### GB INSTALLATION, USE AND SERVICE INSTRUCTIONS

### SAUNA WOODBURNING STOVES – MIRVA, STEAMMASTER, NARVI 30 AND NARVI 50.

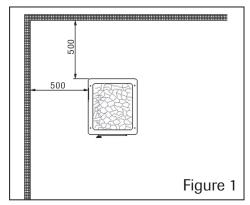
#### SAFETY DISTANCES

Prior to installation of the sauna woodburning stove, ensure the required safety distances to combustible structures are observed. For woodburning stoves the safety distances are 500 mm to the sides and rear and 1,200 mm overhead. A min. 70 mm thick concrete slab or a NARVI installation base should be installed beneath the woodburning stove. For any further queries regarding fire safety, please contact your local fire authority for assistance.

# Note! If the sauna woodburning stove is installed above under-floor heating, a NARVI installation base must always be used.

Combustible components (wooden walls, benches etc.)

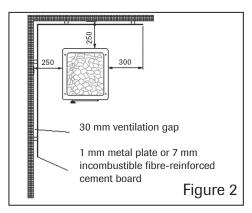
1. Distance to wooden components from vertical sides of sauna woodburning stove without heat shield min. 500 mm. (Figure 1)

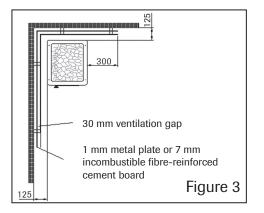


2. The safety distance stated in section 1 (500 mm) can be reduced by half to 250 mm if so-called light, single-layer thermal protection is installed. A single-layer, light thermal shield can be made from min. 7 mm thick fire-resistant fibre-reinforced cement board or from min. 1 mm thick metal sheet which has been fixed sufficiently tightly to the wall. A ventilation gap of 30 mm must be left between the thermal shield and the wooden surface, e.g. using pipe sleeves. (Figure 2)

# The heat shield must also be in non-contact with the floor or ceiling.

3. The safety distance mentioned in section 2 can be further reduced by half (125 mm) if a double shield is installed. A double thermal shield can consist e.g. of two boards of the type recommended in section 2 if a ventilation gap of 30 mm is left between the wall and the boards. (Figure 3)



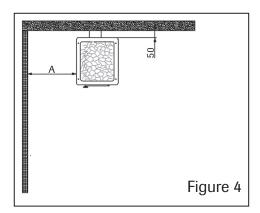


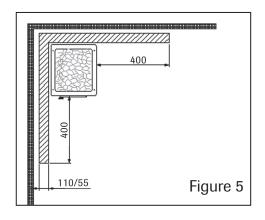
4. If the wall is a masonry wall, a 50 mm ventilation gap between the vertical sides of the sauna woodburning stove and the wall is sufficient. (Figure 4)

Measurement A is applied to wooden surfaces in accordance with the thermal protection method applied:

- no thermal protection: 500 mm
- single-layer, light thermal protection: 250 mm
- double, light thermal protection: 125 mm

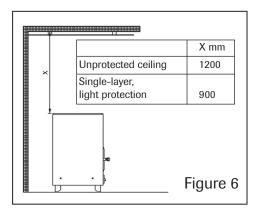
5. 55 mm thick masonry which is open at the edges and detached from the protected surface by at least 30 mm also constitutes single-layer, light thermal protection. Double light thermal protection constitutes 110 mm thick masonry detached from the protected surface as above. (Figure 5)





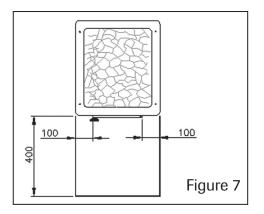
Thermal protection of the ceiling:

When the distance from the upper surface of the sauna woodburning stove is at least 1,200 mm no ceiling protection is needed. If the safety distance is less than 1,200 mm, the thermal protection method for the ceiling is chosen from sections 1-3. (Figure 6)



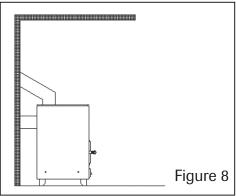
Thermal protection of the floor in front of the sauna woodburning stove:

A floor consisting of combustible material must be protected with a metal sheet extending 100 mm to each side of the woodburning stove fire door and 400 mm to its front. (Figure 7)



#### SAUNA WOODBURNING STOVE INSTALLATION

All of our sauna woodburning stove models are fitted with a flue pipe connection both behind and on top of the sauna woodburning stove. Block the unused opening with the cover plate included in the delivery. Also included in the delivery is a 160 mm flue pipe connector for connection of the sauna woodburning stove to a rear flue pipe. When connecting the sauna woodburning stove to the flue from the top of the woodburning stove, always use NARVI chimney pipes or NARVI chimney flues.

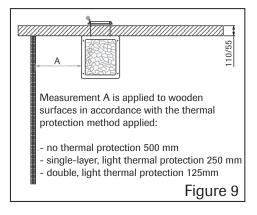


Do not install the flue adapter pipe too deeply into the chimney flue, as this will reduce the flue draw. The gap between the flue adapter pipe and the chimney flue must be insulated e.g. with mineral wool.

In connection with the sauna woodburning stove installation, ensure that the woodburning stove stands firmly on its base and that all of the safety distances mentioned in these instructions have been observed correctly.

Installation of tunnel model sauna woodburning stoves:

The wall separating the fire tending room and the sauna woodburning stove must be built of fire-resistant material such as brick. The required hole size for a brick wall is ...



Measurements from floor:

Product	Height mm	Width mm
ST MIRVA	430	270
WT STEAMMASTER	455	360
ST NARVI 30	570	390
ST NARVI 50	590	390

We recommend the use of mineral wool quilt for insulation of the brick wall and tunnel section, as this material allows for thermal expansion. The tunnel model is connected to the flue from the top of the sauna woodburning stove. Always use NARVI chimney pipes or NARVI chimney flues. In connection with the sauna woodburning stove installation, ensure that the woodburning stove stands firmly on its base and that all of the safety distances mentioned in these instructions have been observed correctly. Thermal protection of the floor in front of the sauna woodburning stove: A floor consisting of combustible material must be protected with a metal sheet extending 100 mm to each side of the woodburning stove fire door and 400 mm to the front.

#### INITIAL HEATING

Before use and installation of stones, the sauna woodburning stove must be preheated to remove any protective agents. 1-2 firebox loads of wood is sufficient for initial heating. Ensure that the sauna room has sufficient ventilation during initial heating to aid removal of combustion gases generated by the burning off of protective agents. Initial heating can also be performed outdoors.

#### SAUNA WOODBURNING STOVE STONES

We recommend use of NARVI olivine diabase stones. Stack the stones in the stone compartment so that the biggest stones are at the bottom. In order to ensure good air circulation between the stones, do not stack the stones too tightly. NARVI sauna woodburning stove stones come ready washed and can be loaded directly into the sauna stove. We do not recommend use of light stone types. Sauna water used on the stove should always be clean. Use of seawater will reduce the service life of your sauna stove considerably.

#### FIREWOOD

Both hardwood and softwood species will provide ideal fuel for your Narvi sauna woodburning stove. Trees for firewood should be felled and cross-cut outside of their growing season. Firewood should be dried outdoors during summer months and transferred to dry storage before damp autumn/winter weather sets in. The amount of firewood stored should ideally cover one to two years worth of consumption, during which time the moisture content of the wood will reach < 20 %.

#### HEATING

Always clean and empty the fire grate and ashpan first before lighting your sauna woodburning stove or stove. Begin lighting the woodburning stove using a small quantity of kindling. Once the wood is burning well, add more wood until the firebox is stacked about 2/3 full. To aid combustion, additional air intake can be regulated by adjusting the ashpan. Avoid overheating the sauna woodburning stove to the extent that the channels within the stone compartment remain red-hot for long periods, as this overloads the firebox and shortens the service life of the woodburning stove. At the end of your sauna bath, a low fire can be left burning in the woodburning stove to help dry out the sauna.

#### SAUNA WOODBURNING STOVE MAINTENANCE

The sauna woodburning stove should be swept via the chimney sweeping hatches once a year to maintain the best possible flue draw. It is also recommended to check the condition of sauna woodburning stove stones on an annual basis and replace any that may have deteriorated in service.