

LA 
CASTELLAMONTE

*Stufe da sempre. Per sempre.
Stoves since 1975.*

INSTRUCTION MANUAL
FOR INSTALLATION
USE AND MAINTENANCE

TYPE

RNO 200

MODEL

SAVE THESE INSTRUCTIONS

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WARRANTY

SAFETY NOTICE: IF THIS APPLIANCE IS NOT PROPERLY INSTALLED, OPERATED AND MAINTAINED, A HOUSE FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA .

This wood heater uses a catalytic combustor, which needs periodic inspection and replacement for proper operation. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual, or if the catalytic element is deactivated or removed. Catalytic filter instructions on page 27

This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

Please read this entire manual before you install and use your new room heater. Failure to follow instructions may result in property damage, bodily injury, or even death. If you have any doubt, please contact the selling Firm or the Producer.

THE CHIMNEY FLUE

The chimney flue: our stoves' "engine"

The chimney flue is a key element for the optimal functioning of our stoves.

General Rules

- Each stove must have its own, adequately insulated, chimney flue to the roof; through it the smoke will flow outside, by natural draft. **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**
- the chimney flue must be separated from combustible or flammable materials (wooden roofs, matchboards and any plastic pipes) through a suitable insulating material, for at least 30 cm (12 inches) all around. The insulation is also recommended when the chimney is installed inside a masonry. This will prevent the cold air from creeping between the steel pipe and the wall. Furthermore, a good insulation will be needed in case of passage in an open floor.
- If the chimney pot is installed on a roof lower than a higher nearby roof, the distance must be more than 5 meters (16,50 ft). FIG. 4A
- The inner section of the chimney flue shall be uniform and without narrowings, possibly round shaped, with smooth walls and corners not any higher than 45°.
- The section of the chimney flue must be **bigger than** the diameter of the stove smoke pipe 150mm (6 inches). For our stoves we recommend a chimney flue diameter from 160 mm to 180 mm (6 to 7 inches) and a chimney flue height of no less than 2,5 meters (8 ft).
- The connection between the stove smoke pipe and the chimney flue in the wall must be done through a pipe fitting (90° or 135°). Moreover, the connection must not have more than two 90° bends and it must have an horizontal length of no more than 2 meters (6,50 ft) with a gradient of 5%. We recommend that the chimney flue is equipped with a condensate and soot collection chamber, which shall end with an airtight door, accessible for cleaning. This will avoid unpleasant smells, bad draft and frequent cleaning of the stove.

FIG. 2 A

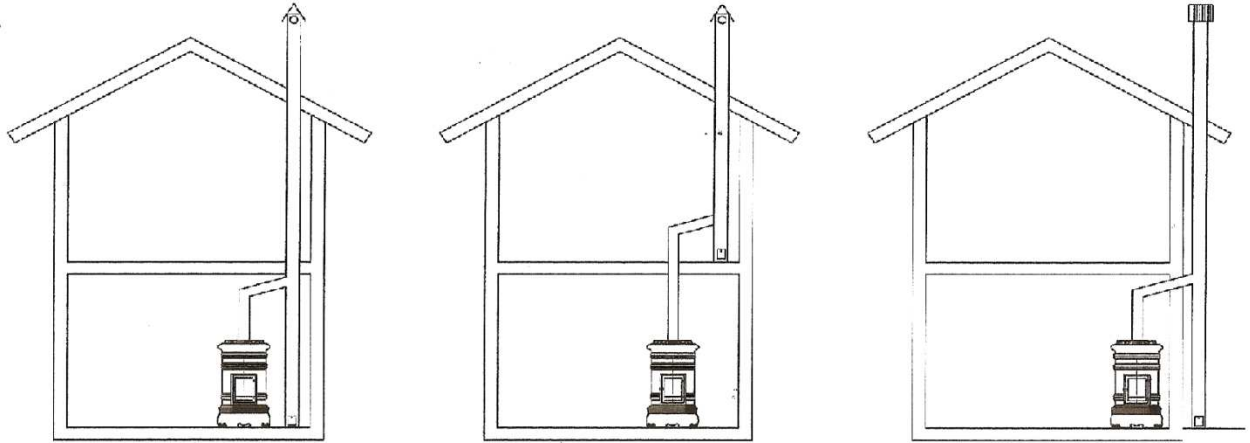


FIG. 2 B

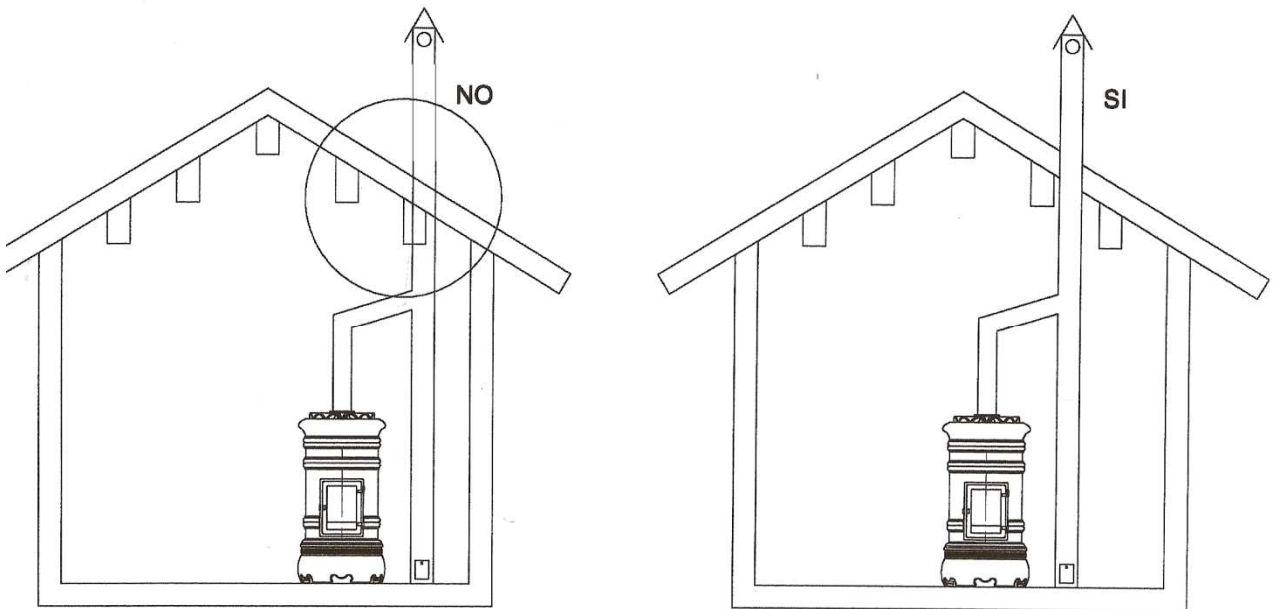
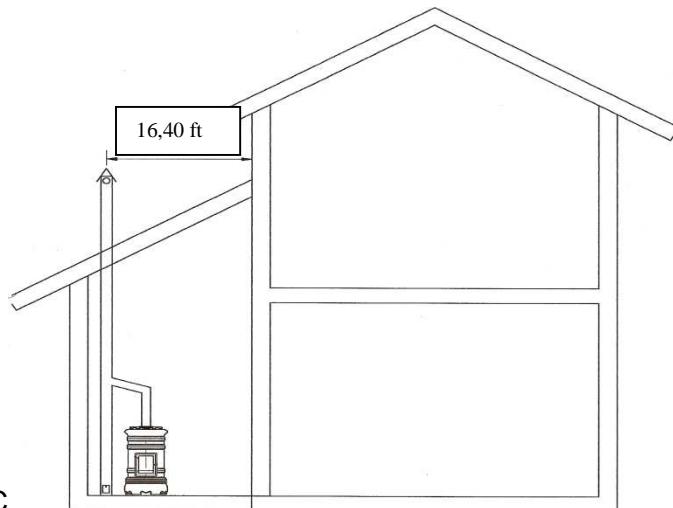


FIG. 2 C

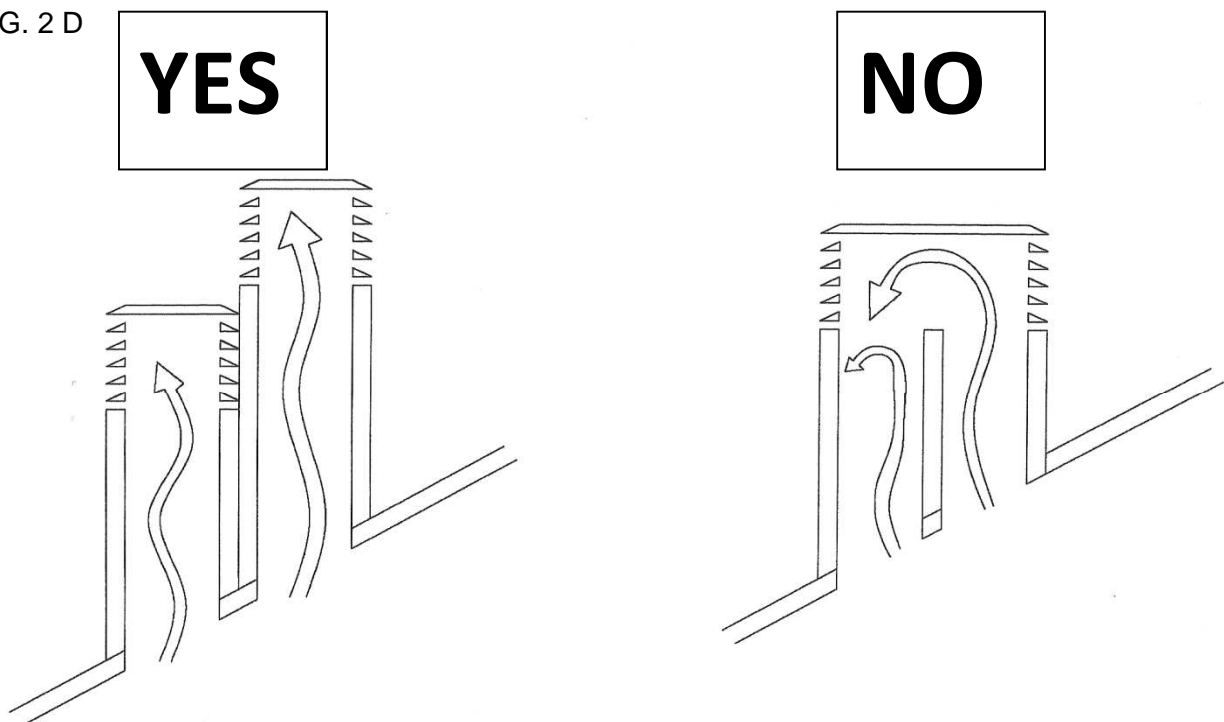


The Chimney Pot

The chimney pot is placed on top of the chimney and helps to expell the smoke. The fundamental characteristics of the chimney pot are:

- It must have the same diameter of the chimney flue
- useful outlet section not less than twice the minimum of the chimney flue (ex. Chimney flue section 200 cm^2 -31 inches² – total output section holes $> 400\text{ cm}^2$ - 62 inches²)
- It must prevent, through an appropriate construction, the entrance into the chimney flue of rain and snow. In very windy areas, it is recommended to install an appropriate chimney pot.
- It must be insulated, like the chimney flue, until its holes.
- In case the brick chimney flue has an internal pipe, this pipe shall continue until the holes in the chimney pot.
- Avoid the output of two chimney flues in the same chimney pot. (fig. 2D)
- If the chimney pot cannot be placed on the ridge of the roof, it should at least be positioned so as to ensure the dispersion of smoke outside the reflux area, in order to prevent the formation of back pression in the chimney, which can compromise the exit of the smoke into the atmosphere.

FIG. 2 D



CHIMNEY SYSTEMS

- DO NOT INSTALL A FLUE DAMPER
- DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE

A. Venting Systems

The venting system consists of:

- A chimney connector (also known as flue or stove pipe)
- A chimney
- Thimble

These get extremely hot during use. In the event of a creosote fire, temperatures inside the chimney may exceed 2000°F (1100°C). To protect against the possibility of a house fire:

- Chimney connector and chimney **must be properly installed and maintained.**
- An approved thimble must be used when a connection is made through a combustible wall to a chimney.
- A chimney support package must be used when a connection is made through the ceiling to a factory built chimney.
- An approved thimble and chimney support package are **absolutely necessary** to provide safe clearances to combustible wall and ceiling material.

Thimble

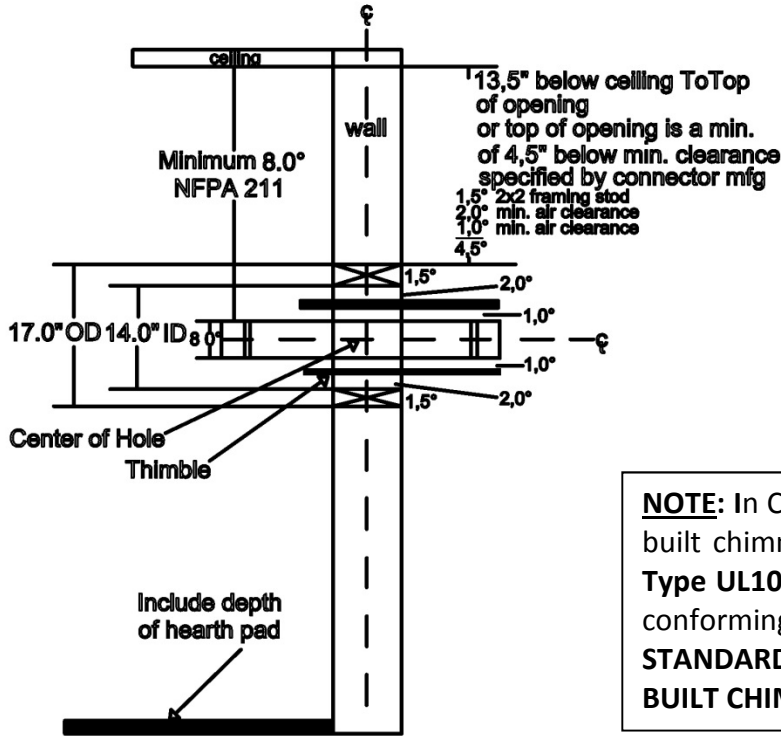
A thimble is a manufactured or site-constructed device installed in combustible walls through which the chimney connector passes to the chimney.

- It is intended to keep the walls from igniting.
- Site constructed thimbles must meet NFPA 211 Standards.
- Factory-built must be suitable for use with selected chimney and meet UL103 Type HT Standards.
- Follow instructions provided by the manufacturer for manufactured thimbles for masonry chimney and factory-built chimneys.

Instructions:

1. Open inside wall at proper height for the chimney connector to entry the masonry chimney.
2. Entry hole to masonry chimney must be lined with an 8 inch (203mm) minimum diameter clay liner, or equivalent, secured with refractory mortar.
3. Construct a 17 inch x 17 inch (432mm x 432mm) outside dimension frame from 2 x 2 framing lumber to fit into wall opening. Inside opening of frame should be no less than 14 inch x 14 inch (356mm x 356mm).
4. Attach the wall spacer to the chimney side of the frame.
5. Nail the frame into the wall opening. The spacer should be on the chimney side.
6. Insert the section of the solid insulated chimney into the outer wall of the masonry chimney.
7. Tightly secure the length of the solid insulated chimney with the wall band to the masonry chimney.
8. Insert a section of chimney connector into the chimney. Make sure it does not protrude past the edge of the clay chimney liner inside the chimney.
9. Seal the end of the chimney connector to the clay liner with refractory mortar.
10. Install trim collar around the sold pack chimney section.

FIGURE 3A



NOTE: In Canada when using a factory-built chimney it must be safety listed, Type UL103 HT (2100oF) CLASS "A" or conforming to CAN/ULC-S629M, STANDARD FOR 650oC FACTORY-BUILT CHIMNEYS.

FIGURE 3B - Solid Pack Chimney with metal Supports as a Thimble

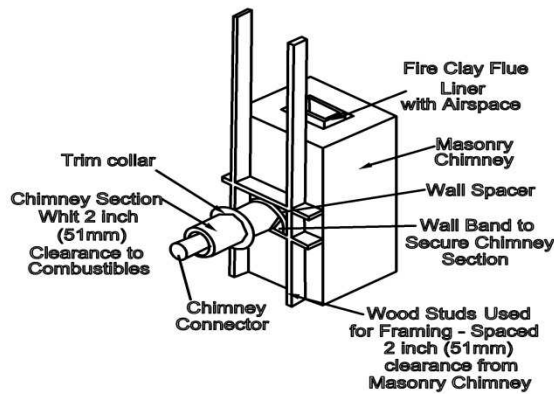
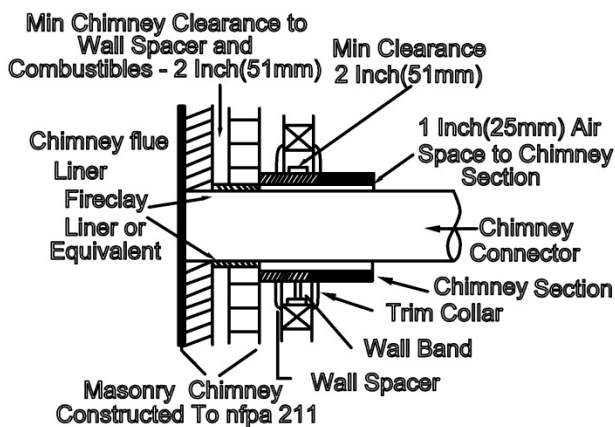


FIGURE 3C



B. Chimney Systems

- The chimney connector joins the stove to the chimney.
- It must be a 6 inch (152mm) minimum diameter 24 gauge mild steel black or 26 gauge blued steel.
- Or an approved air-insulated double wall venting pipe.

Single wall connector or stove pipe

- Must be at least 24 gauge mild steel or 26 gauge blue steel.
- Sections must be attached to the appliance and to each other with the crimped (male) end pointing toward the stove.
- All joints, including the connection at the flue collar, should be secured with 3 sheet metal screws.
- Follow the minimum clearances to combustibles Factory-built chimney connector (vented).

Factory-built chimney connector (vented)

- The listed connectors must conform to each other to ensure a proper fit and seal.

C. Installing Chimney Components

Single wall connector or stove pipe

This must be at least 24 gauge mild steel or 26 gauge blue steel. The sections must be attached to the appliance and to each other with the crimped (male) end pointing toward the stove. All joints, including the connection at the flue collar, should be secured with 3 sheet metal screws. Make sure to follow the minimum clearances to combustibles.

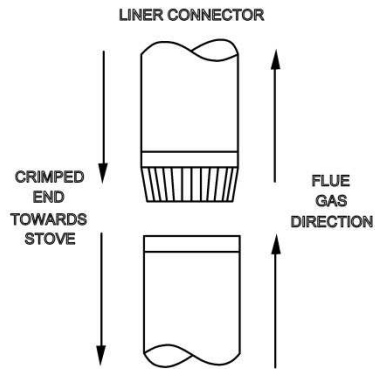
CANADA: Chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor or ceiling. Where passage through the wall or partition of combustible construction is

desired, the installation shall conform to CAN/CSA-B365, Installation Code for Solid Fuel Burning Appliances and Equipment.

Factory built listed chimney connector (vented)

The listed connectors must conform to each other to ensure a proper fit and seal.

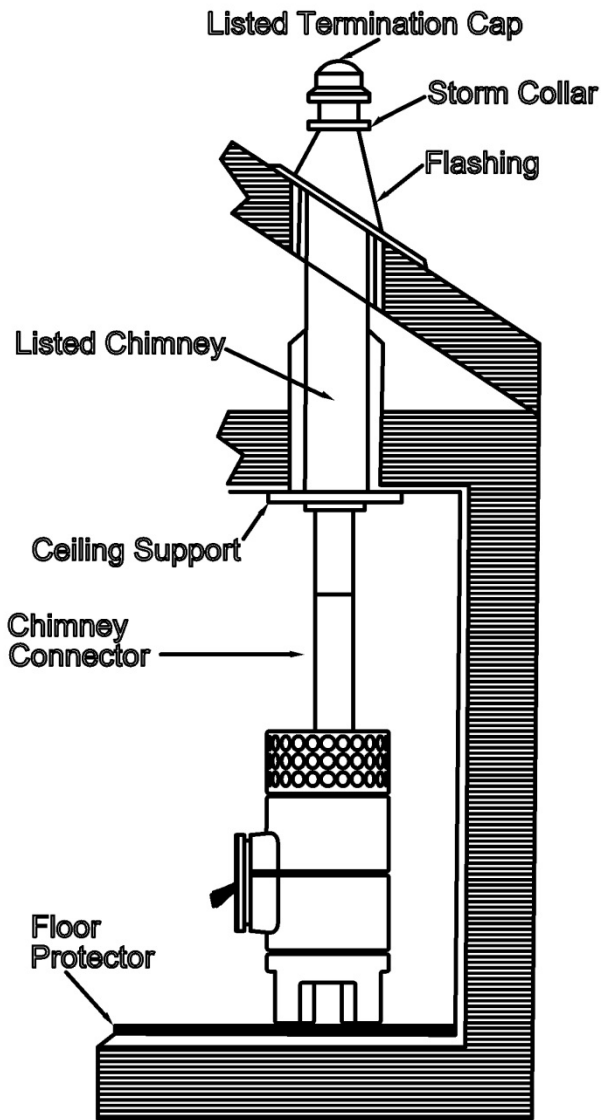
FIGURE 3D



WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this information manual provided with the appliance. For assistance or additional information consult a qualified installer, service agency or your dealer.

FIGURE 3F – Factory built interior chimney



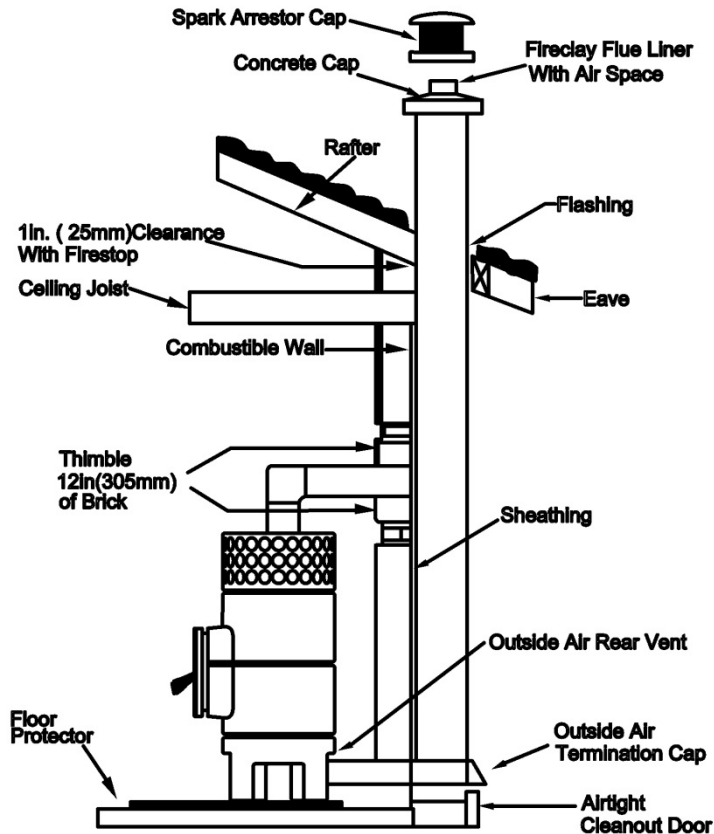
WARNING
Fire Risk – do NOT pack insulation or other combustibles between spacers. ALWAYS maintain specified clearances around venting and spacers. Install spacers as specified.
FAILURE TO KEEP INSULATION OR OTHER MATERIAL AWAY FROM VENT PIPE MAY CAUSE FIRE.

WARNING
Fire Risk – Inspection of chimney:
- chimney must be in good condition
- meets minimum standard of NFPA 211
- factory-built chimney must be 7-8 (180-200mm) UL 103 HT.

WARNING
ASPHYXIATION RISK!
• DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.
• DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

May allow flue gases to enter the house.

FIGURE 3G



WARNING

Fire risk – When lining air-cooled factory-built chimneys:

- run chimney liner approved to UL 1777 Type HT requirements (2100 degrees F)
- re-install original factory built chimney cap ONLY
- DO NOT block cooling air openings in chimney
- blocking cooling air will overheat the chimney

E. Masonry Chimney Liner

For optimal performance, masonry chimneys used to vent this appliance should be: **1. Lined with a 6 to 8 inches (160 – 200 mm) stainless steel liner.**

- Installations into a clay flue without a stainless steel liner may reduce draw which affects performance, cause the glass to darken and produce excessive creosote.

2. It is recommended that a chimney with a larger diameter than 6-8 inches (160-200 mm) be relined.

- the oversized flue can cause poor performance and contribute to the accumulation of creosote.

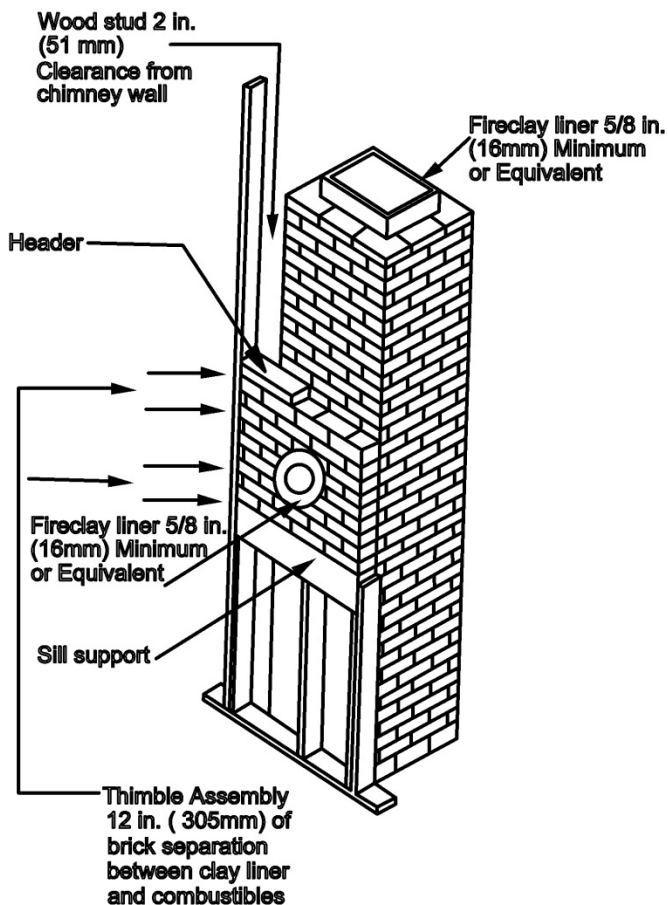
3. Have the chimney cleaned before the appliance is installed and operated.

The following bullets list the more critical requirements for a properly constructed chimney:

- The masonry wall of the chimney, if brick or modular block, must be a minimum of 4 inches (102mm) nominal thickness.
- A chimney of rubble stone must be at least 12 inches (305mm) thick.
- The chimney must have a fire clay flue liner (or equivalent) with a minimum thickness of 5/8 inch (16mm) and must be installed with refractory mortar.
- An equivalent liner must be a listed chimney liner system or other approved material.
- Since an oversized flue contributes to the accumulation of creosote, the size of the flue should be checked to determine that it is not too large for the appliance.
- The chimney should also be checked to ensure it meets the minimum standard of the National Fire Protection Association (NFPA) Standard 211.
- A chimney support package must be used when a connection is made through the ceiling to a factory built chimney.
- An approved thimble and chimney support package are **absolutely necessary** to provide safe clearances to combustible wall and ceiling material.

NOTICE: In Canada when using a factory-built chimney it must be safety listed, Type UL103 HT (2100°F)[1149°C] CLASS "A" or conforming to CAN/ULCS629M, STANDARD FOR 650°C FACTORY-BUILT CHIMNEYS.

FIGURE 3H



CHIMNEY TERMINATION REQUIREMENTS

Follow manufacturer's instructions for clearance, securing flashing and terminating the chimney.

- Must have an approved and Listed cap
- Must not be located where it will become plugged by snow or other material
- Must be located away from trees or other structures

D. Locating Your Stove & Chimney

Location of the appliance and chimney will affect performance. The chimney should:

- Install through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die down of the fire.
- Penetrate the highest part of the roof. This minimizes the affects of wind turbulence and down drafts.
- Consider the appliance location in order to avoid floor and ceiling attic joists and rafters.
- Locate termination cap away from trees, adjacent structures, uneven roof lines and other obstructions.

Your local dealer is the expert in your geographic area and can usually make suggestions or discover solutions that will easily correct your flue problem.

NOTICE:

Chimney performance may vary.

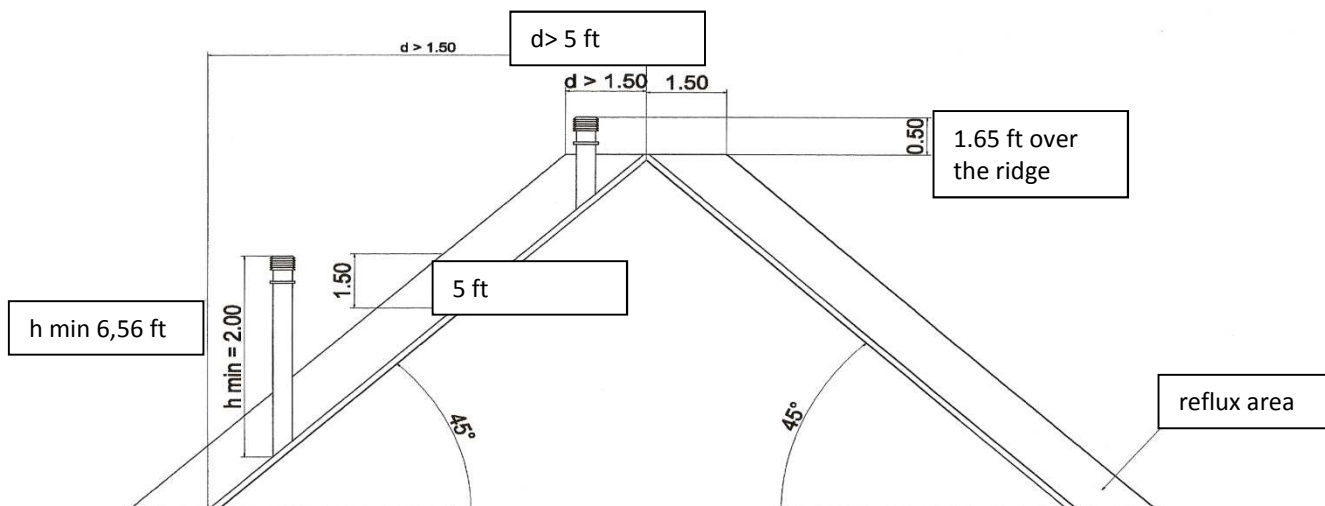
Trees, buildings, roof lines and wind conditions affect performance.

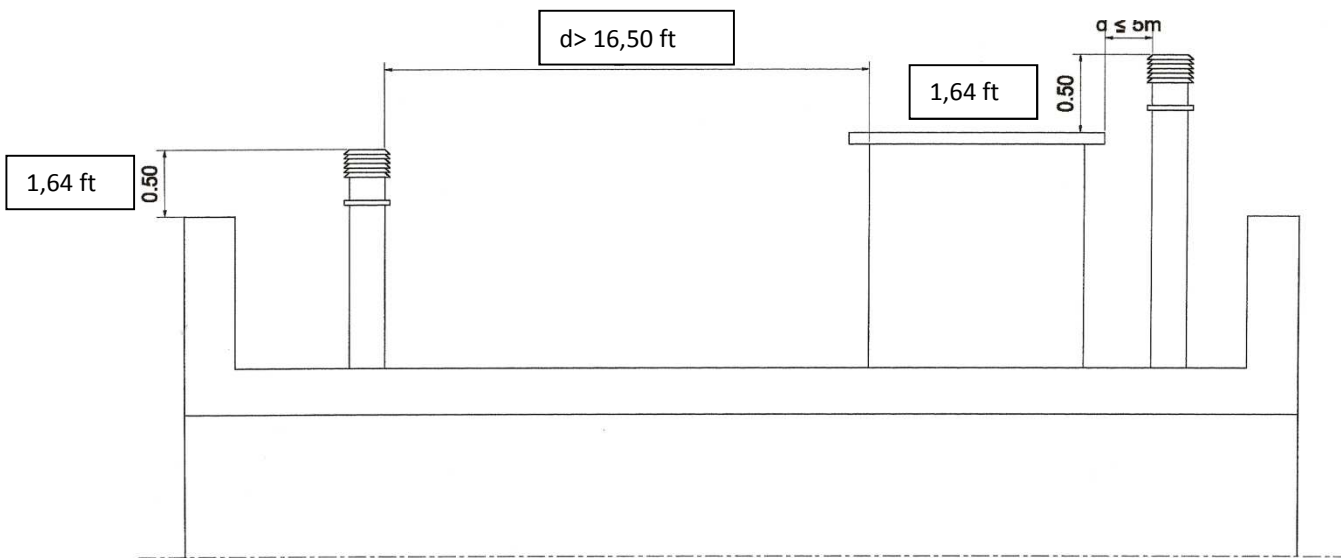
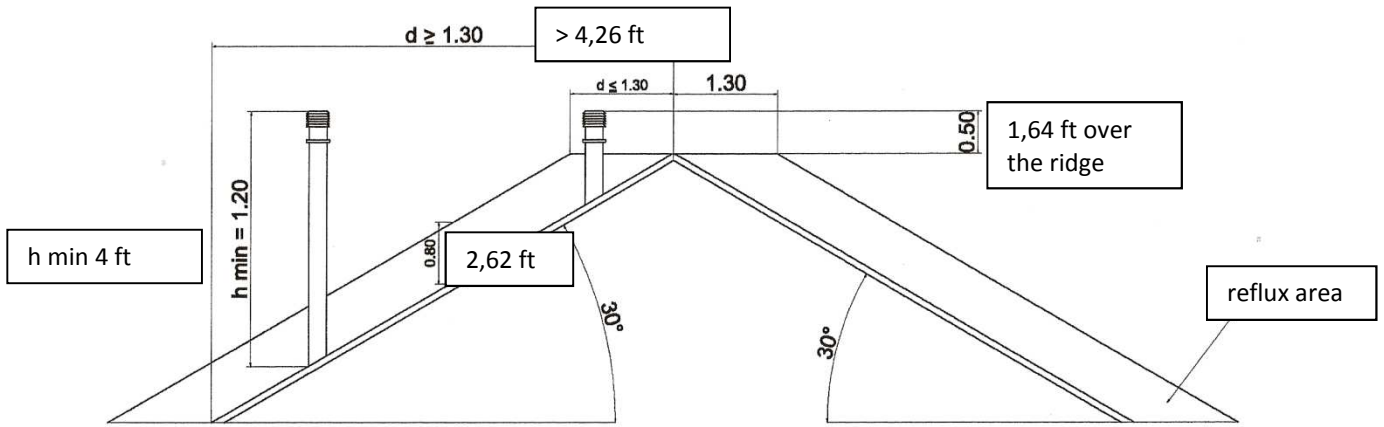
Chimney height may need adjustment if smoking or overdraft occurs.

These are safety requirements and are not meant to assure proper flue draft.

This appliance is made with a 6 inch (152mm) diameter chimney connector as the flue collar on the unit. Changing the diameter of the chimney can affect draft and cause poor performance.

FIG. 4A





INSTALLATION

VENT SPECIFICATION: six (6) inches diameter, minimum 24 MSG black or blued steel connector pipe, with a listed factory-built UL103HT Class A chimney, suitable for use with solid fuels, or a masonry chimney and the referenced clearances.

THIS ROOM HEATER MUST BE CONNECTED TO:

- 1) A chimney complying with the requirements for Type HT chimneys in the Standard for Chimneys, Factory-Built, Residential Type and Building Heating Appliance, UL 103, or**
- 2) A code-approved masonry chimney with a flue liner.**

INITIAL ADVICES

- DO NOT INSTALL IN ANY FIREPLACE
- The stove must be installed on a floor with adequate capacity. If the existing building does not meet this requirement, appropriate measures (eg, load distribution plate) must be taken.
- The installation must guarantee easy access to clean the stove, the smoke pipes and the chimney flue as well.
- Air extraction fans, when installed in the same space or room with the stove can cause draft problems
- **ALL LOCAL REGULATIONS MUST BE RESPECTED IN THE INSTALLATION OF THE STOVE.**
- Do not use the stove as an incinerator or in any other way different from the one it has been conceived for.
- Do not use fuels different from those recommended.
- Do not use liquid fuels.
- **NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.**
- The stove, especially the external surfaces, while it is working gets hot to the touch. Handle carefully to avoid burns.
- Do not perform any unauthorized modification to the stove.
- Use only original replacement parts recommended by the Manufacturer.

INSTALLATION DISTANCES FROM FLAMMABLE MATERIAL

COMPLY WITH ALL MINIMUM CLEARANCES TO COMBUSTIBLES AS SPECIFIED. FAILURE TO COMPLY MAY CAUSE HOUSE FIRE.

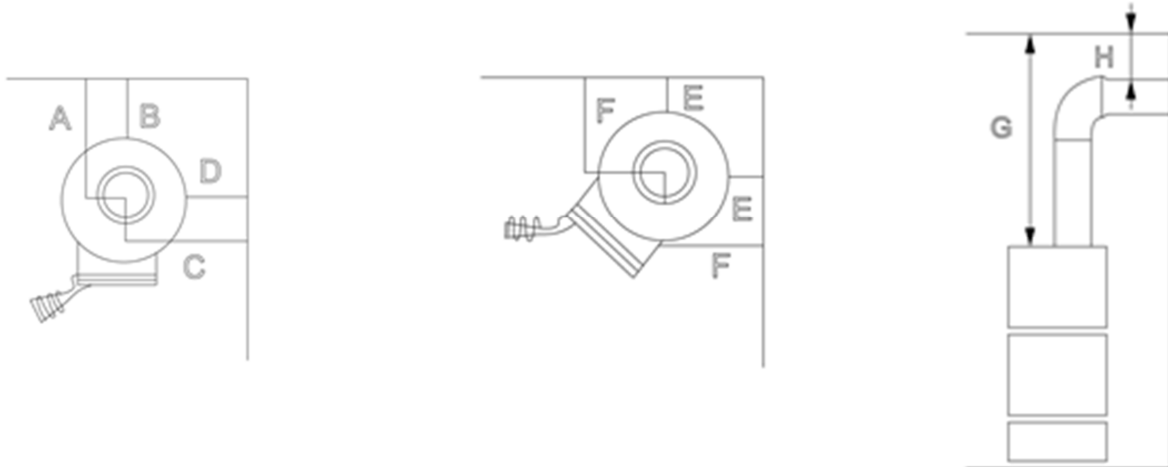
Minimum installation distances from flammable material

- Minimum distance from lateral flammable wall/material: 200 mm – 8 inches
- Minimum distance from rear flammable wall/material: 200 mm – 8 inches
- Minimum distance from flammable floor: 80 mm – 3 inches

Minimum distance from front flammable material: 1000 mm – 40 inches

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS: inches

NOTE: All "A", "C" and "F" Dimensions are to the center diameter of flue collar.



INSTALLATION: FULL VERTICAL

SINGLE WALL PIPE A 18 B 8 C 18 D 8 E 8 F 18 G 44 H* I* J

INSTALLATION HORIZONTAL WITH MINIMUM 2 FT VERTICAL OFF STOVE TOP

SINGLE WALL PIPE A 18 B 8 C 18 D 8 E* 8 F* 18 G 44 H 23 I* J

OPERATION

Lighting and combustion

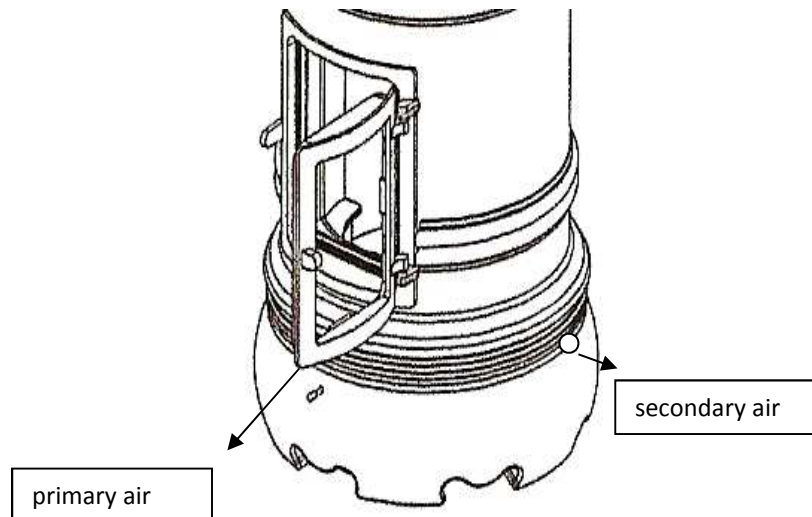
DO NOT USE GRATES OR ELEVATE FIRE. BUILD WOOD FIRE DIRECTLY ON EARTH.

If, during the first lighting, the stove should emanate smells due to the evaporation of substances used in the manufacturing, it is sufficient to ventilate the room for a few hours.

Use small and medium-size logs and put them on the bottom of the fireplace (do not use the door flange - Stack Stove - as a volume for combustion) so that the air can penetrate between them. Place at the base of the stack some lighters (we recommend tablet derived from natural wax).

With the air regulation registers you can regulate the passage of primary and secondary air, necessary for combustion and post-combustion. While lighting the stove, both registers shall be totally opened.

This registers are placed in the base of the stove, like in the following drawings:



The use will be as follows:

- To light the stove: air registers completely opened
- For a fast and powerful combustion: primary air register half opened – secondary air register $\frac{3}{4}$ opened
- For slow combustion: primary air register $\frac{1}{4}$ opened – secondary air register $\frac{1}{3}$ opened.

These positions can be changed in relation to the chimney flue draft, and they are to be considered for an insulated chimney flue with a 160 – 200 mm (6 – 8 inches) diameter and a 12 Pa draft.

ADVICE: do not close the registers completely because by doing so the combustion would be deprived of the necessary air, giving rise to a choked combustion and to the growing of soot on the door glass.

N.B. It is also necessary to clean the fireplace area immediately behind the door from the ashes in order to keep the primary air inlet open. The ash found in this area can be pushed towards the back of the fireplace or removed.

Remove the ashes from the fireplace before their level is so high as to close the primary air entrance. (see technical drawing of the stove interior below). **Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.**

NEVER STORE HOT ASHES IN A GARAGE OR BASEMENT. HOT ASHES GENERATE CARBON MONOXIDE AND/OR FLAMMABLE GASES. THESE GASES MAY CAUSE SUFFOCATION AND POSSIBLE DEATH.

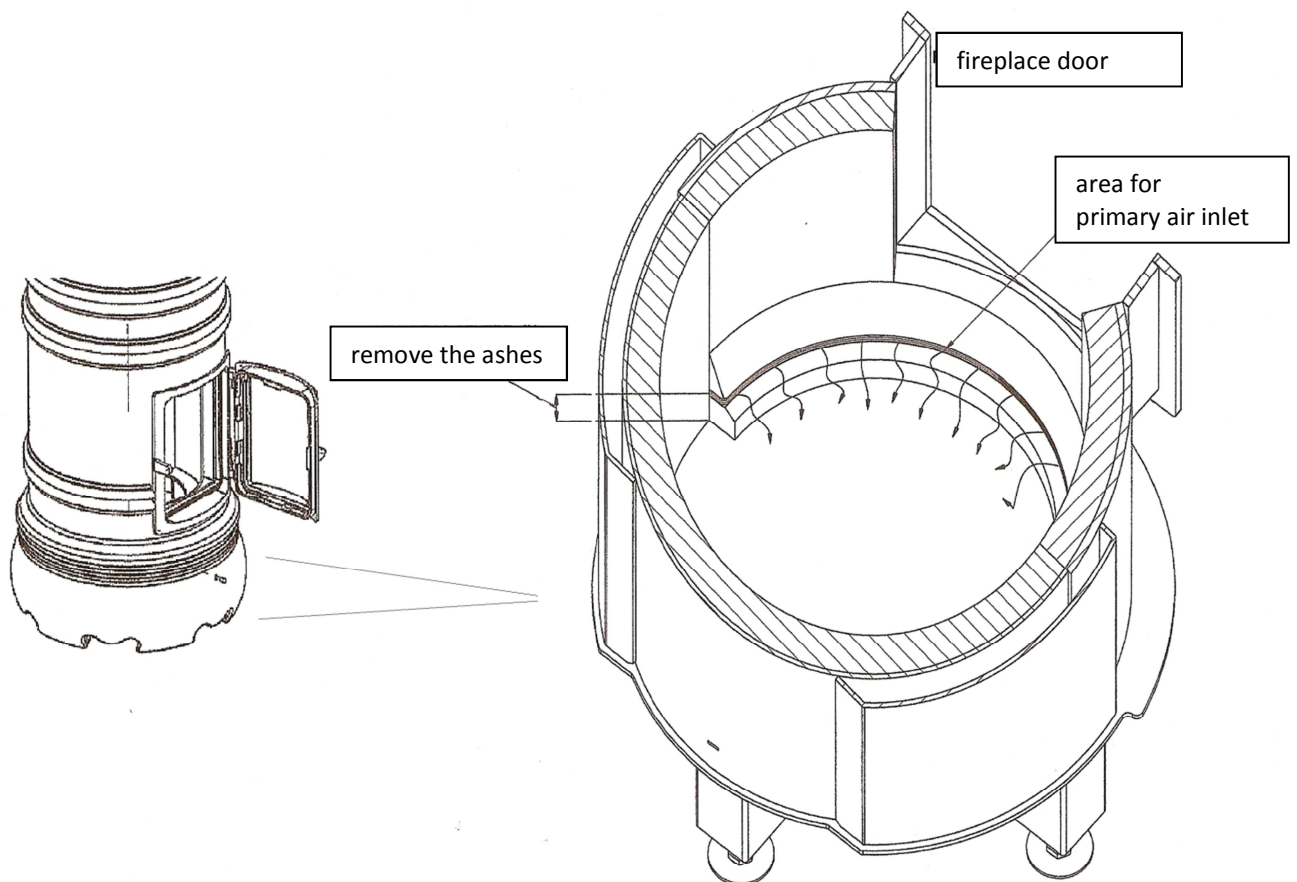


FIG. N. 13

By using dry and seasoned wood for lighting the stove, it is possible to obtain a high flame and to immediately activate the draft in the chimney.

When the brazier is formed on the fireplace floor, it is possible to insert larger logs (always crossed for proper oxygenation). When the charge is burned, it will remain a substantial bed of hot embers that will allow the charge of the fireplace, without having to perform another lighting; in this way, you will obtain a continuous combustion.

The combustion control through the glass door will avoid repeated openings of the fireplace and the consequent lowering of its temperature. FIREPLACE DOOR MUST BE KEPT CLOSED DURING COMBUSTION.

For a good yield, it is necessary to always have a good quantity of wood inside the fireplace; without overfilling it and without pressing its ceiling and its walls (it is always advisable to leave some space to let the air circulate and the inner refractory bricks to dilate).

In this way, the air will circulate freely while keeping a "lively" fire and the refractory bricks will not suffer unnecessary trauma.

The combustion is good if:

- After the lighting phase, there are no visible smokes from the chimney pot.
- The ashes are gray and white and no unburned wood remains.
- There is little soot in the chimney and inside the heat exchanger.

For a good, environment friendly wood combustion, these are the conditions :

- Use only seasoned wood (at least 2 years)
- Be sure the fireplace maintains a high temperature
- During the combustion, maintain an adequate combustion air supply
- Do not overload the fireplace while lighting the stove

A bad combustion is characterized by:

- Very dense smokes
- Gray or dark yellow smoke
- Unpleasant smell
- Very dark ashes with unburned pieces of wood
- Black mouth of the chimneypot
- High wood consumption

WARNING: RISK OF BACKFIRE AND EXPLOSION

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE. DURING COMBUSTION, THE FIREPLACE DOOR MUST REMAIN CLOSED.

Whenever you need to open the door to introduce wood in the fireplace, open the air registers for a few seconds before doing it.

Use the heat glove supplied to open the door and to reload the fireplace. By doing so you will be able to put the logs gently into the fireplace, avoiding unnecessary trauma to the refractory bricks.

Warning: the proper use of the heat glove is for charging the fireplace and NOT to remove glowing embers from it.

During combustion, some parts of the stove (door, handle, glass) can reach high temperatures so it is necessary to be careful and to use precautions.

If during combustion, loss of smoke should occur, do not charge anymore wood, ventilate the room immediately and cool the stove. When the stove is cold, check the reason of the loss and, if necessary, contact the Manufacturer.

However, if the smoke comes out from the stove while loading it, ventilate momentarily the room and continue to load more slowly, giving time to ignite the wood.

THE FIREPLACE DOOR MUST BE KEPT CLOSED during lighting (only the moment in which you light the lighter under the wood, then close it), charging and embers removing, in order to avoid smoke escape.

For night operating, use large size logs and possibly of hard species (beech, oak, etc..) and if the wind and draft conditions are reasonably stable, the stove will continue to burn calmly. If you want to prolong the combustion for many hours, you may need to adjust the air regulators to a minimum.

COMBUSTIBLE

THE PROPER COMBUSTIBLE IS WOOD LOGS.

Commercial firewood is usually divided into soft wood and hard wood. The hard species are characterized by a strong and heavy wood and provide a sustained and persistent flame (eg. Beech, Ash, Walnut, etc..) The soft species, light and soft wood, provide a short term flame (eg. Chestnuts, Poplars, Birch, etc.)

The resinous species (eg. Larch, Spruce, European species of Pine) while providing a significant amount of heat during combustion, have some drawbacks described below:

- Have a low specific weight and therefore burn quickly
- Contain resin, have a rather sooty combustion and therefore require more frequent chimneys and stove cleaning
- They produce hot particles
- They produce few embers

It is recommended to burn strong wood (eg. Beech, oak, etc.) and especially not to burn: garbage, painted wood, plywood or particle board, fibreboard or packagings because it could damage the stove and the chimney flue.

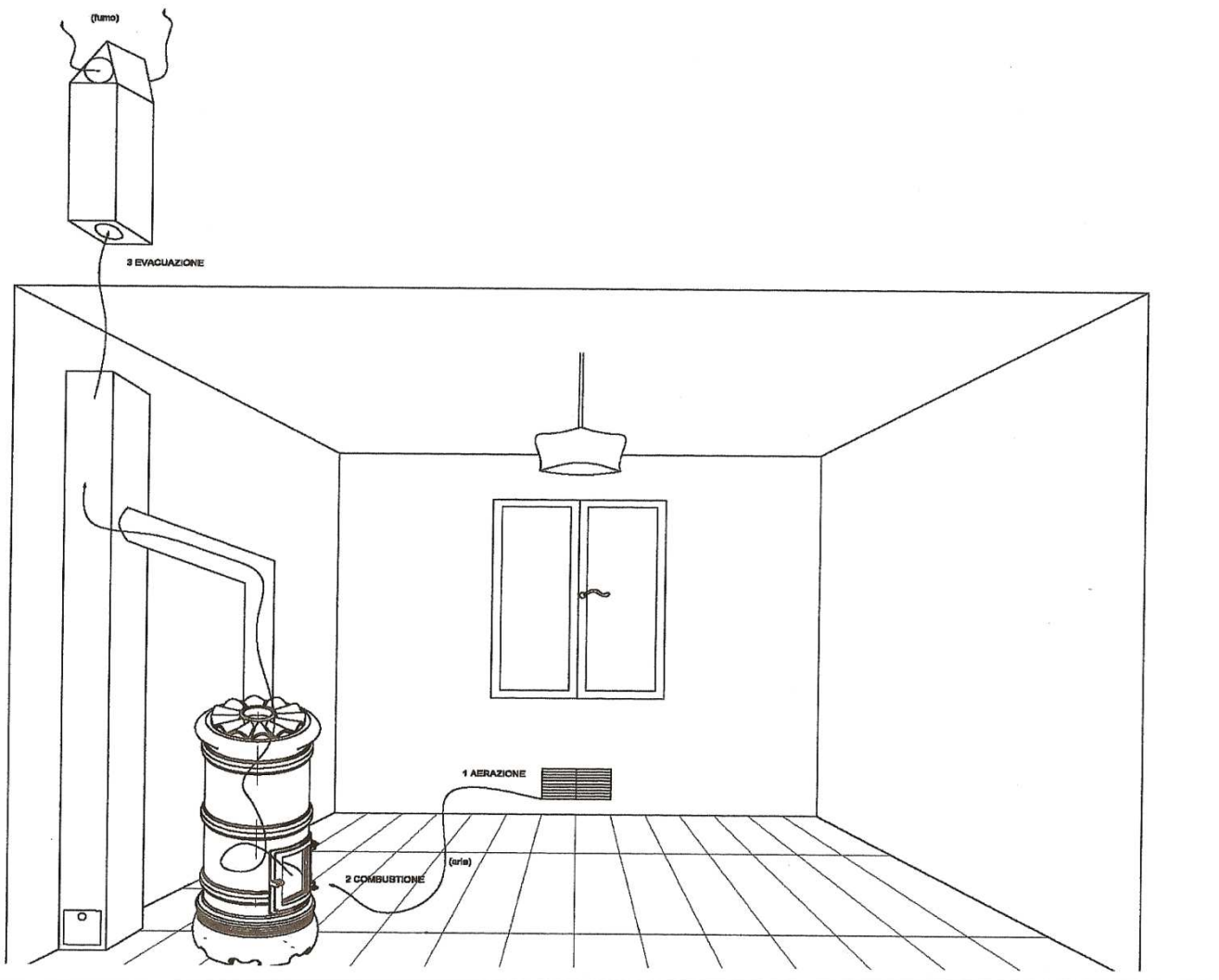
It is important to burn dry and seasoned wood, at least two years, since humidity has a significant influence on the quality of combustion. Infact, when the wood is very wet, it lower the combustion temperature, and also the first part of combustion is used to dry the wood at the expense of yield. Moreover, this lowers the temperature of the smoke and creates condensation and creosote which is very dangerous, flammable and with an unpleasant smell.

SAFETY

Air inlet

The stove must have the necessary air so as to ensure a regular combustion and a healthy environment, so:

- Make sure that in the room where the stove is installed there is adequate ventilation, the minimum recommended section is $> 80 \text{ cm}^2$ (12 inches^2) for devices with closed fireplace
- The air intake must be directly communicating with the room in which the stove is installed. Avoid any obstruction and protect it with a grid as long as it does not reduce the minimum section.
- The adjacent room cannot be used as a garage, storage of combustible material or for activities with risk of fire.



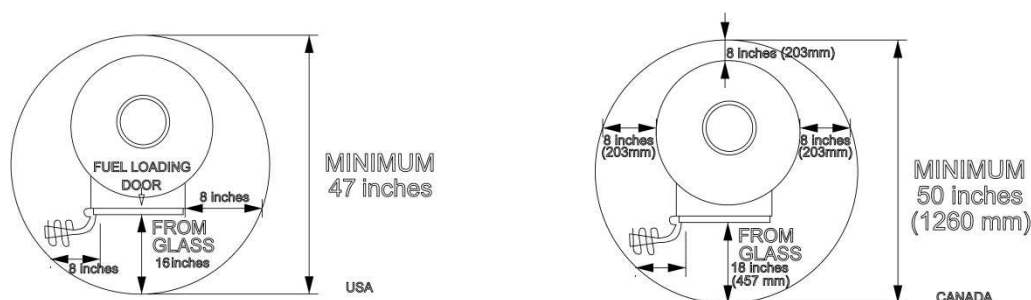
HOME FIRE SAFETY

Installation and use of the stove should be in accordance with the instructions of the Manufacturer and the local rules of habitability.

- When a flue pipe pass through a wall or ceiling particular methods of installation should be applied (protection, thermal insulation, distance from heat sensitive materials, etc)
- **NEVER CONNECT THE STOVE TO A CHIMNEY FLUE ALREADY IN USE FOR ANOTHER DEVICE.**
- Keep away from the fireplace radiation area all combustible and flammable materials (wood furniture, curtains, flammable liquids, etc...)
- If nearby there are shells in combustible or sensitive to heat materials, an insulating and not combustible protection must be interponed.
- If the floor is made in combustible material, at the mouth of the fireplace a protection made of incombustible material (i.e. inox steel, stone, glass) should be placed – with a lateral extension of 203mm (8 inches) and a frontal extension of 406mm (16 inches). Under the chimney connector: 2 inches (51 mm) beyond each side.

FLOOR PROTECTION REQUIREMENTS:

- Use of a floor protector listed to UL 1618
- Type 1 (ember) floor protector or ½" non-combustible material.
- Extend beneath appliance and to the front, sides and rear as indicated in the diagram below



- The floor must be non-combustible or otherwise adequately protected from sparks and falling embers.
- A layer of thin brick or ceramic over a combustible is sufficient.
- **In US installations**, it is necessary to install a floor protector of non-combustible material a minimum of 16 inches (406 mm) in front of glass and 8 inches (203 mm) to both sides of the fuel loading door. Open the door and measure 8 inches (203mm) from the side edge of the opening in the face of the appliance. **see exception**

- **In Canada**, it is necessary to install a floor protector of non-combustible material a minimum of 18 inches (457mm) in front of glass and 8 inches (203mm) to both sides and back of the appliance. **see exception**
- **EXCEPTION:** non-combustible floor protections must extend beneath the flue pipe when installed with horizontal venting and extend 2 inches (51mm) beyond each side.
- ***WARNING! RISK OF FIRE! Hearth pads must be installed exactly as specified. High temperatures or hot embers may ignite concealed combustibles.***

To provide reasonable fire safety, the following should be given serious consideration:

1. Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the heating appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A CO detector should be installed in the room with the appliance.
3. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
4. A practiced evacuation plan, consisting of at least two escape routes.
5. A plan to deal with a chimney fire as follows - In the event of a chimney fire:
 - a - Evacuate the house immediately
 - b - Notify fire department

Negative pressure results from the imbalance of air available for the appliance to operate properly. It can be strongest in lower levels of the house.

Causes include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- Location of return-air vents to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks such as:

- Recessed lighting
- Attic hatch
- Duct leaks

INSTALLATION DISTANCES FROM FLAMMABLE MATERIAL

Minimum installation distances from flammable material:

- minimum distance from lateral flammable wall: 200mm – 8 inches
- minimum distance from flammable rear wall: 200mm – 8 inches
- minimum distance from flammable floor: 80mm – 3 inches

Minimum front distance from flammable material: 1000 mm – 40 inches

NOTICE: LA CASTELLAMONTE assumes no responsibility for the improper performance of the appliance system caused by:

- Inadequate draft due to environmental conditions
- Downdrafts
- Tight sealing construction of the structure
- Mechanical exhausting devices
- Overdrafting caused by excessive chimney heights

CERAMIC LINING

- The various ceramic parts must be handled with extreme care.
- Check the leveling of the floor where the stove will be installed.
- If you notice that the packaging is damaged or any lack of professionalism of the transporter at the stove delivery, sign the note with words “subject to control”.
- The installation must be done by at least two persons, carefully following the installation instructions provided in this manual.

ADVICE ON THE SAFETY OF CHILDREN AND ADULTS

During the stove functioning, the ceramic coating heats up progressively (until 40 / 50 °C) to give heat to the environment. It is very important to keep the children away from the stove in order to avoid touching the ceramic coating, with the risk of burns.

In addition, the ceramic glass and the metal door of the fireplace can get red hot; it is therefore essential to avoid touching these parts or leaving the stove lighted in the presence of unattended children.

As a general rule, it is essential to closely monitor children who are close to the lighted stove and to prevent them from touching it or attempting to open the fireplace door.

In relation to the instructions above, it remains at the Customer discretion the decision to install a protective shield around the stove or in front of the fireplace door.

HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down. Hot glass will cause burns.

- **Do not touch glass until it is cooled**
- **NEVER allow children to touch glass**
- **Keep children away**
- **CAREFULLY SUPERVISE children in same room as appliance.**
- **Alert children and adults to hazards of high temperatures**
- **High temperatures may ignite clothing or other flammable materials.**
- **Keep clothing, furniture, draperies and other flammable materials away.**

#° u° O u#°\ U "you\k

This wood heater uses a catalytic combustor, which **needs periodic inspection and replacement for proper operation**. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual, or if the catalytic element is deactivated or removed.

The temperature in the stove and the gases entering the combustor must be raised between 500° to 700° F for catalytic activity to be initiated. During the startup of a cold stove, a medium to high firing rate must be maintained for about 20 minutes. This ensures that the stove, catalyst and fuel are all stabilized at proper operating temperatures. Even though it is possible to have gas temperatures reach 600° F within 2 to 3 minutes after a fire is started, if the fire is allowed to die down immediately, it may go out or the combustor may stop working.

Once the combustor starts working, heat generated in it by burning the smoke will keep it working.

REFUELING: during the refueling and rekindling of a cool fire, or a fire that has burned down to the charcoal phase, operate the stove at a medium to high firing rate for about 10 minutes to ensure that the catalyst reaches approximately 600° F.

CATALYST MONITORING: it is important to periodically monitor the operation of the catalytic combustor to ensure that it is functioning properly and to determine when it needs to be replaced. A non-functioning combustor will result in a loss of heating efficiency and an increase of creosote and emissions. Following is a list of items that should be checked on a periodic basis:

- **combustors should be visually inspected at least three times during the heating season (and in any case at least every 45 days) to determine if physical degradation has occurred. Actual removal of the combustor is recommended if a more detailed inspection is warranted because of decreased performance. If any of these conditions exists, refer to Catalyst Troubleshooting section of this manual.**

This catalytic heater is equipped with a catalytic thermometer to monitor catalyst operation. Properly functioning combustors typically maintain temperatures in excess of 500° F and often reach temperatures in excess of 1000°

F. If catalyst temperatures are not in excess of 500° F, refer to Catalyst Troubleshooting section on this manual.

DO NOT OVEFIRE THIS HEATER - attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater and to the catalytic combustor.

Draft is the force which moves air from the appliance up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors. Too much draft may cause excessive temperatures in the appliance and may damage the catalytic combustor. Inadequate draft may cause back puffing into the room and plugging of the chimney or the catalyst. Inadequate draft will cause the appliance to leak smoke into the room through appliance and chimney connector joints.

A uncontrollable burn or excessive temperature indicates excessive draft.

COMBUSTOR TESTING

Follow these instructions to test the catalytic combustor:

1. light a fire per "LIGHTING AND COMBUSTION" instructions - page 19
2. after burning a well established fire for 1 hour, position the air regulation to a medium-low burn rate setting.
3. after 5 minutes at the lower burn rate, observe the location of the thermometer needle. A properly working combustor will have a temperature greater than 500F with the thermometer needle in the active zone. An improperly working combustor will yield thermometer reading in the inactive zone.
4. repeat step 3 for at least 3 burn cycles.
5. if the thermometer needles is still not reaching the active zone, your combustor may require inspection and cleaning.
6. if, after cleaning the combustor and reburning, the thermometer needle is still not reaching the active zone, your combustor may need replacing. Contact your local supplier for a replacement combustor
7. note: it is also possible that the catalytic thermometer itself may not be functioning properly. Before deeming the combustor "dysfunctional" please refer to the "catalytic thermometer" section.

COMBUSTOR CLEANING

Under certain conditions, ash particles may become attached to the face of the combustor. Any deposit on the face of the combustor must be removed. There are 2 ways to clean the face of the combustor:

1. brushing the combustor with a clean soft bristle paint brush
2. passing a vacuum cleaner wand or brush near the face of the combustor

Do not scrape the combustor with any hard tool or brush and do not run pipe cleaner through the individual cells of the combustor as this may damage the combustor and make it ineffective.

Note: simply burning a hot fire usually proves to be the best method of cleaning the combustor of deposits.

COMBUSTOR REPLACEMENT

If the catalytic combustor has been deemed "dysfunctional" per the lines in "combustor testing", do not use the appliance until the combustor is replaced. Follow the steps below to complete the replacement. **LA**

CASTELLAMONTE STRONGLY RECOMMENDS THAT YOUR DEALER OR CERTIFIED INSTALLER PERFORM THIS PROCEDURE.

DO NOT PERFORM ANY CLEANING UNTIL THE FIRE IS OUT AND THE APPLIANCE IS COOL. HOT ASH IN A VACUUM CLEANER BAG COULD MELT THE VACUUM AND COULD RESULT IN A HOUSE FIRE, CAUSING SERIOUS BODILY HARM.

1. the appliance must be cool to touch, having gone at least 12 hours without being burned. A combustor can reach 1400F and hold temperatures for several hours, even after the fire is out. After waiting 12 hours, begin by removing the smoke pipe on top of the stove.
2. Once the smoke pipe has been removed, you will have access to the combustor. The combustor is made in steel and caution should be taken so as not to drop or damage the combustor. If your combustor has never been cleaned according to the manufacturers directions, you may wish to clean the combustor before replacing it with a new one. Please refer to the "combustor cleaning" section.
3. to install the new combustor **DO NOT FORCE IT INTO THE STOVE COLLAR. TAKE YOUR TIME AND WORK IT INTO PLACE SLOWLY.**
4. once the combustor is reinserted, replace the smoke pipe on the stove. Do not operate the stove without the smoke pipe correctly installed.
5. **IMPORTANT REMINDER: do not burn anything other than dry, seasoned cordwood. Burning other materials may contaminate, obstruct or ruin your new combustor.**

COMBUSTOR TROUBLESHOOTING

PROBLEM: CREOSOTE PLUGGING

Possible cause: the combustor is coated with creosote burning material that produces substantial char and fly-ash.

Solution: burn only dry, seasoned cordwood. Do not burn materials such as garbage, gift wrap, cardboard, paper, wood derived from buildings or furnitures, vegetable waste, resinous wood.

Possible cause: burning wet, pitchy wood or burning large amounts of smaller diameter wood without the catalytic thermometer needle in the "optimum performance" zone.

Solution: burn dry, seasoned wood until temperatures are high enough to initiate catalyst activation (indicated by the catalytic thermometer needle in the "optimum performance" zone.

Possible cause: combustor not functioning.

Solution: if proper burning procedures have been followed and this problem persists, replace the combustor.

PROBLEM: COMBUSTOR PEELING

Possible cause: over firing can yield extreme temperatures at combustor surface and can cause peeling.

Solution: avoid extreme temperatures by adjusting size of fuel loads. If peeling is severe, replace combustor.

Minor peeling does not affect proper combustor function, while severe peeling needs combustor replacement.

PROBLEM: CATALYTIC DEACTIVATION

Possible cause: burning improper fuels (ie. garbage, pressure treated lumber, painted wood, etc...).

Solution: burn good quality, dry, seasoned wood. If proper burning procedures have been followed and this problem persists, replace the combustor.

PROBLEM: COMBUSTOR MASKING

Possible cause: the combustor is coated with a layer of fly-ash or soot from burning material that produces substantial char and fly-ash.

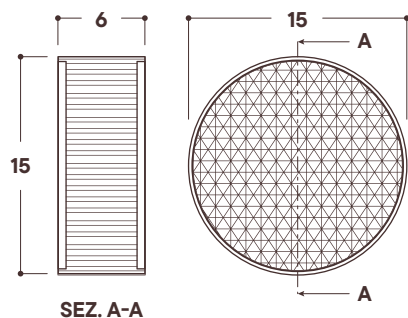
Solution: When the appliance is cool to touch, clean the front face of the combustor with a soft-bristled brush or vacuum lightly (refer to COMBUSTOR CLEANING for proper procedure).



An example of creosote plugging on the face of the catalytic combustor

FILTER DATA SHEET

Measurements in **cm**



CODE: CAT 15/60

Description: catalytic converter

Shape: round

Measurements (d x h): 15 x 6 cm

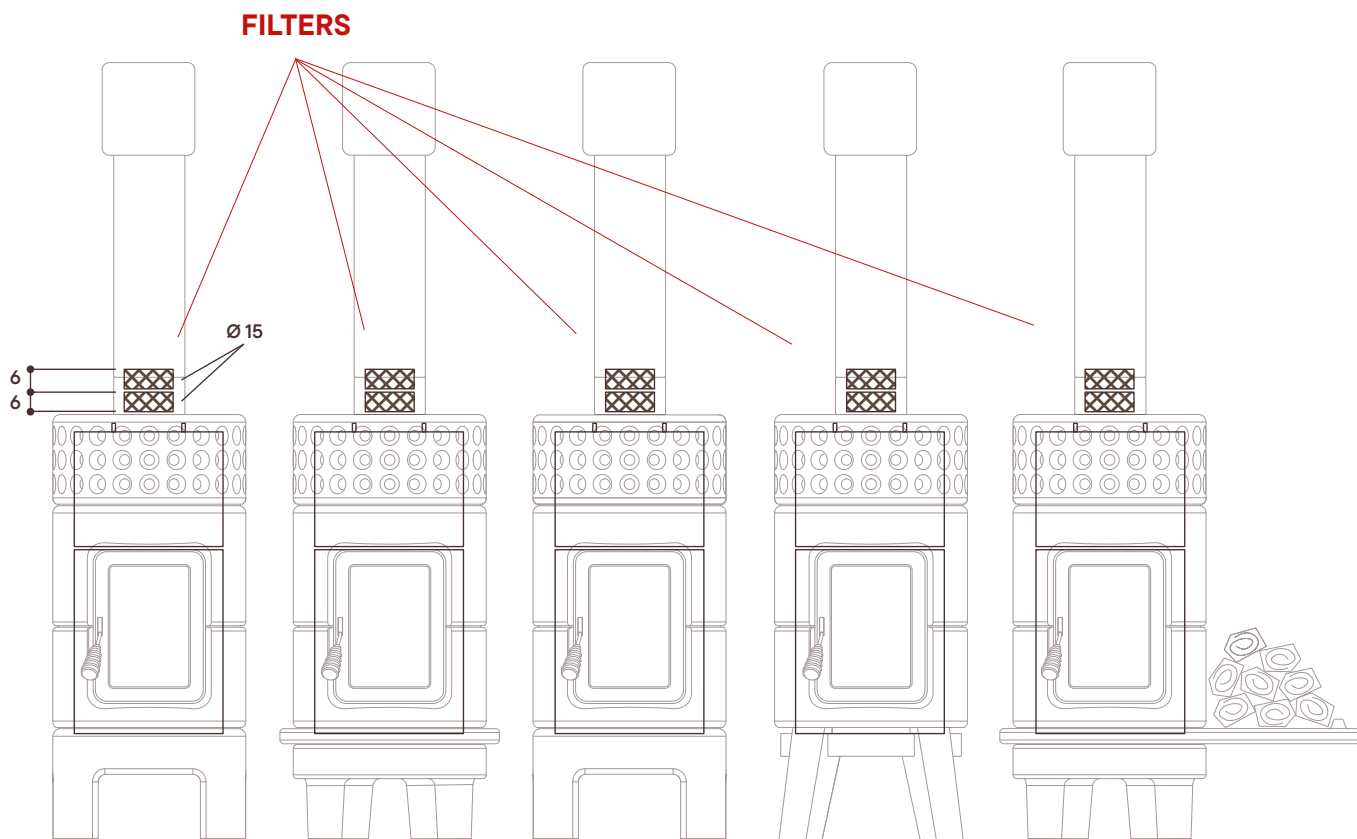
Material: refractory steel with impregnation

Operating temperature: -20 °C / + 800 °C

Melting temperature: 1400 °C

CATALYTIC FILTER POSITION

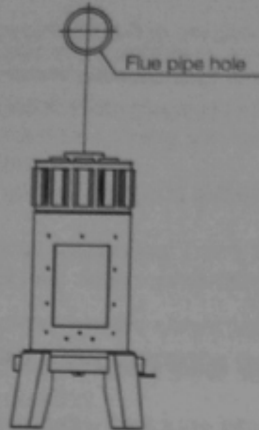
Measurements in **cm**



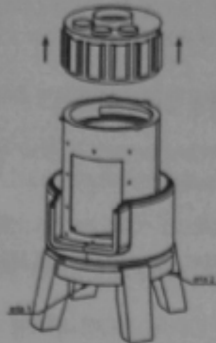
ASSEMBLY SCHEMES

ASSEMBLY SCHEMES

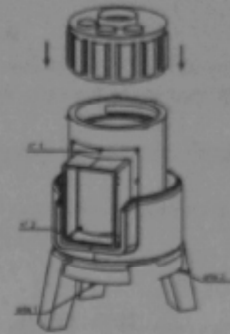
Round Stack - WOOD Base



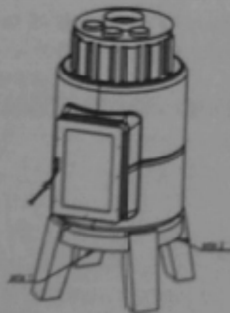
1. Position the fireplace in axis with the flue pipe hole.



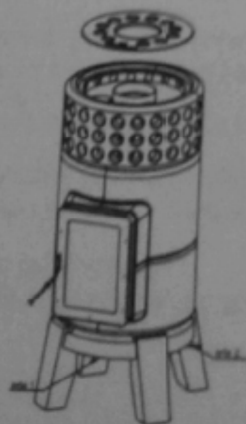
2. Unscrew and remove the door flange assembly. Put the 1st ceramic ring on the wood base.



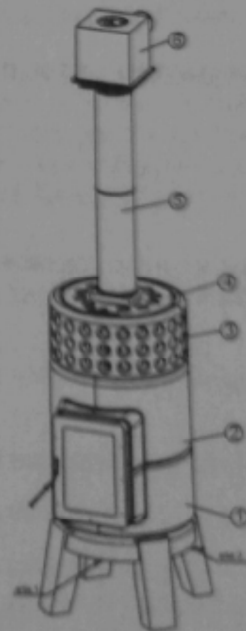
3. Door flange assembly with screws M6. To screw the flange, slightly move the 2 lateral refractory bricks. Start screwing n°1 and n°2. When finished (all screws) stack the exchanger and screw it.



4. Stack form above the second fireplace ceramic ring. Tuck the door into its hinges.



5. Stack the third ceramic pierced body element and the top cover.



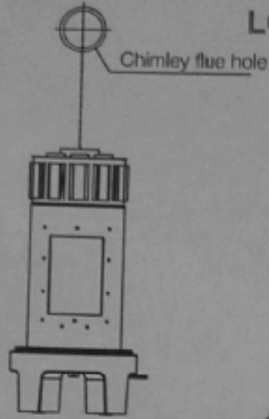
6. Flue pipe connection

- 1= First fireplace ceramic ring
- 2= Second fireplace ceramic ring
- 3= Third ceramic ring
- 4= Top cover
- 5= Ceramic column
- 6= Ceramic Cube

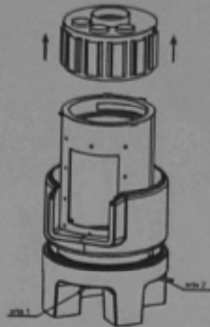
ASSEMBLY SCHEMES

ASSEMBLY SCHEMES

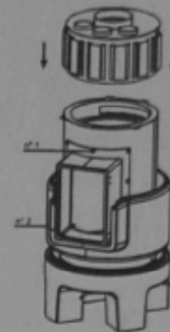
Round Stack - SLIM, RIM, LONG and SIDE base



1. Position the fireplace in axis with the flue pipe hole.



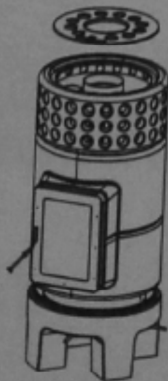
2. Unscrew and remove exchanger. Put the 1st ceramic ring on the wood base.



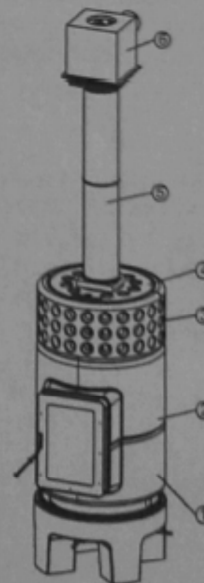
3. Door flange assembly with screws M6. To screw the flange, slightly move the 2 lateral refractory bricks. Start screwing r¹ and r². When finished (all screws) stack the exchanger and screw it.



4. Stack form above the second fireplace ceramic ring. Tuck the door into its hinges.



5. Stack the third ceramic pierced body element and the top cover.



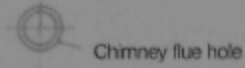
6. Flue pipe connection

- 1= First fireplace ceramic ring
- 2= Second fireplace ceramic ring
- 3= Third ceramic ring
- 4= Top cover
- 5= Ceramic column
- 6= Ceramic Cube

ASSEMBLY SCHEMES

ASSEMBLY SCHEMES

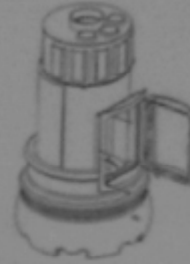
Rondò



1. Position the fireplace in axis with the flue pipe hole.



2. Insert ceramic base from above. Insert primary air dipstick in its hole and screw it.



3. Brass door assembly with 4 M6 screws in the four corners under the gasket. Put 2 M4 screws in the middle of the door.



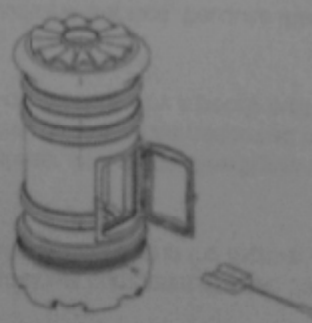
4. Insert ceramic fireplace from above. Put it near the door.



5. Insert the following ceramic rings from above.



6. Stack ceramic top cover. Connect to the chimney flue.



Ashes cleaning from the door with a proper shovel.

MAINTENANCE

WARNING! to prevent serious burns, do not perform any maintenance until the appliance is cool. Appliance surfaces, including the glass and any attached component, will remain hot for extended periods of time after the fire has been put out.

RECOMMENDED MAINTENANCE

It is strongly recommended to complete the following tasks on a regular basis throughout the heating season:

1. visually inspect catalytic combustor and clean as required (see COMBUSTOR CLEANING).
2. Check catalytic thermometer for proper calibration
3. remove all ash from firebox and ash drawer after final burn of season
4. check all gaskets for proper seal and adjust as required
5. inspect and clean the venting system

CATALYTIC THERMOMETER MAINTENANCE

ensure the fire is out and the appliance is cool, then remove the thermometer. While removed, confirm the thermometer indicator needle points towards the bottom of the "creosote buildup" zone (allow the thermometer to sit at room temperature for 10 minutes before checking). If the needle does not point towards the bottom of the "creosote buildup" zone, it may need adjustment. Contact your Dealer if replacement is needed.

MAINTENANCE

The installation of the stove must guarantee easy access for its cleaning, as well as for the cleaning of the flue pipes and of the chimney flue.

All maintenance operations must be carried out on the stove off and cold.

Ash disposal

The removal of the ashes from the fireplace is made with the proper paddle directly from the fireplace floor. All this must be done with the stove off and cold.

Remove the ashes from the fireplace before their level is so high as to close the primary air entrance. (see technical drawing of the stove interior – fig. 13 page 11). Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled. Do not place other waste in this container. **NEVER STORE HOT ASHES IN A GARAGE OR BASEMENT. HOT ASHES GENERATE CARBON MONOXIDE AND/OR FLAMMABLE GASES. THESE GASES MAY CAUSE SUFFOCATION AND POSSIBLE DEATH.**

Stove and chimney flue cleaning - 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 slow burning fire. As a result, creosote residues accumulate in the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire. In normal conditions, where no creosote accumulates, the stove, the flue pipes and the chimney flue can be cleaned once a year.

Heat exchanger cleaning

For the internal cleaning of the heat exchanger: lift the ceramic top cover, unscrew the door on the exchanger (it is recommended to moisten the screws with special lubricants before starting to loosen) and check that the space between the tubes is free, otherwise remove the soot with a special brush and vacuum cleaner.

Ceramic cleaning

The ceramic lining should be cleaned with a soft and dry cloth. DO NOT WET AND NEVER CLEAN THE CERAMIC WHILE IT IS HOT, THE THERMIC SHOCK COULD BREAK IT.

Glass cleaning

Do not clean the glass with materials that can scratch or damage it, the scratches could develop into cracks or breaks.

Do not clean the glass when it is hot, but wait until it cools down.

Use wet cloth with warm water or with suitable products.

Glass, gaskets and door gaskets replacement on RONDO' stove

1. Put some thick blanket or some bubble wrap on the ceramic base, to protect it from object falling on it.



2. Unscrew the screws of the top plate and remove it



3. Unscrew the screws of the side and lower plates and remove all of them

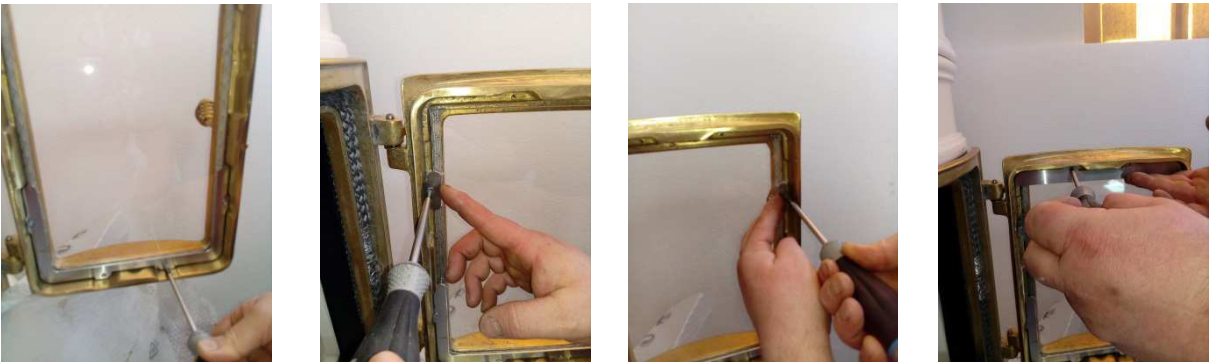


4. Remove glass

5. Replace new glass with its proper gasket



6. Screw the plates back



7. Remove the old gasket if necessary and place the new one



Glass, gaskets and door gaskets replacement on round stack stove

1. Remove the door from the stove by pulling it up from the hinges – and position it on a soft covered (bubble wrap) table with the ceramic handle out of the support plane.



2. Unscrew the 10 screws and lift the glass frame stop



3. Remove the glass



4. If necessary, replace the door gasket - be sure to put the gasket exactly in its proper position (see picture below)



5. Place the new glass and screw back the 10 screws of the frame glass stop



6. Replace the door on the stove by sliding it into its hinges



We suggest the need for regular maintenance by the Manufacturer or by a qualified technician.

WARRANTY

La Castellamonte will replace or repair the goods or its individual components when they are found in lack of conformity which existed at the time the goods were delivered in the manner and extent permitted by the law. (d. lgs 206/05)

The warranty does not cover defects caused by the purchaser as a result of negligent use, by the use of not suitable fuel and with a moisture content above 15%, by maintenance performed by unauthorized persons, by modifications and substitutions of individual components, by a poorly built and not suitable chimney flue.

This warranty does not extend to the refractory bricks inside the fireplace, because their duration depends on how wood is loaded by the User.

The cost of repair or replacement of the goods shall be borne by the Seller. The buyer agrees to make use of this warranty, subject to revocation, to inform the Seller of any lack of conformity within 8 days of discovery.

The warranty period is 2 years from delivery.

In addition to the legal warranty, the Seller guarantees the ceramic parts for an additional period of 1 year.



*Stufe da sempre. Per sempre.
Stoves since 1975.*

LA CASTELLAMONTE di R. Perino e S. Neri Snc

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