------|------|---------------------------------|-----|
| | | | | | | |
| Deluxe 11 | 208/3 | 6.3 | 30 / 40 | 8 | 320 | 640 |
| | 240/1 | 10.7 | 45 / 60 | 6 | 320 | 640 |

240 volt, 1 phase is standard for houses in North America.

(There are a few exceptions; i.e. New York City)

Heaters can be wired 208 volt, single phase. This decreases the output. (208/1 is found in some industrial & condo applications. 208 volt 3 phase (commercial) available upon request.

Minimum ceiling height = 74"

Fig. 3

Tylö Deluxe sauna heater with outside control.

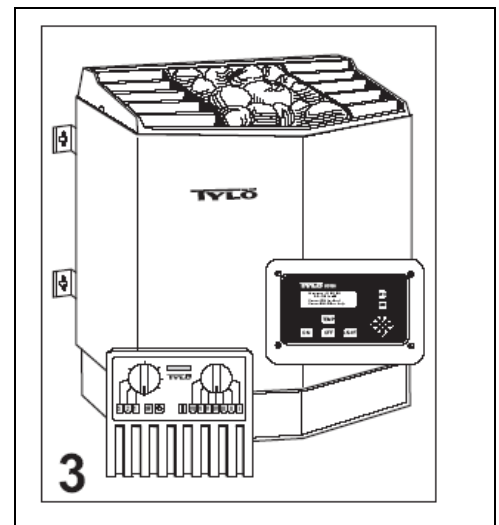
Installing the sauna heater.

Fit the heater 10½ in. above the floor, observing the regulations for the minimum distance to the side wall.

Connect using normal standard wire or cable approved for permanent installation. When the heater has been installed, a set screw (I, fig 12) locks it in place on the supporting brackets. This prevents the heater from being removed from the wall.

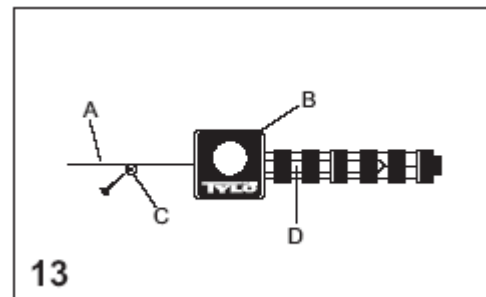
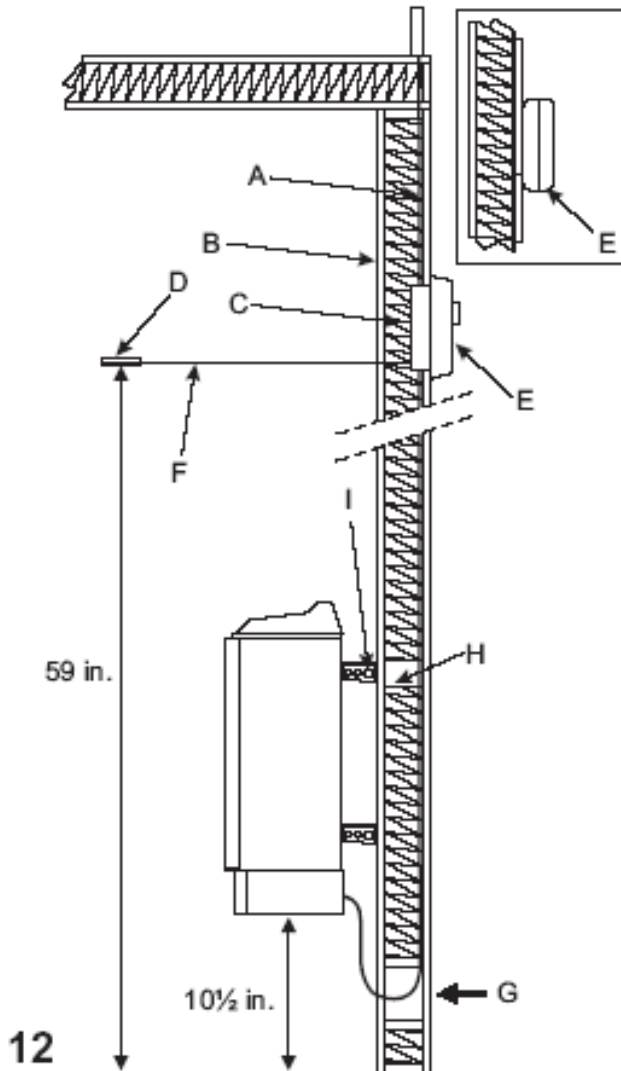
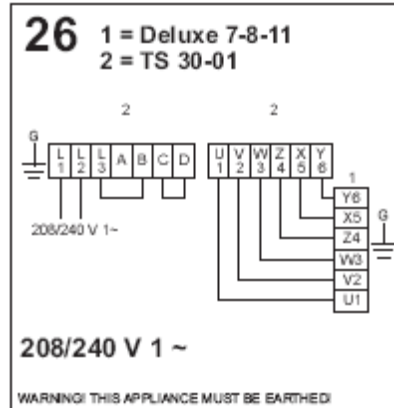
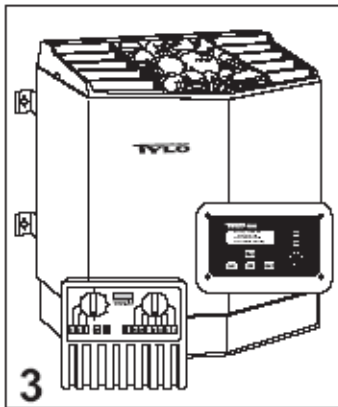
Check the heater's type identification plate to ensure that the heater is connected to the right voltage.

Don't forget – The installation must be grounded!



TS-30 CONTROL (page 2)

A separate control panel is required for the Tylö Deluxe. The control must be installed outside the sauna.



13. Sensor bulb must be located 59" above the floor and not directly over the sauna area. (Place a few feet away)

CC CONTROL (pages 3-5)

Connection to a central computer.

The CC control can also be connected to a central computer, which gives a brief impulse (closure) between terminals 19 and 20 on the CC 10/ CC 50/ CC 300 controls.

Note : Wiring is different than if using Tylo's Remote switch (#4 on drawing 28)

Note:

#4: "external switch" is not generally used. (It is an additional optional Tylo control that can be used to remotely start sauna from other location.)

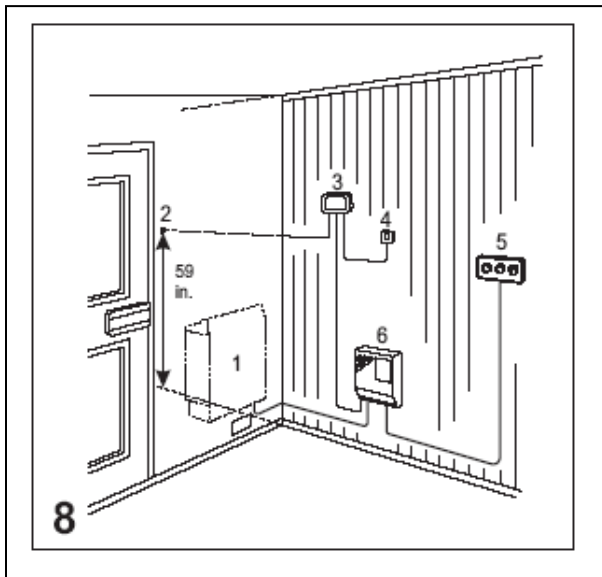
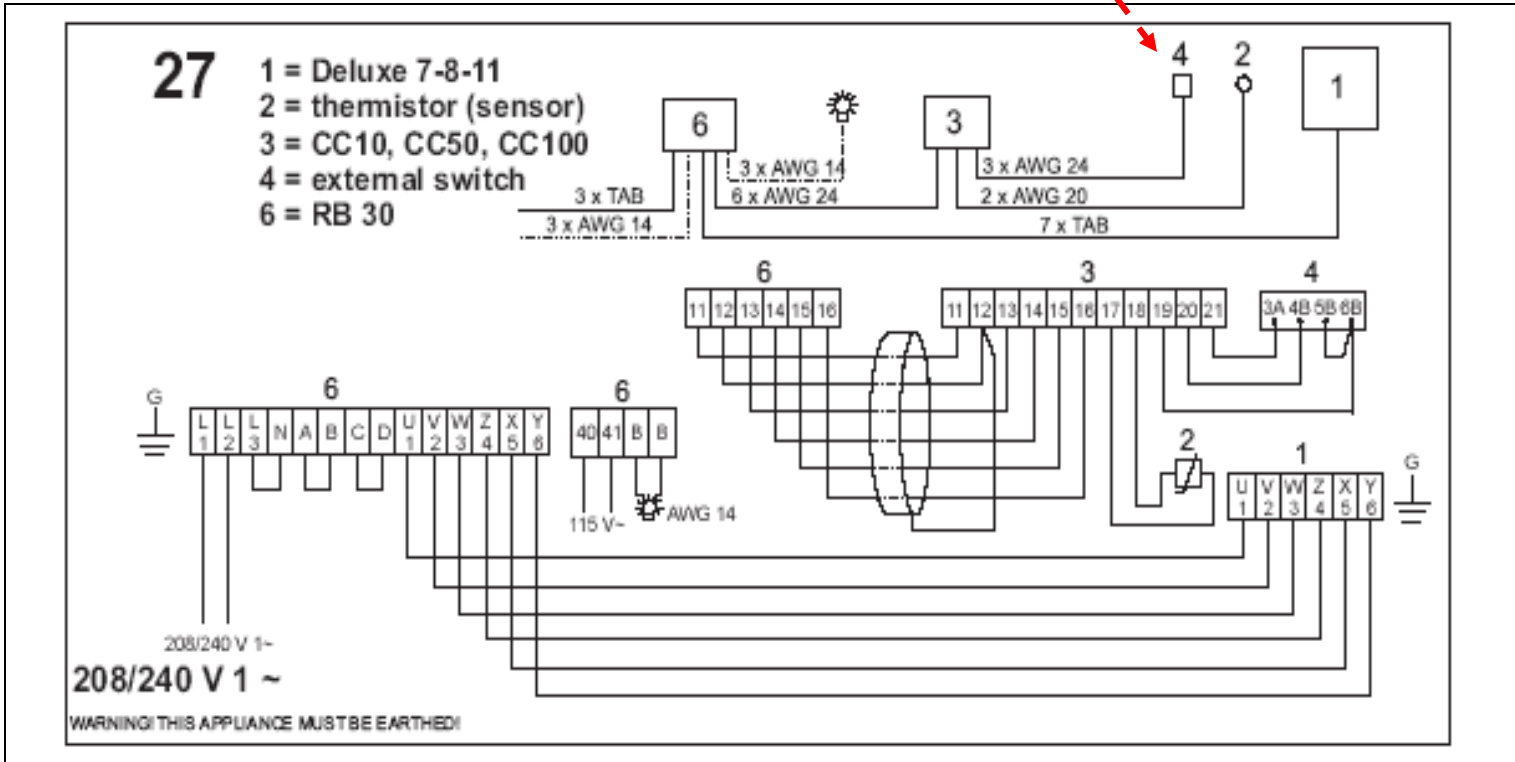
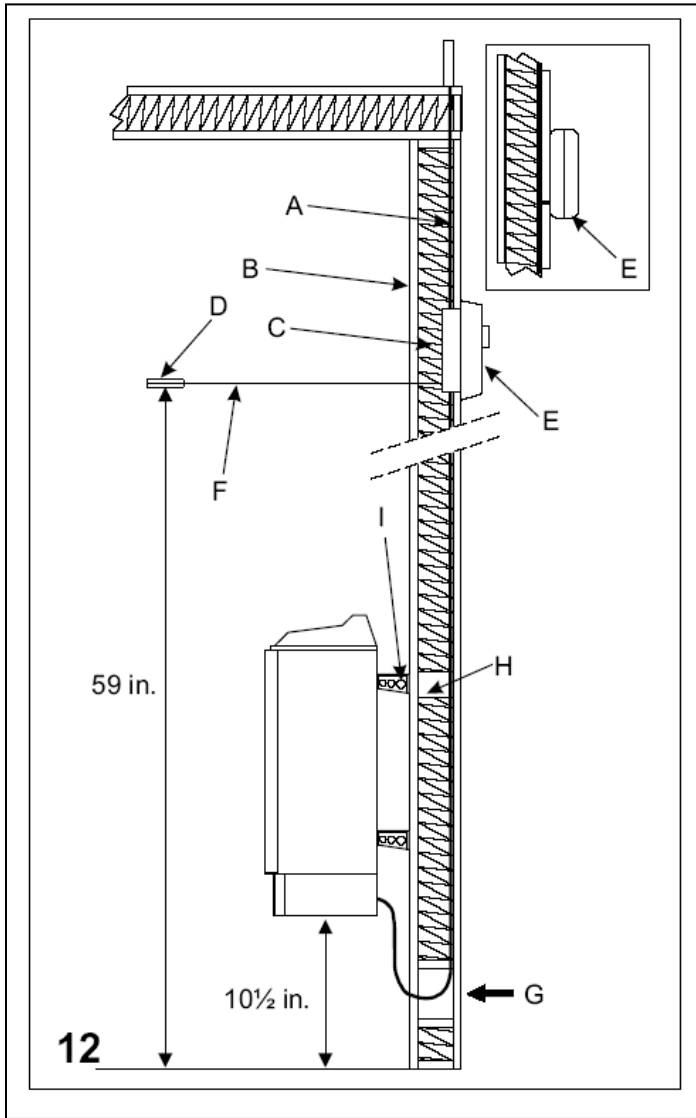


Fig.8:

- 1 = Heater
- 2 = Sensor
- 3 = CC Control
- 4 = External switch (optional)
- 5 = Breaker panel
- 6 = Relay Box (RB)

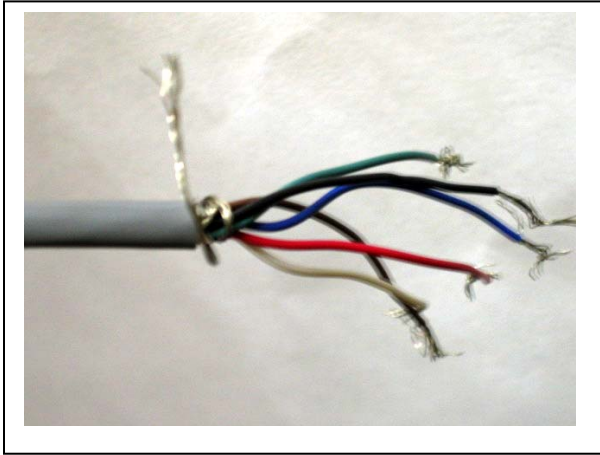


CONTROL SENSOR:
 Sensor bulb must be located 59" above the floor and not directly over the sauna area.
 (Place a few feet away)

CC control panel can be installed at any distance from the sauna room.

Fig. 12:
 A = electric conduit. B = cedar.
 C = insulation (behind control panel).
 D = sensor.
 E = CC separate control panel (panel in folded figure).
 F = thermistor wire and sensor
 G = vent.
 H = wood batten. I = set screw.





The CC controls requires 6 conductor shielded wires to connect control circuit board to heater circuit board.

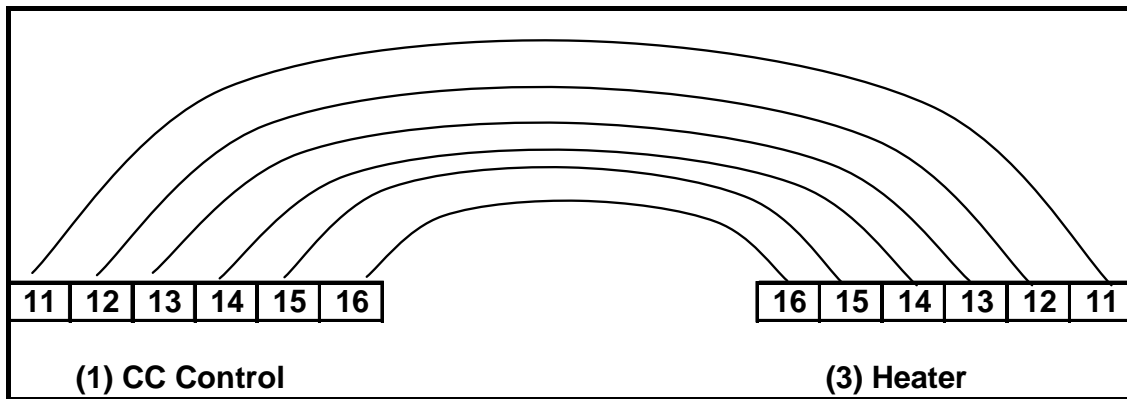
Shield cable includes a silver strand which is tied into the shielding. This wire is shown on drawing 12 as a wire circle around the other wires and connecting to terminal 12 on the control.

NOTE:

Like all Tylo heaters the SE model is an excellent heater. However, because there are more wires, the SE is more prone to installation error. It is important to install the heater, control wiring exactly as shown.

Tip:

One common error is installing the control wires in inverse order.

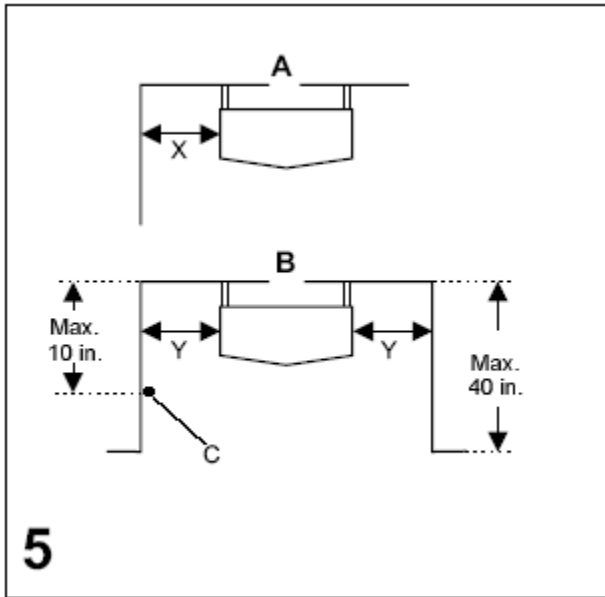


Double-check all wiring. Ensure all wires are connected to corresponding numbers. The wiring diagram inside the heater shows numbers in inverse order. FOLLOW THE NUMBER SEQUENCE. Be careful not to wire them backwards. (If wired backward, the heater will work, but it will trip the limit control when the first element stages off.)

Wires are small. Ensure all connections are proper and wire is under screw for full contact.

Sauna Volume and Minimum Installation Distances

| Output KW | Sauna Volume Min./max. Cubic ft. | Min. Distance from side wall (in.) | |
|--------------|-------------------------------------|------------------------------------|-------------------------|
| | | ** Normal installation "X" | Normal installation "Y" |
| 10.7 | 320 - 640 | 6 | 16 |

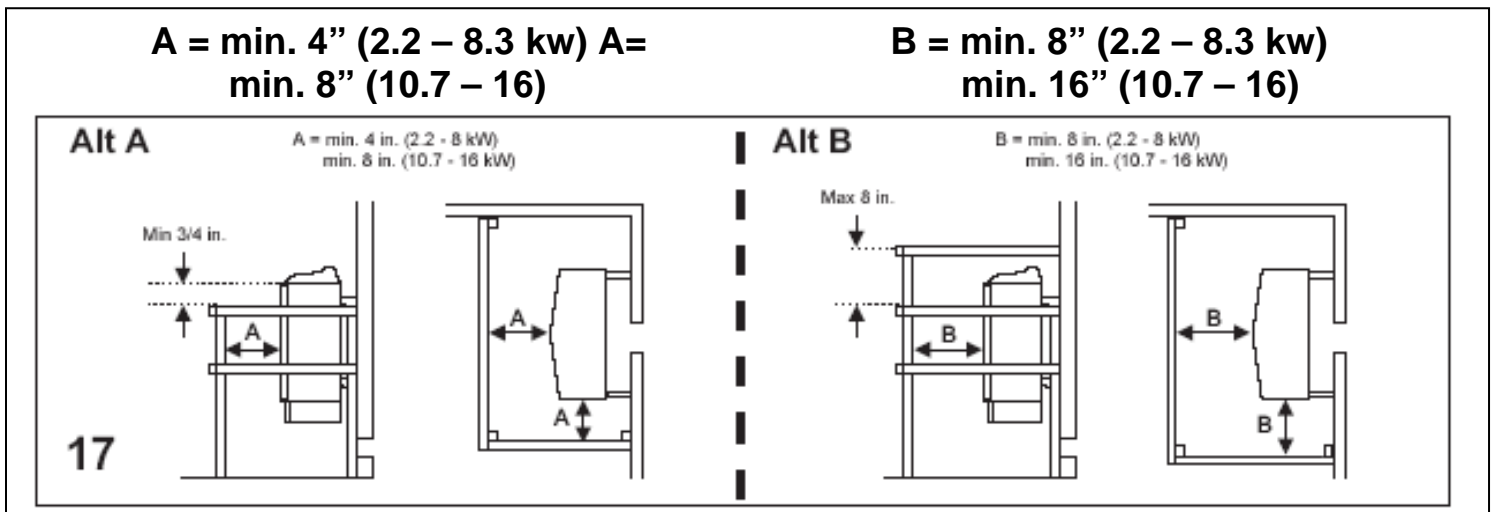


**** NOTE:**
 While Tylo recommends 6" from the heater to the wall, this can be intrusive in certain sauna layouts and with smaller saunas. In our experience a smaller gap is sufficient and does not affect the heater operation.

Heater guard (Fig. 17)

The stones and the top of the sauna heater get very hot! In order to reduce the risk of accidental contact, Tylo always recommend that a heater guard be fixed as shown in the sketches.

NOTE: Because of the thermal-safe cool touch outer shell, Tylo heaters do not "require" guard fences like other heaters do. However, we still recommend a guard with 4" clearance to heater.



First Time Use:

Before you enjoy your first sauna bath, heat the sauna room to maximum and leave the heater to run for about 1 hour. The elements may smoke for the first 20 minutes as they" burn off" residue from the manufacturing process.

Filling the rock compartment (Fig. 18 & 19)

To properly install the sauna rocks in the heater, first wash them to remove any dust or dirt.

Tylo sauna heaters are designed with a vertical rock chamber that allows the sauna rocks to be in direct contact with the heating elements (SEE FIGURE 20). Remove the center grille (not needed) and place the stones down in the center chamber only. Allow them to stack naturally and to settle around the heating elements. Never block the left or right side chambers. Continue stacking the sauna rocks in the center section until they form a small pile above the location of the removable grille.

DO NOT PACK THE ROCKS AROUND THE ELEMENTS!

Packing the rocks around the elements restricts the airflow and causes the heater's high limits to trip and shut off.

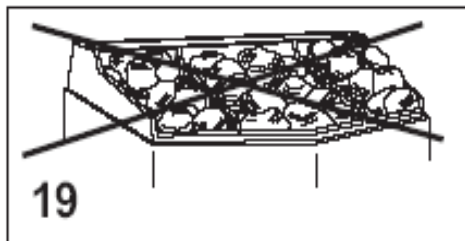
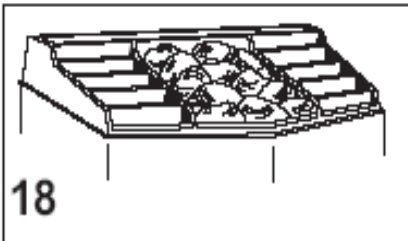
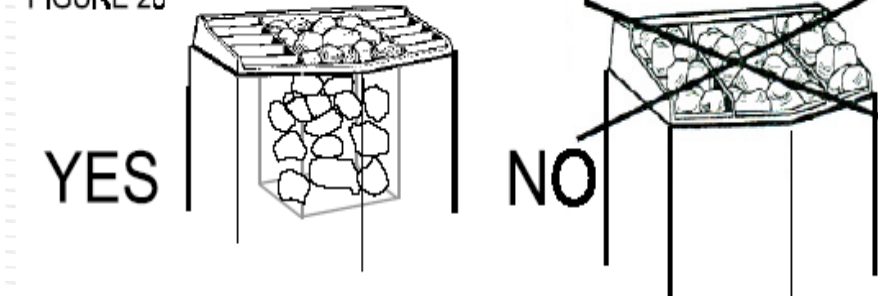


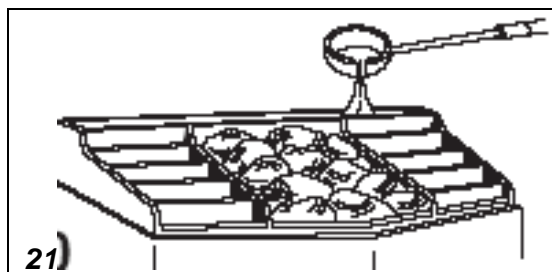
FIGURE 20



The grill top with handle is not needed once the rocks are in place. You may discard this.

Sprinkling water on the stones

Should always be done with the ladle, never with a hose or bucket. **Note:** The stones must be hot.



Check the stone compartment at least once a year.

This is especially important for public saunas and saunas in frequent use. Remove all stones from the compartment. Clean any small stones, grit, gravel and chalky deposits from the bottom of the stone compartment. Use only stones which are whole and intact, replacing them when necessary with new dolerite stones.

Temperature limit control.

Tylö sauna heaters have a temperature limit control built into the terminal box on the heater. This is activated automatically if there is any risk of overheating. More often than not, the cut-off is triggered because of incorrect sauna ventilation or an incorrectly located sauna heater. Call an expert to reset the temperature limit control.

SAUNA OPERATION

You can enjoy traditional dry and wet saunas with all Tylö heaters.

Dry and wet saunas are bathing forms whose history is shrouded in the mists of time. These hot baths are best enjoyed at temperatures between 160-190°F.

In **dry saunas**, where the stones are not sprinkled with water, the relative humidity (RH) is as low as 5–10%.

In **wet saunas**, when water is ladled on the hot stones from time to time, the relative humidity rises steeply to 10–25%, and you can feel how the quivering waves of heat massage their way into your skin. A few drops of Scented Fragrance added to the water poured over the stones give a pleasantly invigorating sensation, clearing nasal cavities and helping you breathe more easily. A great way to round off any sauna is to experience the pleasant tingling sensation when you pour a little extra water over the stones. Wet saunas are considered by most people to be the traditional way to enjoy a sauna, and they are the most popular too.

Note on Unique Tylo Feature:

Tylo saunas have staged elements. Initially all heating element are on to heat up sauna. Then a first and second element will go off. One remains on continuously, while the others reengage as necessary. This is designed to maintain an overall higher and more even temperature and avoid the temperature swings of other heaters that cycle fully on and off.

Important! Use ordinary drinking water. Salt-water, swimming pool or spa water will damage the heating elements. Never hose down the heater. Devices that provide continuous water sprinkling are not permissible.

HOW TO GET THE MOST OUT OF YOUR SAUNA

- Take a towel in with you to sit on. Stay inside the sauna only as long as it feels pleasant. Go out now and then to cool off and freshen up with a quick shower.
- Show consideration for other bathers. Don't set the temperature higher than is pleasant for all those using the sauna.
- Young children love saunas. Let them splash about in a tub of water on the floor the lower benches where it is somewhat cooler. But remember to keep an eye on them at all times.
- Round off your sauna with a long, cool shower.
- Never get dressed right after your sauna. This will only cause you to perspire.
- Relax, treat yourself to a cold drink and enjoy a sensation of true well-being. Don't get dressed until your body has cooled down and your pores have closed once again.

The full instruction manual provided by Tylo and packed with your Tylö heater contains additional information about your sauna. Please consult that manual before installing and using your sauna.