INVICTA
FRANCE

Poêle bois de fonte
Cast iron wood stove

AARON

Référence 6129-04

NELSON

Référence 6129-44

OWNER'S MANUAL

Installation and Operating Instructions

SAVE THIS OWNER'S MANUAL
FOR FUTURE REFERENCE

PLEASE READ THIS ENTIRE OWNER'S MANUAL BEFORE YOU INSTALL AND USE YOUR NEW INVICTA WOOD STOVE.

If this room heater is not properly installed, a house fire may result.
To reduce the risk of fire, follow the installation instructions.
Failure to follow these instructions can result in property damage, bodily injury, or even death.
Conforms to UL Std. 1482
Certified to ULC Std. S627

CONTACT LOCAL AUTHORITIES WITH JURISDICTION (BUILDING DEPARTMENT or FIRE OFFICIALS), ABOUT PERMITS REQUIRED, RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

C SA US

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED

We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute).
www.nficertified.org

Wood Energy Technology Transfer Inc. Certified

California Prop 65

⚠ WARNING: This product can expose you to chemicals including glass wool fiber and carbon monoxide which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

APC LES PROFESSIONNELS DU CHAUFFAGE D'APPOINT

NOTES ON STOVE OPERATION AND EFFICIENCY

Rating:

You have purchased an Invicta stove tested to UL 1482 and ULC S627-00.

This wood heater has a manufacturer-set 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 refer to the Warranty section of this manual for registration instructions. In case of warranty claims, please contact the point of original sale or the nearest authorized Invicta dealer. Our dealer network processes all warranty claims. Authorized Invicta dealers can be located at www.invictastoves.com.

This heater is designed to burn natural wood only. Higher efficiencies and lower emissions generally result when burning air-dried seasoned hardwoods, as compared to softwoods or to green or freshly cut hardwoods. **DO NOT BURN:** *Garbage, lawn clippings, material containing rubber (including tires), materials containing plastic, waste petroleum products paints or paint thinners, asphalt products, materials containing asbestos, construction or demolition debris, railroad ties, pressure treated wood, manure or animal remains, salt water driftwood or other previously salt water saturated materials, unseasoned wood, paper products, cardboard, plywood or particleboard.* This prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, sawdust, wax and similar substances for the purpose of starting a fire in an affected wood heater. Burning these materials may result in a release toxic fumes or render the heater ineffective and cause smoke.

Following the maintenance guidelines set forth in this manual will help insure the efficient use of your wood heater and minimize visible emissions. Having your stove inspected by a trained professional on a regular basis will greatly increase the potential for recognizing potential impacts to efficiency.

Proper draft is important to the efficient operation of your heater. Refer to the Normal Operation section of this manual for information regarding adequate draft. Both excessive and sub-minimum draft can affect the efficiency of your wood heater. Excessive draft can lead to over-consumption of fuel, lower overall heating capacity of the stove and potential over firing. Low draft can result in inefficient burns, low heat output, expulsion of smoke into the living area when stove doors are opened and an increased potential for build-up of flammable materials in the flue.

To maximize the efficiency of your wood stove, make sure it is sized properly for the space you plan to heat. An oversized stove will often be forced to burn at a lower and dirtier burn rate. Consult with your dealer for sizing and correctly placing the stove in your home. An incorrectly placed stove can greatly reduce efficiency. Maximizing the efficiency of your stove will heat your house quickly, burn cleaner and use less wood.

Refer to the Choosing Firewood section of this manual for appropriate fuel selection. Seasoned firewood is typically at or near 20% moisture content. This can be measured with any number of hand-held moisture meters available through your local hearth shop. Follow instructions included in the meter you purchase to measure fuel wood moisture content. Burn only dry, seasoned wood as using wet wood will greatly reduce your efficiency.

Smoke/Fire/CO Detectors:

It is highly recommended that smoke and CO detectors be installed throughout the heated space when a wood burning heater is installed. Be certain to install these devices not only in the area where the wood appliance is located, but also in bedrooms, hallways leading to other areas of the house and all common areas of the heated space. Check the batteries in these devices and assure operation by performing whatever test operations are recommended by the manufacturer.

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INTRODUCTION

Thank you for purchasing an Invicta woodstove from Energy Distribution 2015. This stove will provide years of comfortable heat. This Invicta series offer you modern technology with the unique beauty and qualities of cast iron. We trust that you will appreciate the quality of this handcrafted product.

Your Invicta series woodstove burns and produces a large amount of heat. However, you should not consider this stove as the primary heat source for your home.
This Invicta series as one of the largest glass window on the market and allows you to enjoy the fire from a variety of locations in the room.

Please read this manual in its entirety. Its purpose is to familiarize you with your stove's safe installation, proper break-in, operation and maintenance. It contains extremely important information so keep it handy and refer to it often.

A qualified heating technician may need this owner's manual as a reference when installing this stove in your home. There are national, state, and local building codes that direct the technician on how to install your stove. These codes stipulate the dimension of stovepipe and clearances to walls, ceilings, hearth, and other combustible surfaces. The codes exist to reduce the risk of fire. Failure to follow these instructions can result in fire, property damage, bodily injury, and even death.

Install the stove in a safe, open area, away from traffic flow, doors, and hallways. If possible, try to install the stove near an existing chimney and chimney connector. It is extremely important to install this stove with the proper clearance from combustible surfaces. You can purchase specific connector pipe and special wall coverings as specified by this manual and the NFPA 211 code to protect combustible surfaces. As a general rule, keep furniture, drapes, curtains, wood, paper, and other combustibles at least 36 inches (92 cm) away from the stove. Never install the stove in or near a storage location for gasoline, kerosene, charcoal lighter fluid or any other flammable liquids.

Install the stove in your central living area to allow heat to radiate naturally to distant rooms. Do not install your stove in a poorly insulated area. This is inefficient and would likely result in higher fuel usage.

- **SAFETY NOTICE :**

  AN IMPROPERLY INSTALLED STOVE CAN RESULT IN A HOUSE FIRE. FOR YOUR SAFETY, CAREFULLY FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

The safety of your stove will depend on many factors, some of which include: distance to combustible objects, correct venting, and adequate chimney maintenance. Should you have any questions, do not hesitate to contact your dealer for additional information.

Contact your dealer for any necessary warranty service.

This Invicta series stove is warranted by:

Energy Distribution 2015
1361 Denison ouest
St-Alphonse, Qc J0E 2A0, Canada
www.Invictastoves.com

CODES

When you install your Invicta serie woodstove, it is imperative that you adhere to all Federal and local codes. Obtain these codes from either of the following sources:

American National Standards Institute, Inc. (ANSI)
1430 Broadway New
York, NY 10018
www.ansi.org

National Fire Protection Association, Inc. (NFPA)
Battery March Park Quincy,
MA 02269 www.nfpa.org

Do not install in a mobile home.

SAFETY INFORMATION

Read and understand this Owner's Manual thoroughly before installing and using this stove.

Make sure to install your stove:

- According to the manufacturer's recommendations
- In accordance with all applicable codes
- With the proper sized chimney

When using your stove, follow these safety precautions:

- **Never** modify this stove in any way.
- **Never** burn kiln dried, painted or treated wood in this stove.
- **DO NOT BURN GARBAGE. Never** burn garbage or trash, colored or glossy paper, solvents, plywood, artificial logs, cardboard, or driftwood, in this stove.
- **Never** burn coal in this stove.
- **DO NOT BURN FLAMMABLE FLUIDS.**
- **DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE. Never** use gasoline, kerosene, charcoal lighter fluid, or other flammable fluids to start or invigorate the fire. These fuels will cause dangerous burning conditions in the stove. Keep all such materials away from the stove.
- **Never** use a wood grate or other device to elevate the fire.
- **Never** allow logs in the firebox to hit the glass when the door is closed.
- **Never** slam the door or use the door to force wood in to the stove.
- **Never** over-fire your stove.
- **Never** put articles of clothing or candles on a hot stove.
- **Never** connect the stove to a flue used by another appliance.

Other safety guidelines :

- Keep all combustible items such as furniture, drapes, clothing, and other items, at least 36" (0.92 m) from the stove
- Install a smoke detector, preferably in an area away from your wood stove.
- Keep a fire extinguisher handy. We recommend the type rated "A B C."
- Dispose of ashes properly. (See page 22)
- Keep children and pets away from the stove when it is burning; they could be seriously injured by touching a hot stove.
- Clean your chimney system as needed.
- Outside combustion air may be required if:
  1. This solid-fuel-fired appliance does not draw steadily, smoke rollout occurs, fuel burns poorly, or back-drafts occur whether or not there is combustion present.
  2. Existing fuel-fired equipment in the house, such as fireplaces or other heating appliances, smell, do not operate properly, suffer smoke roll-out when opened, or back-draft whether or not there is combustion present.
  3. Opening a window slightly on a calm (windless) day alleviates any of the above symptoms.
  4. The house is equipped with a well-sealed vapor barrier and tight fitting windows and/or has any powered devices that exhaust house air.
  5. There is excessive condensation on windows in the winter.
  6. A ventilation system is installed in the house.

If these or other indications suggest that infiltration air is inadequate, additional combustion air should be provided from the outdoors. Outside combustion air can be provided to the appliance by using an optional air dispenser.

PERIODIC CHECKLIST

Perform each of these tasks at the specified intervals.

At the End of Every Week:

- Empty ashes from the firebox, sooner if the firebox is full.

At the Beginning of Every Other Month:

- Depending upon your use of the stove, visually inspect the chimney connector and chimney for creosote.
- Check door seals using the "dollar bill test." - When the stove is cool, shut the door on a dollar bill. If the bill pulls out without any resistance, then your stove's door is not sealing properly. To tighten the seal, adjust the door latch mechanism or change the door gasket.

At the End of Every Season:

- Dismantle the chimney connector and clean it thoroughly. Replace any pieces that show signs of rust or deterioration.
- Inspect and, if necessary, clean your chimney.
  Clean out the inside of the stove thoroughly.
- Inspect all door gasket material and replace if worn, frayed, cracked or extremely hard.

EMERGENCY PROCEDURES

If you have a stovepipe or chimney fire, follow these instructions:

1. If the fire is too threatening, leave the area and call the fire department immediately! If not, perform the next three steps.
2. Close the stovepipe damper (if present).
3. Keep the stove front door closed!

WARNING : DO NOT ATTEMPT TO PUT OUT A STOVEPIPE OR CHIMNEY FIRE BY THROWING WATER ONTO THE STOVE, STOVEPIPE, OR CHIMNEY. THE EXTREMELY HIGH TEMPERATURE OF SUCH FIRES CAN CAUSE INSTANTANEOUS STEAM AND SERIOUS BODILY HARM.

Once the chimney fire expires, let the fire in the stove die out completely. Inspect the stove, stovepipe, and chimney thoroughly for any sign of damage before firing the stove again. You must correct any damage before using your stove again.

Establish a routine for the fuel, wood burner and firing technique. Check daily for creosote build-up until experience shows how often you need to clean to be safe. Be aware that the hotter the fire the less creosote is deposited, and weekly cleaning may be necessary in mild weather even though monthly cleaning may be enough in the coldest months. Contact your local municipal or provincial fire authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire.

SPECIFICATIONS

Maximum Heat Output:

99,000 BTUs per hour of cordwood (based on independent laboratory test results).

Floor Size of Heated Area:

Up to a maximum of 1,500 square feet. Factors unique to your home can reduce the square footage the stove will heat. Home insulation value, number and efficiency of windows, floor plan, stove placement, quality of the fuel and other conditions may limit the heating ability of the stove.

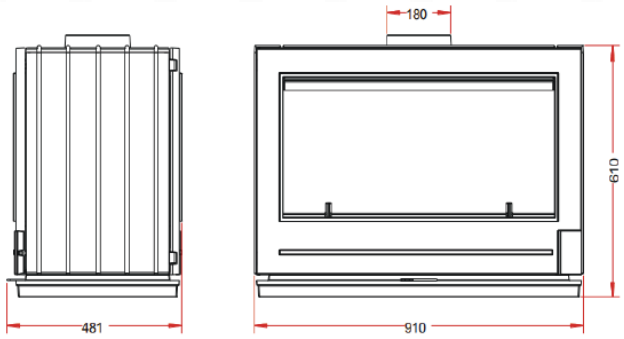
Maximum Log Length: Up to 30” (76cm).

Burn Time: Up to **+/-**4 hrs.

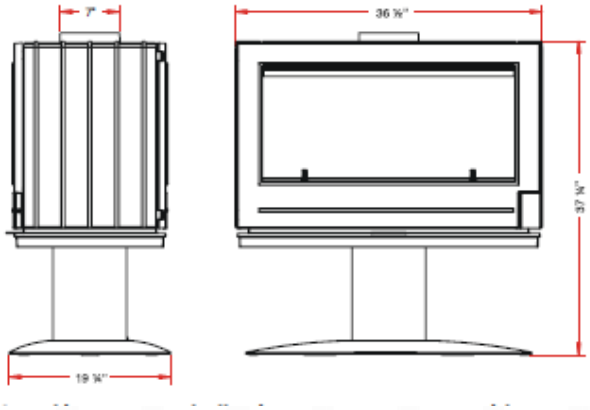
Note: The amount and weight of wood contained per cubic foot of firebox volume can vary from 10 to 25 lbs. per cubic foot depending on type of wood, moisture content, packing density and other factors.

Stove Dimensions: (see drawing for exact dimension of each model)

AARON 6129-04



NELSON 6129-44



Connector Size:	**7**" (178 mm) diameter
Metal Chimney:	**7**" (178 mm) inside diameter
Masonry Chimney:	7” (178 mm) inside diameter (round flue), 8” x 8” (203 x 203 mm) (square flue)

INSTALLATION

UNPACKING

Energy Distribution packages your Invicta series woodstove with the greatest care so that it ships safely. Under certain circumstances, however, damage may occur during transit and handling. When you receive the Invicta, carefully unpack and inspect the stove and all accompanying parts. Ensure that all parts are included inside the stove. If any parts are damaged or missing, please contact your authorized Invicta dealer immediately.

Be sure to remove the packaging material in the flue collar and above the baffle before installing the chimney.

PACK LIST

Invicta serie Aaron/Nelson Woodstove
Owner's Manual

The label is attached by a cable below the ashtray inside the stove.

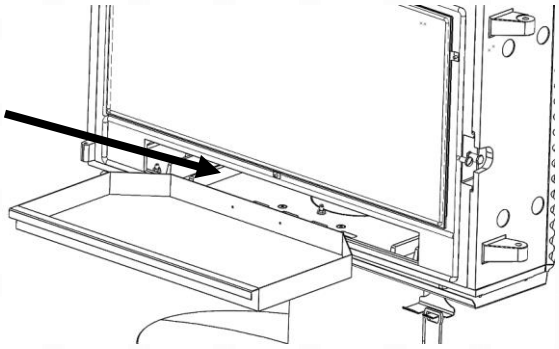


Figure 2 - Label Location

INSTALLING YOUR STOVE

Choose a place to install your Invicta woodstove. Consider the location of your stove for optimum heating efficiency. In general, it is better to place your stove in a main living area, rather than in a basement or other confined space.

Inspect this location to make sure that the stove and stovepipes will have the required clearance from combustible materials that are near the stove. Combustibles include walls, floor, ceiling, and chimney chase. You must carefully consider the clearances to all of these combustibles before actually connecting your stove.

If the floor is made of combustible material, then a non-combustible floor protector is required between the floor and the stove. An example of a non-combustible floor protector is a hearth constructed with a continuous layer of tile, brick, slate, glass or another non-combustible facing. There is no R-value requirement.

If you use a rear connector pipe, ensure it is listed with Underwriter's Laboratories. Check the listing of your pipe with UL for the correct clearances.

The diagrams in this manual represent typical installations, but are specific to the Security Chimney brand.

Clearances to NFPA Code 211 Protected Surfaces

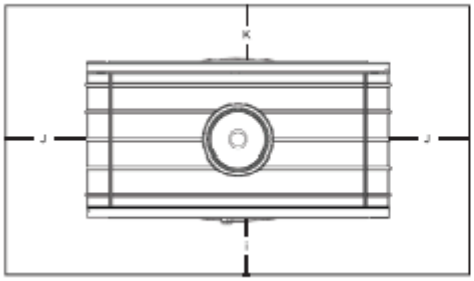
You can reduce the clearances to combustible surfaces by using any National Fire Protection Agency (NFPA) approved wall protection system with additional approval of the regulatory authority having jurisdiction in your area. Please refer to NFPA Code 211 for specifications and complete details. You can obtain this information directly from the NFPA.

National Fire Protection Agency
Batterymarch Park
Quincy, MA 02269
1-800-344-3555
1-617-770-3000 www.nfpa.org

HEARTH REQUIREMENTS & FLOOR PROTECTION

Ensure you protect combustible flooring with a covering of non-combustible material. This Invicta series does not require an insulated hearth pad. The minimum floor protection must be met under the stove and extend beyond the stove as follows:

The minimum floor protection for US installations is 52 ½ in x 51 ¼ in.
The minimum floor protection for installations in Canada is 52 ½ in x 55 ¼ in.



PROTECTION MINIMALE DU PLANCHER			
	AVANT (I)	CÔTÉS (J)	ARRIÈRE (K)
CANADA	18" (457.2mm)	8" (203.2mm)	18" (457.2mm)
É.-U.	16" (406.4mm)	8" (203.2mm)	16" (406.4mm)

MINIMUM FLOOR PROTECTION			
	FRONT (I)	SIDES (J)	BACK (K)
CANADA	18" (45.7cm)	8" (203.2mm)	18" (45.7cm)
USA	16" (40.6cm)	8" (203.2mm)	16" (40.6cm)

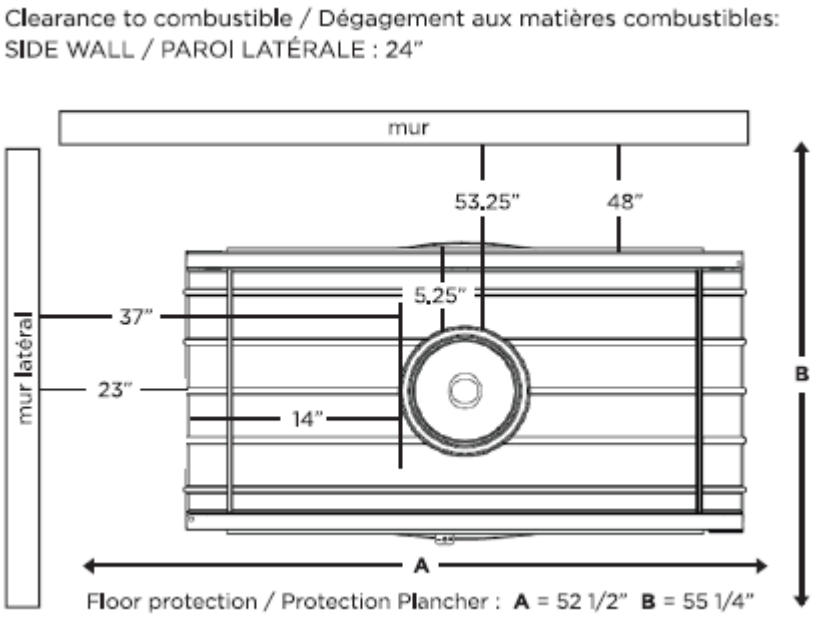
Figure 3 – Hearth Dimensions

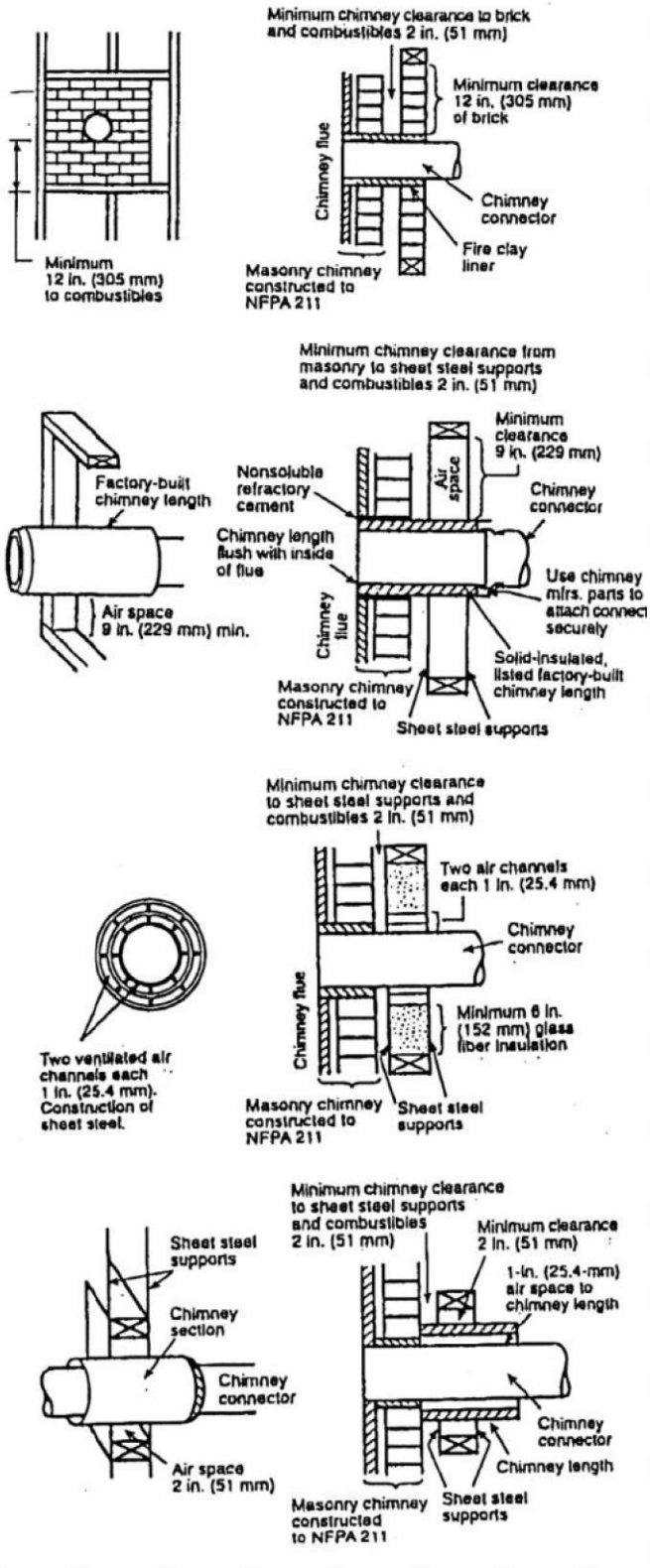
COMBUSTIBLE SURFACE REQUIRED CLEARANCES

Note: *Dimensions shown in the following figures are from the body of the stove unless otherwise indicated.*

It is very important to follow minimum clearances for chimney connectors to combustibles such as walls and ceilings when installing the stove near combustible surfaces.

Figure 4 – Clearance to Combustibles





CHIMNEY CONNECTOR SYSTEMS AND CLEARANCES FROM COMBUSTIBLE WALLS

FOR RESIDENTIAL HEATING APPLIANCES

A. Minimum 3.5in thick brick masonry all framed into combustible wall with a minimum of 12in. brick separation from clay liner to combustibles. The fire clay 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. Solid-insulated, listed factory-built chimney length of the same inside diameter as the chimney connector and having 1in. or more of insulation with a minimum 9in. air space between the outer wall of the chimney length and combustibles.

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

D. Solid insulated, listed factory-built chimney length with an inside diameter 2in. larger than the chimney connector and having 1in. 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 2in. air space between the outer wall of chimney section and combustibles. Minimum length of chimney section shall be 12in. chimney section spaced 1in. 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 supports securely fastened to wall surfaces of minimum 24-gauge thickness. Fasteners used to secure chimney

section shall not penetrate chimney flue liner.

OUTSIDE AIR SUPPLY

You can connect an outside air source as closed as possible to this stove using an optional air dispenser. The advantage of providing outside air directly to the stove is that the air used by the stove for combustion is taken from outside the residence rather than from within the room where the stove is located.

The outside air dispenser will allow to bring sufficient air intake to a minimum 3" (76 mm) diameter duct (supplied by others) * which leads to the outside of the house. When considering placement of the air dispenser from the outside of the house, keep in mind the need to avoid structural members of the house.

Locate the termination of the duct on the outside wall of the home in such a manner to avoid the possibility of obstruction by snow, leaves or other material. Screen the termination using ¼" x ¼" mesh rodent screen and cover it with a rain/wind proof hood (flex pipe, outside termination, mesh, and hood supplied by others) Contact your dealer for availability.

VENTING COMPONENTS & CONFIGURATION REQUIREMENTS

- **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE USED BY ANOTHER APPLIANCE**

- Single wall connector that is at least 24 MSG or 25 MSG blued steel stovepipe.

- Double wall connector (Rear pipe) which is used with a listed, factory-built "Type HT" chimney or with a masonry chimney to reduce clearances, is available from several manufacturers, your dealer can help you choose. Some air insulated connector pipe models available are Simpson Dura Vent DVL and Metalbestos DS. Security, GSW, ICC and Ameritec also have acceptable Rear connector pipe.

- The chimney connector cannot pass through a floor or ceiling, nor any attic or roof space, closet or similar concealed space. Where venting requires passage through a wall or partition of combustible construction, the installation must conform to NFPA Code 211 or CAN/CSA - B365.

- Be sure to follow the manufacturer's instructions to maintain an effective vapor barrier at the location where the chimney of other component penetrates the exterior of the structure

- It is very important to follow minimum clearances for chimney connectors to combustibles such as walls and ceilings when installing the stove. Typical chimney connector clearances are outlined below. The single wall clearances are generic; the double wall clearances shown are specifically for Security brand and may vary with other brands. ***Check the specifications from the manufacturer of your connector.***

COMPONENTS OF A VENTING SYSTEM

The complete venting system consists of several components: chimney connector, wall thimble, wall pass-through, chimney, and liner. It is *absolutely necessary* that you install all of these components and maintain the clearances to combustibles discussed earlier to ensure a safe stove installation.

To protect against the possibility of a house fire, you *must properly install and constantly maintain the venting system in good condition. Be sure to inspect the chimney and chimney connector and keep it clean.* Upon inspection, immediately replace rusted, cracked, or broken components. Failure to follow these instructions and specified components or using make-shift compromises can result in fire, property damage, bodily injury, and even death.

- The *chimney connector* is the stovepipe from the woodstove to the chimney. The chimney connector stovepipe is 7" (178 mm) diameter, 24 MSG or 25 MSG blued steel connector pipe. *Do not use aluminum or galvanized steel pipe* - they cannot withstand the extreme temperatures of a wood fire.
- The *thimble* is a manufactured (or siteconstructed) device installed in combustible walls through which the chimney connector

passes to the chimney. It keeps the walls from igniting. You must use a wall thimble when installing a chimney connector through a combustible wall to the chimney.

- A *wall pass-through* (or chimney support package) also keeps the walls from igniting. You must use one when connecting through a wall or ceiling to a prefabricated chimney.

- Only install this stove to a *lined masonry chimney* or an *approved high temperature prefabricated residential* type building heating appliance chimney. *Do not* connect this stove to a chimney serving another appliance; you will compromise the safe operation of both the wood stove and the connected appliance.

- A *liner* is the UL 1777 or ULC S635 (for factory built fireplace or masonry) chimney.

You must connect your stove to a chimney comparable to those recommended in this manual. *Do not use stovepipe as a chimney*. Use stovepipe for freestanding installations only to connect the stove to a proper chimney.

- **WARNING: DO NOT CONNECT THIS APPLIANCE TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.**

INSTALLING A VENTING SYSTEM

Attach stovepipe sections to the flue collar and to each other with the crimped end toward the stove. If creosote builds up, this allows the creosote to run into the stove and not on the outside of the stovepipe or onto the stove.
Secure all joints, including attaching the stovepipe to the stove's flue collar, with three sheet metal screws. Install #10 x 1/2" (3 mm x 13 mm) sheet metal screws into the holes pre-drilled in the flue collar. Disregarding the screws can cause joints to separate from the vibrations that result from a creosote chimney fire.

You can simplify connecting stovepipe by using additional accessories such as telescoping pipes, slip-connectors or clean-out tees. These accessories ease the periodic inspection of your chimney, as well as allow you to dismantle the stovepipe easily (without moving the stove).

Install the stove as close as practical to the chimney, while maintaining all proper clearances. Install stovepipe that is as short and as straight as possible. Horizontal runs of stovepipe must always rise away from the stove at a minimum of 1/4" per foot (21mm/m).

We do not recommend long runs of stovepipe to increase heat dispersal. Longer lengths of stovepipe, or more connecting elbows, than necessary increase the chances of draft resistance and the accumulation of creosote buildup.

In general, you do not need to install a stovepipe damper with the Invicta series. Some installations, however, could benefit from a stovepipe damper, such as a tall chimney which can create a higher than normal draft. In such cases, a damper can help regulate the draft. The Invicta series requires a draft between 0.06" and 0.1" WC. For drafts above 0.1" WC, install a stovepipe damper. Check the draft at stove installation time.

Remember, the NFPA recommends minimum clearances for chimney connectors to combustibles such as walls and ceilings. Once the stove is installed at safe distances from these combustible surfaces, it is also important to maintain these connector clearances for the remainder of the installation.

CONNECTING THE STOVE TO A CHIMNEY

You can install your Invicta to a prefabricated metal chimney, or to a masonry chimney.

This room heater must be connected to (1) a listed Type HT (2100° F) chimney per UL 103 or ULC S629, or (2) a code-approved masonry chimney with a flue liner. The chimney size should not be less than the flue collar, or more than three times greater than the cross-sectional area of the flue collar.
We recommend installing a cleanout tee where possible to simplify chimney cleaning and maintenance.

Connecting to a Prefabricated Metal Chimney

There are two ways to install a prefabricated metal chimney:

- An *interior* installation where the chimney passes inside the residence through the ceiling and roof.

- An *exterior* installation where the chimney passes through the wall behind the stove then up the outside of the residence.

Whenever possible, choose an interior chimney. An interior chimney heats up quickly and retains its heat; thus promotes a better draft and discourages the formation of creosote. An exterior chimney does not

benefit from the warmth of the building, so it typically operates at lower flue temperatures than an interior chimney and may experience increased creosote accumulation.

When connecting the Invicta to a prefabricated metal chimney, you must follow, precisely, the manufacturer's installation instructions. Use only Type HT (2100° F), prefabricated metal chimneys listed per UL 103 or ULC S629 standards.

Ensure the size of the prefabricated chimney's flue is appropriate for the Invicta stove. This Invicta series requires a 7" (178 mm) inside diameter flue for new installations. A 7" diameter flue provides adequate draft and performance. You can use an 8" (203 mm) diameter existing flue with a reducer. An oversized flue contributes to creosote accumulation. (In this case, bigger is NOT better.)

When purchasing a prefabricated chimney to install with your stove, ensure you also purchase from the same manufacturer the wall pass-through (or ceiling support package), "T" section package, fire-stops (when needed), insulation shield, roof flashing, chimney cap, and any other required accessories.
Follow the manufacturer's instructions when installing the chimney and accessories. In addition, ensure you maintain all manufacturers' recommendations for the proper clearances to the chimney.

Connection to a Masonry Chimney

Consider two primary elements when connecting your stove to a masonry chimney: the chimney itself and the thimble where the stovepipe connects to the chimney. **Use only code approved masonry chimneys containing a proper flue liner.**

Before connecting to a masonry chimney, hire a professional to examine the chimney for cracks, loose mortar, and other signs of deterioration and blockage. If the chimney needs repair, complete them before installing and using your stove. Do not install your stove until the chimney is safe for use.

Ensure the chimney's cleanout is complete and working properly. To avoid a loss of draft, the cleanout door must close completely and provide a tight seal. If the cleanout door leaks, the chimney will cool, your stove will perform poorly, and creosote can form.

Ensure the size of the chimney's flue is appropriate for this stove and that it is not too large. Use a masonry chimney with a maximum 7" Diameter or 8" x 8" (203 mm x 203 mm) tile size for best results. An oversized flue contributes to the accumulation of creosote.

Use the following checklist to ensure that your masonry chimney meets these minimum requirements:

MASONRY CHIMNEY WALL CONSTRUCTION :
- Mortared brick or modular block at least 4" (102 mm) thick – must use liner
- A mortared rubble or stone wall – must use liner

FLUE LINER OPTIONS :
- Tile - minimum wall thickness of 5/8" (16 mm), installed with refractory mortar, and with at least 1" (25 mm) air space around the liner
- Stainless steel - UL listed 7" diameter, insulated or wrapped liner, or the space around the liner filled with vermiculite or suitable material (these keep the liner warmer for better performance)
- Ensure any equivalent flue liner is a listed chimney liner system meeting type HT requirements or other approved material.

INTERIOR CHIMNEY REQUIREMENTS :
- Must have at least 2" (51 mm) clearance to combustible materials
- Must install fire stops at the spaces where the chimney passes through floors and/or ceiling
- Any insulation material must be at least 2" (51 mm) from the chimney

EXTERIOR CHIMNEY REQUIREMENTS :
- At least 1" (25 mm) clearance to combustible materials

CHIMNEY HEIGHT REQUIREMENTS (SEE *FIGURE 9*):
- At least 3 feet (0.9 m) higher than the highest part of the roof opening through which it passes.
- At least 2 feet (0.6 m) higher than any part of the roof within 10 feet (3 m) measured horizontally from the top of the chimney.

The recommended minimum chimney height is 15 feet (4.5 m) off the floor. The recommended maximum chimney height is 45 feet (13.5m). This Invicta series requires a draft between 0.06" and 0.1" water column. Ensure your chimney is long enough to provide the minimum draft, and use a damper if your installation has a required chimney height that provides too much draft.

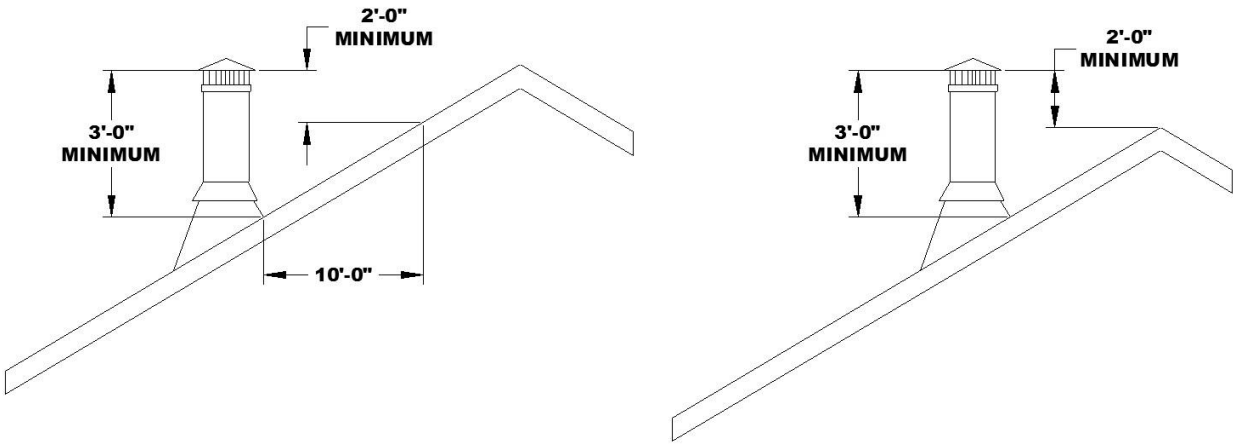


Figure 8 – Chimney Height Requirements

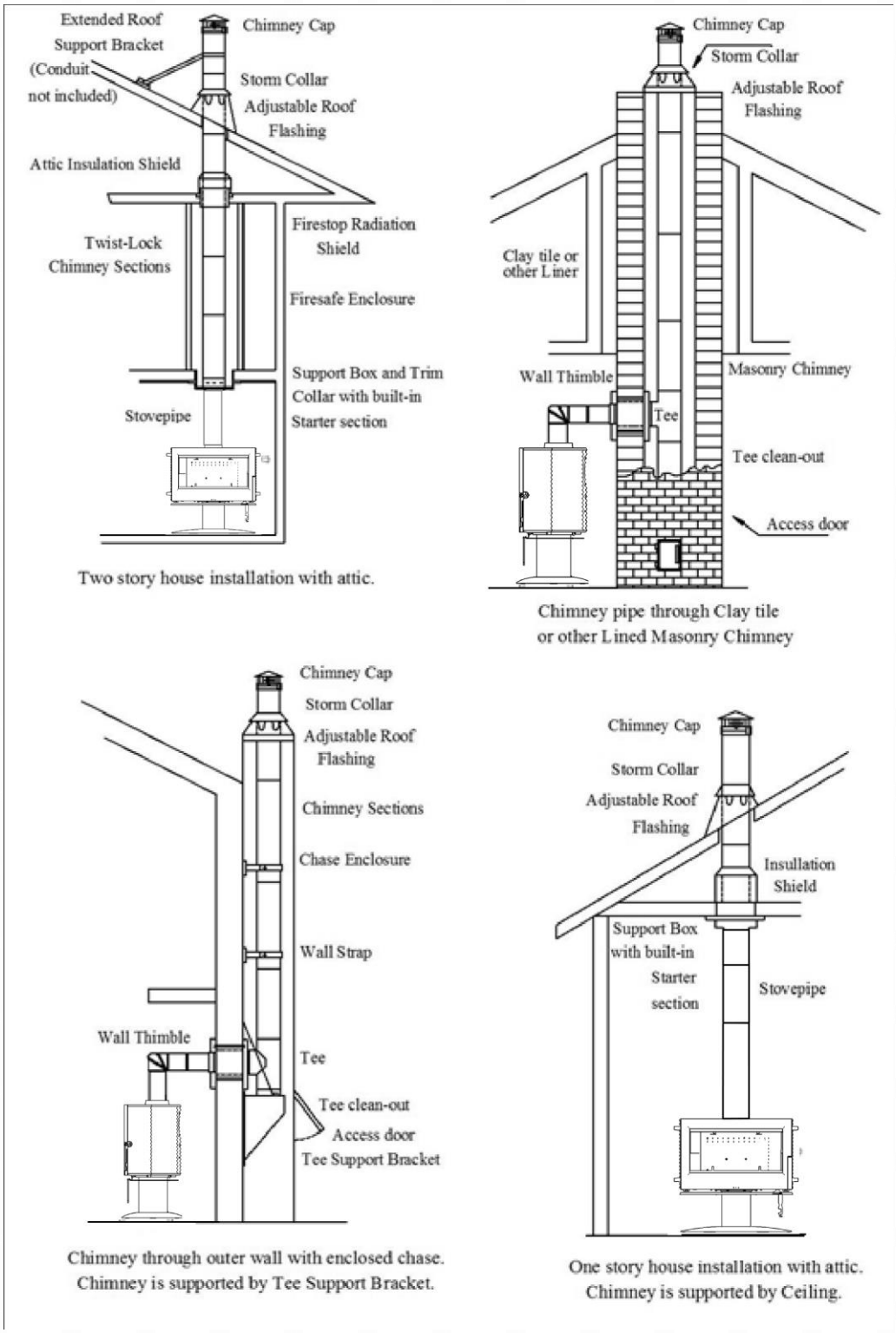


Figure 9 – Typical Chimney Configurations

OPERATION

Once your INVICTA is installed, you are ready to light a fire.

Every installation, season's firewood, and operator's technique varies. Learn how to use your stove most efficiently for your installation. We can give you the basic principles, but only you can ensure maximizing the potential of your stove while also operating it safely.

- **WARNING : HOT WHILE IN OPERATION ! KEEP CHILDREN, PETS, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**

Read this entire chapter before lighting your first fire. It explains the controls and features of your wood stove, how to choose firewood, and how to use your stove on a daily basis.

CONTROLS AND FEATURES

Before lighting any fires, become familiar with the location and operation of your stove's controls and features and learn how to use them (*See Figure 10*). For your own safety, do not modify these features in any way. We recommend you use fireplace gloves when the stove is in operation and hot.

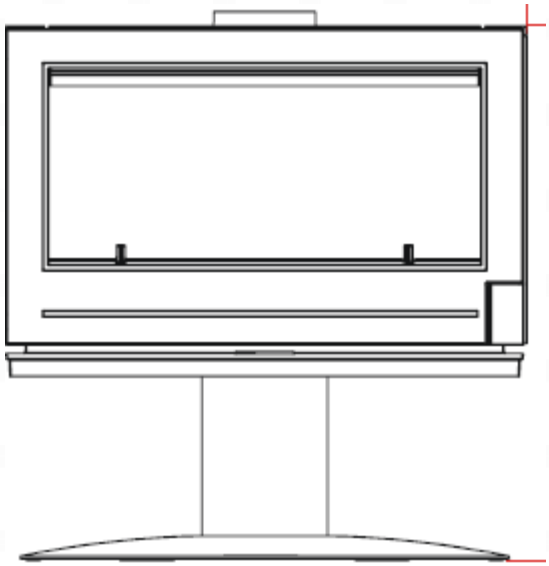


Figure 10 - Controls & Features

OPENING THE DOOR

A glove is provided with your stove. Use it always when manipulating the door opening tool (cold hand). Always remove and place the cold hand away but close by the stove when not using it. Never let the cold hand hung in position to the stove. Burn may occur.

BURN RATE: This wood heater has a manufacturer pre-set 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.''

CHOOSING FIREWOOD

Burn only natural firewood (known as cordwood) in this INVICTA Wood Heater. This stove is not designed to burn other fuels.

- **CAUTION: DO NOT USE CHEMICALS OR FLAMMABLE FLUIDS TO START THE FIRE. DO NOT USE CHARCOAL, PELLETS, COAL, ARTIFICIAL LOGS OR ANY OTHER MATERIALS AS FUEL; THEY ARE NOT SAFE. DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS.**
- **THE USE OF UNAUTHORIZED FUEL SUCH AS COAL COULD PRODUCE HIGH LEVELS OF CARBON DIOXIDE IN THE LIVING SPACE. AT HIGH LEVELS CARBON DIOXIDE COULD RESULT IN PERSONAL INJURY OR DEATH.**

The quality of your firewood directly affects heat output, duration of burn and performance of your stove. Softwoods generally burn hotter and faster, while hardwoods burn longer and produce better coals. Density and moisture content are two critical factors to consider when purchasing wood.

The following is a list of some wood species and their relative BTU (British Thermal Unit) content. The higher the BTU content, the longer the burn. Firewood with higher BTUs is generally ideal for a wood stove.

Burn untreated wood only. Other materials such as wood preservatives, metal foils, coal, plastic, garbage, sulphur, or oil may create creosote.

Wood Heat Value: Sorted By Btu Content		
Common Name	**Lb/ cord**	**MBTU/ cord**
High		
Osage Orange (Hedge)	4,728	32.9
Hickory, Shagbark	4,327	27.7
Hop Hornbeam (Ironwood)	4,267	27.3
Beech, Blue (Ironwood)	3,890	26.8
Birch, Black	3,890	26.8
Locust, Black	3,890	26.8
Hickory, Bitternut	3,832	26.7
Locust, Honey	3,832	26.7
Apple	4,100	26.5
Mulberry	3,712	25.8
Oak, White	4,012	25.7
Medium High		
Beech, European	3,757	24
Maple, Sugar	3,757	24
Oak, Red	3,757	24
Ash, White	3,689	23.6
Birch, Yellow	3,689	23.6
Medium		
Juniper, Rocky Mtn	3,150	21.8
Elm, Red	3,112	21.6
Coffee tree, Kentucky	3.112	21.6
Hackberry	3,247	20.8
Tamarack	3,247	20.8
Birch, Gray	3,179	20.3
Birch, White (Paper)	3,179	20.3
Walnut, Black	3,192	20.2
Cherry	3,120	20
Ash, Green	2,880	19.9
Cherry, Black	2,880	19.9
Elm, American	3,052	19.5
Elm, White	3,052	19.5
Sycamore	2,808	19.5
Ash, Black	2,992	19.1
Maple, Red	2,924	18.7
Fir, Douglas	2,900	18.1
Medium Low		
Boxelder	2,797	17.9
Alder, Red	2,710	17.2
Pine, Jack	2,669	17.1
Pine, Norway (Red Pine)	2,669	17.1
Pine, Pitch	2,669	17.1
Catalpa	2,360	16.4
Hemlock	2,482	15.9
Spruce, Black	2,482	15.9
Pine, Ponderosa	2,380	15.2
Low		
Aspen, American	2,290	14.7
Butternut (Walnut, White)	2,100	14.5
Spruce	2,100	14.5
Willow	2,100	14.5
Fir, Balsam	2,236	14.3
Pine, White (Eastern, Western)	2,236	14.3
Fir, Concolor (White)	2,104	14.1
Basswood (Linden)	2,108	13.8
Buckeye, Ohio	1,984	13.8
Cottonwood	2,108	13.5
Cedar, White	1,913	12.2

Moisture content also plays a key role in the performance of your stove. Wood freshly cut from a living tree (green wood) contains a great deal of moisture. As you might expect, green wood burns poorly. You must season green wood before using it in your wood stove. To season green wood properly, split, stack, and allow it to air dry for a period of one year. Green wood may provide less than 2000 Btu per pound, whereas dry wood can provide up to 7000 Btu per pound.

Stack the firewood on skids or blocks to keep it off the ground, cover only the top of the stack. Plastic or tarps that cover the sides of the woodpile trap moisture and prevent the wood from drying. As for stacking, an old Vermonter said, "The spaces between the logs should be large enough for a mouse to get through, but not for the cat that's chasing it."

- **CAUTION: DO NOT STORE FIREWOOD WITHIN THE STOVE'S SPECIFIED CLEARANCES TO COMBUSTIBLE MATERIALS.**

BUILDING A FIRE

Once you understand the controls of your wood stove and have the appropriate firewood, you are ready to start a fire.

- **WARNING: NEVER USE GASOLINE, GASOLINETYPE 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.

BREAKING IN YOUR WOOD STOVE

It is imperative that your stove is "broken in" gradually. Cast Iron must be "seasoned"; overfiring a new stove may cause cast iron to crack or may damage other stove parts. Natural moisture must be driven out slowly to minimize the “shock” to the cast iron of its first exposure to high firebox temperatures. In addition, the asbestos-free furnace cement must be cured slowly to ensure adequate sealing and bonding.

When you light your first fires, the woodstove will emit some smoke and fumes. This is normal “off gassing” of the paints and oils used when manufacturing the woodstove. If you find it necessary, open a few windows to vent your room. The smoke and fumes will usually subside after 10 to 20 minutes of operation. The odor and smoke will end once the stove is “cured”.

The first few fires of the season may produce other odors from impurities that exist in the area immediately surrounding the stove. Some potential impurities are cleaning solvents, paint solvents, cigarette smoke, and soot from scented candles, pet hair, dust, adhesives, a new carpet, and new textiles. These odors will dissipate over time. You can alleviate these odors by opening a few windows or otherwise creating additional ventilation around your stove. If any odor persists, contact your dealer or an authorized service technician.

If you adhere to the operating procedures in this manual, the steel and cast iron components of your stove will give you many years of trouble-free use.

Avoid the following conditions that can cause the glass, steel or cast iron pieces to break:

- Do not throw wood into the stove.
- Do not use the door as a lever to force wood into the stove.
- Do not load wood encrusted with ice into a burning stove - the thermal shock can cause damage.
- Do not use a manufactured log grate or otherwise support the fuel. Burn the fire directly on the floor of the firebox.

BUILDING A BREAK IN FIRE

1) Open the front door and place five or six double sheets of tightly twisted newspaper in the center of the firebox. Arrange kindling in a crisscross pattern over the newspaper. Kindling should be approximately ten pieces, 1/2" (13 mm) in diameter and 10" to 16" (254 mm to 457 mm) long.
2) Light the paper under the kindling. Leave the door slightly ajar momentarily until the kindling has started to burn and draft begins to pull.
3) Close the door and allow the fire to burn. Keep the door closed while the stove is in use.
4) KEEP A WATCHFUL EYE ON YOUR STOVE to maintain a steady fire. Your first fire should make the stove warm but **not hot to the touch**. Visible steam, or boiling moisture and hissing indicate the cast iron is too hot. At most, a few small chunks of wood should be added to the fire to reach safe break-in temperatures.
5) Once the stove is warm but **not hot to the touch,** allow the fire to die out completely.
6) Let the stove return to room temperature.

Your first fire and first fire each season thereafter should be built and maintained as outlined above. Your patience will be rewarded by a properly seasoned stove.

 NOTE : The cool flue gas temperatures present during the break-in procedure may cause rapid creosote build-up. The door glass may also get dirty. A good hot fire will clean it. We recommend a visual inspection (and cleaning if necessary) of your stovepipe and chimney once the break-in procedure is completed.

NORMAL OPERATION

BUILDING A FIRE FOR EVERYDAY USE

1) Open the front door and place five or six double sheets of tightly twisted newspaper in the center of the firebox. Arrange kindling in a tee-pee configuration over the newspaper. Use approximately 10 pieces of kindling, 1/2" (13 mm) in diameter and 10" to 16" (254 mm to 406 mm) long.
2) Light the paper under the kindling. Leave the front door slightly ajar momentarily until the kindling begins to burn and draft begins to pull (about 10 to 15 minutes).
3) Close the door and allow the fire to burn.
4) Once the kindling is burning, open the front door and add logs, small at first, to build the fire up. Ensure you keep the logs away from the glass in front in order for the air-wash system to work properly. Keep the front door closed while the stove is in use.

   CAUTION: DO NOT BUILD THE FIRE TOO CLOSE TO THE GLASS. KEEPING THE FIRE TOWARDS THE CENTER OF THE FIRE BOX WILL KEEP COALS FROM BUILDING UP AGAINST THE GLASS DURING RELOADING.
5) Once the fire is burning well, close the front door. Now the combustion is steady and your stove will be burning at its optimal efficiency.

Note: Always remember to use the cold handle before opening the front door. When opening the front door to reload or re-arrange logs, it is advisable to open the door just a crack, pause for a moment then open the door completely. This procedure allows the firebox to clear of smoke before the door is open fully. In addition, reloading on a bed of hot, red coals reduces smoking time and brings fresh fuel up to a high temperature rapidly. During the refueling and rekindling of a cool fire, or a fire that has burned down to the charcoal phase, operate the stove with the door slightly crack for about 10 minutes to ensure that the fire is relighting faster. Once the fire as relight, door can be closed.

OVER-FIRE CAUTION

Over-firing means the stove is operating at temperatures above normal temperatures reached during High Burns outlined in the *BURN RATE* section. Carefully avoid over-firing, as it will damage the stove. Symptoms of chronic over-firing can include warped components, short burn times, a roaring sound in the stove or stovepipe, and discoloration of the stovepipe. A properly installed stove using fuel and following operating procedures as outlined in this manual should not over-fire.

Excessive draft, inappropriate fuel, and operator error can cause over-firing. Correct an over-fier situation as follows:

- **EXCESSIVE DRAFT:** Contact your local dealer to have a draft reading taken. Any draft in excess of 0.1 WC requires a damper in the stovepipe. Some installations may require more than one damper.
- **INAPPROPRIATE FUEL:** Do not burn coal; kiln dried lumber, wax logs, compressed wood, highly volatile fuels or combustibles, or anything other than natural cordwood.
- **OPERATOR ERROR:** Ensure all the gaskets are in good condition. Replace worn out or compressed gaskets. Only burn the stove with the firing and ash doors in the closed position.

If you suspect your stove is over-firing, discontinue use and contact your dealer immediately. **Damage caused by over-firing is not covered by your warranty**. Results of over-firing can include warped or burned out internal parts, cracked refractory panels, discolored or warped external parts, and damaged finish.

- **ANY SIGNS OF OVER-FIRING WILL VOID YOUR WARRANTY!**
- **THE FRONT DOOR MUST REMAIN CLOSED WHEN IN OPERATION**

REMOVAL AND DISPOSAL OF ASHES

You can leave a thin layer of ashes in the firebox if preferred. Allow fire to die down or go out completely. It is important to prevent ashes from building up around the front door opening or they will spill out, or they can pack into the gasket channel and prevent proper sealing. To remove ashes, use a fireplace shovel. Avoid removing large live coals by pushing them to the side and removing only the finer ash with a shovel.

Disposal of ashes - Ashes should be placed directly into a **metal** container with a tight fitting lid. Do not place any other items or trash into the metal container. Do not pour water into the container. Replace the container's lid and allow the ashes to cool. Never place the ash disposal container on a combustible surface or vinyl flooring, as the container could be **hot!**

Pending disposal, place the closed ash container on a non-combustible floor or on the ground outside, well away from all combustible materials, liquid fuels, or vehicles. Retain ashes in the closed container until all coals thoroughly cool.

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 place ashes in wooden or plastic containers, in trashcans with other trash, or in paper or plastic bags, no matter how long the fire has been out. Coals within a bed of ashes can remain hot for several days once removed from the firebox.

MAINTENANCE

INSPECTION AND REPLACEMENT PROCEDURES

WARNING : THIS WOOD HEATER 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

INSPECTING AND REMOVING/REPLACING THE BAFFLE

1. Allow the stove and ashes to fully cool.
2. Lift up on the right side baffle, and gently pull the left side baffle down and out of the stove.

Ensure that the baffle pieces are pushed together at the center joint.

CAUTION - Do not force the baffle pieces. Gently adjust the baffle orientation until each side can be removed freely from the stove.

GLASS REPLACEMENT PROCEDURES

WARNING : DO NOT OPERATE THIS APPLIANCE WITH THE GLASS PANEL REMOVED, CRACKED, OR BROKEN. DO NOT SUBJECT THE DOOR TO ABUSE, SUCH AS STRIKING OR SLAMMING SHUT. ONLY A QUALIFIED SERVICE PERSON SHOULD REPLACE THE GLASS PANEL.

1. Follow the instructions included with the replacement glass kit.

2. Remove the screws from the glass clips (use penetrating oil if necessary) – Set aside for reinstallation.
3. Carefully lift the damaged glass off the door and discard.
4. Remove any remaining glass and old gasket material.
5. Clean the screw holes and place a small amount of anti-seize compound in each one.
6. Install a new glass gasket in the glass gasket groove.
7. Place the new glass onto the door.
8. **Important! Center the glass** and ensure that the edges of the glass are parallel with the edges of the opening.
9. Check glass position again (centered, and parallel), then screw the glass retainer clips with the glass pads back on the door using a crisscross pattern. Tighten the screws no more than 1/8th of a turn after they seat. The glass will break at this point if not positioned correctly.
10. Apply a light film of anti-seize lubricant on the door's hinge pins if needed.
11. After 5 or 6 fires, check the glass retainer screws, and retighten if necessary. Use only 4mm x 329mm x 395mm Ceramic, or

Neoceram glass. Contact your INVICTA dealer.

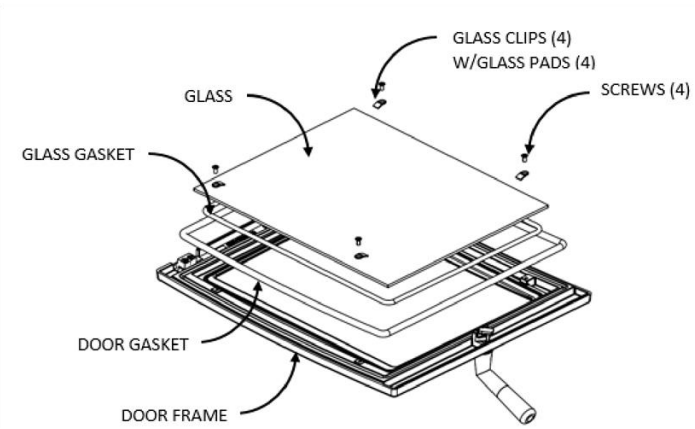


Figure 20 : Front Door assembly

CREOSOTE FORMATION & REMOVAL

When wood burns slowly at low temperatures, it may produce tar and other organic vapors, which combine with expelled moisture to form creosote. These creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire, which may damage the chimney or even destroy the house. When burning wood, inspect the chimney connector and chimney at least once every two months during the heating season to determine if there is a creosote buildup.
If a creosote build-up occurs, inspect the stovepipe connector and chimney more often, at least monthly during the heating season to monitor the accumulation. If a creosote residue greater that 1/4" (6 mm) accumulates, remove it to reduce the risk of a chimney fire.

PREVENTION

Burn the stove with the door slightly crack for 15 - 20 minutes daily to burn out creosote deposits from within the stove and the venting system.

After reloading with wood, burn the stove with the door slightly crack for 15 to 20 minutes. This manner of operation ensures early engagement of the secondary combustion system that minimizes creosote buildup in the chimney.

If your glass always remains dirty, your wood is wet; therefore, there is a higher risk of creosote buildup.

Inspect the venting system at the stove connection *and* at the chimney top. Cooler surfaces tend to build creosote deposits faster, so it is important to check the chimney at the top (where it is coolest) as well as from the bottom near the stove. **CLEANING**

Remove accumulated creosote with a cleaning brush specifically designed for the type of chimney in use. We recommend you use a certified chimney sweep to perform this service. Contact your dealer for the name of a certified chimney sweep in your area (your dealer may be a certified sweep!).

We recommend that before each heating season you have the entire system professionally inspected, cleaned and repaired, if necessary.

GASKETS

Replace door gasket material every two to three seasons, or whenever it becomes deteriorated or loose, depending on stove use. If the door seal leaks, a new gasket will ensure a tight seal and improve stove performance.

We recommend you only use INVICTA replacement gaskets when you need to replace your door gasket. Contact your dealer for a gasket kit that includes instructions, and the gasket for your stove.

GLASS

The glass used in our stoves is actually not plain glass, but a tough, clear ceramic material capable of operating at temperatures up to 2300° F. Do not operate the stove with a broken door glass. Do not abuse the front door by striking or slamming.

When necessary, clean the glass. For the inside surface of the glass, we recommend using a damp paper towel dipped in gray ash. Rub the inside of the glass with a circular motion. When all the deposits are removed, clean up with window cleaner or with commercial stove glass cleaners, which are available from your local dealer. Use this type of cleaner for the outside surface as well. Never attempt to clean the glass while the fire is burning or while the glass is hot. Remove deposits by following the instructions provided with the cleaner. Wipe the cleaner off with a soft cloth, or black & white newsprint.

> **Important:** scratching or etching the glass will weaken the integrity of the glass. Do not use a razor blade, steel wool, or any other abrasive material to clean the glass. Use a cleaner specifically manufactured for woodstoves only.

The front door glass is a ceramic, thermal shock resistant glass, made specifically for use in woodstoves. Do not use any replacement glass other than the ceramic glass manufactured and supplied for use in this woodstove. Replacement glass is available through your local dealer.

Replace the door glass immediately if broken or chipped. Contact your local dealer for replacement glass. The glass kit includes instructions and everything needed for the repair. If you replace the glass yourself, wear work gloves and safety glasses.

TROUBLESHOOTING

COMMON ISSUES

Virtually all woodstove operators experience basic common problems at one time or another. Most are correctable and generally require only a minor adjustment of the stove, installation, or operating technique. In cases where weather conditions dramatically affect stove performance, the problems are typically temporary and solve themselves once the weather changes.

If you question whether your stove is producing adequate heat, the best way to troubleshoot the problem is to monitor the temperature of the stack no more than 12 inches (30 cm) above the flue collar. A 400° F (200° C) stovepipe confirms the stove is supplying sufficient heat. Keep in mind that your house itself will regulate room/house temperatures. How well the walls, floors and ceilings are insulated, the number and size of windows, the tightness of outside doors, and the construction or style of your house (vaulted ceilings or other open spaces which collect large percentages of heat, ceiling fans, etc.) all are determining factors of room temperature.

Your stove's performance is also dependent on its installation. One common cause of poor performance is an oversized chimney flue. Oversized chimney flues result in decreased draft, which prevents the smoke from rising out the chimney. Oversized flues are also more difficult to heat effectively, especially when burning a high efficiency stove. Cool flue temperatures inhibit the establishment of a strong draft (and encourage the accumulation of creosote). The lack of a strong draft will cause the fire to die down and may even force smoke to pour into the room.

If your chimney is the proper size and a strong draft is not easily established, there is the possibility that the chimney is too cold. Again, hot chimneys promote stronger drafts. Opening a window briefly in the room while lighting the stove may help.

Other draft guidelines are as follows:

An **"AIRTIGHT" HOUSE:** The air supply (infiltration) to the interior of the house may be inadequate if your home is super-insulated or especially well sealed. This phenomenon of air starvation within the building is exacerbated if exhaust fans, such as clothes dryers, bathroom fans or cook stove exhaust fans, are in operation within the home. Outfitting your stove with an optional outside air dispenser, which leads to the outside of the building, can correct this problem.

Tall Trees or Buildings: These obstructions, when located close to the top of the chimney can cause chronic or occasional downdrafts. When selecting a site for a new chimney, consider the placement of other objects near the proposed chimney location.

Wind Velocity: Generally, the stronger and steadier a wind, the stronger (better) the draft. However, "gusty" wind conditions can cause erratic downdrafts. For consistent problems, consider a high wind cap, such as the Vacu-Stack.

Barometric Pressure: Chimney drafts are typically sluggish on balmy, wet or muggy days (low barometric pressure). This is a weather-related phenomenon, which generally is self-correcting as the weather changes.

Briskness of Fire: The hotter the fire in your stove, the hotter your chimney and, therefore, the stronger the draft.

Breaks in the Venting System: An unsealed clean-out door at the bottom of the chimney, leaky stovepipe joints, a poor stovepipe-to-thimble connection, missing caps, or a leaky chimney all can cause inadequate draft.

Seasonal Factors: Early fall and late spring are generally difficult seasons in which to establish proper drafts. The colder the outside air is relative to room temperature, the stronger the draft.

OPERATING THE STOVE

As outlined above, there are days when a good draft is just not easy to establish. The causes are usually seasonal factors or a cold chimney. Try starting the fire by using small kindling and fuel to obtain a quick, hot fire. Tend the fire frequently with small fuel until the chimney is hot and the draft is well established. Sometimes, partially opening a first floor window briefly will help quickly get draft established.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
STOVE SMOKES	Operating Technique	Slightly crack the door one minute before fully opening doors.
	Cold Chimney or reverse draft	Preheat the chimney when first starting a fire. Briefly open a window in the room containing the stove.
	Blocked Chimney	Examine the chimney and stovepipe for blockage or creosote accumulations.
	Oversized Chimney	Reline the chimney to the appropriate diameter
	Undersized Chimney	Install a draft inducer or replace the chimney.
	Chimney Too Short	Lengthen the chimney.
	Air Infiltration into The Chimney	Seal chimney connections and openings. Check clean-out doors.
	Not burning proper fuel	Ensure cordwood is seasoned and dry.
	More Than One Appliance Connected to the Flue	Disconnect all other appliances and seal openings.
BACK-PUFFING OR GAS EXPLOSIONS	Operating Technique	Slightly crack door one minute before fully opening the door and keep it fully open for a few minutes after reloading.
	Chimney Down-draft	Install a chimney cap.
	Excessive Ash Build-up	Empty the ash pan more frequently. Increase efficiency of burns, and avoid using poor quality or green wood.
UNCONTROLLED OR SHORT BURN	Unsealed or Open Door	Close the door tightly or replace the gaskets. Air leakage around glass gasket – replace gasket
	Excessive Draft	Check the installation. Install stovepipe damper. Draft in excess of 0.1 wc should be corrected with a stovepipe damper(s)
	Extra Long Chimney	Shorten the chimney. Install stovepipe damper(s).
	Oversized Chimney	Reline the chimney to the proper diameter.
	High Winds or Hilltop Location:	Install a chimney cap.
INSUFFICIENT HEAT	Poor Quality, low Btu content, or Green Wood	Use only air-dried wood, preferably dried at least one year. Use a wood with a high Btu content if available.
	Cold Exterior Chimney	Reline or insulate the chimney.
	Leaky Stovepipe or Chimney	Check the installation. Replace with a pre-fabricated insulated chimney system or a properly sized masonry chimney.
	Too Much Heat Loss From House	Add insulation, use energy efficient windows, or caulk windows, and seal openings in home.
	Excessive Ash Build-up	Empty the ash pan more frequently. Increase efficiency of burns, and avoid using poor quality or green wood.
BLISTERING OF FINISH	Operating Technique	Do not over-fire the stove. Monitor stove temperatures. Use seasoned wood only.
	Excessive Draft	Check the DRAFT. A damper may be required. Operate the stove at a LOW BURN range.

SAFETY LABEL

C US

MODEL/MODÈLE :
INVICTA NELSON/AARON

MANUFACTURED BY/FABRIQUÉ PAR :
INVICTA GROUP SASU
785 520 180 R.C.S. SEDAN
Greffe du Tribunal de Commerce de SEDAN

Siège social
INVICTA GROUP SASU
ZI LA GRAVETTE
F-08350 DONCHERY

DATE OF MANUFACTURE / DATE DE FABRICATION				

Label No. / No. D'étiquette :

CERTIFIED TO / CERTIFIÉ:
ULC S627-00 & UL 1482-11

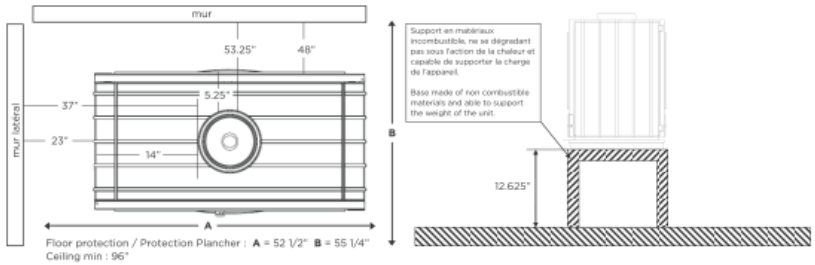
LISTED FACTORY BUILT STOVE
FOR USE IN CANADA & USA
NOT SUITABLE FOR MOBILE HOME INSTALLATION

POÊLE PRÉ-FABRIQUÉ HOMOLOGUÉ
POUR LE CANADA & USA
NE PAS INSTALLER DANS UNE MAISON MOBILE

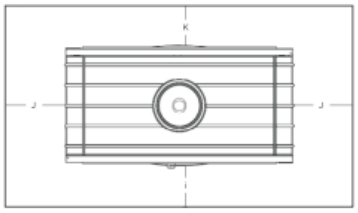
CHIMNEY TYPE
(See manual for appropriate choice)
Use only a 7 inches pipe flue connector (black)
Use only a 7 inches chimney listed
per UL 103 HT or ULC S-629

TYPE DE CHEMINÉE
(voir le manuel d'instruction pour les bons choix)
Utiliser uniquement un connecteur 7 pouces (noir)
Utiliser uniquement une cheminée de 7 pouces
répertoriée selon la norme UL 103 HT ou ULC S-629

Clearance to combustible / Dégagement aux matières combustibles:
SIDE WALL / PAROI LATÉRALE : 24"



Floor protection / Protection Plancher : **A** = 52 1/2" **B** = 55 1/4"
Ceiling min : 96"



PROTECTION MINIMALE DU PLANCHER			
	AVANT (I)	CÔTÉS (J)	ARRIÈRE (K)
CANADA	18" (457.2mm)	8" (203.2mm)	18" (457.2mm)
É.-U.	16" (406.4mm)	8" (203.2mm)	16" (406.4mm)

MINIMUM FLOOR PROTECTION			
	FRONT (I)	SIDES (J)	BACK (K)
CANADA	18" (45.7cm)	8" (203.2mm)	18" (45.7cm)
USA	16" (40.6cm)	8" (203.2mm)	16" (40.6cm)

! CAUTION - ATTENTION !

HOT WHILE IN OPERATION DO NOT TOUCH, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAME-PLATE AND INSTRUCTIONS.
CHAUD LORSQU'EN FONCTION. GARDER LES ENFANTS, VÊTEMENTS ET MEUBLES HORS DE PORTÉE. TOUCHER L'APPAREIL POURRAIT CAUSER DES BRÛLURES. VOIR LA FICHE SIGNALÉTQUE ET INSTRUCTIONS.

DO NOT REMOVE THIS LABEL / NE PAS RETIRER CETTE ÉTIQUETTE

! AVERTISSEMENT

LA VITRE CHAUDE CAUSERA DES BRÛLURES.

NE PAS TOUCHER LA VITRE AVANT QU'ELLE AIT REFROIDI.

NE JAMAIS LAISSER LES ENFANTS TOUCHER LA VITRE.

CONSIGNES DE SÉCURITÉ

! AVERTISSEMENT

Si ces instructions ne sont pas suivies à la lettre, un incendie ou une explosion pourraient s'ensuivre, causant des dommages matériels, des blessures corporelles ou des pertes de vie. Une installation non conforme, des ajustements, des altérations, un service ou un entretien inadéquats peuvent causer des dommages matériels, des blessures corporelles et des pertes de vie. Veuillez lire le manuel en entier avant d'installer et d'utiliser cet appareil. Cet appareil n'a pas été testé avec un ensemble de bûches à gaz non ventilées. Afin de réduire le risque d'incendie ou de blessure, n'installez pas d'ensemble de bûches à gaz non ventilées dans cet appareil.

- Cet appareil peut devenir très chaud lorsqu'il fonctionne.
- Les matériaux combustibles, tels que le bois de chauffage, les vêtements mouillés, etc. placés trop près de l'appareil pourraient prendre feu.
- Il faut empêcher les enfants et les animaux de toucher l'appareil quand il est chaud.
- La cheminée doit être en bon état et ne pas être fêlée. Avant d'installer cet appareil, contactez le service du bâtiment ou le service d'incendie de votre municipalité et suivez leurs directives.
- Faites fonctionner l'appareil uniquement avec la porte bien fermée et assurez-vous que les joints étanchéité en bonne condition.
- N'utilisez pas un chenet et n'essayez pas de surélever le feu de quelque manière.
- Cet appareil a été conçu pour brûler du bois naturel uniquement. Vous obtenez une meilleure efficacité et des émissions plus basses avec du bois dur séché à l'air qu'avec du bois résineux ou vert, ou du bois dur fraîchement coupé.
- N'allumez pas votre feu à l'aide de produits chimiques ou de liquides tels que de l'essence, de l'huile à moteur, etc.

Cet appareil a été conçu pour brûler du bois naturel uniquement. Ne brûlez pas de déchets, des résidus de tonte de pelouse, de caoutchouc, des produits pétroliers résiduels, de la peinture ou du diluant / de solvants, de plastique, des matériaux contenant de l'amiante, des débris de construction, des traverses de chemin de fer ou de bois traités, du fumier ou des restes d'animaux, du bois de grève imprégné de sel ou des matériaux salés, du bois non séché, de charbon, de papiers de couleur cartons, des contreplaqués ou des panneaux de particules.

- Ne laissez pas l'appareil chauffer au point où des parties deviennent rougeoyantes.
- GARDEZ LA TEMPÉRATURE SUR LE DESSUS DE L'APPAREIL SOUS 700°F (371°C). Toute tentative de dépasser les débits maximaux de chaleur, tels que mentionnés dans les spécifications de conception, pourrait provoquer

- **ATTENTION : Pièces chaudes. Ne pas faire fonctionner avec le clapet retiré.**

Se référer au code du bâtiment et aux instructions Invicta avant de traverser le mur ou le plafond avec votre conduit de cheminée.

! WARNING

HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

SAFETY INFORMATION

! WARNING

If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage, bodily injury or even death. Please read entire manual before you install and use your appliance.
This appliance has not been tested with an unvented gas log set. To reduce risk of fire or injury, do not install an unvented gas log set into the appliance.

- This appliance can be very hot when burning.
- Combustible materials such as firewood, wet clothing, etc. placed too close can catch fire.
- Children and pets must be kept from touching the appliance when it is hot.
- The chimney must be sound and free of cracks. Before installing this unit, contact the local building or fire authority and follow their guidelines.
- Operate only with the door tightly closed and make sure that all seal are in good condition.
- Do not use an elevated grate or otherwise raise the fire.
- This appliance is designed to burn natural wood only. Higher efficiencies and lower emissions generally result when burning air dried seasoned hardwoods, as compared to softwoods or to green or freshly cut hardwoods.
- Do not start a fire with chemicals or fluids such as gasoline, engine oil, etc.
- Do not burn trash or garbage, lawn clippings / waste, rubber, waste petroleum products, paints or paint thinners / solvents, plastic, materials containing asbestos, construction debris, railroad ties or treated wood, manure or animal remains, salt water driftwood or salted materials, unseasoned wood, coal, charcoal, coloured paper, cardboard, plywood or particleboard.
- Do not let the appliance become hot enough for any part to glow red.
- KEEP THE STOVE TOP TEMPERATURE BELOW 700°F (371°C). Attempts to achieve heat output rates that exceed design specifications can result in steel distortion and damage.

- **Caution: hot parts. Do not operate unit with damper removed.**

Check Invicta's installation instructions for precautions required for passing a chimney or chimney connector through a combustible wall or ceiling and reference to local building code for details.

WARRANTY

CONTRACTUAL GUARANTEE

DURATION The duration of our guarantee is10 years on the firebox body and 3 years for all casting component having direct contact with the fire like the ashes grid, the chenet and the baffle, counting from the date of delivery by the installer or the date of point of sale. The guarantee applies during this period to all defects of parts or of manufacture. We are only responsible for the free replacement of parts found defective, after verification by ourselves. If the replacement of these parts would prove too expensive, we reserve the right to replace the appliance, a decision we alone can make.

LEGAL GUARANTEE The provisions of this guarantee do not preclude the purchaser from benefiting from the legal guarantees on equipment, covering faults and defects, which apply in any event under the conditions of article 1641 and following of the civil code.

VALIDITY The purchaser designated hereunder, acknowledging having received the notice of installation and of use, agrees to conform to it for safety reasons.

This guarantee is only valid if the appliance is used according to the rules and recommendations stated on the Instructions for Installation and Use, supplied with the appliance.

The appliance must be installed at the address quoted on the certificate of guarantee.

The other components are guaranteed for 1 year, such as : latch, screws and bolts, springs, fans, printed circuits, switch, electric thimbles, wire, electric sheaths, etc...

EXCLUSION The glass is resistant to a temperature of 750°C, and the temperatures in the combustion chamber never reach this temperature, a breakage of glass cannot occur as a result of overheating. Therefore, the breakage of the glass, due to a bad manipulation on installation or the handling of the appliance, is not covered by the guarantee.

The joints are considered items which are subject to wear.

The fuel used and the control of the apparatus, being outside our control, the parts of the stove in direct contact with the ignited fuel, are not included in the cover of the guarantee, including : fireplate, fire grate, vent, log barrier. The cost of travelling, of transport, of workmanship, of packaging, of disassembly and the consequences of the immobilization of the appliance, resulting from the operations of the guarantee, are the sole responsibility of the customer.

Any disorder caused on any part of the installation, by mechanical or electrical parts which we have not supplied and which are prohibited by the texts governing heating appliances.
The damage caused by the use of any other fuel than wood.

Date of purchase (start of the guarantee) : .....

PURCHASER

SURNAME : .....
First name : .....
Address : .....
Postal Code : ..... Town : ..... Country : .....

SUPPLIER

Designation of the appliance : .....

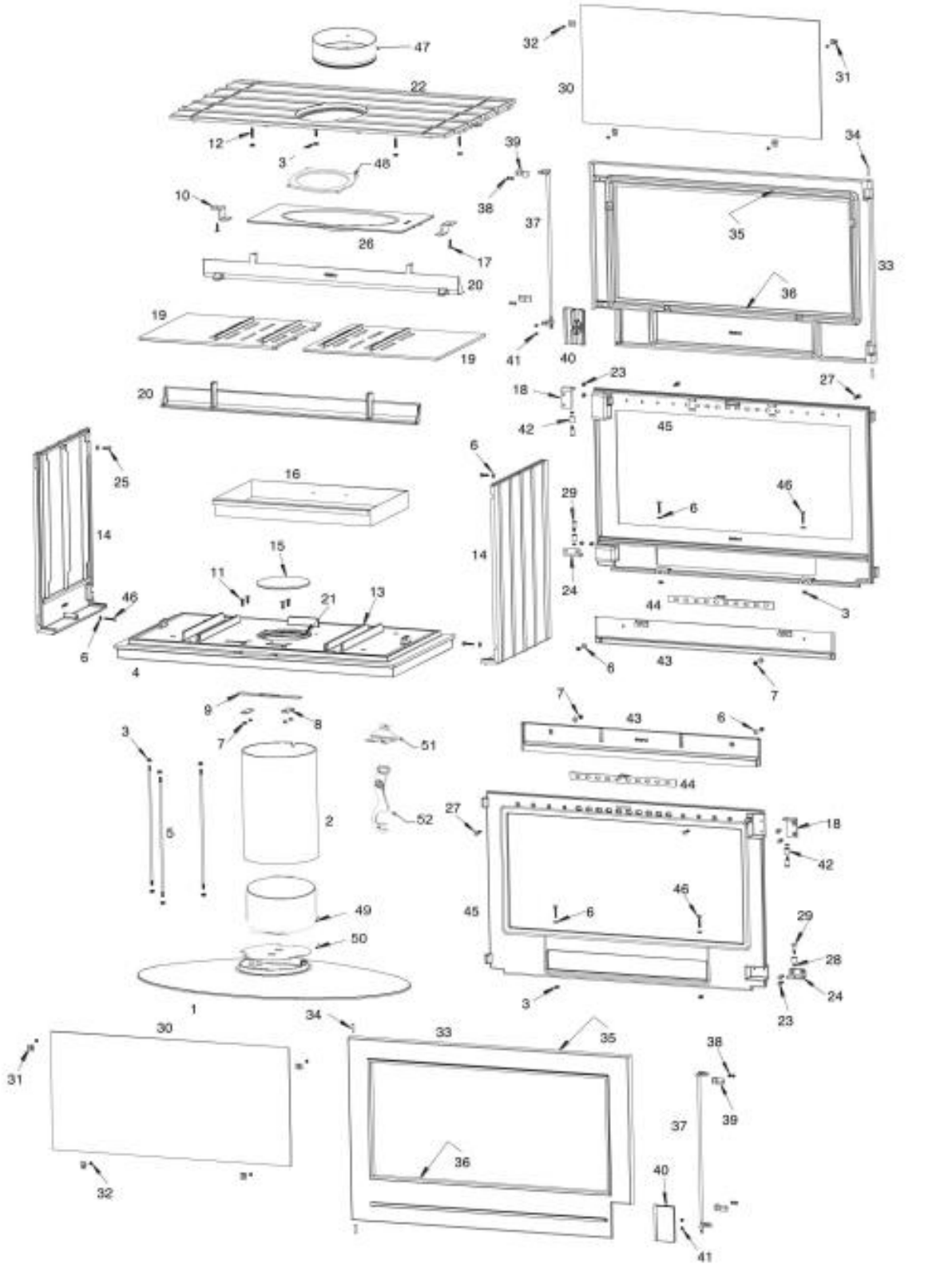
Reference : .....

ANNEX – PARTS

INVICTA FRANCE

Poêle NELSON

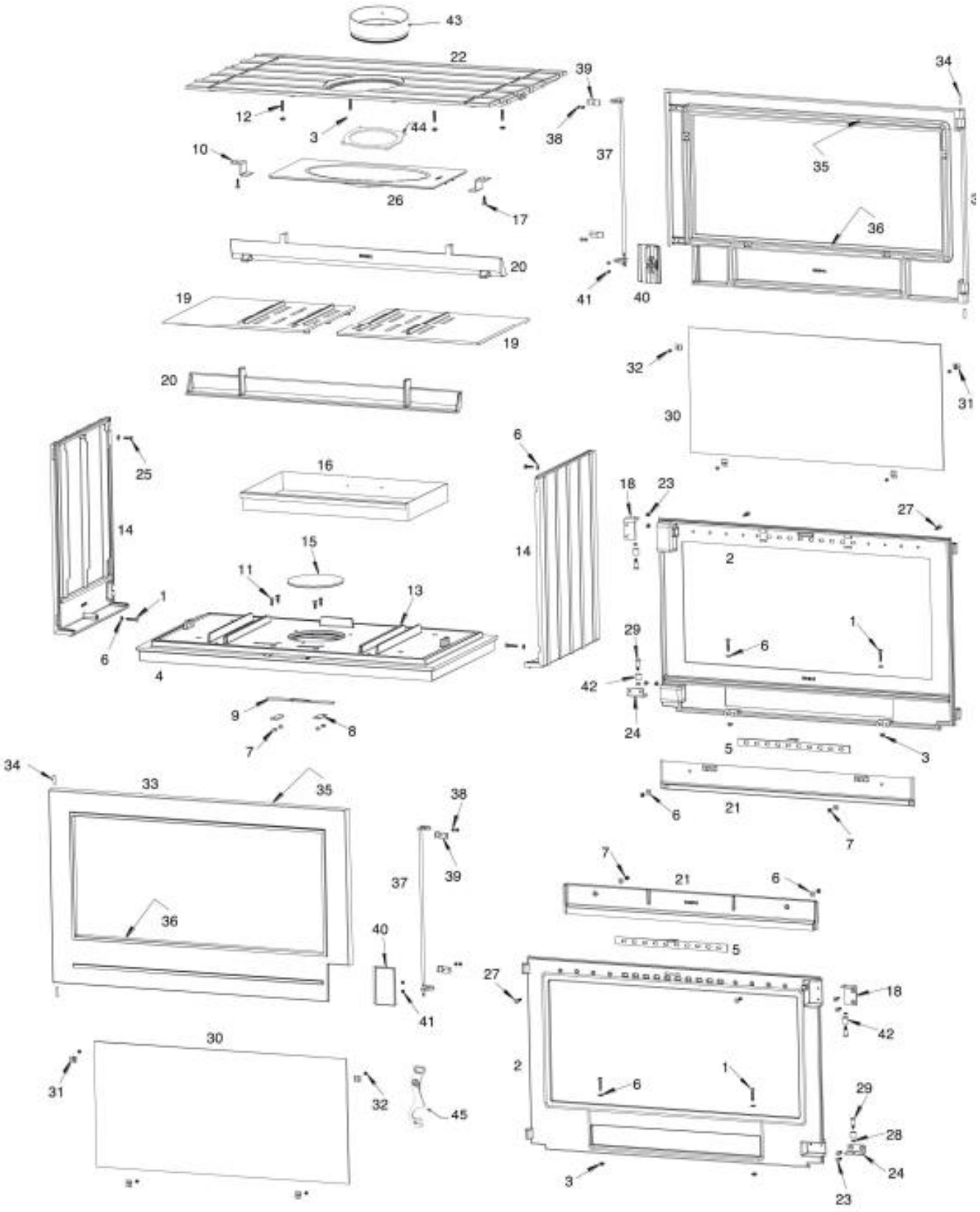
référence 6129 44



Repère	Nbr	Désignation	Référence
1	1	Pied	F610591B
2	1	Tube pietement	AT610354A
3	14	Ecrou a embase de 6	AV7220060
4	1	Embase	F610855B
5	3	Tirants	AS610173A
6	12	Rondelle de 6	AV4100060
7	8	Ecrou de 6	AV7100060
8	2	Bride de Registre	AT610112A
9	1	Registre de réglage d'air primaire	ED-REO-1002
10	2	support de deflecteur	AT610219A
11	4	Vis à têtefraisée hexagonale creuse de 6x20	AV8636200
12	4	Vis sans tête hexagonale creuse de 6x30	AV8706300
13	2	Joint thermocorde 05 de 0.320 mètres	A1303005
14	2	Côté	F610856U
15	I	Tampon	F610590B
16	I	Tiroir cendrier	AT610101A
17	2	Vis à tête hexagonale de 6x10	AV8406100
18	2	Equerre d'excentrique haute	AT610174A
19	2	Demi grille	F610858B
20	2	Chenet	F610852B
21	I	Joint thermocorde 05 de 0.434 mètres	A1303005
22	I	Dessus	F610857U
23	8	Vis à têtefraisée pozy de 6x12	AV8656120
24	2	Equerre d'excentrique basse	AT610146A
25	2	Vis à tête hexagonale de 6x20	AV8406200
26	I	Déflecteur	F610859B
27	4	Vis à têtefraisée hexagonale creuse de 6x30	AV8636300
28	4	Ecrou bas de 6	AV » 30060
29	4	Axe excentrique	AS610307A
30	2	Vitre	AX606128A
31	8	Attache de vitre	AS700180A
32	8	Vis à tête cylindrique pozy de 4x6	AV8644067
33	2	Porte	F610843U
34	4	Goupille cannelée 06x50	AV6306500
35	2	Joint thermocorde 08 de 3,06 mètres	A1303008
36	2	Joint de vitre de7x3 de 2.224 mètres	A1010080
37	2	Axe defermeture	AS610159A
38	8	Vis à tête cylindrique pozy de 4x8	A « 8644080
39	4	Bride pour axe defermeture	AT610172A
40	2	Poignée de porte	F610854T
41	4	Vis à tête bombée hexagonale creuse de 4x16	AV8684160
42	4	bague d'excentrique	AS610306A
43	2	Guide d'air	F610848B
44	2	Registre de réglage d'air secondaire	AT610184A
45	2	Façade	F610842U
46	6	Vis à tête hexagonale de 6x30	A V8406300
47	1	Buse 7 pouces visée	ED BVS-7002
48	1	Base de Buse	ED BVS-7001
49	1	Laine isolante	ED HSW-0001
50	1	Support de laine isolante	ED HSF-1001
51	1	Support de poignée	ED HAN-1001
52	1	Main froide (poignée)	ED HAN-1002

Poêle AARON

Référence : 6129 04



Poêle à bois AARON

référence 6129 04

Repère	Nbr	Désignation	Référence
1	6	Vis à tête hexagonale de 6x30	AV8406300
2	2	Façade	F610842U
3	8	Écrou a embase de 6	AV7220060
4	1	Embase	F610855B
5	2	Registre de réglage d'air secondaire	AT610184A
6	12	Rondelle de 6	AV4100060
7	8	Écrou de 6	AV7100060
8	2	Bride de Registre	AT610112A
9	1	Registre de réglage d'air primaire	ED-REO-1002
10	2	support de déflecteur	AT610219A
11	4	Vis à tête fraisée hexagonale creuse de 6x20	AV8636200
12	4	Vis sans tête hexagonale creuse de 6x30	AV8706300
13	2	Joint thermocorde 05 de 0.320 mètres	A1303005
14	2	Côté	F610856U
15	I	Tampon	F610590B
16	I	Tiroir cendrier	AT610101A
17	2	Vis à tête hexagonale de 6x10	AV8406100
18	2	Equerre d'excentrique haute	AT610174A
19	2	Demi grille	F610858B
20	2	Chenet	F610852B
21	2	Guide d'air	F610848B
22	I	Dessus	F610857U
23	8	Vis à tête fraisée pozy de 6x12	AV8656120
24	2	Equerre d'excentrique basse	AT610146A
25	2	Vis à tête hexagonale de 6x20	AV8406200
26	I	Déflecteur	F610859B
27	4	Vis à tête fraisée hexagonale creuse de 6x30	AV8636300
28	4	Ecrou bas de 6	AV7130060
29	4	Axe excentrique	AS610307A
30	2	Vitre	AX606128A
31	8	Attache de vitre	AS700180A
32	8	Vis à tête cylindrique pozy de 4x6	AV8644067
33	2	Porte	F610843U
34	4	Goupille cannelée 06x50	AV6306500
35	2	Joint thermocorde 08 de 3, 06 mètres	A1303008
36	2	Joint de vitre de7x3 de 2.224 mètres	A1010080
37	2	Axe de fermeture	AS610159A
38	8	Vis à tête cylindrique pozy de 4x8	AV8644080
39	4	Bride pour axe de fermeture	AT610172A
40	2	Poignée de porte	F610854T
41	4	Vis à tête bombée hexagonale creuse de 4x16	AV8684160
42	4	bague d'excentrique	AS610306A
43	1	Buse 7 pouces visée	ED BVS-7002
44	1	Base de Buse	ED BVS-7001
45	1	Main froide (poignée)	ED HAN-1002

INVICTA STOVE AND FIREPLACES ARE DESIGNED AND MANUFACTURED BY:
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785 520 180 R.C.S. SEDAN
Greffe du Tribunal de Commerce de SEDAN
Siège social
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www.invicta.fr

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www.invictastoves.com