TABLE OF CONTENTS

PLEASE SAVE THESE INSTRUCTIONS

REV (08/89)

SEEFIRE MODELS: 900S, 1600S, 2100S

OPERATING INSTRUCTIONS; READ COMPLETELY

SAFETY NOTICE;
If this stove is not properly installed, a house fire could result. Therefore follow the installation directions carefully. This stove can be very hot when burning. Combustible materials such as firewood, wet clothing, etc. placed too closed can catch fire. Children and pets must be kept from touching the stove when it's hot. The chimney must be sound and free from cracks. Before installing this unit contact the local building or fire authority and follow guidelines.

Operate only with door tightly closed and burn wood directly on hearth. Do not use a grate or elevate the fire. At least 14 in. 2(90 cm2) of outside air must be admitted to the room or directly to the stove through a 4" (10 cm) diameter pipe. The use of such fuels as coal or charcoal is not recommended as there is a danger of carbon monoxide being produced. Do not start a fire with chemicals or fluids such as gasoline, engine oil, etc. Do not burn treated wood, coloured paper, cardboard, solvents, or garbage which tend to produce more pollution than wood. Do not let the stove become hot enough to get any part red.

STARTING;
Place loosely crumpled paper on the floor and cover with dry kindling. Open the draft fully and ignite. After the wood is burning brightly, add more dry wood and when the fire is hot, use the draft control to adjust the burn rate. It limits the amount of combustion air entering the fuel chamber and can be adjusted from a low burn rate with the handle fully in, to a fast burn rate with the handle fully out.

FIRST START;
Don't operate unless all firebricks are installed. When first installed, the chimney, firebricks and steel are cold and must become hot before the stove will function well. Normally it takes two or three hours of high burn for the new stove and bricks to become dry and hot enough to burn really well. The paint will smell a little the first time or two as it cures and you may wish to open a door or window.

OPERATING;
Cut the firewood less than 18" (.45m) long for models 900S, 1600S and less than 20" (.5m) long for model 2100S. Once the stove is entirely hot it will burn very efficiently with little smoke from the chimney. There will be a bed of orange coals and secondary flames flickering just below the baffle. You can safely fill it with wood to the top of the door and will get best burns if you keep the stove top temperature between 250 F (120 C) and 450 F (270 C).

Burn only dry, seasoned wood. It produces more heat and less soot or creosote. Do not burn beach wood. Its salt content can produce a metal eating acid. When re-fuelling open the door slowly to prevent smoke spillage. Keep a small steel shovel nearby to use as a poker and remove ashes. Do not store wood within 3 feet (1m) of the stove.

REMOVING ASHES;
If you let the ashes accumulate two or three inches on the floor they tend to burn themselves up. When necessary shovel some out through the door into a metal container with a tight fitting lid. Keep this closed container on a noncombustible floor well away from all combustible materials. Cold wood ashes can be used on the garden or compost.

CLEAN GLASS;
It is easy to burn these Seefires and have the glass stay clean. Most owners do, but not all! The most common reasons for dirty glass include: not using sufficient fuel to get the stove thoroughly hot; using green or wet wood before the fire is hot enough to burn them properly; closing the draft so far that there is insufficient air for complete combustion. If it is necessary to clean the glass, use soft cloths with no abrasive and clean only when cold.

REPLACING GLASS;
The glass is very strong but do not let burning fuel rest on it and always close the door gently. If the glass should ever crack when the fire is burning, do not open the door until the fire is out and do not operate the stove again until the glass has been replaced with a new 9" x 13" (228 mm x 330 mm), 5 mm thick plate of Pyroceram glass, preferably by your dealer. Do not use a substitute glass. To remove the door, open and lift. To replace the glass, remove the screws holding the steel keepers in place and remove all broken glass. Wrap the edges of the new glass with 44" long x 3/4" wide x 1/8" thick strip of adhesive-backed fiberglass gasket using the adhesive back to hold it to the glass, covering the edge and 1/4" on each side. Place this gasketed glass in position and replace its steel keepers. When finished, you should be able to move the glass slightly, horizontally and vertically.

FIRE EXTINGUISHER AND SMOKE DETECTOR;
All homes with a solid fuel burning stove should have at least one fire extinguisher near an exit known to all, and at least one smoke detector in the room containing the stove. If it sounds an alarm, correct the cause but do not de-activate or relocate the smoke detector.

CREOSOTE - ITS FORMATION AND REMOVAL;
When wood is burned slowly, it produces tar and other organic vapours which combine with expelled moisture to form creosote. These vapours condense in relatively cooler chimney flue of a slow burning fire and when ignited, make an extremely hot fire. So, the smoke pipe and chimney should be inspected monthly during the heating season to determine if a build-up has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

CHIMNEY OR RUN-AWAY FIRE.
1. Call local Fire Department
2. Close the draft fully
3. Examine fluepipes, chimney, attic, and roof of house, to see if any part has become hot enough to catch fire. If necessary spray with fire extinguisher or water from a garden hose.
4. Do not operate the stove again until you are certain the chimney and its lining have not been damaged.

MAINTENANCE
At the end of each heating season clean the chimney and the smokepipe. Clean above the stove's top baffle with a vacuum cleaner. Replace the shield below the secondary air tube if it is badly eroded. It is held to the tube above with sheet metal screws. Replace worn gaskets or broken bricks if necessary. Door gasket is 3/4" (19mm) fiberglass.

SMOKING;

A properly installed Seefire should not smoke. If your does, check the following: Has the chimney had time to get hot? Is the smoke passage blocked anywhere in the stove, smokepipe or chimney? Is the room too airtight and the air intake not connected to the outside? Try with a window partly open. Is the smoke flow impeded by too long a horizontal pipe or too many bends? Is it a weak draft perhaps caused by a leaky chimney, a cold outside chimney, too short a chimney, or a chimney too close to trees or a higher rood?

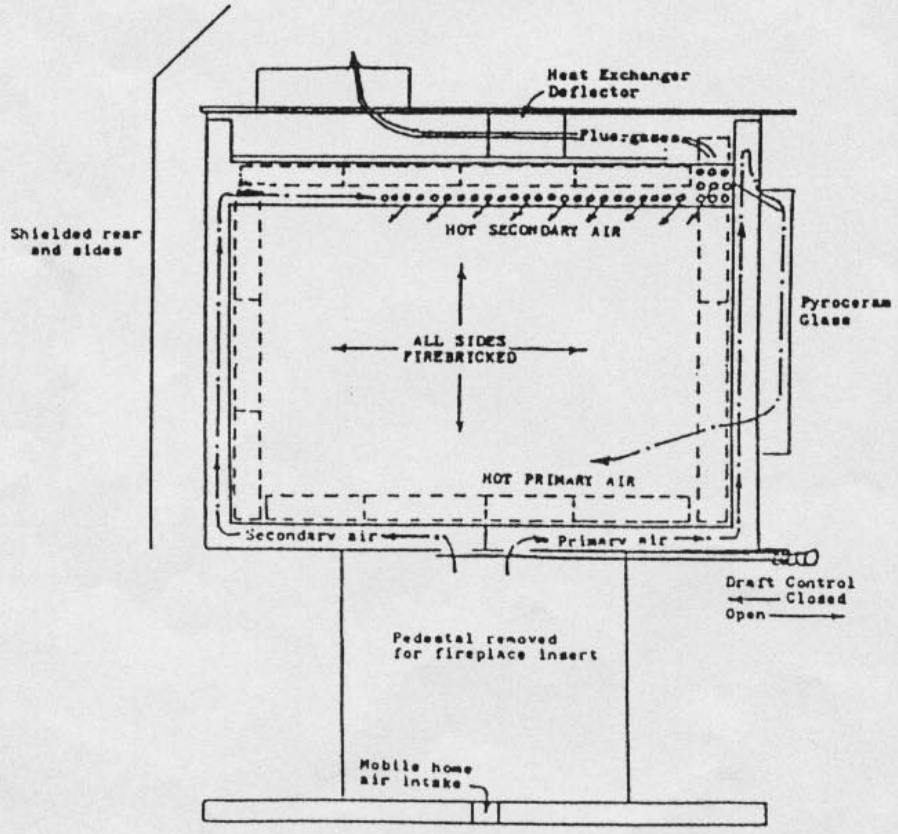
SEEFIRE PRINCIPLES;

Except for their different depths; models 900S, 1600S, 2100S are identical with the same burning principles. They were specifically designed over many months of research to meet the 1990 U.S.A. EPA emission standards and have been extensively tested in Canadian and American laboratories. This system is the most efficient, simple and trouble free we know and works as follows:

The combustion air enters through two holes in the double bottom covered by a single draft control. Primary air from the front hole goes up two tubes on each side of the door into a top preheating manifold and then down the window to feed the fire. Secondary air from the rear hole goes up the double back into the secondary air tube and shoots out laterally to oxidize the glass below the baffle and the smoke exit.

The combustion chamber is lined with high-temperature firebrick on all sides, and in the top baffle and extends close to the front. Firebrick maintains a high temperature in the chamber so that the gases mixing with preheated air from secondary air tube just below the baffle are easily ignited and burned. Indeed, it is fascinating to watch blue flames flickering much of the time just below this baffle.

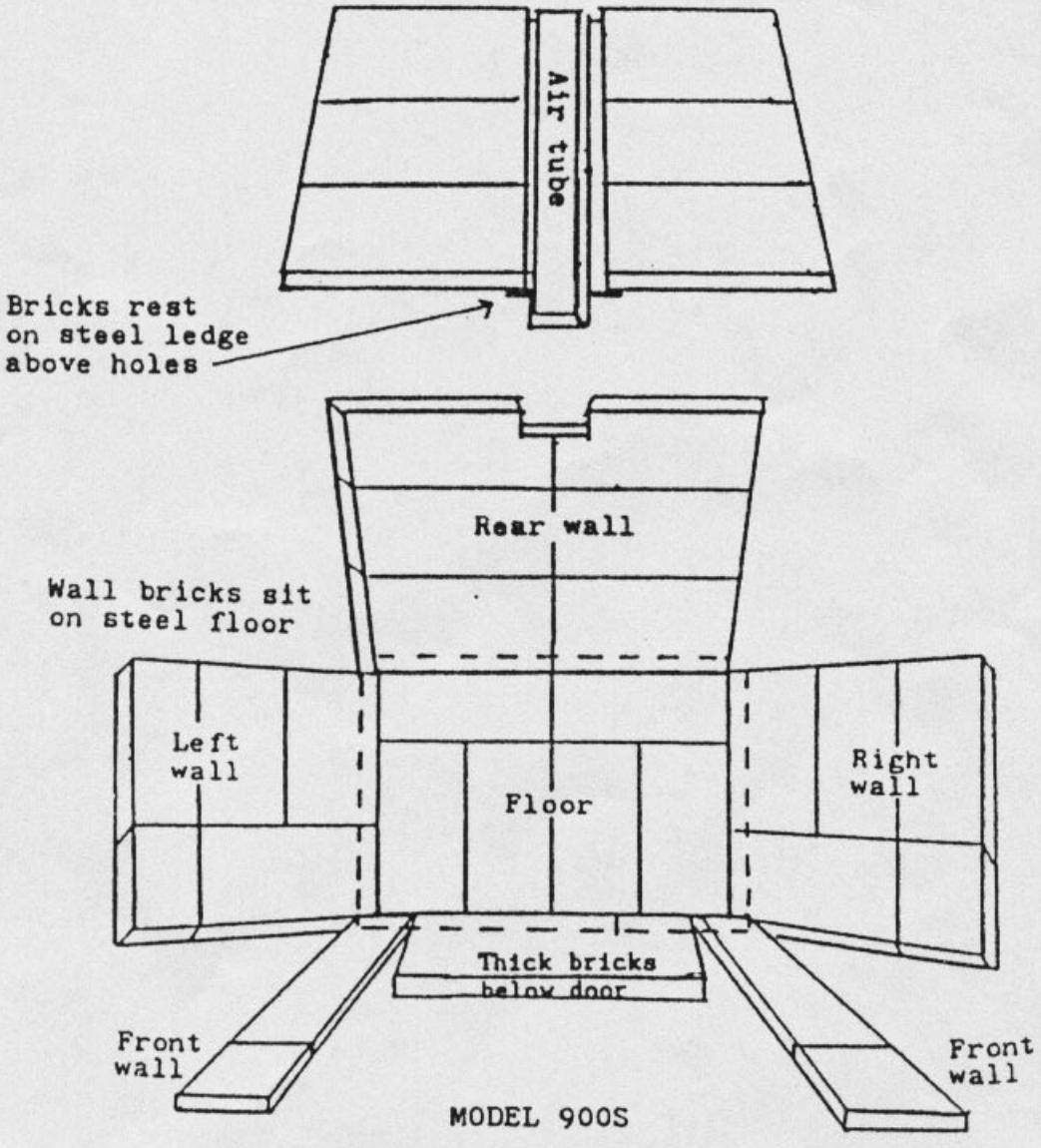
The stove sides and back are shielded to direct the heat upwards and forwards into the room.

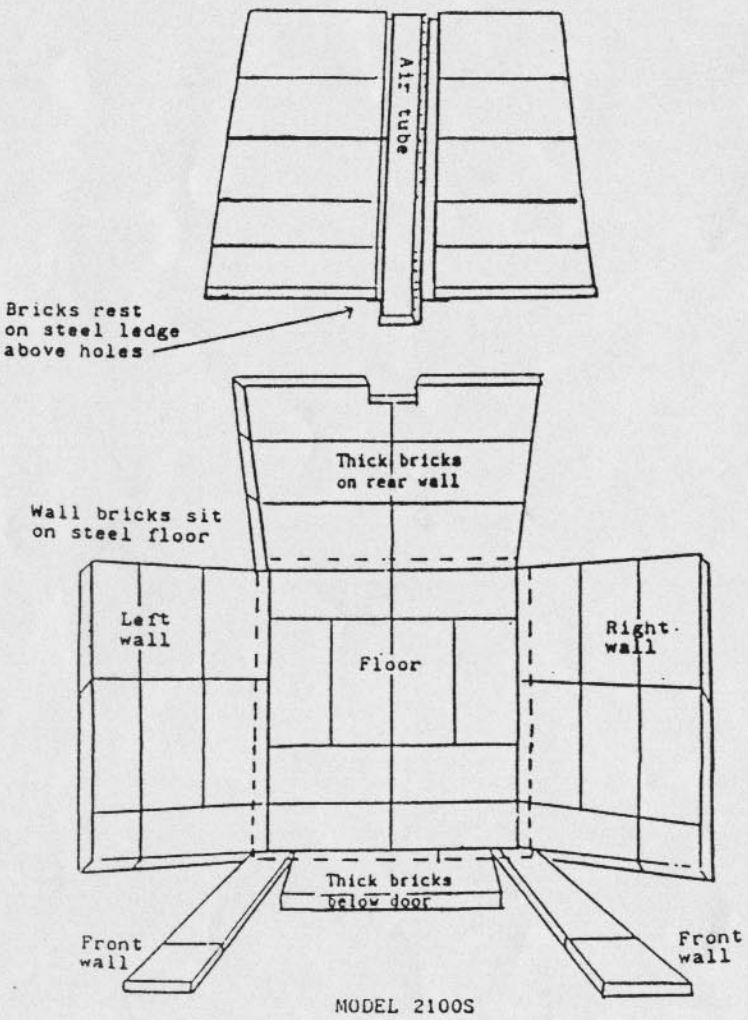


INTERIOR ASSEMBLY

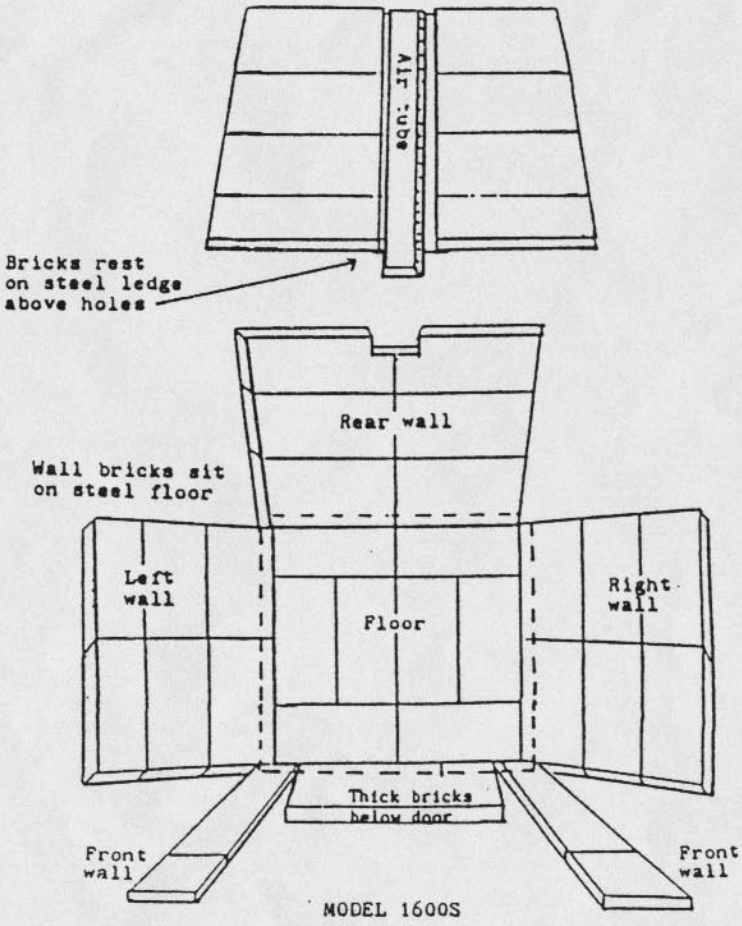
Complete the stove and smokepipe installation before placing bricks. Then work in the following order and as in diagrams below:

1. Place the two thick front bricks (1 long and 1 short) below the door.
2. Place the two narrow front wall bricks on either side of the door with the short one on top of the longer one.
3. Place the bottom two rows of the side wall bricks.
4. Place the six rear bricks. They fit between the side bricks.
5. Place the floor bricks.
6. All baffle (ceiling) bricks rest on side and rear top bricks.





MODEL 2100S



MODEL 1600S

FREESTANDING INSTALLATION

CHIMNEY CONNECTION; Vent the stove into a masonry chimney or listed factory insulated, solid-fuel stainless-steel chimney with as short and straight a six-inch (150 mm) smokepipe as possible. Connection to a masonry chimney must be by a metal or masonry thimble cemented in place. An insulated stainless steel chimney must be supported at the ceiling or roof and its installation must comply with its manufacturer's instructions. The total smokepipe length should not exceed 40% of the chimney height above the stove. All smokepipe must slope slightly upwards and all connections must be tight and secured by three sheet metal screw equally spaced.

CAUTION; An uninsulated smoke pipe shall not pass through an attic, roof space, closet or similar concealed space, or through a floor, ceiling, wall or partition, or any combustible construction. Do not use any makeshift materials during installation.

OUTSIDE AIR; If possible, connect the air intake at the pedestal's base to the outside with the 5" (125 mm) diameter fresh air adapter.

MAINTAIN THESE MINIMUM CLEARANCE* TO COMBUSTIBLES;

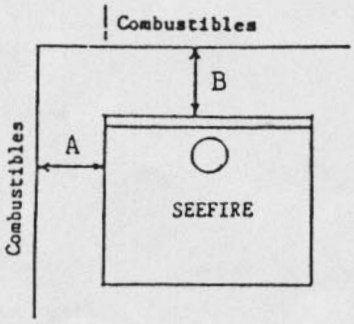
With Double Wall Pipe. Use Security DL6 in Canada, or Dura Vent Plus in U.S.A. | With Single Wall C Vent Pipe

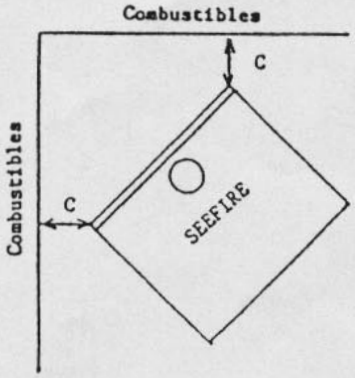
	Model 900S	Model 1600S	All Models
A. Side shield:	12"(300 mm)	14"(355 mm)	14"(355mm)
B: Rear shield:	5" (130 mm)	8"(205 mm)	8" (205 mm)
C: Rear corner:	4" (100 mm)	9" (230 mm)	9" (230 mm)

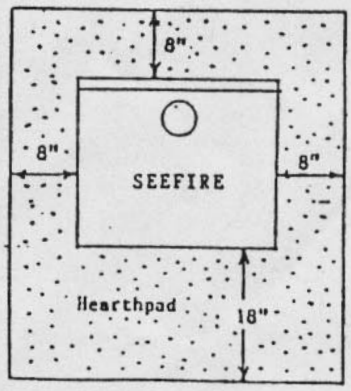
* These clearances can be reduced with shielding acceptable to the local authority.

ALCOVE INSTALLATION;
Model 900S or 1600S may be installed in an alcove at least 7ft.(2.13m) high, at least 45" (115mm) wide, and no more than 4ft. (1.22 mm) deep, with Double Wall pipe (Security DL6 in Canada or Dura Vent Plus in U.S.A.)

FIREPROOF HEARTHPAD:
If a stove is installed on a combustible floor, it must have its pedestal attached and be placed on a non-combustible hearth pad. This pad must extend 8" (200 mm) to each side, and 18" (455 mm) to the front.



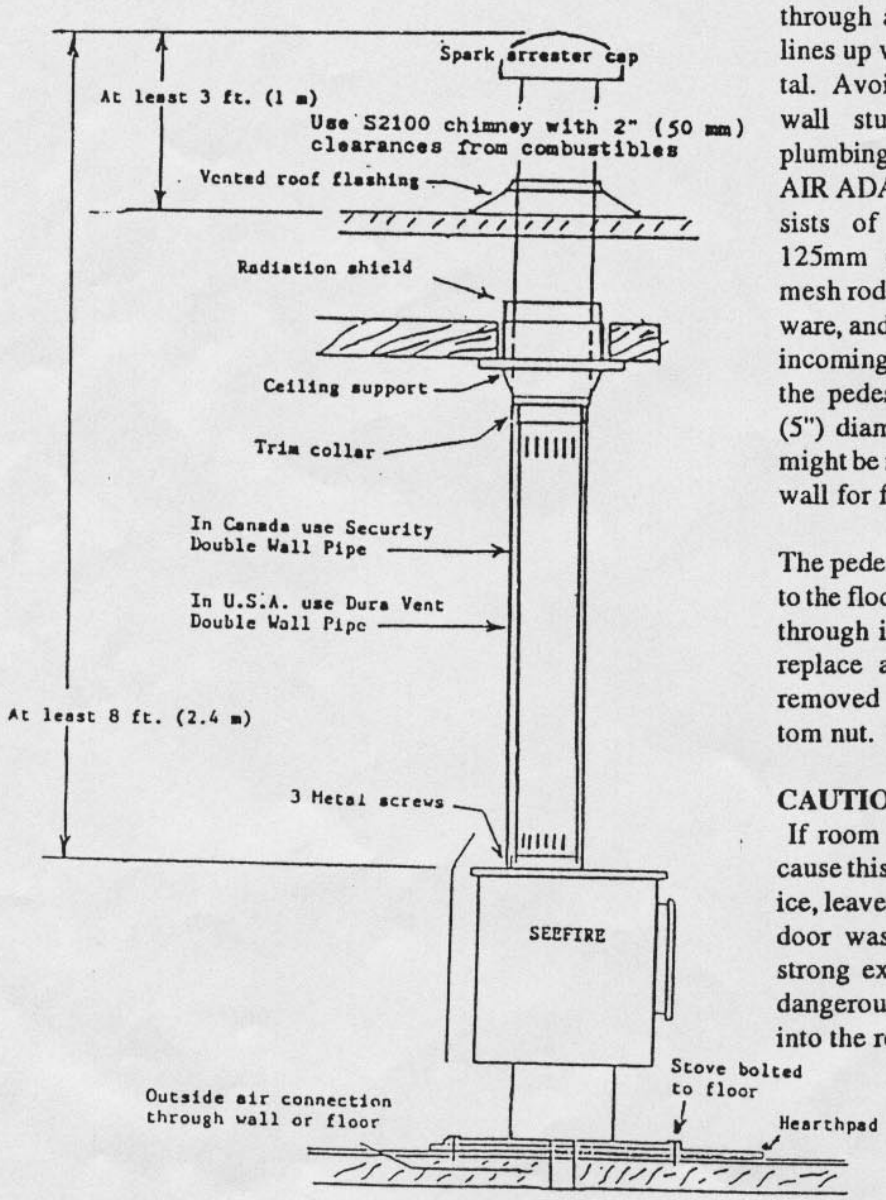




MOBILE HOME INSTALLATION

SPECIAL REQUIREMENTS; Pedestal model 900S & 1600S are tested and listed for use in mobile homes. Do not install in a sleeping room. All freestanding installation requirements on opposite page must be met plus the following:

VENTING: Use Double Wall Pipe, Security DL6 in Canada or Duravent Plus in U.S.A. Connect to a listed S2100 chimney system in Canada or a Duravent Plus chimney system in U.S.A. These must be installed in accordance with the manufacturer"s instructions. Use only specified components with no substitutions. The chimney and pipe must extend at least 8 feet (2.4 m)above the stove and 3 feet (900 mm) above the highest point of the roof. Install a rain cap with spark arrestor at the top which will not impede the smoke exhaust. The chimney must be supported at the ceiling or roof so that its weight does not rest on the stove. It must be installed between ceiling joints, with radiation shield and roof flashing, so that the structural strength, insulation and waterproof qualities of the home are not lessened. Seal with silicone to maintain vapour barrier at the chimney and outside air pipe penetrations.



OUTSIDE AIR; Connection from the stove's air intake to the outside is mandatory. This can be done through a hole in the floor which lines up with the hole in the pedestal. Avoid cutting any floor joists, wall studs, electrical wires or plumbing. Use SEEFIRE FRESH AIR ADAPTOR KIT. The kit consists of a 380mm (15") long, 125mm (5") diameter duct with mesh rodent guard, fastneing hardware, and insulation to close off the incoming air through the back of the pedestal. Additional 125mm (5") diameter ducting and elbows might be needed to reach an outside wall for fresh air source.

The pedestal must be firmly bolted to the floor with ¼ " bolts or heavier through its side holes. Be sure to replace any insulation or panels removed when fastening the bottom nut.

CAUTION

If room air starvation occurs because this air intake is blocked with ice, leaves etc. or because the stove door was left open, or due to a strong exhaust fan operating, etc. dangerous fumes could be sucked into the room.

INSTALLATION IN A FIREPLACE

Install only in a masonry fireplace at least 26" (660 mm) wide, 22" (530 mm) high and with a masonry chimney at least 15' (4.6 m) high, both of which have been constructed in accordance with the building code. Do not remove bricks or mortar from the fireplace.

1. Remove the fireplace damper or fasten it permanently open.

2. Measure the roof of the fireplace and mark this shape on a 24-gauge shell metal flue cover with a six-inch (150 mm) hole placed to lie directly below the fireplace flue opening. Mark a two inch flange on each side and cut on the outside. Bend down the flanges. If you have not done this before, it might be a good idea to make a cardboard pattern and test it first. Fasten this flue cover in position as high as possible with two masonry screws per side through the flanges into the fireplace.

3. The stove is connected with a short length of six-inch (150 mm) slip pipe which fits inside the stove's collar and also inside the flue cover hole projecting about one inch (25 mm). Slide the slip up into the flue cover hole and hold with a piece of tape if necessary. Place the stove below it. Then pull the slip pipe down into the stove's collar. Fasten in place with a sheet metal screw at the stove's collar.

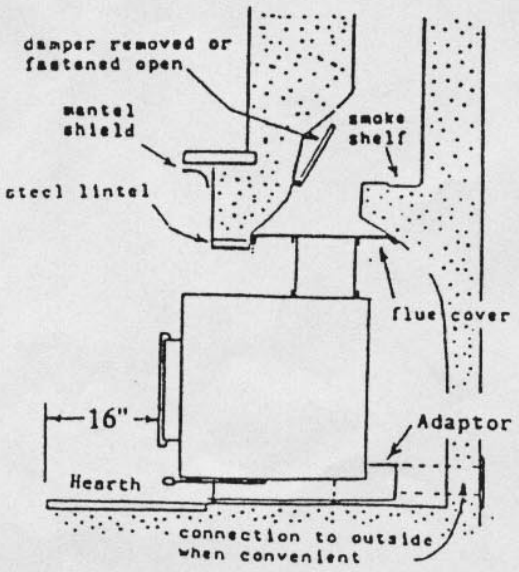
4. If desired, use the fresh air adaptor to cover the air intake and connect to the outside through a cleanout or a 4" (100 mm) diameter hole in the fireplace wall.

5.REQUIRED MINIMUM CLEARANCES TO COMBUSTIBLES FROM INSERT;

(a) If the unit projects less than 3.5" (90 mm) from the fireplace face:
27.5" (700 mm) to a combustible mantel or top facing.
9" (230 mm) to a side facing. 12" (305 mm) to a side wall

(b) If the unit projects more than 3.5" (90 mm) from the fireplace face:
There must be no combustible mantel or top facing
14" (355 mm) to a side wall.

(c) The hearth must extend at least 16" (405 mm) from the stove front or extend at least 12.5" (320 mm), and be raised at least 3" (75 mm) and have the floor in front protected by a non-combustible material to a distance of 16" (405 mm) in front of the stove.



(d) These clearances may be reduced with suitable shielding acceptable to the local authority.

SPECIFICATIONS

	Model 900S	Model 1600S	Model 2100S
Width x depth	24 x 19"	24 x 23.5"	24 x 28"
	.61x.48 m	.61x.60 m	.61x.71 m
Height on pedestal	29" (.74 m)	29" (.74 m)	29" (.74 m)
height on runners	21" (.53 m)	21" (.53 m)	21" (.53 m)
Chamber (D.W.H.)	12x18x12"	16.5x18x12"	20x18x12"
	.30x.46x3	42x46x3 m	51x.46x.3 m
Capacity	1.8 c.f.	2.3 c.f.	2.7 c.f.
	.05 m3	.07 m3	.08 m3
App. area heated*	900 s.f.	1600 s.f.	2100 s.f.
	85 m2	150 m2	200 m2
Heat output (high burn)	40,000 BTU	55,000 BTU	70,000 BTU
Duration low fire*	7 hrs.	9 hrs.	11 hrs.
Wt. without bricks	225 lb.(100 kg)	255 lb.(115 kg)	285 lb.(130 kg)
Wt bricks	115 lb. (52 kg)	145 lb.(65 kg)	175 lb.(89 kg)

*Figures will vary considerably with individual conditions.

CERTIFICATION;

These Seefire stoves have been tested and listed by Warnock Hersey Ltd to standards: CSA, B366.2, ULC S627, ULC S628, UL 1482, UL 907.
Models 900S & 1600S have been tested and listed for mobile homes and alcoves.

PATENTS AND TRADEMARKS:

"SEEFIRE" is a registered trademark in Canada #222687,
and in U.S.A. #1063256

Seefire patents include. Canada 40688, 45857, 50467
U.S.A. D241547, D258235, D257517, D269120
U.K. 997189
Others pending.

LIMITED FIVE YEAR WARRANTY:

This Seefire stove is guaranteed to original purchaser only to be free from defects in material or workmanship. If any such defect is found within five years from date of purchase, contact the dealer explaining the defect and he will have it remedied according to the following schedule:

Year after date of purchase in which defect occurs:	Portion of repair cost to be paid by manufacturer
first	100%
second	80%
third	60%
fourth	40%
fifth	20%

To be covered by this warranty, the repairs must be made or authorized by the manufacturer. The glass, brick, gasketing, paint, gold plating, installation related problems or problems related to incorrect operation are not covered by this warranty. No other guarantee is implied or expressed.

Manufactured by: SHERWOOD INDUSTRIES LTD.
Victoria, B.C. CANADA