

NIPPA

Sauna Stoves and Room Heaters

Since 1930



INSTALLATION and OPERATING GUIDE for SAUNA HEATER MODELS

WB18

WB22

WB24

WC18

WC22

WC24

Nippa Sauna Stoves
Beulah, Michigan 49617
Phone (231) 882-7707

www.nippa.com

Congratulations

On your purchase of a NIPPA wood burning sauna heater

Undoubtedly, you have given much consideration into your decision to buy a NIPPA sauna heater and everyone at NIPPA is proud to have a part in your family's future comfort. Pride in craftsmanship and engineering have made your sauna heater the finest product available today.

As fossil fuels become more expensive and less abundant, nature's only renewable, stored solar energy, (wood) will remain a viable alternative to dependence on convenience fuels.

The NIPPA dealer in your community knows there is no substitute for quality, and you can place your confidence in his recommendation for the type of installation that will best serve your heating needs now, and in the many years to come.

We suggest you read through the Installation and Operating Guide and recommend a policy of SAFETY FIRST, before installing or operating your NIPPA wood burning sauna heater.

Please season your stove before the first use. Seasoning is done by building a small fire and burning at low temperature for several hours. This will cure the paint as well.

Thank you for choosing a NIPPA sauna heater manufactured by Nippa Sauna Stoves, where old-fashioned quality is still our highest priority.

Nippa Sauna Stoves
8862 N US 31
Beulah, Michigan 49617
Phone (231) 882-7707

RULES FOR SAFE INSTALLATION AND OPERATION OF YOUR NIPPA SAUNA HEATER

- Check local codes, the installation must comply with them.
- The heater must be installed with strict conformance in regard to clearances.
- Connect the heater to a tile lined inside masonry chimney or an approved, insulated, all fuel prefabricated chimney only.
- Do not connect to a flue serving a gas-fired appliance. (There is possible risk of asphyxiation.)
- Keep the smoke pipe connection as short as possible using a minimum 12" rise from the flue collar to the chimney opening.
- Be sure there is sufficient supply of combustion air to the area where the heater is to be located.
- Do not over draft the heater! It is designed to operate at .04 to .06 inches of water column, and must be set with a draft gauge to maintain a steady draft.
- Do not use flammable liquids for starting a fire.
- Do not store fuel or combustibles near the heater. Some areas of the heater are hot and could cause an explosion, and possible bodily or property damage.
- Store all ashes in a metal container with a tight sealing lid, and allow ashes to cool before disposing of them.
- The heater has hot surfaces. Keep children away.
- The heater is designed to burn 20% air-dried wood at a pre-determined firing rate. Over firing could result in damage and cause dangerous operation.
- Follow a regular service and maintenance schedule of the heater and chimney for efficient and safe operation.
- Do not leave the ash drawer open when the fire is burning.
- Familiarize yourself with the heater's wood burning characteristics before leaving unit unattended for long periods of time.
- The fire door and ash drawer must be tightly closed during heater operation to insure safety and efficiency.
- In the event of a chimney fire, call the fire department. Be sure the heater door is closed tightly and the combustion air is turned off.

For further information on using your heater safely, contact the
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101

or on the web at: <http://www.nfpa.org/>

SAUNA HEATER ASSEMBLY AND INSPECTION

Your new sauna heater comes from the factory completely assembled and only requires you to install the rocks. At times, shipping damage does occur, therefore, inspect your heater thoroughly upon arrival. If you find a questionable area, speak to the delivery agent. He/she will take the necessary steps to correct the problem.

SAUNA HEATER LOCATION

Installing a wood burning sauna heater requires more consideration than other types of heater. The safety, as well as efficiency of the wood burner's operation, relies greatly on the minimum clearance to combustibles, ventilation of the sauna, and the chimney system.

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIAL

Your sauna heater has been tested to determine the safe clearances to combustible material, and they are summarized in the following chart and shown in *Figures 1 and 2*.

REDUCED CLEARANCES

Reduced clearances are allowed if area between the heater and combustible walls are protected according to NFPA values. The NFPA is:
*National Fire Protection Association
60 Batterymarch Street
Boston, MA 02269-9101*

It is a mistake to assume that sheet metal, masonry, or asbestos board placed directly against a wall protect it. Materials installed in this manner give very little protection. These materials are good heat conductors, so they will be almost as hot on their backside as well as on the exposed side. Therefore, the combustible wall behind is still a fire hazard. A wall can be kept cool using ¼" cement asbestos board but only if it's mounted and spaced out from the wall as shown in *Figure 2* to allow free circulation of room air behind the protective panel. Circulating air keeps the wall cool by carrying the heat from the space

between wall and panel. The protective panel should start within a few inches of floor level. (See *Figure 3*)

Three rules to follow when constructing wall protectors:

1. Non-combustibility of all materials including mounting system.
2. A well ventilated air space between protector and wall.
3. Sufficient strength and rigidity so that the protector and air space will be durable.

	Clearance Chart	
From Sauna Heater to:	Protected Wall*	Unprotected Wall
The side wall	13 inches	42 inches
The back wall	17 inches	36 inches
The front wall	48 inches	48 inches

Note: The smoke pipe at any point must not be closer than 18 inches to a combustible wall.
*The wall protection indicated in this chart is illustrated in *Figures 2 and 3*.

UNPROTECTED WALL CLEARANCES

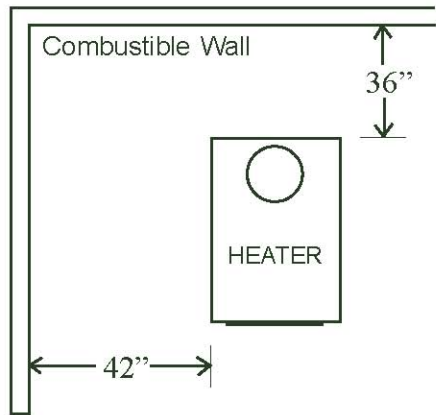


Figure 1

In addition to the wall clearances, the floor must also be given special consideration. The heater must be placed on a noncombustible floor system of at least the size specified in *Figure 4*. The noncombustible floor may be a typical concrete basement floor at least four (4) inches thick.

For Models with the Extension

Follow the clearances and **NONCOMBUSTIBLE** wall requirements as shown in "Safe Wood Stove Installation with 6", 8" or 12" Extension". This will apply to 10" Extensions as well.

PROTECTED WALL CLEARANCES

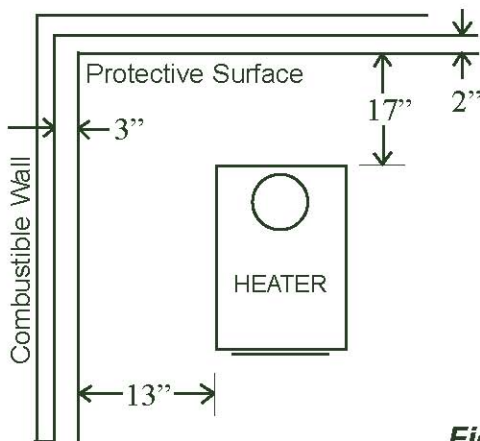


Figure 2

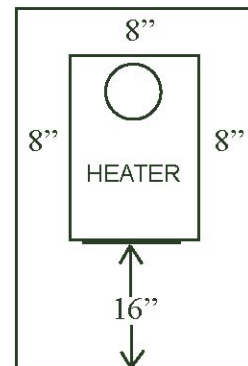


Figure 4

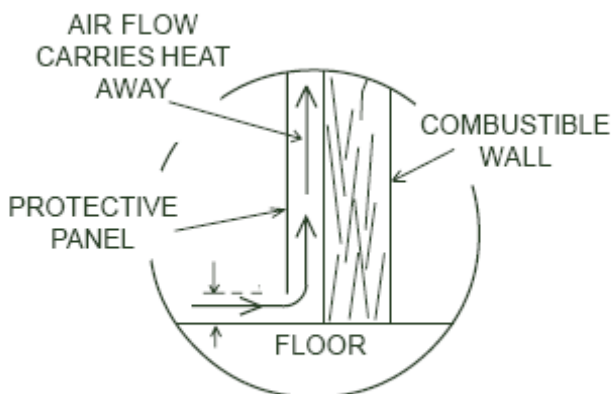


Figure 3

SAUNA VENTILATION

With the heater being installed in a closed area, like a sauna, you must provide for enough fresh air to assure proper combustion. Install two (2) 6" x 9" grilles in the sauna. One near the heater and one near the ceiling opposite the heater. This will provide enough air to ventilate the sauna and supply the heater.

THE CHIMNEY SYSTEM

The chimney system consists of all the parts necessary to vent your sauna heater to the outside. This would include the chimney itself, smoke pipe and chimney dampers.

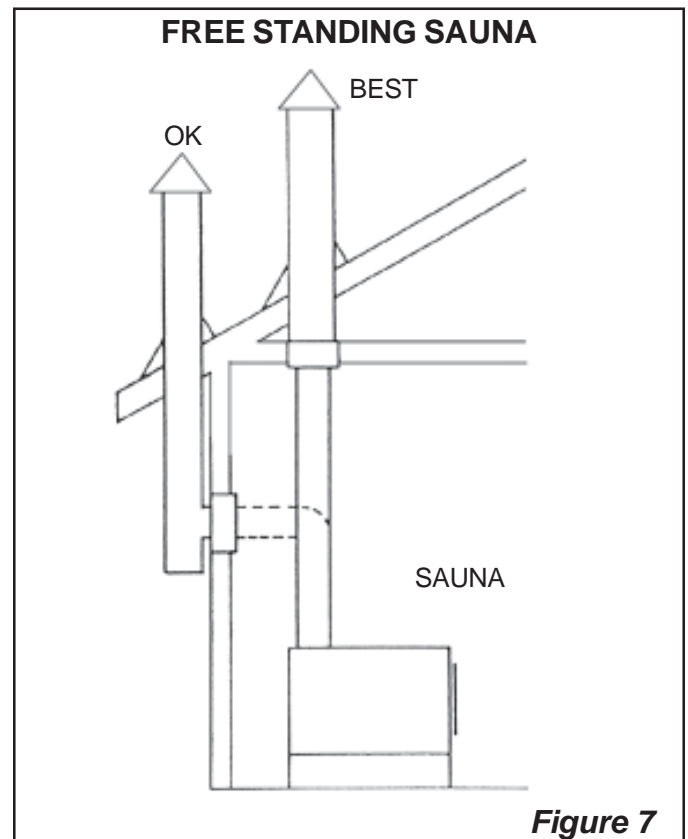
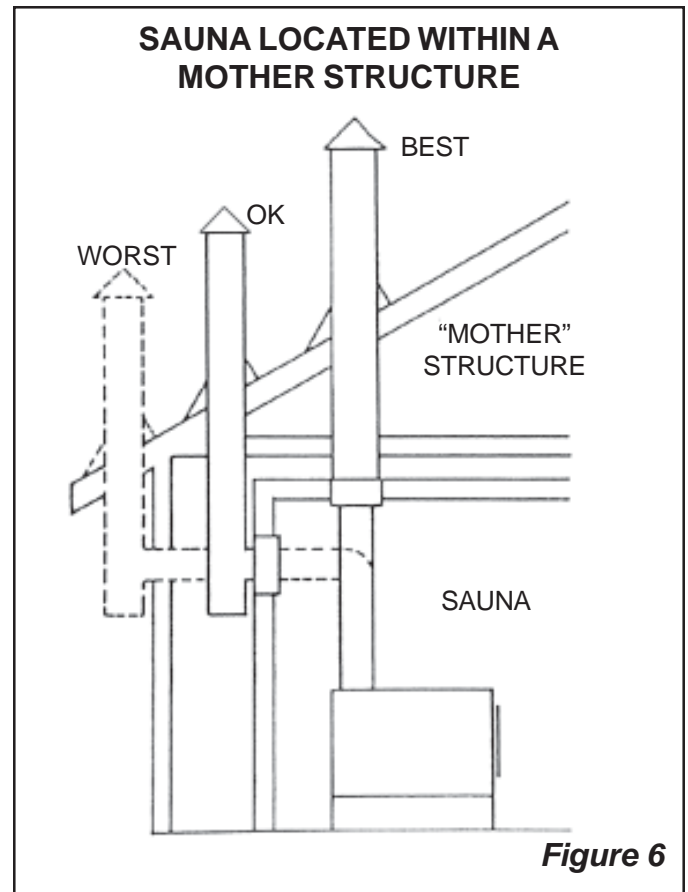
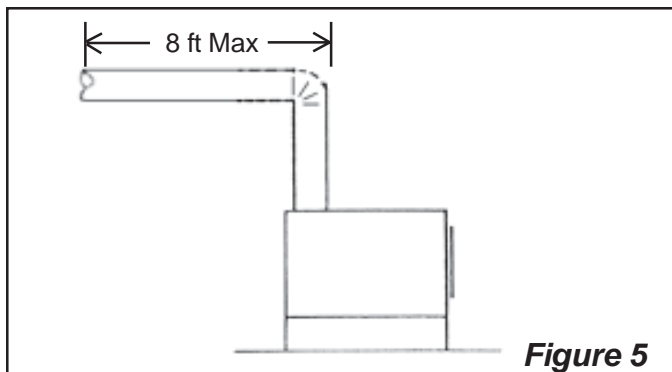
THE CHIMNEY

The chimney, which must be used, is a Class A, all fuel chimney being six (6) or seven (7) inches in diameter. These chimneys include masonry chimneys, which are tile lined, and also many metal chimneys, which are listed for all fuel. (Typically triple wall or double wall insulated).

When installing a new chimney, it is recommended that it be placed within the structure, rather than running up along the outside. These interior chimneys remain warmer and tend to have less creosote build up and fewer over all problems.

Before deciding to use an existing chimney, have it inspected by the building inspector or fire department for its suitability for use with your sauna heat. Also when using any chimney, make sure it's not further than eight (8) feet from the sauna heater. This will eliminate any fire hazard from having the smoke pipe run too long. (Over eight (8) feet is too long)!

Figures 6 and 7 show the typical venting arrangements used. Metal chimneys are shown, however, the theories apply to masonry chimneys as well.



INSTALLING THE SMOKE PIPE

The smoke pipe is not a chimney. Its function is to connect the sauna heater to the chimney. The smoke pipe you use should be not less than 24-gauge steel. When planning your chimney hookup, make sure a minimum of smoke pipe elbows are used two (2) or less, and that a horizontal run of smoke pipe does not exceed eight (8) feet. The smoke pipe must not be installed closer than 18 inches to any combustible materials or pass through a combustible wall or ceiling.

When attaching the smoke pipe to the heater, use a minimum of three (3) sheet metal screws at each joint. This includes the joint at the sauna heater flue collar. For added protection, you may want to use furnace cement to help seal each joint.

MANUAL DAMPERS IN THE STOVE PIPE

It is recommended that a manual damper be installed at a safe, convenient place between the sauna heater and chimney. In the event of a chimney fire, it can quickly be closed, reducing air to the chimney.

CAUTION

Never use chemicals or fluids such as gasoline, charcoal lighter fluid, drain oil or kerosene to light a fire in your heater. This would be like checking the level of gas in your gas can with a lighted match.

Place several pieces of paper and some small dry kindling inside the unit. Ignite the paper and close the door.

It will take a few minutes for the fire to establish itself. Once you have some good red hot burning embers, add larger pieces of wood. All chimneys and hook-ups act differently. After a while, you will find out how your unit works best for starting.

After a time, you can adjust draft according to your needs. On air tight units, the burning time is controlled very much by the draft control, contrary to the old type stove where the smoke pipe damper controlled the burning time. Your heater is capable of putting out a lot of heat so don't fully load your unit or open all draft fully until you have become familiar with the operation of the heater. Keep in mind; a full load will not always give you the best results for your needs. Note: With new metal – you may smell an odor. This is normal during the first operation.

When loading your heater that has existing hot coals, rake the red-hot embers over grates evenly. Put a few smaller pieces of wood on coals first, then load up. Close fuel door. Note: After several days of lengthy burn, load unit, open draft controls and burn your unit hot for about 15 minutes while in attendance.

This is a good way to eliminate excessive creosote build up.

Use Caution when opening loading door. Avoid opening-loading door rapidly. This could cause flame to flash out the door. This occurs when there is fuel that has not been burned, creating a large amount of gases on top of the firebox. When the door is opened, oxygen is combined with the gases and ignites.

HELPFUL HINTS

Set the draft to proper setting. The chimney, hookups and kinds of wood will be a factor.

Your heater is capable of holding very large logs. Do not try to add a log that is larger than what you can easily place in the firebox. You will get best efficiency when you add only the amount of wood needed for a short burn.

In the spring and fall when the weather is mild, burning large loads of wood for long periods may cause creosote. Stack temperature should be 200 – 300 for good burning. An inexpensive oven thermometer that reads 100 – 500 works well for finding stack temperatures. We recommend you install one to your smoke pipe.

You can use wood of various shapes, diameters and lengths, but not to exceed your unit specification.

Always try to place the logs so air has free flow between them – increasing combustion.

ASH REMOVAL

Once every week or two, depending on how much fuel you burn, ashes should be removed.

CAUTION

Never let ashes build up to a grate level. This will reduce the life span of your grate.

To remove ashes, simply pull out your ash pan. But remember, the ash pan can get very hot. Dump ashes in a metal container with a lid that is placed on a noncombustible surface.

CAUTION

Never use anything but a metal container to put your ashes in. Emptying ashes into cardboard boxes or paper bags causes fires every year.

MAINTENANCE

At the start of the heating season:

- It is advisable to have your local furnace man inspect and service your heater for the upcoming heating season.
- The furnace, smoke pipe and chimney should be cleaned and checked for repairs.

Grates – Keep ash pan empty. Failure to do

this can cause grates to warp.

Once a week let your heater burn with ash drawer open for 15 minutes, not unattended. This will help to minimize creosote build up.

Smoke Pipe, Chimney – Do not burn green or freshly felled wood. If you do, creosote and soot may build up in the chimney and smoke pipe. This should be checked and cleaned twice monthly.

CLEANING THE CHIMNEY AND SMOKE PIPE

On a regular schedule, twice monthly, check for creosote and soot build up in the chimney and smoke pipe. They must be kept clean.

Steel brushes are the safest for cleaning metal surfaces. Salt solutions and some chemicals may damage metal surfaces. When cleaning chimney, obtain a stiff steel brush with an extension handle and insert brush into chimney from the top. Continue brushing and sweeping downward until the full length of the chimney is cleaned. Open the clean out door at the bottom of the chimney and sweep the debris into a plastic bag or container. When cleaning the smoke pipe, use a steel brush.

WARNING

In Case of Chimney Fire

1. Alert everyone in the house.
2. Call the Fire Department immediately.
3. Shut any doors and air inlet dampers and draft control. This should take no longer than a few seconds.

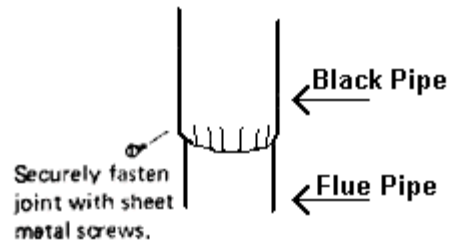
Do not use your heater until a professional inspection has been made of your heater, smoke pipe and chimney.

CREOSOTE – FORMATION AND NEED FOR REMOVAL

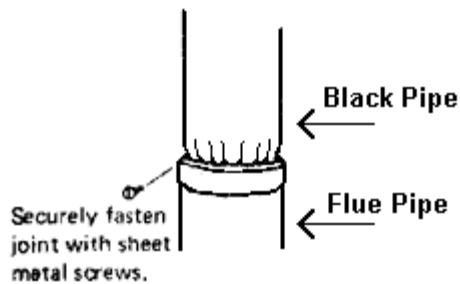
When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a low burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.

The chimney connector and chimney should be inspected at least twice monthly during the heating season to determine if a creosote build up has occurred.

If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.



**Stove pipe is on the OUTSIDE of flue
for a Sauna Stove**
Flatten the seam on the stove pipe to allow
it to slip OVER the flue pipe.



**Stove pipe is on the INSIDE of flue
for a room wood heater**

The stove pipe for a sauna stove is located on the OUTSIDE of the flue, which avoids water getting into the stove when pouring water onto the rocks!

Stove pipe for a room heater or wood stove is located on the INSIDE of the flue, allowing creosote to flow downward.

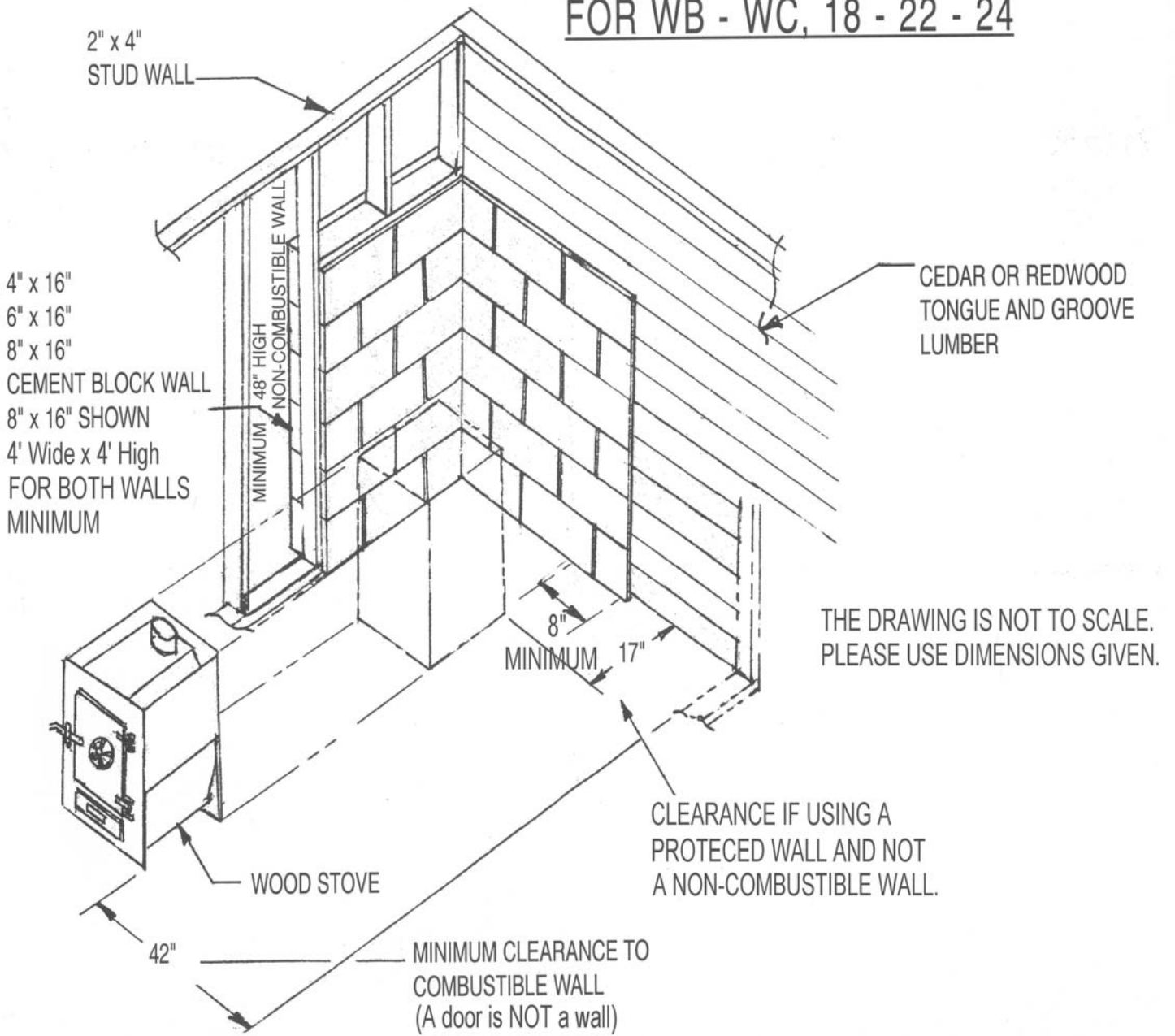
Stove pipe for a sauna stove should be standard black pipe. To flatten the “Pittsburg Seam” on the first section, join the tube at the seam, lay it flat on a hard surface and using a hammer, pound the seam about 1 ½” up from the crimped end. This will still be a tight fit, but will allow the pipe to fit OVER the flue.

If you wish to use insulated pipe for a sauna stove, the first course must be standard black pipe. Insulated pipe will not fit on the outside of the flue.

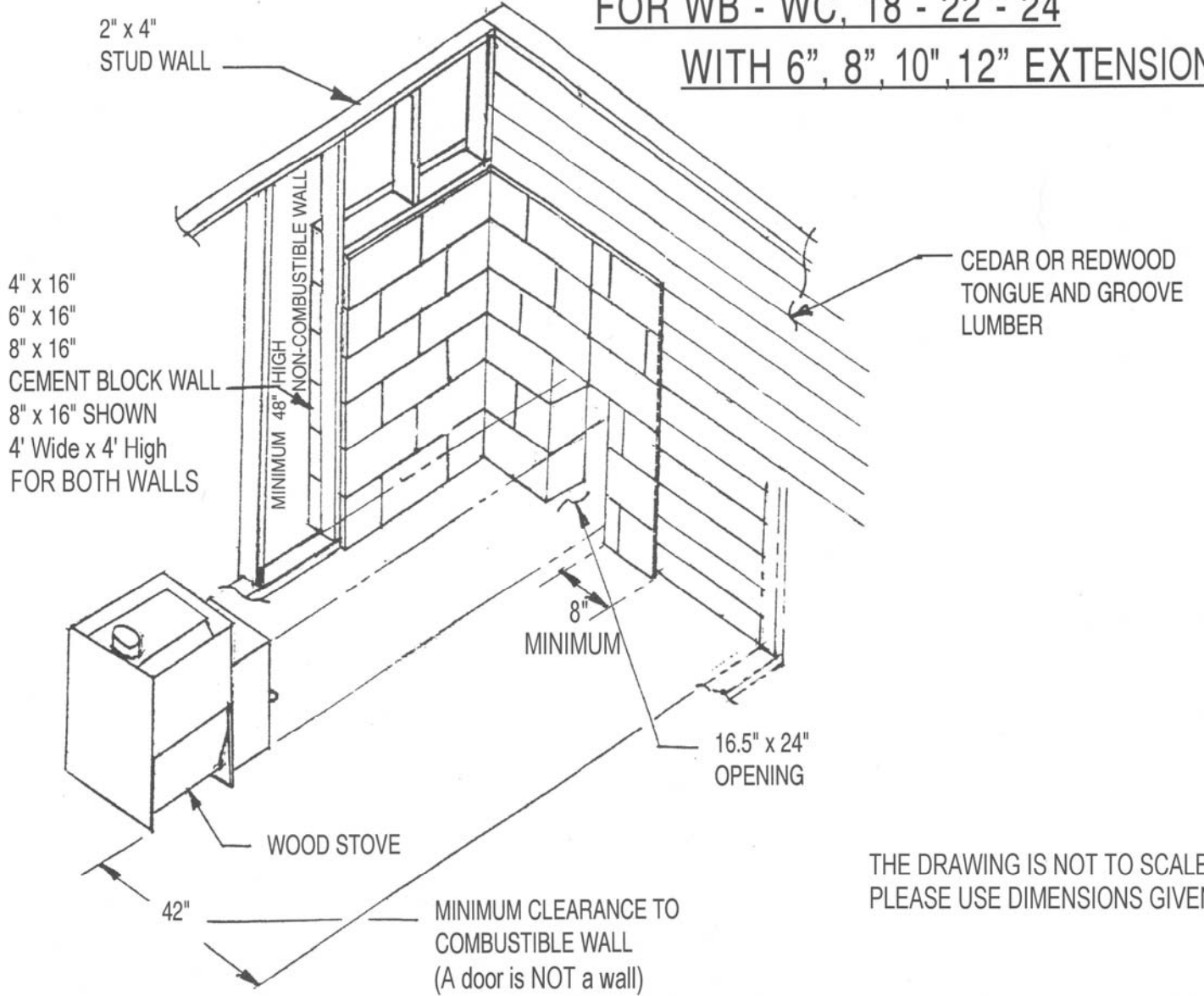
Wood stoves or room heaters may use insulated pipe OR standard black pipe.

At the ceiling for either stoves remember to use insulated pipe fittings!

SAFE WOOD STOVE INSTALLATION FOR WB - WC, 18 - 22 - 24



SAFE WOOD STOVE INSTALLATION FOR WB - WC, 18 - 22 - 24 WITH 6", 8", 10", 12" EXTENSION



THE DRAWING IS NOT TO SCALE.
PLEASE USE DIMENSIONS GIVEN.