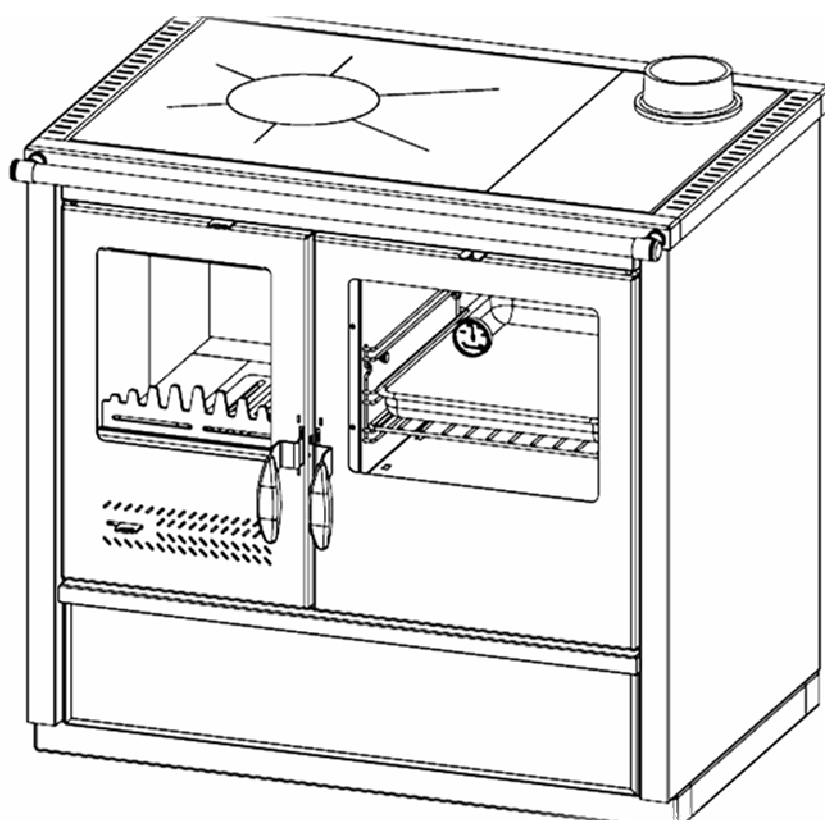


# NORTH

Owners's manual

INSTALATION, ADJUSTMENT AND OPERATING INSTRUCTION



**CE**

**EN 12815**

Dear Customer,

We appreciate your trust vested in us and decision to use "TIM SISTEM" product.

You have invested in energy-efficient and high-quality product - NORTH wood burning cooker.

Your purchase will provide you long-term clean and comfortable heating with minimal maintenance.

Please read these instructions carefully and completely.

Its purpose is to inform you about the installation, operation and maintenance of your stove. Keep it handy and refer to it as needed. You will find in it information that will be useful now and in the years to come.

Make sure that when installing the stove all security standards have been respected and that all gas pipes, connections between tubes and pipes and walls are connected properly.

Failure to comply with these standards and carelessness during installation can result in damage to property or put your health and life in danger!

Set your cooker to a safe place, away from the frequent passages and doors, somewhere near chimney and chimney connection.

We wish you many pleasant moments with NORTH.

TIM SISTEM d.o.o.

**Safety: UL1482 ; ULC-S627**

**U.S. Environmental Protection Agency**

**This unit is not a certified wood heater. The primary use for this unit is for cooking and baking.**

**Tested by: GUARDIAN Fire Testing Laboratories, Inc**

[gftli@earthlink.net](mailto:gftli@earthlink.net)

[www.firetesting.com](http://www.firetesting.com)

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**Imported by: Sopka Inc**

[www.sopkainc.com](http://www.sopkainc.com)

[contact@sopkainc.com](mailto:contact@sopkainc.com)

## **WARNING BEFORE USE**

To keep your cooker working properly, it is important to read this manual and strictly stick to the instructions for use and handling.

For use with solid fuel only, such as wood and wood briquettes. It is forbidden putting explosive devices and materials combustion chamber or the limited thermal furnace. It is forbidden to keep flammable materials near the stove.

For proper combustion, in normal operating mode, draft in the chimney should be 10-12 Pa. If the draft is greater than 15Pa, the valve should be installed in the chimney.

Room where the cooker is positioned must be vented regularly for the fresh air needed for combustion.

Some parts of cooker heat up during operation and it takes appropriate precaution when handling it. Do not allow children to handle and play near the cooker.

Only spare partes reccomended and allowed by the manufacturershould be installed on the cooker. You must not make any changes on the cooker.

With first firing there might show a mild smoke, especially from the plate's surface. It is a common appearance that occurs due to combustion deposits on the plate's surface (corrosion protection, paint, dust ...). The room where the cooker is should be vented during the first firing.

It's not reccomended connecting the cooker to the common chimney because it can adversely affect the required draft.

Device that uses gas as fuel must notbe connected to same chimney.

During firing, use protection gloves because the door handles get heated.

National and local regulations for the installation of the furnace must be respected.

**In a case of non-copliance with instructions given in this manual, manufacturer does not take any kind of responsability for caused damage.**

## DESCRIPTION OF THE COOKER

North Wood burning cooker is intended to be used for cooking and baking food and it's manufactured and tested according European EN 12815 and UL1482, ULC-S627, American and Canadian standards.

The upper plate of the fireplace is made of steal.

Firebox doors are made of steal with fireproof glass.

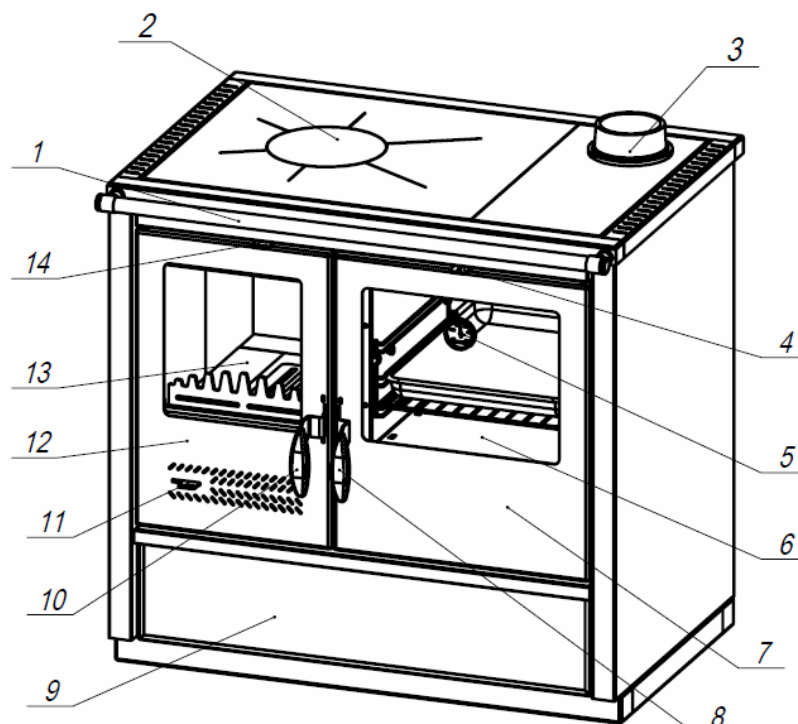
Connection for smoke drainis being put on the plate and connected with screws.

All the materials that NORTH cooker is made can be recycled.

Sealing elements are made of materials that NOT contain asbestos.

### Parts of the COOKER:

- |                        |                             |
|------------------------|-----------------------------|
| 1. Protection rail     | 9. Wood drawer              |
| 2. Hotplate            | 10. Firebox door handle     |
| 3. Smoke exhaust       | 11. Primary air regulator   |
| 4. Flue gases register | 12. Firebox door            |
| 5. Thermometer         | 13. Firebox                 |
| 6. Oven                | 14. Secondary air regulator |
| 7. Oven door           |                             |
| 8. Oven door handle    |                             |



## TECHNICAL DATA

Name		NORTH
Use		Solid fuel cooker
Nominal power	Btu	31,500
efficiency	%	84
Fuel		Wood, wood briquets
Dimensions of the cooker W x L x H	in	35.5x23.7x33.5
Dimensions of the fire place W x L x H	in	11.5x17.7x11
Dimensions of the oven W x L x H	in	13.8x18.7x11.6
Weight	lbs	265
Minimum distance from flammable materials		
Back	in	6
Side	in	6
Front	in	36
Content CO (reduced on 13% O2) [%]	%	0,091
Chimney connection	in	6
Chimney connection position		Left/right upper plate
Consumption by nominal power	kg/h	1,5
Emission temperature	°C	239
Air regulation		Primary
		Secondary
Required draft	Pa/wc	12±2/ 0.040 – 0.057

## INSTALLING THE COOKER

Cooker must not be set up near the wooden parts, refrigeration parts, plastic furniture and other flammable materials because during operation (during fuel combustion) it achieves high operating temperature that is distributed on the outside of the furnace. Minimum distance between the stove and the surrounding elements is 6".

If the ground on which you set the cooker is made of easily flammable material (wood, warm floor, laminate ...) you need to set under the cooker a protection sheet metal or any non flammable floor protector.

Because of its weight, the cooker must be installed on the appropriate base. If it does not satisfy necessary standard, you must take appropriate measures to make it possible (eg, weight distribution).

Connect the cooker to a chimney and flue pipes through the connector on top of the furnace, so as to ensure adequate tightness and flow of smoke from the stove to the chimney. Flue pipe must not be drawn too deeply into the chimney that would reduce the cross sectional area and thus undermined draft in the chimney. Do not use reducers which reduce the cross section of pipe smoke.

The cooker requires insertion of fresh air in the room where it is installed, with surface openings for insertion of fresh air should not be less than  $0.4 \text{ dm}^2$ . The unit for fresh air set outside the common room for ventilation, which must be insured by door and grille.

Fans that work in the same room where the cooker is installed may make interference with the cooker. Also, all devices or ventilation that creates negative pressure in the room where the cooker is installed, must be set in the way that does not make decompression that prevents normal operation of the furnace.

Before installing the cooker, check the chimney drafts because it is a key factor in the proper functioning of the cooker. Draft depends on the proper operation of the chimney and meteorological conditions. One of the easiest ways to check the draft in the chimney is with a candle flame, as shown in Figure 2. Put a candle near the chimney connection drain. If the flame bends towards drain, the draft is satisfying (Figure 2b). If the flame doesn't bend or bends a little, that indicates poor draft (Figure 2a).

If there is poor draft in the chimney (Figure 2a), check the chimney operation. The chimney should be located inside the building, and if it's located on the external walls of the building, it's recommended insulation chimney.

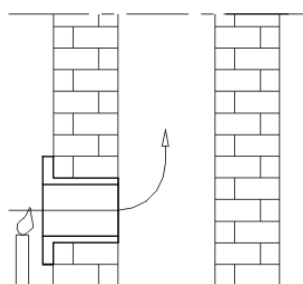


Figure 2a.

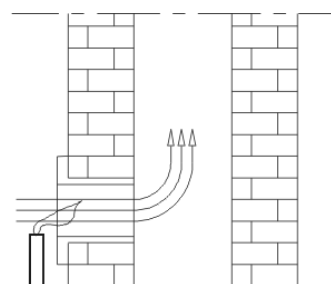


Figure 2b.

### Disadvantages of the chimney (Figure 3):`

1. The chimney is higher than the top of the roof, a small cross section of the output,
2. Excessive slope
3. A sudden change of direction of the flue channel
4. Stove or some other device connected to the same flue channel,
5. Bulges in the flue channel
6. Cracks
7. Alien body or accumulated grime,
8. Tube inserted too deeply,
9. Fan or other device that creates a vacuum in the room
10. Unsealed or opened cleaning hole

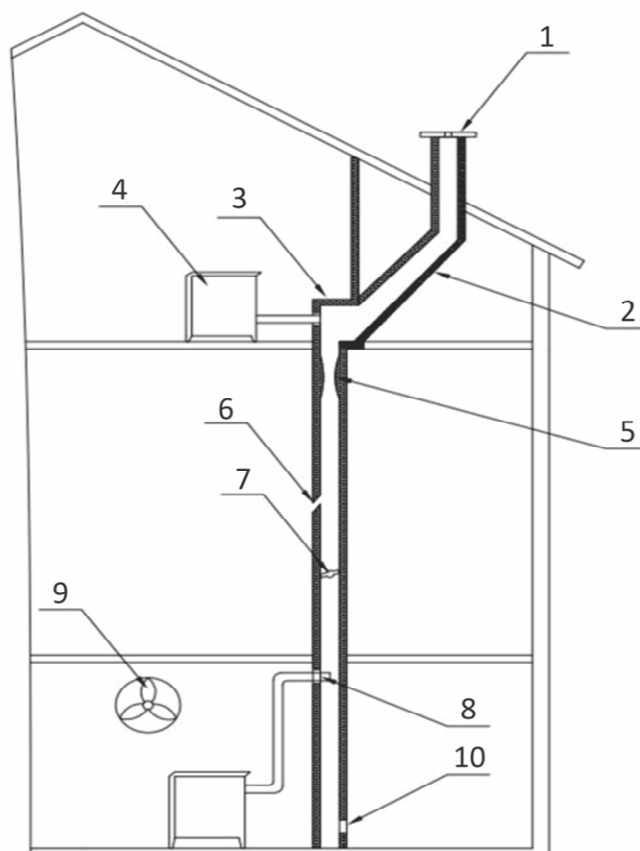


Figure 3.

## IGNITION AND LIGHTING

Before the first firing, wipe all painted surfaces with clean and dry cloth, in order to avoid burning impurity on the oven and creation of unpleasant smells.

Start the fire in the stove by following order:

- open the fire door,
- place the fuel into the fire place (chopped wood to non greasy wrinkled paper)
- light a fire
- leave open primary air regulator until the flame gets stable and after having stabilized the flame, control burning intensity with draft regulator (Fig. 1, pos. 11)
- secondary air regulator leave opened until the flame gets stable and after having stabilized the flame, control burning intensity with regulator (Fig. 1, pos. 14)
- close the firebox door,
- after creating a basic flame insert larger pieces of wood or briquettes in the firebox, and close the firebox door. If you use briquettes as a fuel, you must wait that all briquettes are lit and then reduce the draft in half.
- when adding fuel, (Fig. 1, pos. 12) open the fire door step by step wait for 4-5 seconds, and then slowly open it wide.

Do not open the doors suddenly, when there's a strong flame in the combustion chamber, it may come to it's spreading into the room.

Regulating the draft in the cooker, you can regulate temperature, power and the combustion of fuel, and this is done by running draft regulator on the firebox door (Fig. 1, pos. 11). Combining primary air through the regulator on the firebox door and secondary air over the leverage above the firebox door (Fig. 1, pos. 14) you get desired combustion.

Cooker contains auxiliary tools in order to facilitate its maintenance.

Recommended fuel: cord wood max length 16".

You must not use gasoline and similar fuels, because by using liquid fuels you create conditions for damaging the stove and to provoke an explosion.



## Attention!

- Do not use organic waste as fuel, food residue, plastic, combustible or explosive materials, which combustion disturbs the proper functioning of the cooker and may cause damage and environmental pollution.
- Increased ambient temperature can cause poor air circulation (drafts) in the chimney, and in that case is recommended more frequent firing in smaller quantities.
- Avoid using the cooker when there are bad weather conditions for the cooker and in the case of strong wind, because it reflects the required vacuum in the chimney. In these cases there may occur potential return of smoke in the room where the cooker is placed. Ignition is difficult then.

We recommend firing every hour with the amount of fuel in the combustion chamber up to 15cm with cross stacking wood for better airflow.

After each refilling, it's recommended to leave the oven running in full speed for 30 minutes, in order to destroy all volatile elements that may cause condensation in the cooker.

Correct cooker operation demands:

- Regular cleaning of the cooker and chimney
- Regular room ventilation for better combustion
- Regular ash tray cleaning
- Accumulated slag and unburned material regularly remove from the grid

## WORKING REGIMES

There are four working regimes, which could be selected by adjusting the draught in the cooker.

**Combined** working regime - working regime in which it could be cooked in the oven, cooked on the top of the hotplate and heat the room at the same time. It is necessary to push the flue gas register handle towards the inside of the cooker, move primary air regulator to create medium inlet of the air.

**Quick cooking** - during this process it is the hotplate heats up intensively and to be able to do that with small quantity of fuel, draw flue gas register handle completely outside, oven door should be shut and move primary air regulator to create medium inlet of the air.

**Heating** - Push the flue gas register handle towards the inside of the cooker, move primary air regulator to create medium inlet of the air and the oven's door closed.

**Baking** for this regime push the flue gas register handle towards the inside of the cooker, move primary air regulator to create medium inlet of the air and the oven's door closed after putting the baking pan inside.

## HANDLING THE COOKER OPERATION

Start a fire with a moderate flame in order to avoid thermal shocks.

The following amounts of wood are inserted only after the previous volume burn.

Do not allow that ashes and unburned accumulate on the grid and to tap that way. Clean the grid.

Open the door slowly and carefully, allowing that way equalization of pressure in the firebox and in the room, otherwise it might cause the smoke in the room.

The cooker is designed and intended for use with firebox door constantly closed, except during refueling. Do not open the door with no need.

The wood must be a maximum of 19% moisture content for maximum fire effect. Otherwise the tar gets separated which with water steam may create creosote. If that happens in some bigger quantity, it may lead to a chimney fire. You will most easily recognize chimney fire by: the characteristic sound that comes out of the chimney like loud roaring, visible flames coming out of the chimney, high ambient temperatures of surrounding walls and the characteristic smell of burning.

If there comes to the fire do the following:

- Immediately call the fire squad
- muffle oxygen supply to the chimney and turn off the cooker
- Do not insert anything into the chimney and make sure that the fire does not spread to the wooden construction or other combustible materials in its nearby.
- DO NOT pour water into the cooker or chimney
- A fire in the chimney can be extinct only with dry powder
- Water can extinguish only a surrounding material
- Do not cool the surrounding walls with water

Note:

If the fire in the cooker for some reason becomes dangerously strong take the following measures: close air dampers that provide air for combustion. If it is necessary put in the firebox specially prepared sand for this purpose or non-combustible fire blanket. It would be good to have a fire extinguisher.

Before the second charging, clean the grid in order to provide the fresh air.

Regularly clean the ash pan making sure that there is always a place for ashes.

The furnace is designed to operate in periodic mode. To maintain the required nominal power, combustion chamber is periodically filled with prestabled amount of fuel.

Furnace is not designed to operate in continuous mode of heating or in accumulating temperature mode.

## CLEANING AND MAINTENANCE

Regular and proper cleaning allows proper operation and long life of the stove. All cleaning the interior or exterior surfaces are always performed in a cold oven.

Cleaning exterior surfaces - is done with a soft cloth that will not damage the surface of the stove. Cleaners of chemical origin can damage the surface of the fire place and cannot be used. Painted surfaces must not be cleaned with abrasive products.

Cleaning inter surfaces –when cleaning use protective gloves.

Clean the bottom of the oven from accumulated ash and pick up small unburned pieces of the grid, clean the ashtray and ash accumulated in the interior of the fireplace.

Cleaning glass surfaces - glass on the firebox may get dirty during the operation. For cleaning use a mild detergent. Do not use abrasive cleaners because they can damage the surface of the glass. Clean the glass only when cool.

Cleaning and maintenance of the chimney - chimney cleaning and control is recommended at least once a year and after a long downtime. Regular maintenance and control of the chimney will prevent the occurrence of fire and poor operation of stow.

### Malfunction. Recommendations for its elimination

The following table shows the most common defects and recommendations for their removal.

Table: Showing the most common malfunctions, possible causes and ways of eliminating it.

Malfunction	Possible cause	Howe to remove it
Oven heats poorly	improper handling, Poor uptake	Read carefully and follow the instructions. Inthe case that despite all instructions have been respected, malfunctions are still not removed, call the customer service
Difficulties in lighting fire	Closed regulator of air supply, Wet wood, Lack of oxygene	Open the regulator of air supplyand provide a supply of a primary air Use a dry wood Ventilate a room in order to provide a supply of fresh air
Smoke reenters into a room	Closed regulator of air supply, Insufficient draft, Remainings of ashes on a grid	Open the regulator of air supplyand provide a supply of a primary air Read carefully the instructions and apply advices how to provide a draft Clean the grid
Glass on a firebox door are getting sooty for a while	Wet wood Too much fuel Insufficient draft	Use a dry wood Check a suggested quantity of a fuel provided in a user's manual

	Closed intake of secondary air	Check a connection with a chimney Read carefully the instructions and apply advices how to provide secondary air
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## GENERAL RECOMMENDATION

If you have followed all the recommendations for installation, operation and control of cleaning, given in this manual, the stove is now tested, safe device for household use.

Before installing the stove, remove the package. Be aware of potential injuries because the wooden slats are connected with nails. Dispose a plastic bag in accordance with the regulations. Old stove you do not want to use anymore, dispose to designated areas in accordance with the regulations.

All complaints, perceived failure or malfunctioning stoves, should be reported to the factory or authorized service center by telephone or in written, only with fiscal receipt. All contact information provided at the end of this guide.

Any malfunction of the cooker, must be removed by the manufacturer's service only.

If unauthorized persons carry out any servicing or repairs and alterations to the stove, the owner loses the right to the manufacturer's warranty.

Supply of spare parts has to be done via manufacturer's service, based on the position and image of this manual.

The manufacturer does not assume any responsibility if the buyer fails to comply with the instructions for use and installation of the stove.

## ADVICES FOR ENVIRONMENT PROTECTION

### PACKAGING

Packaging material is 100% recyclable.

For a waste disposal of, act in accordance with local regulations.

Packaging material (plastic bags, polystyrene parts-polystyrene, etc.), should be kept away from children, as a potential source of danger.

Take care of safe removing and disposing of wooden boards because they are connected with nails.

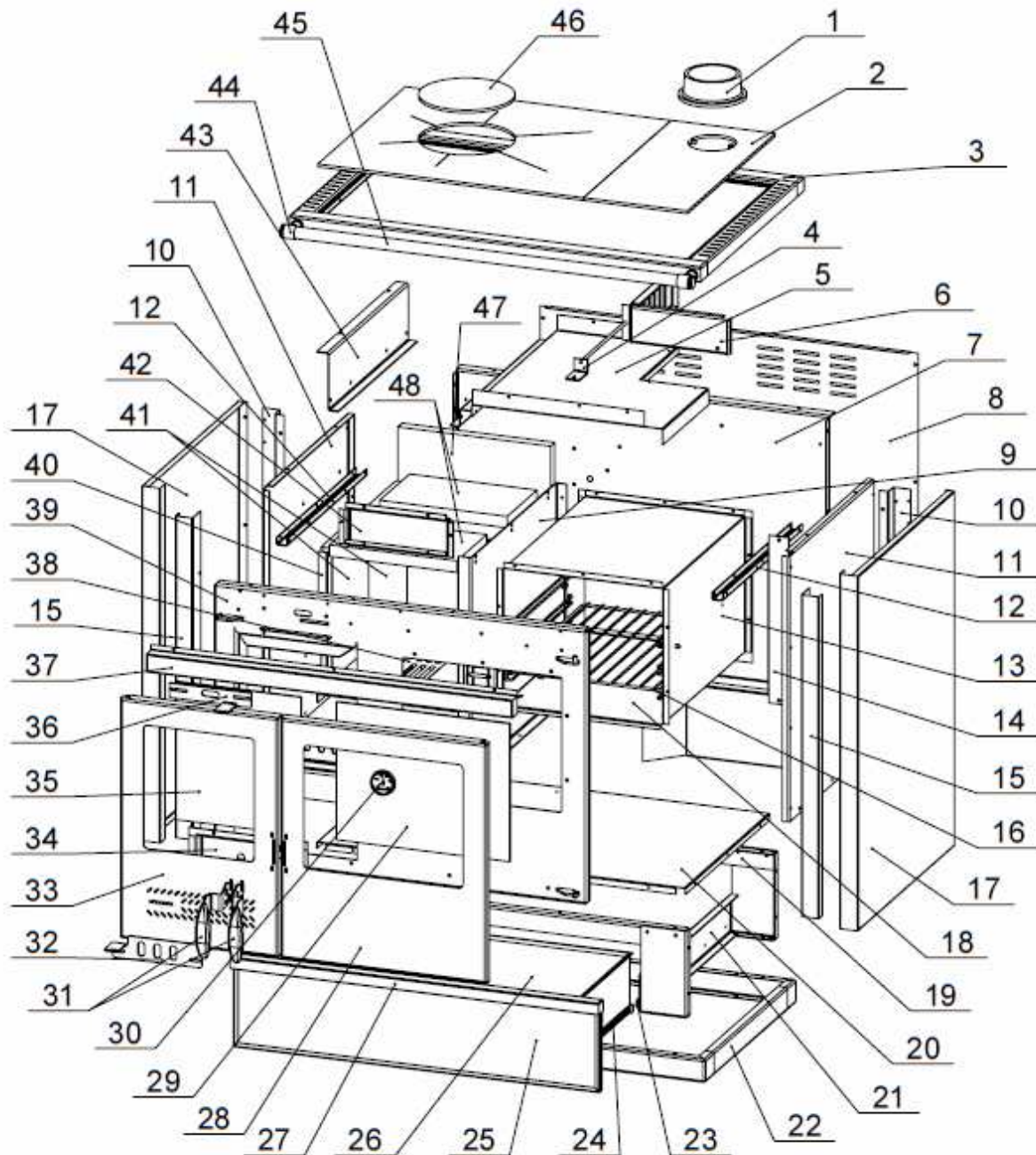
## PRODUCT

The device is made of materials that can be recycled. When disposing the waste, act in accordance with environmental laws in effect.

Use only the recommended fuel.

It is forbidden burning an inorganic and organic materials (plastics, plywood, textile, oiled wood, etc.), because the combustion releases carcinogenic materials and other toxics.

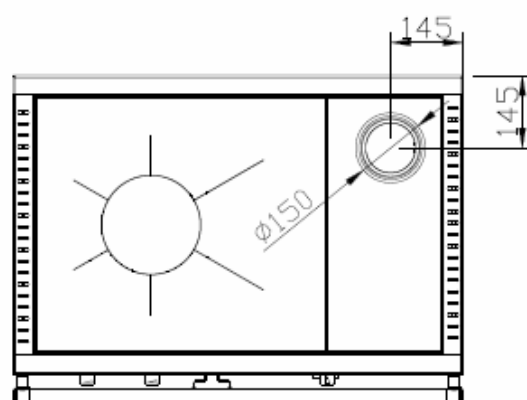
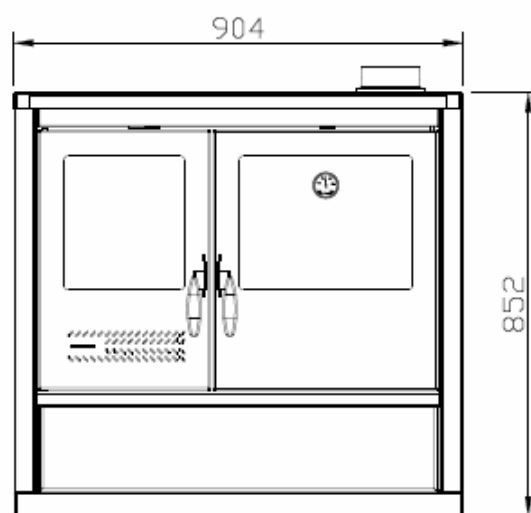
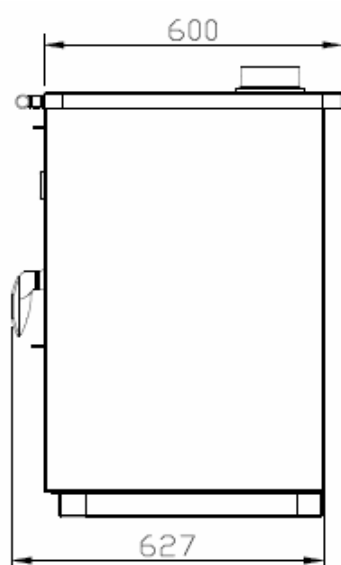
## SOLID FUEL COOKER "NORTH"



## List of all Positions on the "NORTH" cooker

1. Smoke exhaust
2. Hotplate carrier
3. Cookers frame
4. Flue gas register handle
5. Oven protector
6. Flue gas register
7. Rear inner panel
8. Rear exterior panel
9. Partition firebox panel
10. Rear carrier side panel
11. Inner side plate
12. Carrier side brick
13. Assembly oven
14. Deflector below the oven
15. Front carrier side panel
16. Oven grill
17. Side panel
18. Bottom of the oven
19. Corps carrier
20. Bottom plate
21. Mount drawer slide
22. Base assembly
23. Stationary slider
24. Moving slider
25. Decorative drawers mask
26. Wood drawer assembly
27. Wood drawer handle
28. Oven door
29. Oven door glass
30. Thermometer
31. Doors handle
32. Primary air regulator
33. Firebox door
34. Primary air box
35. Firebox door glass
36. Secondary air regulator
37. Decorative plate
38. Grill
39. Front plate assembly
40. Front plate protector
41. Side brick
42. Secondary air box
43. Side panel protector
44. Protection rail carrier
45. Protection rail
46. Hotplate
47. Back brick
48. Uper brick

## DIMENSIONS OF THE COOKER



# Owner's Manual

Tested to UL 1482, ULC-S627 *Solid Fuel Cook Stove*  
Tested to: EN 12815

**PLEASE READ ALL INSTRUCTIONS BEFORE YOU INSTALL YOUR NEW STOVE. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.**

**SAFETY NOTICE: FOR YOUR SAFETY, CONTACT LOCAL BUILDING OR FIRE OFFICIAL ABOUT PERMITS, RESTRICTIONS, AND INSTALLATION REQUIREMENTS FOR YOUR AREA. PLEASE CHECK WITH YOUR INSURANCE BEFORE USING IN YOUR HOME. USE PROFESSIONAL INSTALLER.**

## CAUTION

Hot while in operation- do not touch Contact may cause skin burns

Keep children and clothing away

Keep furnishing and other combustible materials a considerable distance away from stove.

Do not overfire. If stove or chimney connector glows, you are overfiring

**DO NOT INSTALL IN MOBILE HOME OR TRAILER**



## ***SAFETY INSTRUCTIONS***

***Read all instructions carefully.***

1. The installation of this stove must comply with your local building codes. Please observe the clearance to combustible. Stove must be 6"(15 cm) from any combustible material, wall, wood, furniture, paper, etc.
2. Always connect this stove to a chimney and vent outside. This stove requires approved masonry or factory build 6" diameter UL 103 Type HT chimney, that is high enough to give good draft.
3. Do NOT connect this stove to a chimney flue serving another appliance.
4. Be sure that your chimney is safely constructed and in good repair. Have chimney inspected by the fire department or a qualified inspector.
5. Creosote or soot may build up in the chimney connector and chimney and may cause a house or building fire. Inspect the chimney connector and chimney twice monthly during the heating season and clean if necessary.
6. Burning any kind of fuel uses oxygen from the dwelling. Provide fresh air for proper combustion from outside the house into the room where the stove is located.
7. To prevent injury, do NOT allow anyone to use this stove who is unfamiliar with the correct operation of the stove. Do not operate stove while under the influence of drugs or alcohol.
8. Flue connector pipe should be 6" diameter, minimum single wall 24 msg black or 25 msg blued steel. (Listed to UL 103, Type HT and evaluated to CAN/ULC-S629-M87)
9. Do Not overfire. The special paint used on stove may give off some smoke and an odor while they are curing during first few fires. Open windows and doors as needed to clear smoke and odor. Overfiring may cause some damage to the stove.
10. Use only dry, seasoned, natural untreated wood. Do not burn garbage or flammable fluids, such as gasoline, naphtha, kerosene or engine oil.
11. Use the metal ash drawer only to dispose of ashes. Dispose of ashes in a metal container with a tight fitting lid. Keep the closed container on a non-combustible floor, well away from all combustible materials. Keep ashes in the closed container until all cinders have thoroughly cooled. The ashes may be buried in the ground or picked up by a refuse collector.
12. CAUTION: Hot while in operation. All person, especially young children should be alerted and trained to stay a safe distance from the stove. Small children should be all the time care-fully supervised when they are in the same room with the stove.
13. This stove requires non-combustible floor protection.
14. Keep stove area clear and free from all combustible materials such as gasoline and/or other flammable vapors and liquids at minimum 40".
15. Never leave an unattended woodstove burning on high.
16. It is highly recommended to install smoke and carbon monoxide detectors in the home when installing a wood stove.

**SAVE THESE INSTRUCTIONS**

## ***INSTALLATION INSTRUCTION***

**NOTE: FLOOR EMBER PROTECTION IS REQUIRED FOR SPARK AND ASH SHIELDING, NOT FOR LIMITING FLOOR TEMPERATURE FROM THE RADIANT HEAT OF THE APPLIANCE.**

1. Proper clearances must be maintained for adequate air circulation. Adequate ventilation must be provided while operating this stove.
2. The stove must be placed on solid masonry, solid concrete, or when installing on combustible floor, on a UL 1618 listed floor protector or flammable floor must be protected by in-sulating plate ( steel, brass, marble, stone, ceramic tiles, etc.) . The base must extend at least 18" (46 cm) beyond the front of the stove and 8"(20 cm) to the sides, and **MUST** extend under the stove pipe. (Check local building codes and fire protection ordinances.) Floor protector minimum size; 52" x 50" (131cm x 126cm)
3. The stove must have its own flue. **DO NOT CONNECT THIS UNIT TO A CHIMNEY SERVING OTHER APPLIANCES.**
4. Connect flue collar to the stove and adapter for creosote leakage. The crimped end of the stove pipe must be installed facing down to fit inside the adapter. Figure 1, page 11
5. Use three (3) sheet metal screws at each joint of stove pipe and adapter to firmly hold stove pipe together. Use 6" round black/blue stove pipe (Listed to UL 103, Type HT and evaluated to CAN/ULC-S629-M87) **NOT** galvanized pipe. **DO NOT CONNECT THIS STOVE TO ANY AIR DISTRIBUTION OR DUCT SYSTEM.**
6. Slope any horizontal single wall pipe and ceiling stove pipe upward toward the chimney at least 1/4 inch for each foot of horizontal run.
7. You must have at least 18" of clearance between any horizontal pipe and ceiling.
8. The stove pipe must **NOT** extend too far into the chimney flue.
9. It is recommended that no more than two (2) 90 degree bends be used in the stove pipe installation.
10. Connect to 6" inspected masonry chimney or 6" UL Type HT listed chimney.

### **MASONRY CHIMNEY**

Before using an existing masonry chimney, clean the chimney, inspect the flue liner and make any repair needed to be sure it is safe to use.

If connector stove pipe must go through a combustible wall before entering the masonry chimney, consult a qualified mason or chimney dealer. The installation must conform to local fire codes, and NFPA 211.

Do **NOT** connect this stove into the same chimney flue as the fireplace or flue from another stove. If there is a cleanout opening in the base of the chimney, close it tightly.

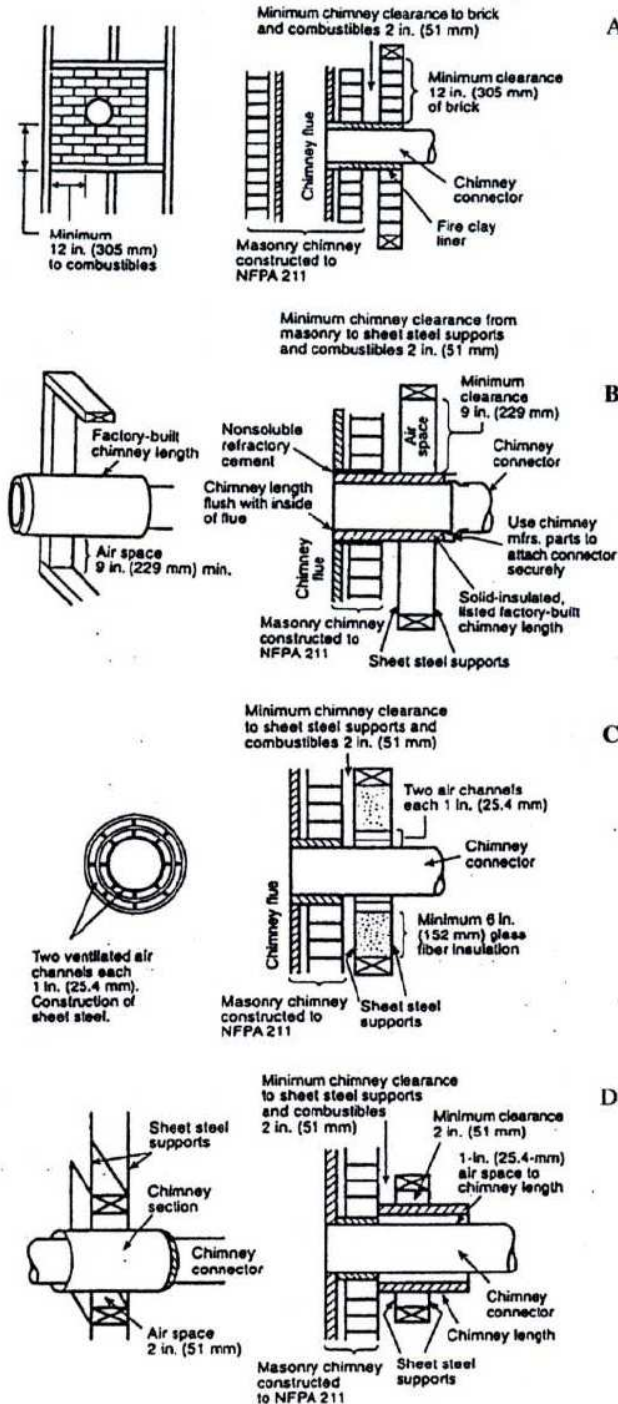
### **UL LISTED CHIMNEY**

Carefully follow chimney manufacturer's instructions. Use only a UL 103 Type HT Listed Residential Type and Building Heating Appliance Chimney. The top of the chimney must be at least three (3) feet above the roof and be at least two (2) feet higher than any point of the roof within ten (10) feet.

**A PROFESSIONAL, LICENSED HEATING AND COOLING CONTRACTOR SHOULD BE CONSULTED IF YOU HAVE QUESTIONS REGARDING THE INSTALLATION OF THIS SOLID FUEL BURNING APPLIANCE.**

## Chimney connector systems and clearances

Chimney connector shall not pass through attic or roof space, closet or similar concealed space, or a floor, or ceiling. When passage through a wall, or partition of combustible is desired, the installation shall conform to CAN/CSA-B365, Installation Code for Solid-Fuel-Burning Appliances and Equipment:



### A. Brick Masonry

Minimum 3.5-inch thick brick masonry all framed into combustible wall with a minimum of 2-inch brick separation from clay liner to combustibles. The fireclay liner shall run from outer surface of brick wall to, but not beyond, the inner surface of chimney flue liner and shall be firmly cemented in place.

### B. Insulated Sleeve

Solid-insulated, listed factory-built chimney length of the same inside diameter as the chimney connector and having 1-inch or more of insulation with a minimum 9-inch air space between the outer wall of the chimney length and combustibles.

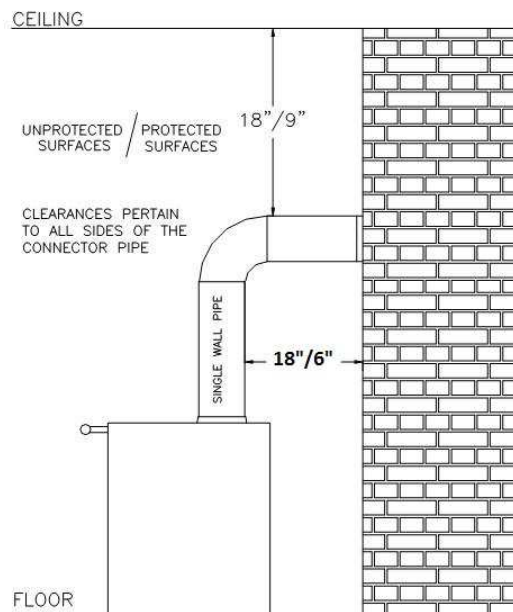
### C. Ventilated Thimble

Sheet steel chimney connector, minimum 24 gauge in thickness, with a ventilated thimble, minimum 24 gauge in thickness, having two 1-inch air channels, separated from combustibles by a minimum of 6-inch of glass fiber insulation. Opening shall be covered, and thimble supported with a sheet steel support, minimum 24 gauge in thickness.

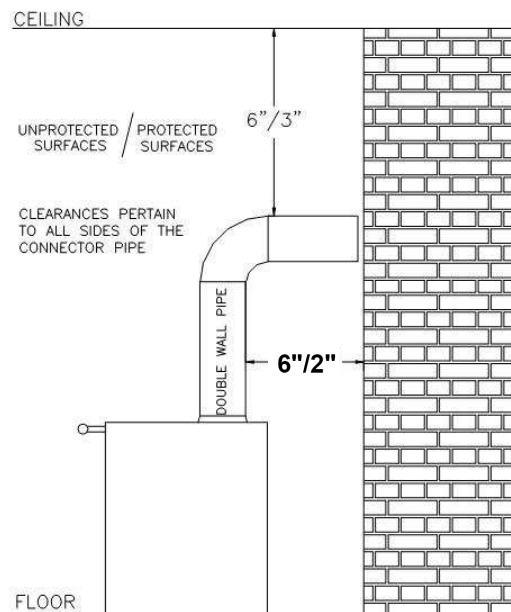
### D. Chimney Section Pass-through

Solid insulated, listed factory-built chimney length with an inside diameter 2-inch larger than the chimney connector and having 1-inch or more of insulation, serving as a pass-through for a single wall sheet steel chimney connector of minimum 24 gauge thickness, with a minimum 2-inch air space between the outer wall of chimney section and combustibles. Minimum length of chimney section shall be 12-inch chimney section spaced 1-inch away from connector using sheet steel support plates on both ends of chimney section. Opening shall be covered, and chimney section supported on both sides with sheet steel support securely fastened to wall surfaces of minimum 24 gauge thickness. Fasteners used to secure chimney section shall not penetrate chimney flue liner.

## CHIMNEY CONNECTOR CLEARANCE TO COMBUSTIBLES



**SINGLE WALL CONNECTOR**



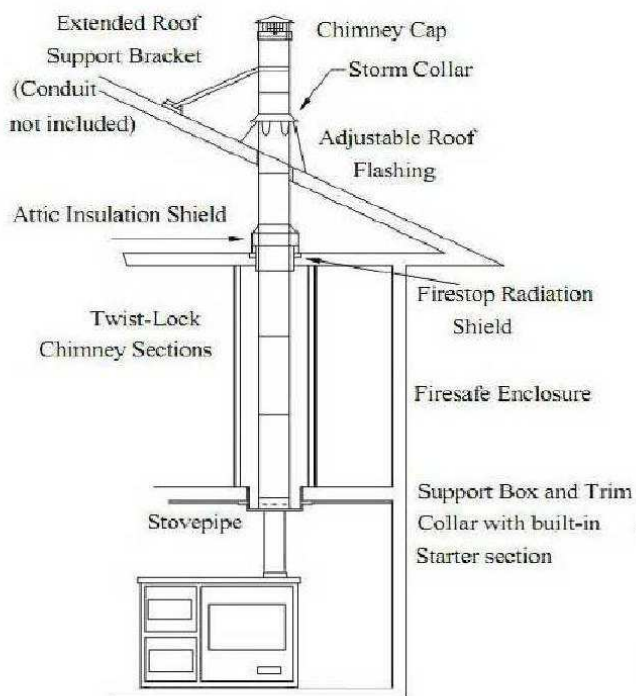
**DOUBLE WALL CONNECTOR**

### CLEARANCES:

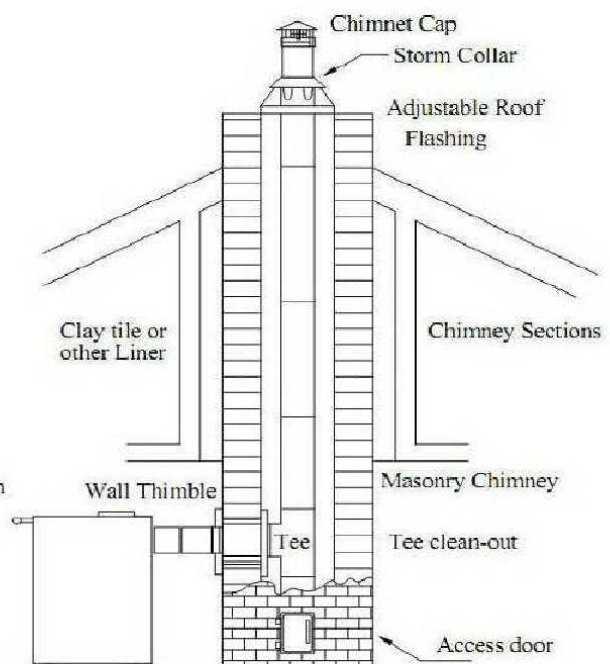
Back of Stove  
Side of Stove

**Combustible**  
**6"(15cm)**  
**6"(15cm)**

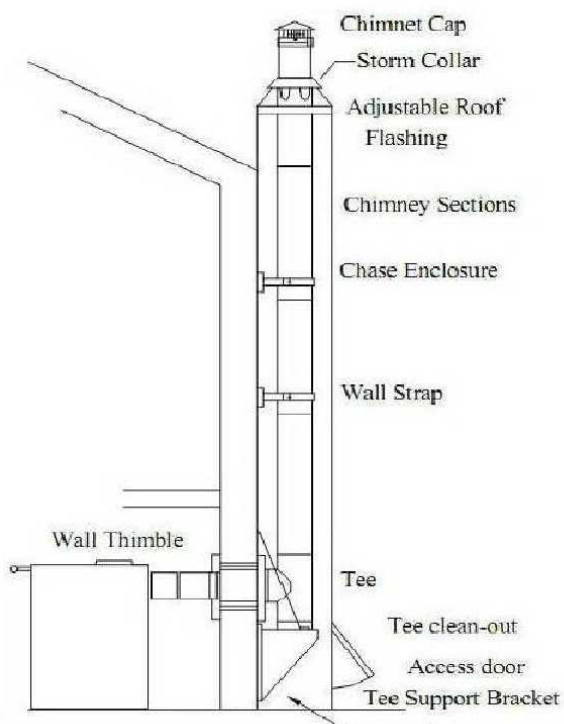
**NON-combustible (Protected Walls)**  
**2"(5cm)**  
**2"(5cm)**



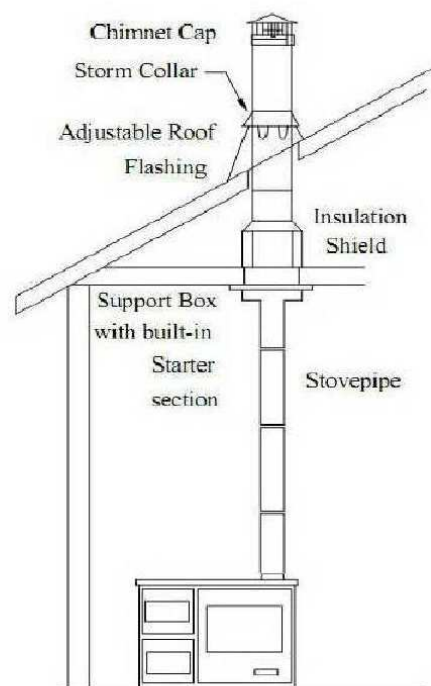
Two story house installation with attic.



Chimney pipe through Clay tile or other Lined Masonry Chimney



Chimney through outer wall with enclosed chase. Chimney is supported by Tee Support Bracket.



One story house installation with attic. Chimney is supported by Ceiling.



## MINIMUM CLEARANCES TO COMBUSTIBLE SURFACES

Unit to Sidewall - - - - -	6"(15cm)	CAUTION: KEEP FURNISHING AND OTHER COMBUSTIBLE MATERIALS AWAY FROM THE STOVE.
Unit to Backwall - - - - -	6"(15cm)	
Unit Corner to wall - - - - -	6"(15cm)	
Pipe Connector to Ceiling - - - - -	18" (46 cm)	
Clearances may only be reduced by means approved by regulatory authority.		

### OPERATION OF THE STOVE

1. Burn wood only. The wood should be natural, air dried (seasoned) for at least six (6) months. Before lighting open draft, located on front left or right side of stove. Light wood using paper, twigs, etc. NEVER USE ANY FLAMMABLE LIQUIDS OR GASOLINE TO START OR FRESHEN UP A FIRE IN THE STOVE.
2. After the fire has been started, adjust the rate of burning by opening or closing the draft control.
3. Do NOT touch the stove after firing until it has cooled.
4. Never overfire this stove by building excessively hot fires.
5. If stove begins to glow or turn red, you are overfiring the stove.
6. Inspect stovepipe every 60 days. Replace immediately if stove pipe is rusting or leaking smoke.
7. Inspect the stove pipes, connectors, and chimney twice monthly during the heating season and clean if necessary.

**CAUTION: SLOW BURNING FIRES AND EXTENDED USE MAY CAUSE EXCESSIVE CREOSOTE BUILDUP. IGNITION OF CREOSOTE/SOOT OR OVERFIRING MAY CAUSE CHIMNEY FIRE. CHIMNEY FIRES BURN EXTREMELY HOT AND MAY IGNITE SURROUNDING MATERIALS. IN CASE OF CHIMNEY FIRE CALL THE FIRE DEPARTMENT IMMEDIATELY.**

### CHIMNEY MAINTENANCE - Creosote/Soot 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 relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this soot/creosote makes an extremely hot fire. The chimney and the chimney connector should be inspected at least twice monthly.

If creosote/soot has accumulated, it should be removed. Failure to remove creosote/soot may cause a house or building fire. Creosote/soot may be removed by using chimney brush. Chimney fires burn very hot. If the chimney connector glows red, immediately call the fire department.

**PROVIDE AIR INTO THE ROOM FOR PROPER COMBUSTION.**

**CAUTION: HOT WHILE IN OPERATION. KEEP CHILDREN, ANIMALS, CLOTHING AND FURNITURE AWAY FROM THE STOVE. DO NOT TOUCH HOT STOVE. CONTACT MAY CAUSE SKIN BURNS. TRAIN CHILDREN TO STAY A SAFE DISTANCE FROM THE UNIT. CHILDREN SHOULD BE ALL THE TIME CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM WITH THE STOVE.**

**CAUTION: NEVER USE CHEMICALS, GASOLINE, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR FLAMMABLE LIQUIDS TO START OR FRESHEN UP A FIRE IN THE STOVE. KEEP ALL FLAMMABLE LIQUIDS AWAY FROM THE STOVE-WHETHER IN USE OR IN STORAGE.**

### ***OPERATING SAFETY PRECAUTIONS***

- 1. NEVER BUILD EXTREMELY LARGE FIRES IN THE STOVE AS DAMAGE TO THE STOVE OR SMOKE LEAKAGE MAY RESULT.**
- 2. NEVER OVERFIRE THIS STOVE BY BUILDING EXCESSIVELY HOT FIRES AS A HOUSE OR BUILDING FIRE MAY RESULT. YOU ARE OVERFIRING THE STOVE IF STOVE OR STOVE PIPE BEGINS TO GLOW OR TURN RED.**
- 3. PROVIDE AIR INTO THE ROOM FOR PROPER COMBUSTION.**
- 4. USE SOLID NATURAL AIR DRIED (SEASONED) WOOD only.**
- 5. INSPECT STOVE PIPES, CHIMNEY AND STOVE AT LEAST TWICE A MONTH AND CLEAN IF NECESSARY.**
- 6. WHILE IN OPERATION, KEEP THE FEED DOOR CLOSED ALL THE TIME, EXCEPT WHILE TENDING THE FIRE. ALWAYS OPEN DRAFT CONTROLLER BEFORE OPENING THE FEED DOOR.**

### **ABOUT DRAFT:**

The principle of draft is that warm air rises. Your chimney provides draft which sucks the smoke up the chimney. The stove does NOT PUSH out the smoke. Your stove has been design and approved for use under normal conditions. Unacceptable smoking usually indicates poor draft in your chimney. Normal operating draft for this stove is 12 Pa +- 2 Pa ( 0.04 w.c. - 0.055 w.c.). For draft above 15 Pa ( 0.06 w.c.) install a stovepipe damper. Gauges to measure draft are readily available at stove stores and are economical to rent or purchase.

Should you have a problem with inadequate draft, you should contact a licensed heating and cooling contractor for assistance in solving the problem.

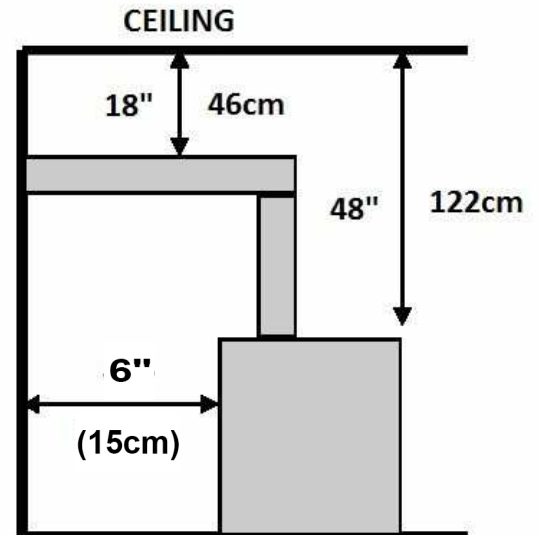
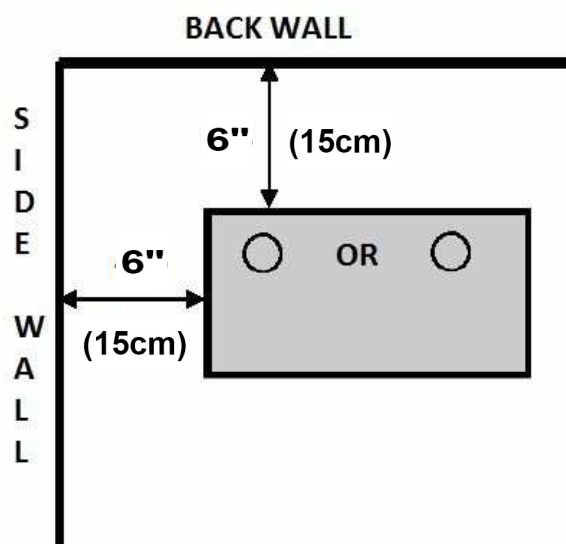
### **PROBABLE CAUSES FOR SMOKING ARE:**

Insufficient chimney height above nearby obstructions.

Clogged or obstructed chimney system

Downdraft caused by nearby trees, hills, buildings, etc.

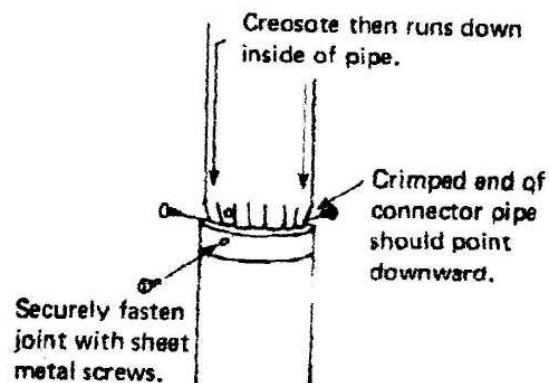
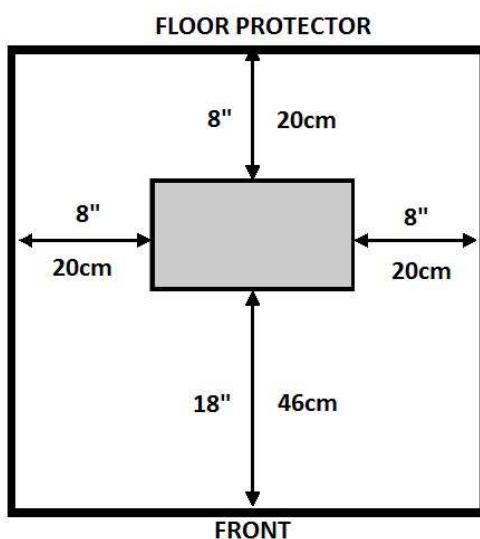
Negative draft. In a cold chimney, a cold air column rushing down the chimney can prevent stove start-up causing the stove or chimney pipe joints to smoke. SOLUTION: Open nearby window, and use small strips of newspaper or tinder loosely placed in the firebox that will provide quick and hot heat up the chimney, thereby reversing draft.



### ***SINGLE WALL PIPE-MINIMUM CLEARANCES FOR USA/CANADA***

#### **Some example of clearance reduction;**

- Using heat shields on back and sidewalls allowing at least 1" of space away from the walls for ventilation. The inch spacing is necessary to ensure air circulation between the protection and the wall so that the wall is not subject to high temperatures. The spacer used must be non-combustible. Another method to achieve the same type of protection is using brick or masonry with 1" air space between the brick or masonry and the wall. When reducing distances, please check local codes and consult with professional installer.
- Using special interior double wall stove pipe can reduce distance.
- Protecting wall or ceiling adjacent to the pipe.
- Installing an approve 'pipe heat shield' onto the stove pipe.
- **WARNING:** Do not place stove too close to the shield. There should be enough space between for proper air ventilation.





## RULES FOR INSTALLATION

The stove may not be positioned in the immediate vicinity of the wooden elements, parts made of plastic, textile and other flammable materials because during the operation (during the fuel combustion) it has high work temperature which is distributed on the outside of the stove. The smallest distance between the stove and surrounding elements should be 6'(15cm) (sideways and from the back side). Safe distance from the front side is 6'(15cm). The stove may not be positioned in the immediate vicinity of the cooling equipment (refrigerators, freezers etc.).

In case that the load bearing capacity of the floor does not suit the stove weight, take cautionary measures to increase its load bearing capacity.

Moreover, if there is a flammable floor, a non flammable plate must be positioned between the floor and the stove and it must extend at least 46 cm(18") from the front and at least 20 cm(8") from the sides.

The stove is connected to the chimney with appropriate smoke pipes in order to provide an adequate tightness and flow of smoke from the stove to the chimney. The smoke pipe must not be too deeply positioned in the chimney in order not to reduce the surface of the cross cut and disturb the draft in the chimney.

### CHIMNEY

Special attention should be drawn to the chimney quality which has to be manufactured according to standards. The maintenance of the chimney has to be regular. The stove is connected to the chimney through the fitting via appropriate smoke pipes, in order to provide the adequate tightness and the flow of smoke from the stove to the chimney. The smoke pipe must not be positioned too deep in the chimney in order not to disturb the draft in the chimney.

### AIRFLOW

To ensure adequate stove operation, the draft in the stove chimney flue should be  $12 \pm 2$  Pa. The lower value does not allow the proper combustion, and as the consequence there is the deposit of carbon and excess quantity of smoke which goes out through the grilles or the door. If the value of the airflow is too high, the combustion shall be too fast, and as the result the heat goes out through the chimney. In case of draft greater than 15 Pa, the chimney flue must be fitted with a damper.

The signs of bad airflow are:

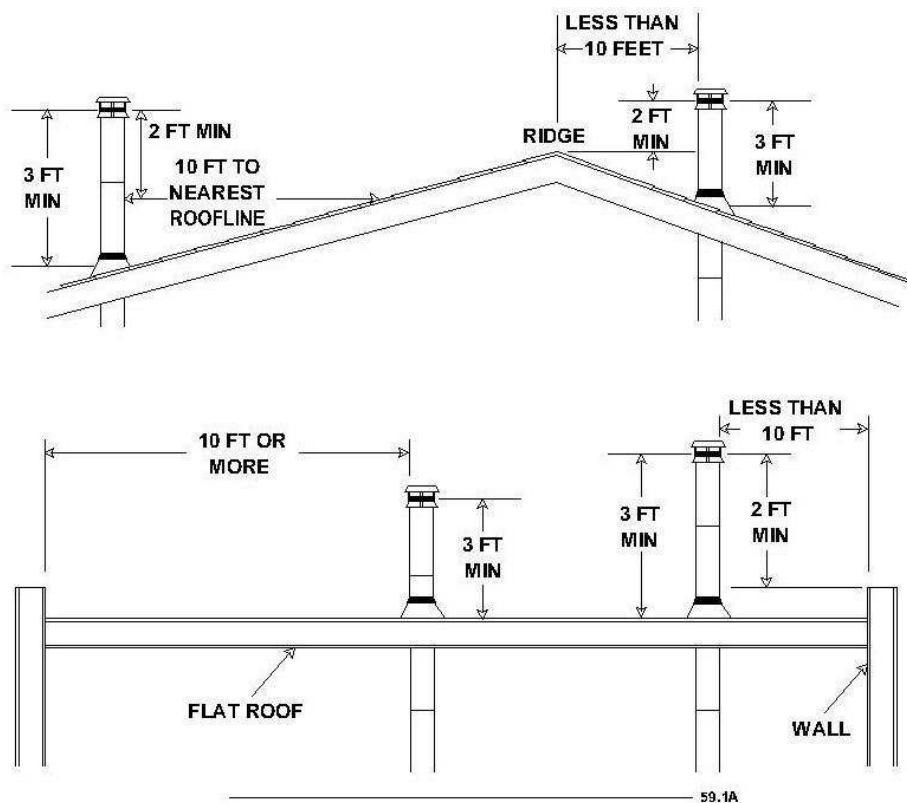
- Dirty glass, hot handle
- Smoke enters the room

### Glass Care

**Caution:** Never operate the stove with a broken door glass. Never build the fire up against the glass.

**Warning:** Do not use any replacement glass other than the original "ceramic" glass manufactured and supplied for use in this cookstove.

Replacement glass is available from manufacturer or authorized dealer. Do not abuse glass door by striking or slamming it. Never clean hot glass. Never use abrasive cleaner. When necessary, the glass can be cleaned with low alkaline content commercial stove glass cleaners, which are available from your local dealer



The chimney guarantees the conveyance of the fumes outwards even when there are strong horizontal winds and stops them from being blown back down the chimney.

Bad maintenance of the chimney stops the smoke passage due to breakage or separation of cement mortar, brick or other material used for chimney construction, as well as due to product deposits combustion and intrusion of foreign objects.

Chimney must have sufficient heat insulation; otherwise it can lead to condensation.

The internal parts of the whole flue should have a smooth surface, and the material used should be chemically and thermally resistant to products of combustion.

In case of any problems connected with chimney, you should consult professionals and chimney sweepers.

## LIGHTING

Prior to the first stove lighting, it is necessary to wipe all stove surfaces with a dry cloth, remove dust, oil and impurities from the stove plate and the oven in order to avoid their combustion and occurrence of unpleasant odours and smoke.

The first time that the appliance is lit, there will be an unpleasant odour and smoke given off, especially from the stove plate surface, as well as from the other parts protected with a heat resistant paint. This is a normal occurrence because the paint stabilizes on temperatures above 250°C during the first lighting. A good ventilation of the room where the stove is located must be ensured.

**Important:** The stove has been made from materials which are NOT harmful for health.

## GENERAL NOTES

If all recommendations for installation, regulation of operation and cleaning have been respected, the stove represents a safe domestic appliance.

In case of any problems, please contact the producer or distributor by telephone or in written form. Contact data are given at the end of this instruction.

Any defect on the stove shall be removed by the authorized service.

If an unauthorized person performs service or any changes on the stove, the owner of the stove loses the right for the service provided by the manufacturer's warranty.

The supply of spare parts is performed exclusively through the factory service, based on the positions and pictures in this instruction and their names.

The manufacturer is not liable if the buyer does not respect the installation and operation manual.

The manufacturer reserves the right to make modifications in appearance, dimensions and the model without the previous notice.

### **Limited One year Warranty**

"Tim Sistem" warrants its products against manufacturing defects to the original purchaser only—i.e., individual (register customer) whose name appears on the warranty registration card., for a period of One year from date of purchase from only an authorized dealer.

If within the one year period, your product should develop a defect due to materials or workmanship of the original new product, Tim Sistem (manufacturer), Sopka Inc (importer), or your authorized dealer will supply ONLY the parts necessary to make the repairs. (Labor Not Included) and is subject to following condition and limitations:

This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect.

This limited warranty does not cover any scratches, dents, corrosion or discoloring caused by excessive heat, cleaning chemicals, nor chipping on porcelain enamel parts, nor any venting components used in the installation.

Installation must be done in accordance with installation instructions included with product and all local and national building and fire codes.

Tim Sistem or Sopka Inc will not be liable for incidental and consequential damage of any nature. This warranty gives the purchaser specific legal rights which may vary from state to state. No other warranty is to be implied or expressed, including warranties implied for a specific or particular purpose.

Tim Sistem reserves the right to have its representative inspect any product or part thereof prior to honoring any warranty claim.

**Tim Sistem**  
Prva industrijska 9  
22330 Nova Pazova, Serbia  
www.timsistem.rs  
Made in Serbia

Imported and Distributed by:  
Sopka Inc., USA  
216-543-7002  
www.sopkainc.com  
contact@sopkainc.com

**Tested to:**  
**UL 1482, ULC-S627**  
**Tested to:**  
**EN 12815: 2001**

Listed and Labeled by:  
**Guardian Fire Testing Laboratory**



www.firetesting.com

**- Solid Fuel Cook Stove - For Use with Solid Wood Fuel only**

Model Modèle	<input type="checkbox"/> North	Date of manufacture Date of fabrication	Month Mois	Year Année	Serial No. N° de série
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**TO PREVENT HOUSE FIRES:**

Contact local building or fire officials about restrictions and installation inspection in your area.

Install and use only in accordance with manufacturers's installaton and operating instructions and local codes.

In the absence of any local codes, installation must meet minimum requirements of NFPA 211 in the USA, and B365 in Canada.

Refer to manufacturer's instructions and local codes for precautions required for passing a chimney through a combustible wall or ceiling.

Inspect and clean chimney system frequently in accordance with manufacturer's instruction.

Do not connect this stove to a chimney flue serving another appliance.

Do not use grate or elevate fire. Build wood fire directly on hearth.

Flue connector pipe must be 6" diameter, minimum single wall 24 msg black or 25 msg blued steel.

Chimney must be factory built 6" diameter Class, "A" 103 Type HT, or masonry.

**TO PREVENT CREOSOTE FIRES:**

Inspect and clean chimney frequently - under certain conditions of use, creosote buildup may occur rapidly. Do not use other fuels than firewood.

**CAUTION:** Fully open combustion air control before opening the fuel feed door. Only operate the wood heater with the doors closed.

Replace fire box glass only with original "Ceramic" glass available from manufacturer or authorized dealer, only.

**POUR EVITER LES INCENDIES DOMESTIQUES:**

Contactez les Autorités des bâtiments et les pompiers pour obtenir des instructions concernant les restrictions et inspections d'installation dans votre région. Installez et utilisez cet appareil uniquement en respectant les instructions d'installation et d'utilisation du fabricant. Respectez également les réglementations locales.

En l'absence de réglementations locales, l'installation doit respecter les normes minimales de NFPA 211 aux Etats -Unis et B365 au Canada.

Référez-vous aux instructions du fabricant aux réglementations locales pour obtenir des instructions concernant les précautions nécessaires pour le passage de la cheminée à travers une paroi ou un plafond combustible. Inspectez et nettoyez le système de cheminée fréquemment selon les instructions du fabricant.

Ne connectez pas ce poêle à un conduit de cheminée utilisé par un autre appareil.

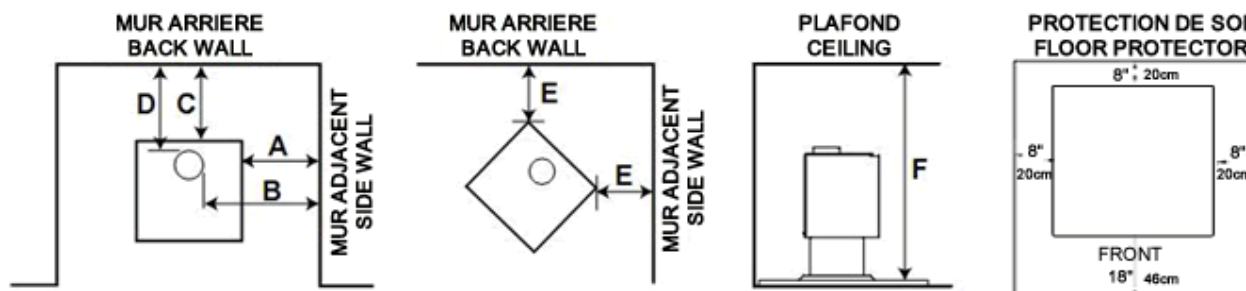
N'utilisez pas de grille et ne faites pas monter le feu. Etablissez le feu de bois directement dans l'âtre. Le tuyau de connexion au conduit doit avoir un diamètre de 6" (152 mm), une paroi unique en acier de 24 msg (noir) ou 25 msg (bleu).

Le matériau de la cheminée doit être 103HT de classe A de 6" (152 mm) ou une construction en dur.

**POUR EVITER LES FEUX DE CREOSOTE:**

Inspectez et nettoyez la cheminée régulièrement - Sous certaines condition d'emploi, la créosote peut s'accumuler rapidement. Ne pas utiliser d'autres combustibles que le bois.

**ATTENTION:** Ouvrez complètement le contrôle d'air de combustion avant d'ouvrir la porte du foyer. N'utilisez le poêle que lorsque les portes sont fermées. Remplacez la vitre du foyer de feu seulement par une vitre en "céramique" d'origine, fourniesuniquement, par le fabricant ou un revendeur autorisé.



Parallel & Corner	A	B	C	D	E	F
Single Wall Connector	6" (15cm)	18" (46cm)	6" (15cm)	18" (46cm)	6" (15cm)	84" (213cm)
Double Wall Connector	6" (15cm)	6" (15cm)	6" (15cm)	6" (15cm)	6" (15cm)	84" (213cm)

Floor / Ember protector minimum size: 52" x 50" (131cm x 126cm).

Clearances can be reduced with shielding acceptable to local authorities. Reduced installation must comply with NFPA 211 or CAN/CSA-B365.



**CAUTION**  
**HOT WHILE IN OPERATION - DO NOT TOUCH.**  
**KEEP CHILDREN AND CLOTHING AWAY.**  
**CONTACT MAY CAUSE SKIN BURNS. SEE**  
**NAMEPLATE AND INSTRUCTIONS. KEEP**  
**FURNISHINGS AND OTHER COMBUSTIBLE**  
**MATERIALS A CONSIDERABLE DISTANCE**  
**AWAY FROM THE APPLIANCE.**  
**DO NOT OVERFIRE - IF HEATER OR CHIMNEY**  
**CONNECTOR GLOWS, YOU ARE OVERFIRING.**

**ATTENTION**  
**CHAUD PENDANT LE FONCTIONNEMENT**  
**- NE PAS TOUCHER. TENIR ELOIGNES LES ENFANTS**  
**ET LES VETEMENTS - LE CONTACT PEU CAUSER DES**  
**BRULURES. CONSULTEZ LA PLAQUE**  
**D'IMMATRICULATION ET LES INSTRUCTIONS. TENIR**  
**LES FOURNITURES ET AUTRES MATIERES**  
**COMBUSTIBLES A DISTANCE DE L'APPAREIL.**  
**EVITER**  
**DE SURCHAUFFER - SI LE FEU OU LA CHEMINE**  
**DEVIENT ROUGE, VOUS SURCHAUFFEZ.**

**DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ETIQUETTE**