

Black Line Series

16 CK

Wood Burning Sauna Stove Installation and Operation Instructions



Installation and Operation Instructions

Side walls:

Woodburning sauna stoves are regarded as fireplaces having scorching surfaces. In our stoves, the surface temperature will not exceed 350 °C, and the following safety distances should be observed when using them:

Flammable structural elements such as wooden walls, sauna seats etc.

1. Minimum distance between the vertical surfaces of the stove and any unprotected wooden structural element: 20". (Figure 1)

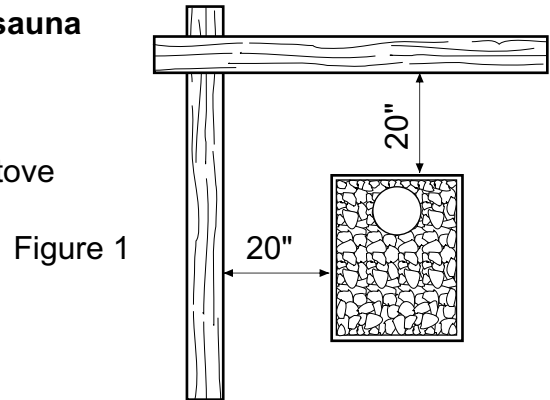


Figure 1

2. However, the safety distance mentioned in item 1 can be decreased to minimum 10" provided a single light protection is used. This kind of single light protection can be constructed either by using a minimum 1/4" thick incombustible cement plate reinforced with fiber, or by fastening an at least 1mm thick metal plate densely enough to the wall. A minimum 1-1/4" vent hole must be left between the protective plate and the wooden surface to be protected. This can be done for example by using pipe bushings as intermediate supports. (Figure 2)

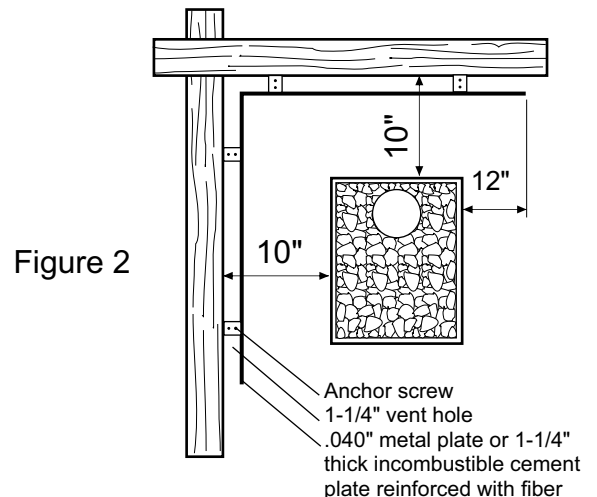


Figure 2

3. The safety distance mentioned on item 1 can be further decreased to minimum 5" provided a double protection is used. The double protection can be constructed using two plates described in item 2, in addition to which an at least 1-1/4" vent hole must be left between the wall and the plates. (Figure 3)

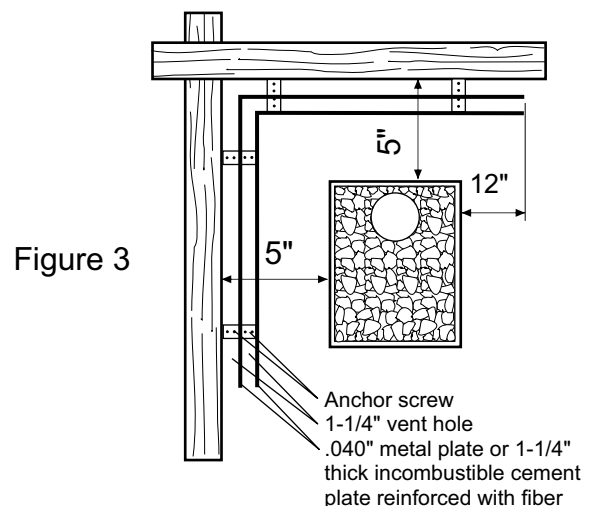


Figure 3

Installation and Operation Instructions

4. If the wall has been bedded in, a 2" vent hole between the wall and the vertical surfaces of the stove is enough. (Figure 4) Dimension A is determined according to the protection method used for wooden surfaces

- 20" with no protection
- 10" with single light protection
- 5" with double light protection

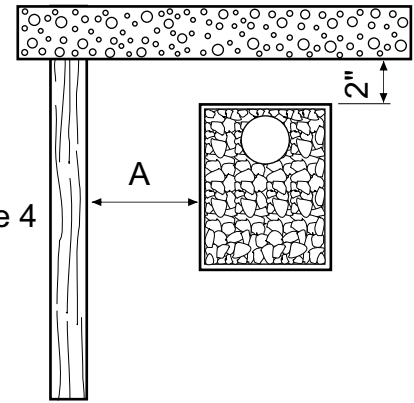


Figure 4

5. A 2-1/4" embedding with open sides at a minimum 1-1/4" distance away from the protected surface is equivalent for a single light protection. Likewise, a 4-1/4" embedding not touching the protected surface would be equivalent for a double light protection. (Figure 5)

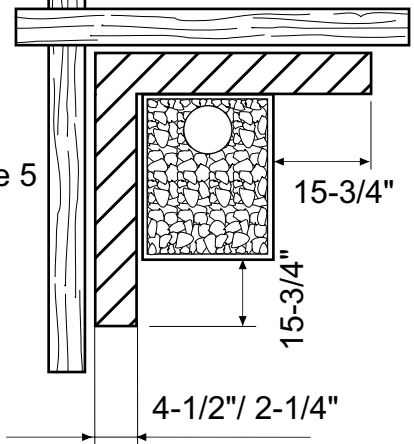


Figure 5

Protecting the ceiling:

Provided the distance between the stove top and the ceiling is minimum 47-3/4", no special protection is needed for the ceiling. If the distance is less than 47-3/4", you can choose one of the protection methods mentioned in items 1-3. The ceiling protection must extend above the vertical surfaces of the stove. (Figure 6)

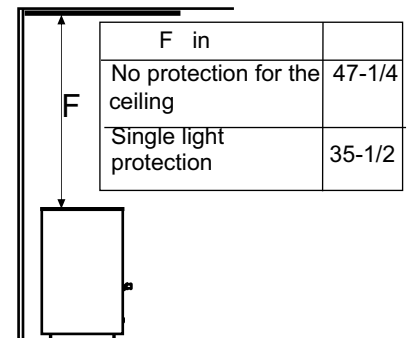


Figure 6

Fireplace base:

The fireplace must be installed on a rigid base. This base must be strong enough to bear the weight of the fireplace and to prevent any excessive rise of temperature of the structural elements connected to it. When installing the stove on a wooden floor, it is advisable to use a minimum 2" thick concrete slab or a minimum 1/4" thick fiber-reinforced cement plate covered by a metal plate.

Protecting the floor in front of the stove:

The safety distances listed in items 1-5 cannot be applied to a combustible floor area in front of the stove. This area should be protected using a metal plate connected to the floor and closely fitting the stove. The floor protection in front of the stove must extend at least to 4" beyond both sides of the oven mouth and to 15-3/4" in front of it.

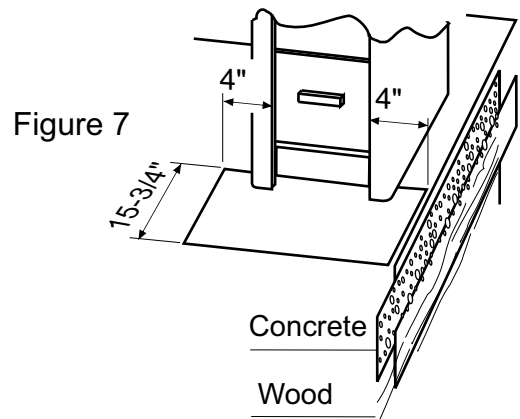


Figure 7

Installation and Operation Instructions

Wall protection and choices of materials:

If the wooden walls surrounding the heater are closer than the required minimum safety distance recommends and the walls are made of a combustible material (panels, boards, logs, etc), the wall surfaces must be protected.

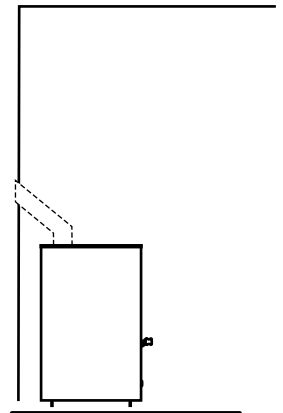
A 2-3/16" masonry equals single-layer protection, and 4-3/8" masonry equals double layer protection. The masonry must be open-ended and at least 1-18" from the surface being protected, extending 23-5/8" above the top of the heater, and have a 19-3/4" minimum safety distance on each side.

Wood materials used in the sauna room, such as panels, will darken over time. This darkening is caused by temperature changes in the sauna. If the wall panels have been treated, the wall surfaces above the heater will begin to darken very quickly depending on the treatment used. Darkening is due to the fact that the treatment has a weaker resistance to heat than untreated wood. This has been proved in material tests.

Fine-grained stone particles rising from crumbling sauna rocks with air currents may darken the wall surfaces around the heater. If the heater installation instructions are followed, the heater will not heat up combustible materials used in the sauna room to a dangerous level. The maximum allowed temperature for wall and ceiling surfaces is +140 °C. **Note! Glass and stone surfaces can be very hot to the touch.**

Installing the stove:

Install stove so the base rests firmly on a solid surface and maintaining proper safety distances. The stove has an opening in the top of the heater for the flu. Insert the building pipe inside the pipe on the top of the stove.



Preheating:

In the factory, the interior parts of the stove have been coated with protective agents to prevent corrosion during storage. Before starting to use the stove and placing rocks on the stove, you should preheat the stove in order to remove these protective agents. A minimum of 3 oven fills of wood should be burned for preheating. During preheating, sufficient ventilation should be arranged in the washroom to dissipate the smoke gases produced by the protective agents.

Installation and Operation Instructions

Stove rocks:

Always use rocks supplied by the manufacturer in your stove.

Before placing the rocks onto the stove, carefully wash them with clean water. Do not use any detergents.

Place the rocks on top of each other so that they are level with the edge of the rock well. Be careful not to place the rocks too close to each other to allow air circulation between the rocks. Place the largest rocks at the bottom of the rock well.

Heating up the stove:

Only wood can be used for heating up the stove. Before heating, the stove grate should always be cleaned and the ash pan emptied

Avoid heating the stove so that the passage in the rock well remains red heated for a long time because this would overload the firebox and shorten the lifetime of the stove.

After your saunabath, you can leave a small fire in the stove to dry up the washroom constructions.

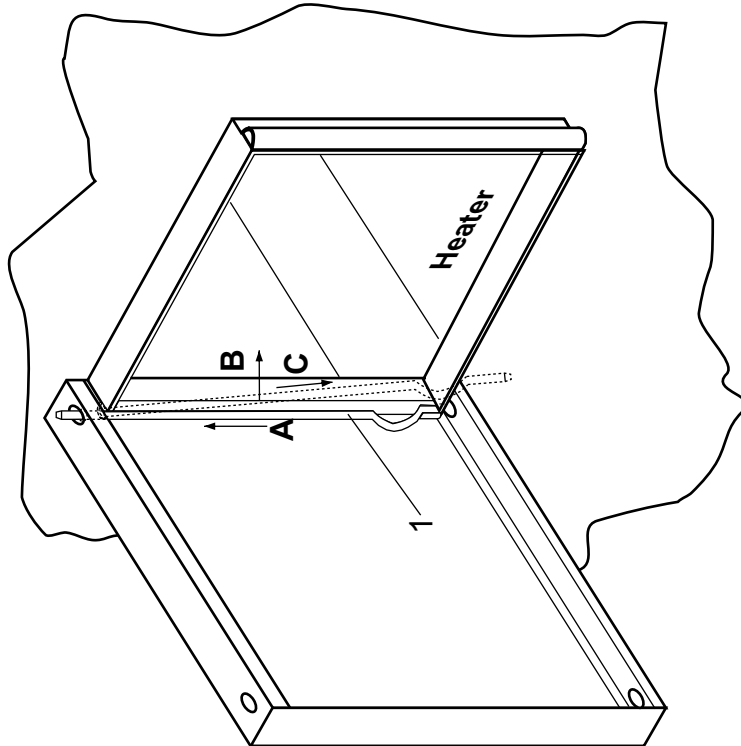
Stove maintenance:

The stove must be cleaned through the soot hatches at least once a year in order to maintain optimal draft. At the same time, it is also useful to check the condition of the stove rocks and to replace the decayed ones with new ones.

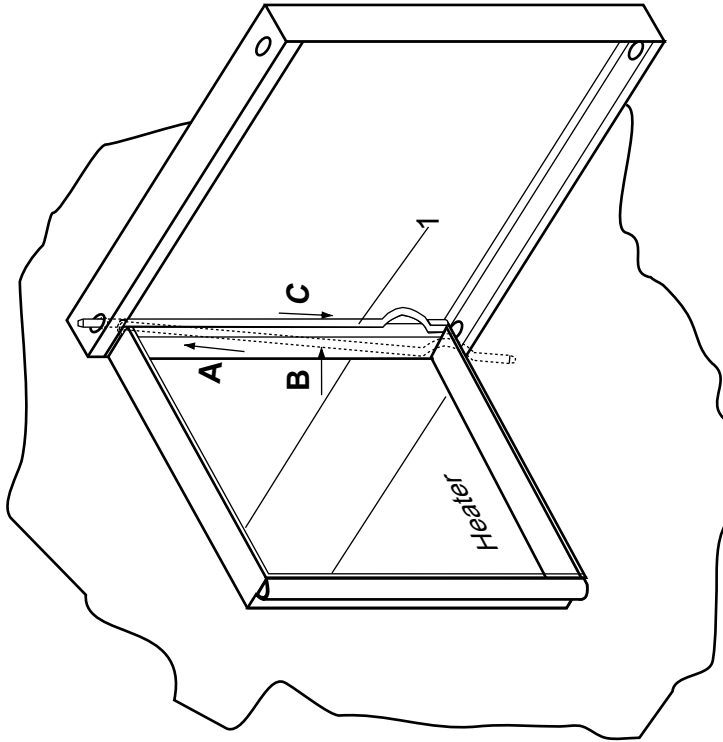
The wood burning stoves are manufactured and sold by: TyloHelo Inc.

Installation and Operation Instructions

Changing the direction of the door opening:



1. Remove the ash box door.
 - A. Hold on to the door and lift the hinge pin upwards to enable the lower part to come free from the holes of the door.
 - B. Pull outwards.
 - C. Pull down.



- A. Hold on to the door. Push the hinge pin from the inside through the console and through the upper hole of the door.
- B. Push the hinge pin inwards.
- C. Push the hinge pin through the console and the lower hole of the door.

Installation and Operation Instructions

Connecting to the chimney:

Check the fire safety of the chimney connection seal (use mineral wool or ceramic fibre, if necessary).

Do not mount the light-duty flue to the heater. Attach the light-duty flue to sauna structures only.

Ensure that the connecting flue duct diameter is correct and the joint is tight.

Other fireplaces on the same chimney:

Install one fireplace per chimney. Check fireplace function.

First heating: burning and other smells:

The first heating should be done in the sauna without rocks with the heater connected to the chimney. The sauna must be thoroughly ventilated, and the heater must be heated for an adequate length of time (min. 3 loads of firewood).

If the first heating is done outdoors, a minimum of 2-metre (6 ½) metal duct must be used as a flue duct.

Sauna rocks, care and quality:

Use Saunatec-approved, prewashed rocks specifically intended for use in a sauna heater (no ceramic).

Reload, and, depending on the frequency of use, replace sauna rocks at least once a year.

Troubleshooting:

Stones that do not heat up:

Check the seal on chimney structures.

Reduce the draft.

Cleaning hatch is leaking.

Side panels and rear parts are overheating:

Check the seals on chimney and flue duct structures.

Overheating can shorten the useful service life of the chamber.

Ash drawer:

Empty the ash drawer regularly before each use.

Installation and Operation Instructions

Sauna steam water:

We recommend the use of clean, fresh tap water.

Winter storage:

If the heater will be kept in the cold for the winter, remove all heater stones and clean out the stone tray. Empty the ash drawer.

Fire safety instructions:

Before installation, check with your local fire safety authority on the most recent fire safety regulations in force.

For technical assistance or service questions call 1-888-780-4427 and ask for Technical Support. Prior to calling please have your model or type number of your stove. You can also email us at: techsupport@tyloheloinc.com