



 **LANOUE ET FILS**
INC.

INFO 2021

RBQ:5695-9893-01

Pellet Stove Specialists





Who are we?

- ▶ Lanoue et Fils Inc. is an enterprise that specialises in the installation and repairs of pellet stoves that has been active for the past 31 years.
- ▶ Located in Mascouche, the enterprise operates in a territory covering 100 kilometers around Montreal.
- ▶ We annually help more than 1000 consumers and boutiques.
- ▶ Since our priority is the satisfaction of our customers, we offer a professional service based on knowledge acquired on the different products sold in Quebec through our experimented specialists



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1 *The pellet: Fabrication*

- ▶ The pellets are made of sawdust and compressed wood chips. It doesn't contain any other additives which makes it an ecological and renewable product.
- ▶ Through a rigorous process, these residues are compressed to about 45lbs/cubic foot to produce these wood pellets.
- ▶ Hardwood or soft, same compression.



1 *The pellet : Quality*

- ▶ Wood pellets are the cleanest fuel amongst the fuels used for residential heating.
- ▶ The Wood Pellet Association of Canada (WPAC) and the PFI (Pellet Fuel Institute) have been working for 4 years in order to implement Enplus and CANplus certification to achieve better performance. Nearly 70% of the manufacturers in America joined the program.



1 The pellet: Ecological

ENplus and CANplus certifications (Europe and America)

- ▶ Diameter of 6mm (¼")
- ▶ Length between 3,15mm and 40mm (1/8" et 1½")
- ▶ Humidity level below 10%
- ▶ Ash content less than 0,7% - heated to 550°C
- ▶ Mechanical hardness greater than 97,5%
- ▶ Proportions of dust less than 1%
- ▶ Calorific value between 7 093 BTU/lbs. and 8 168 BTU/lbs.
- ▶ and / or 15 627 BTU/kg and 18 016 BTU/kg (4,6 kW/kg and 5'3 kW/kg).



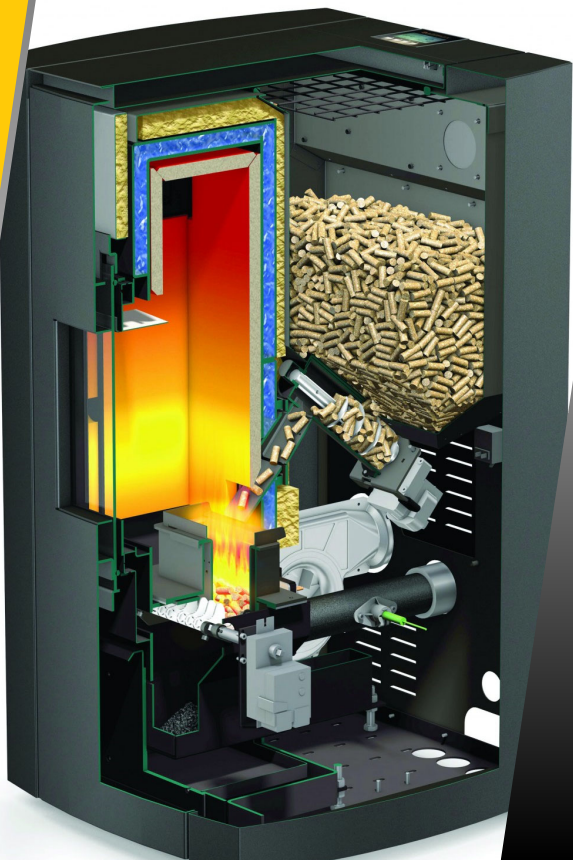
1 The pellet : Storage

- The pellets can be stored easily
- Contrary to what certain insurance companies may think, pellets are not a fire risk factor when they are stored
- In fact, the pellets needs a very large amount of forced air to burn, so in a bag, it can't have the necessary air for combustion.



2

The stove : Heating system



- ▶ IT IS A SAFE SYSTEM:
 - ▶ Insulated fire box
 - ▶ Controlled temperatures
 - ▶ Controlled pressure
 - ▶ Security devices
 - ▶ Heat exchanger
 - ▶ Autonomous system



2

The stove : Different models



- ▶ Cast iron, steel
- ▶ On base, on legs, built in
- ▶ Varying from 30 000 to 70 000 BTU/h (10 kW to 20 kW)
- ▶ In height or width
- ▶ Fire box high or wide
- ▶ Automatic, thermostatic or manual



3 The components: Their functions



Hopper: to store the pellet



Auger: to feed the pellet to the firepot



3 The components: Their functions



3

Firepot: a hole-shaped container, designed to burn the wood pellet and let a very large quantity of air pass through



4

Heat exchanger: the heat produced by the fire is routed to the outside of the stove

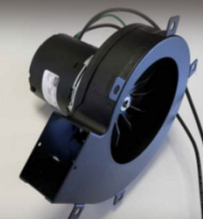


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The components: Their functions



Combustion motor: evacuates the exhaust fumes to the outside by creating a suction in the firepot



Convection motor: fan that pushes warm air into the room



3 The components : Their functions



Igniter: Permits the ignition of the wood pellet



Ash tray: Accumulates the ashes



4 Operation



During the start-up, the electronic card sends and receive signals from each component in order to coordinate the start-up process.



The combustion engine and the igniter starts.



4

Operation



If the pressure switch detects the right pressure, the auger will send the pellets towards the fire pot.



The igniter being already heated, the pellet lights up by the aspiration of the combustion motor.



4 Operation



4

When the thermic switch detects the required temperature for the stove it sends a signal to the electronic card.



5

The card contains functioning sequences that are pre-programmed. The stove will function at the requested level until we decide to turn it off.



Here's what it looks like...



5

Pipes and compliance



- ▶ Chimney duct of type L or PL
- ▶ UL641 and ULC S609 norms
- ▶ Allowed constant temperature of 572° F
- ▶ Air space isolation of 3/8"
- ▶ Diameter of 3" and 4" (recommended)
- ▶ Double walls
- ▶ Interior in inox 304
- ▶ Galvalume exterior

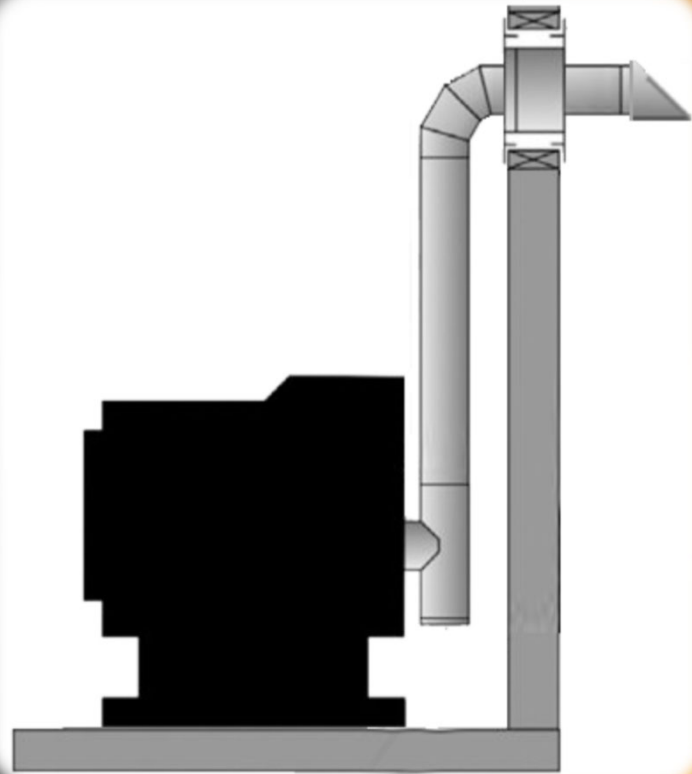


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Installation

A

1. Most pellet stove need a spark protector on the floor.
2. The pipes for the gas outtake need to be sealed at each joints with a specially designed silicone.
3. The outtake pipe then needs to be taken up by 4 to 5 foot in order to assure the natural aspiration in case the stove would stop functioning with a fire inside.

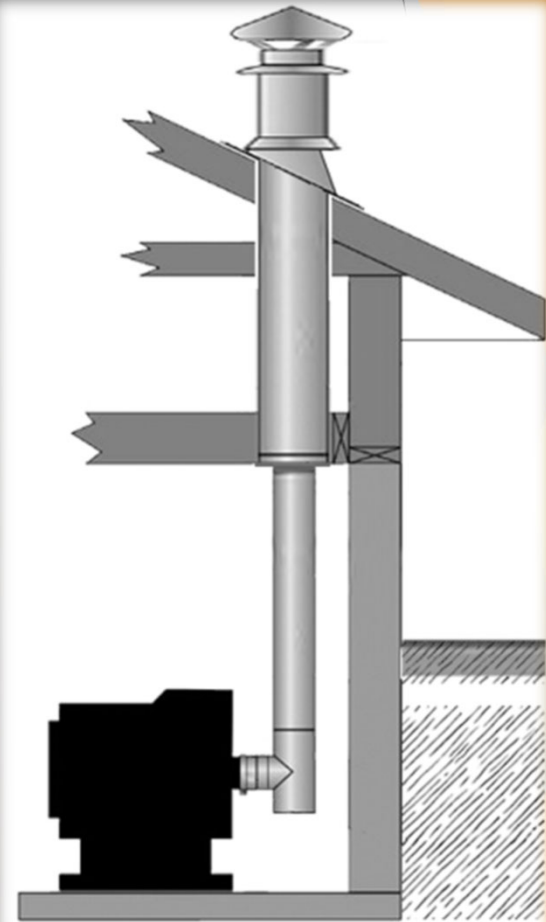


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Installation

B

1. A conventional chimney can eliminate the risk of smoking a house by up to 95%.
2. Here is the simplest and safest installation. It also is the easiest one to maintain.
3. An air entry is rarely required, only when a house is too hermetic.

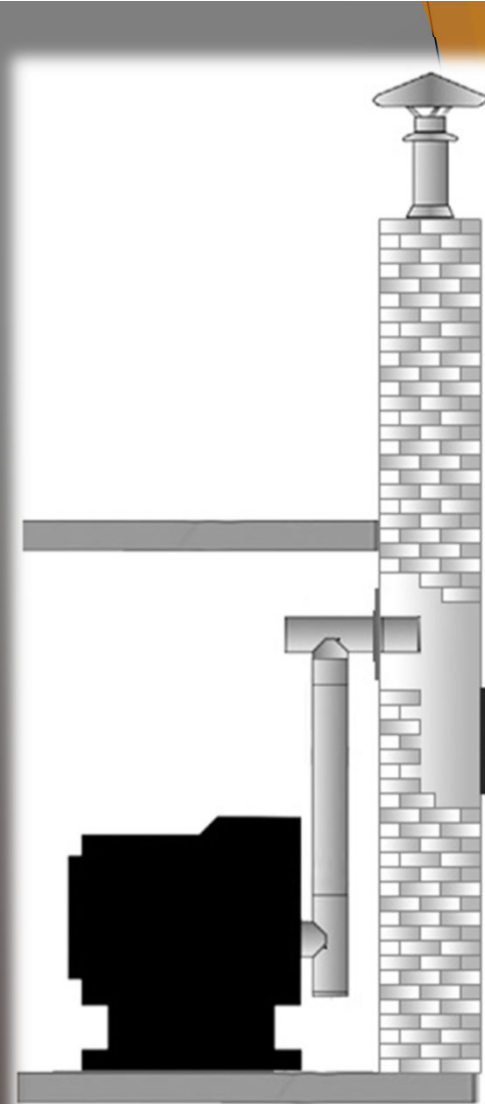


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Installation

C

1. Never instal a flexible duct in a good chimney
2. A flexible duct is indicated for a insert, a defective chimney or if it has a diameter superior to 8", is in metal and is located outside a building



7

Maintenance

- ▶ Annual maintenance is done in autumn when we are ready to start heating therefore, the ash needs to remain in the stove at the end of the season.
- ▶ An ash vacuum is recommended to do the maintenance of the stove properly.
- ▶ When we do the maintenance, we explain the tasks that must be done during the season and we also demonstrate them.
- ▶ Therefore, an advised person will be able to profit from the quality and the security of their pellet stove in all peace of mind.





514-781-1689

We hope that this has been helpful

We will always be available if you have
any questions on the matter!

Formation on demand.

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