

**IMPORTANT:  
THESE INSTRUCTIONS ARE TO  
REMAIN WITH THE HOMEOWNER**



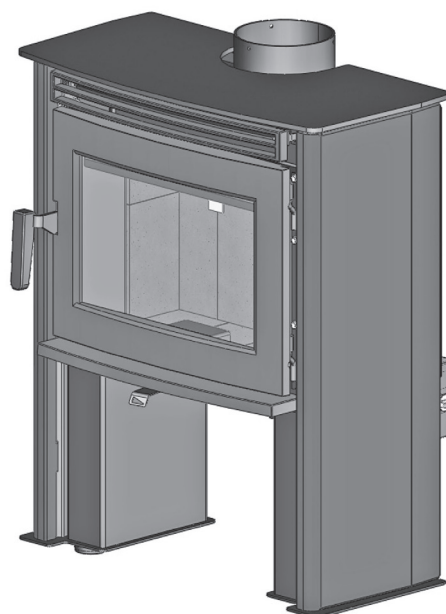
SERIAL #

## **INSTALLATION AND OPERATING INSTRUCTIONS**

### **SAFETY NOTICE**

If this stove is not properly installed, a house fire may result. For your safety, follow the installation instructions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

**TESTED and LISTED to CAN/ULC S627  
AND UL 1482  
Meets the Environmental Protection  
Agency's May 2015 Particulate Emission  
Standards**



**MODEL - NEO 1.2**

**SERIES - A**

Visit [www.pacificenergy.net](http://www.pacificenergy.net) for the most up-to-date version of this manual

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# WARNING



**HOT GLASS WILL CAUSE  
BURNS.**

**DO NOT TOUCH GLASS UNTIL  
COOLED.**

**NEVER ALLOW CHILDREN TO  
TOUCH GLASS.**

This manual describes the installation and operation of the Pacific Energy, NEO 1.2 Freestanding wood heater.

This heater meets the 2015 U.S. Environmental Protection Agency's crib wood emission limits for wood heaters sold after May 15, 2015. Model NEO1.2: 2.9 g/hr.

Under specific test conditions this heater has been shown to deliver heat at rates ranging from 11,700 to 22,400 Btu/hr.

**SAFETY NOTICE:** If this stove is not properly installed, a house fire may result. For your safety, follow the installation instructions. Contact local building or fire officials about restrictions and installation inspection requirements in you area.

Please read this entire manual before you install and use your new room heater. Failure to follow instructions may result in property damage, bodily injury, or even death.

EPA Certified Emissions	2.9 grams per hour
LHV Tested Efficiency 1	79.6%
HHV Tested Efficiency 2	73.7%
EPA BTU Output 3	11,700 to 22,400 btu/hr
Peak BTU/Hr Output 4	29,700
Maximum Wood Length	17 inches
Ideal Wood Length	16 inches
Fuel	Seasoned Cord wood

1 Weighted Average Lower Heating Value (LHV) efficiency as tested using CSA B415 Performance testing of solid-fuel-burning heating appliances. LHV assumes the moisture is already in a vapour state so there is no loss of energy

2 Weighted Average Higher Heating Value (HHV) efficiency as tested using CSA B415 Performance testing of solid-fuel-burning heating appliances. HHV includes the energy required to vaporize the water in the fuel

3 The range of BTU outputs is based on efficiency using CSA B415 Performance testing of solid-fuel-burning heating appliances and burn rates from the low and high EPA tests using Douglas Fir dimensional lumber.

4 The Peak BTU/hr is based on efficiency using CSA B415 Performance testing of solid-fuel-burning heating appliances, the Maximum one hour High burn rate from the High Burn EPA test and the BTU content of cord wood (8600 btu/lb).

The Rating label is located on the lower portion of the rear cover.

Experience will give you the right settings for proper combustion and efficient burning. Remember the correct air inlet setting is affected by variables such as type of wood, outside temperature, chimney size and weather conditions. With practice, you will become proficient in operating your heater and will obtain the performance for which it was designed.

## Chimney Smoke and Creosote Formation

When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours 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. The chimney connector and chimney should be inspected periodically (at least once every two months) during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated (3 mm. or more), it should be removed to reduce the risk of a chimney fire.

1. Highest smoke densities and emissions occur when a large amount of wood is added to a bed of hot coals and the air inlet is closed. The heated wood generates smoke, but without ample air, the smoke cannot burn. Smoke-free, clean burning requires small fuel loads, two or three logs at a time or 1/4 to 1/2 of fuel load and leaving the air inlet relatively wide open, especially during the first 10 to 30 minutes after each loading, when most of the smoke generating reactions are occurring. After 30 minutes or so, the air inlet can be turned down substantially without excessive smoke generation. Wood coals create very little creosote-producing smoke.
2. The cooler the surface over which the wood smoke is passing, the more creosote will be condensed. Wet or green wood contributes significantly to creosote formation as the excess moisture that is boiled off cools the fire, making it difficult for the tars and gases to ignite, thus creating dense smoke and poor combustion. This moisture-laden smoke cools the chimney, compounding the problem by offering the smoke the ideal place to condense.

In summary, a certain amount of creosote is inevitable and must be lived with. Regular inspection and cleaning is the solution. The use of dry, seasoned wood and ample combustion air will help to minimize annoying smoke emissions and creosote buildup.

## Chimney Fires

The result of excessive creosote buildup is a chimney fire. Chimney fires are dangerous. Chimney inside temperatures can exceed 2000° F(1100°C). This causes much higher than normal temperatures in the chimney and on its exterior surfaces. Thus ignition of nearby or touching combustible material is more likely during a chimney fire. Proper clearances are critical during such a fire.

Chimney fires are easy to detect; they usually involve one or more of the following:

- Flames and sparks shooting out of the top of the chimney
- A roaring sound
- Vibration of the chimney

## In Case of a Chimney Fire

1. Prepare to evacuate to ensure everyone's safety. Have a well understood plan of action for evacuation. Have a place outside where everyone is to meet.
2. Close air inlet on stove.
3. Call local fire department. Have a fire extinguisher handy. Contact your local municipal or provincial fire authority for further information on how to handle a chimney fire. It is most important that you have a clearly understood plan on how to handle a chimney fire.
4. After the chimney fire is out, the chimney must be cleaned and checked for stress and cracks before starting another fire. Also check combustibles around the chimney and the roof.

- The services of a competent or certified installer, (certified by the Wood Energy Technical Training program (WETT) - in Canada, Hearth Education Foundation (HEARTH) - in U.S.A.,) are strongly recommended.

## Avoiding a Chimney Fire

There are two ways to avoid chimney fires:

1. Do not let creosote build up to a point where a big chimney fire is possible.
2. Do not have fires in the heater that may ignite chimney fires. These are hot fires, such as when burning household trash, cardboard, Christmas tree limbs, or even ordinary fuel wood; (e.g. with a full load on a hot bed of coals and with the air inlet excessively open.)

**NOTE: WE STRONGLY RECOMMEND THAT SMOKE AND CARBON MONOXIDE DETECTORS BE INSTALLED IN THE AREA WHERE THE HEATER IS TO BE INSTALLED.**

If smoke detectors have been previously installed, you may notice that they are operating more frequently. This may be due to curing of stove paint or fumes caused by accidentally leaving the fire door open. Do not disconnect the detectors.

## Operation

**CAUTION:** Never use gasoline, gasoline type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or "freshen up" a fire in this heater. Keep all such liquids well away from the heater while it is in use.

**CAUTION:** Hot while in operation. Keep children, clothing and furniture away. Contact may cause skin burns.

Your PACIFIC ENERGY™ heater is designed for many years of trouble free operation. Over firing the appliance will shorten the life of the product. Failure to rectify an over firing condition can be hazardous and may void the manufacturer's warranty.

### Wood Selection

This heater is designed to burn natural wood only. Higher efficiency and lower emissions generally result when burning air-dried seasoned hardwoods, as compared to softwoods or to green or freshly cut hardwoods.

Wood should be properly air dried (seasoned) for six months or more. Wet or undried wood will cause the fire to smoulder and produce large amounts of smoke and creosote. Wet wood also produces very little heat and tends to go out often. Wood should be stored under cover away from open flame or heat sources.

### DO NOT BURN THESE MATERIALS

Salt water wood *	Treated wood
Wet or green wood	Coal/charcoal
Garbage*	Solvents
Lawn clippings/yard waste	Unseasoned wood
Railroad ties	Manure or animal remains
Materials containing plastic	Materials containing asbestos
Construction or demolition debris	Materials containing rubber, including tires
Paper products, cardboard, plywood, or particleboard.	Waste petroleum products, paints or paint thinners, or asphalt products

\* **These materials contain chlorides which will rapidly destroy metal surfaces and void warranty.**

Burning these materials may result in the release of toxic fumes or render the heater ineffective and cause smoke.

The prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, saw dust, wax and similar substances for the purpose of starting a fire in an affected wood heater.

Do not burn anything but wood. Other fuels, eg. charcoal, can produce large amounts of carbon monoxide, a tasteless, odorless gas that can kill. Under no circumstances should you attempt to barbecue in this heater.

- **DO NOT STORE/PLACE WOOD WITHIN THE STOVES INSTALLATION CLEARANCES, INCLUDING IN FRONT OF THE UNIT.**
- **DO NOT STORE WOOD UNDER THE UNIT / BETWEEN THE LEGS.**

### How to Test Your Wood

Add a large piece of wood to the stove when it has a good large bed of coals. It is dry if it is burning on more than one side within one minute. It is damp if it turns black and lights within three minutes. If it sizzles, hisses and blackens without igniting in five minutes it is soaked and should not be burnt.

## Lighting a Fire

**WARNING: Never use chemicals or any other volatile liquid to start a fire.**

1. Adjust air control to "High" position (all the way to the left) and open door.
2. Place crumpled newspaper in the centre of the heater and crisscross with several pieces of dry kindling. Add a few small pieces of dry wood on top.
3. Ignite the paper and leave the door ajar approximately 1/2" (13mm) - 1" (25mm) until the wood kindling is fully engulfed in flame.
4. After the kindling is fully engulfed add a few small logs. Close door.
5. Begin normal operation after a good coal base exists and wood has charred. Curing of the Paint Finish

When burning your stove for the first 2-3 times it is very important that the room be well ventilated. Open all windows and doors. Smoke and fumes caused by the curing process may cause discomfort to some individuals.

## Normal Operation

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

1. Set air control to a desired setting. If smoke pours down across the glass (waterfall effect) this indicates you have shut the control down too soon or you are using too low a setting. The wide range control makes finding the desired setting for your application easy. As every home's heating needs vary (ie. insulation, windows, climate, etc.) the proper setting can only be found by trial and error and should be noted for future burns.
2. To refuel, adjust air control to "High" position (all the way to the left), and give the fire time to brighten. Open the door slowly, this will prevent backpuffing or flame roll-out.
3. Use wood of different shape, diameter and length (recommended 16" (406mm)). Load your wood and try to place the logs so that the air can flow between them. Always use dry wood.
4. Do not load fuel to a height that exceeds 7 1/2" from the firebox floor or in such a manner that would be hazardous when opening the door.
5. For extended or overnight burns, unsplit logs are preferred. Remember to char the wood completely on "High" setting before adjusting air control to the "Low" setting for overnight burn.

## Curing of the paint finish

See Stove Bright user guide. When burning your stove for the first two or three times, it is very important that the room be very well ventilated. Open all windows and doors.

### Health Warning.

The smoke from the curing process displaces oxygen. Small children, elderly folks and persons with existing breathing problems should vacate the area during the hot burn to avoid the discomfort of lost oxygen. The smoke is primarily Carbon Dioxide, and therefore non-toxic but uncomfortable.

**WARNING: Always keep loading door closed when burning. This heater is not designed for open door burning.**

**WARNING: No alteration or modification of the combustion air control assembly is permitted. Any tampering will void warranty and could be very hazardous.**

**WARNING: Do not use grates or andirons to elevate the fuel. Burn directly on the fire bricks. Replace broken or missing bricks. Failure to do so may create a hazardous condition.**



## Restarting After Extended or Overnight Burns

1. Open door and rake hot embers towards the front of the heater. Add a couple of dry, split logs on top of embers, close door.
2. Adjust air control to high and in just a few minutes, logs should begin burning.
3. After wood has charred, reset air control to desired setting.
4. To achieve maximum firing rate, set control to "High" position(all the way to the left). Do not use this setting other than for starting or preheating fresh fuel loads.

## Over Firing

**DO NOT OVERFIRE THIS HEATER: Attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater and chimney.**

Over firing can be caused by operating the unit with the door open, damage to door gaskets allowing excess air to enter the firebox, the use of kiln dried lumber, mill ends or paper waste and prolonged or continual use on a high burn setting.

## Proper Draft

Operation with the door open can cause excessive smoke. Do not operate this unit in a manner that will cause excessive smoke.

Draft is the force which moves air from the appliance up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors. Too much draft may cause excessive temperatures in the appliance. An uncontrollable burn or a glowing red stove part or chimney indicates excessive draft. Inadequate draft may cause backpuffing into the room and plugging of the chimney. Smoke leaking into the room through appliance and chimney connector joints indicates inadequate draft.

## Ash Removal

Caution: Ashes are to be removed only when the heater is cold.

Whenever ashes get 3 to 4 inches deep in your firebox, and when fire has burned down and cooled, remove excess ashes. Leave an ash bed approximately 1" (25 mm) deep on the firebox bottom to help maintain a hot charcoal bed for future fires.

Optional Ash Cleanout system(NA): The ash dump handle is located under the ash lip on the left hand side behind the lower grill. To operate ash dump, remove the lower grill, pull handle out 1/2"(13mm) and turn clockwise. This will unlock the ash dump and allow it to open. Hold handle open while pulling ashes into the opening. Avoid large embers as these still contain heat value. Release handle and push in to lock. Ensure ash dump door is properly engaged. Fill the cavity with the remaining ash level with the firebox floor. Lift and pull out ashpan and discard ashes into metal container. Replace ashpan and ensure it is seated properly.

Do not burn with ash dump door open. Doing so will create a hazardous condition. Always leave about 1"(25mm) of ash when cleaning.

## Disposal of Ashes

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in closed container until all cinders have thoroughly cooled. Other waste should not be placed in this container.

## Maintenance Checks

Check the following parts for damage such as cracks, excessive corrosion, burned out sections and excessive warping: (See website for descriptions and more detail)

Some warping of the baffle is normal (up to 1/4" or .65cm). Replace if the baffle has permanent warping greater than this or has signs of cracking or breakage.

### Weekly:

- Firebrick - for cracking.
- Door Gasket - sagging, placement, damage.

### Monthly:

- Brick rail tabs and brick rails.
- Air riser tube in the back of the firebox.
- Back side of air wash chamber - located in the upper front of firebox.
- Baffle locking pin.
- Boost tube cover - located in center of manifold, bottom front of firebox.

### When Cleaning the Chimney System:

- Top baffle board/blanket.
- Baffle.
- Brick Rails.
- Manifold - located in bottom front of firebox.

### Blower:

- The blower should be cleaned out a minimum every six months by using a vacuum on the grill openings in the back and bottom of the blower casing to remove any dust and debris.
- Please contact your dealer if you experience any of the damage listed above. Continuing to operate your stove with broken parts may accelerate damage to other parts and may void your warranty.

### Maintenance Continued;

1. Burn only dry and well seasoned cord wood. The denser or heavier the wood when dry, the greater its heat value. This is why hardwoods are generally preferred. Green or wet wood will cause a rapid buildup of creosote. If you feel it is necessary to burn wet or unseasoned wood, do so only with the air inlet set open enough to maintain a good strong fire and fairly high chimney temperatures. Do not attempt to burn overnight using green wood or wet wood. Wet wood can cause up to 25% drop in heater output, as well as contributing significantly to creosote buildup.

**WARNING: Never use chemicals or any other volatile liquid to start a fire. Do not burn garbage, or flammable fluids such as gasoline, naphtha, or engine oil. We strongly recommend that smoke detectors be installed.**

2. Remove ashes frequently. Embers can roll out the door and create a fire hazard. Maintain a 1"(25mm) minimum ash base.
3. If glass becomes darkened through slow burning or poor wood, it can readily be cleaned with fireplace glass cleaner when stove is cold. Never scrape with an object that might scratch the glass. The type and amount of deposit on the glass is a good indication of the flue pipe and chimney buildup. A light brown dusty deposit that is easily wiped off usually indicates good combustion and dry, well-seasoned wood and therefore relatively clean pipes and chimney. On the other hand, a black greasy deposit that is difficult to remove is a result of wet and green wood and too slow a burning rate. This heavy deposit is building up at least as quickly in the chimney.



**WARNING: ONLY USE MATERIALS AND COMPONENTS SUPPLIED BY MANUFACTURER WHEN DOING MAINTENANCE OR REPLACEMENTS.**

4. DOOR GASKETS - The gasket used on this unit (5/8" medium density fiberglass rope) requires only light pressure to seal. This will prolong seal life. It is important that the door seal be maintained in good condition. Periodically inspect seals and replace if necessary. Follow instructions included in the WODC.DG58 kit obtainable from your nearest Pacific Energy Dealer.
5. DOOR GLASS - Do not slam loading door or otherwise impact glass. When closing door, make sure that no logs protrude to impact the glass. If the glass gets cracked or broken, it must be replaced before using the stove. Replacement glass can be obtained from your dealer. Use 16-1/2"(419mm) x 10-1/2"(267mm) x 5 mm. Ceramic glass only. **Do not substitute with any other type.**

To remove broken glass, remove the door gasket and then undo the eight screws securing the gasket guides and glass retainers. Remove all particles of glass. Be careful as they are very sharp. Install new glass complete with gasket. Replace glass retainers and gasket guides then install new door gasket as per instructions provided with the door gasket kit.

**CAUTION:**

- do not overtighten, tighten screws very carefully - do not clean glass when hot
- do not use abrasive cleaners on glass

6. The area where boost combustion air enters the firebox must be kept clear of excessive ash buildup which will block air flow. This area is at the front of the firebox.
7. Do not store wood within heater installation clearances, or within the space required for fuel loading and ash removal. Keep the area around the heater clean and free of loose combustibles, furniture, newspapers, etc.
8. Establish a routine for the fuel, wood burning and firing technique. Check daily for creosote buildup until experience shows how often you need to clean to be safe.
9. Be aware that the hotter the fire, the less creosote is deposited. Weekly cleaning may be necessary in mild weather, even though monthly cleaning is usually enough in the coldest months when burning rates are higher.

Instruct all members of your family on the safe operation of the heater. Ensure they have enough knowledge of the entire system if they are expected to operate it. Stress the section on chimney fires and the importance of following the steps outlined "In Case of Chimney Fire".

## Baffle Removal

Chimney connector pipe should be disconnected from stove to clean and inspect. Only if this is not possible should you remove baffle assembly. CAUTION: Ceramic blanket insulation is located on top of baffle. Do not use a vacuum in this area.

**DO NOT OPERATE WITH BAFFLE ASSEMBLY OR INSULATION REMOVED.**

Remove retaining pin at the back top of the firebox, just under the baffle. Lift baffle up and pull forward to disconnect from the supply tube. Tilt baffle sideways to drop down and remove from firebox. Re-install baffle assembly in reverse order.

**WARNING**

Sweep/Clean chimney with baffle installed or be sure to plug the top of the baffle tube in the back of the firebox before sweeping or cleaning. Failure to prevent ash or soot from falling into the baffle tube will cause incorrect operation and will lead to premature burn out of the tube or baffle.

# Troubleshooting

Problem	Cause	Cure
Glass is Dirty	<ol style="list-style-type: none"> <li>1. Wood is wet</li> <li>2. Turning down air control or damper too soon</li> <li>3. Draft too low</li> <li>4. Door gasket leakage</li> </ol>	<ul style="list-style-type: none"> <li>- Use dry wood</li> <li>- Do not turn down until               <ol style="list-style-type: none"> <li>a) there is a good bed of coals</li> <li>b) the wood is charred</li> </ol> </li> <li>- Improper chimney height and / or diameter</li> <li>- Chimney plugged or restricted, check flue</li> <li>- Provide outside air for combustion</li> <li>- Replace gasket</li> <li>- Check latch</li> </ul>
Excessive Creosote Buildup - See 1,2,3, above.		
Low Heat Output	<ol style="list-style-type: none"> <li>1. Wood is wet</li> <li>2. Fire too small</li> <li>3. Draft too low</li> </ol>	<ul style="list-style-type: none"> <li>- Use dry wood</li> <li>- Build a larger fire</li> <li>- Chimney plugged or restricted, inspect and clean</li> </ul>
Stove Won't Burn	<ol style="list-style-type: none"> <li>1. Combustion air supply blocked</li> <li>2. Draft too low</li> </ol>	<ul style="list-style-type: none"> <li>- Check outside air supply for obstruction</li> <li>- Check that room air cover is removed</li> <li>- Chimney plugged or restricted, inspect and clean</li> <li>- Chimney oversized or otherwise unsuitable, consult Dealer</li> </ul>

# Warranty Information

## Pacific Energy Limited Lifetime Warranty Wood Products

Pacific Energy extends the following warranty coverage to the original registered purchaser of the product:

### LTD Lifetime Coverage (10 years)

Limited lifetime coverage is extended to the following components (parts only) porcelain finish, glass (glass for thermal breakage only, not impact), plating, firebox and baffle.

### 3 Year Comprehensive

Pacific Energy will replace or repair any part found to be defective (parts and labor) for three years from the date of purchase.

This coverage includes electrical components (blowers, speed controls and thermal switches).

### Conditions:

**Your stove has been designed to perform in the harshest climates in North America. You can be confident that under normal use your stove will be trouble free for many years. If your stove is prematurely deteriorating this is a significant indicator of improper usage, for example; excessive draft, heating to large an area, contaminated fuel - such as high sodium content or plastics and chemicals. Please be aware, these conditions may be reasons to void your warranty.**

**For wood products** - All installations must be installed according to all applicable local and national codes. It is the responsibility of the installer to ensure the unit is operating correctly at installation.

Any part that shows in our judgment evidence of defect shall be repaired, replaced or refunded at Pacific Energy's option. The defective part may be required to be returned to Pacific Energy or an accredited agent, transportation prepaid.

**Porcelain** is warranted for gloss retention. Certain colors may darken when heated and return to the original shade when cool.

**Glass** is warranted against thermal breakage.

**Plating** is warranted against tarnishing. Gold plating may attain a deeper color with use.

### Exclusions

Limited Lifetime coverage - Lifetime coverage is limited to the repair, replacement or refund of the indicated parts only. Labor charges are not covered under the lifetime warranty.

The following items are not included in the Lifetime Warranty: firebox rails and heat shields.

The following parts are not warranted: firebrick, gaskets and ceramic fiber blankets.

This warranty does not apply to any part that shows evidence of misuse, abuse, improper installation, accident, lack of maintenance, or modification.

Pacific Energy shall in no event be liable for any special, indirect or consequential damages of any nature whatsoever which are in excess of the original purchase price of the product.

Pacific Energy is not responsible for installation, operational or environmental conditions beyond our control. (The company may, at its discretion, discharge all obligations by refunding the wholesale price of the defective part.)

**For Warranty claims, please contact your nearest Pacific Energy dealer.**

## Stove Dimensions

NOTE: DIMENSION  
DOES NOT INCLUDE  
LEVELLING LEGS

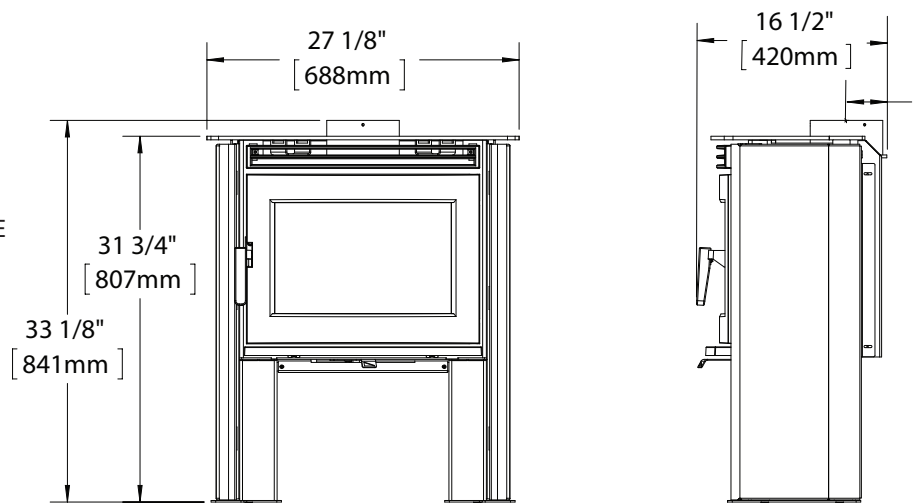


Figure 1: NEO 1.2 Dimensions.

## Assembly

### Removing stove from crate

1. Carefully remove wood top and supports.
2. Remove plastic cover.
3. Using a  $\frac{7}{16}"$  (12mm) wrench, remove lag bolts that secure hold down brackets to bottom pallet (Figure 2).
4. Slide the hold down brackets away from the stove.

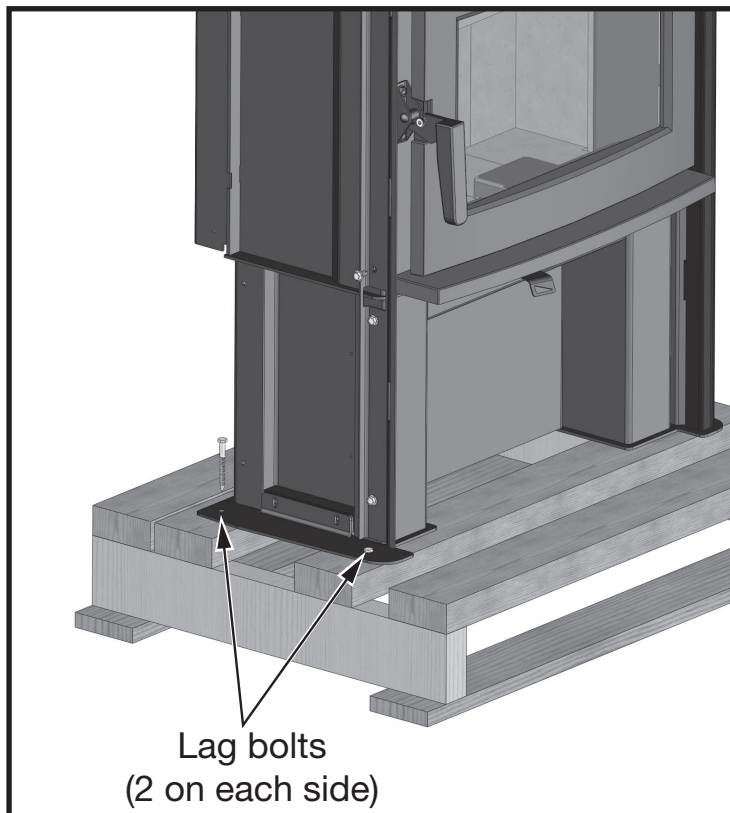


Figure 2: NEO 1.2 pallet removal.

## Side Panel Installation

1. Carefully remove the panels from the box.
2. Loosen the panel bracket screws a little so that the bracket can move while fitting the panel into place.
3. Engage the tabs of the panel into the slots in the front mounting bracket (Figure 4).
4. Attach the panel to the panel bracket. Panel edge fits over top of the panel bracket (Figure 5).
5. Insert two screws into the back of the panel but do not tighten.
6. Push panel from the front toward the rear so that there is no play between the panel tabs and the front mounting bracket. Also align the bottom of the panel so that it aligns evenly with the base of the unit (Figure 6).
7. Tighten screws.

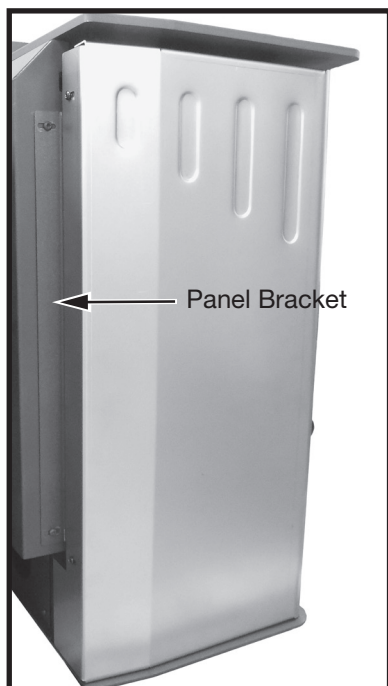


Figure 3: Panel bracket.

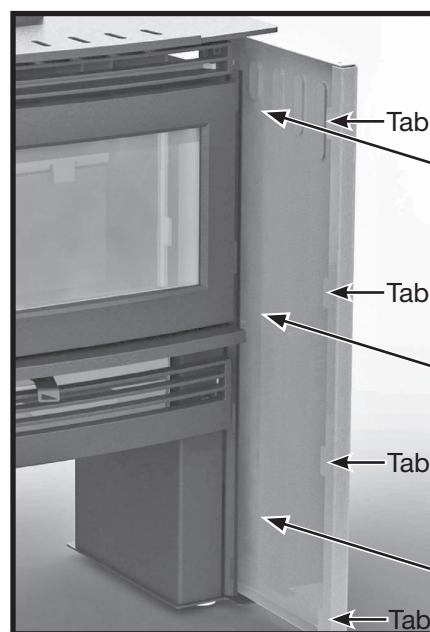


Figure 4: Slide panel in to place.



Figure 5: Panel adjustments

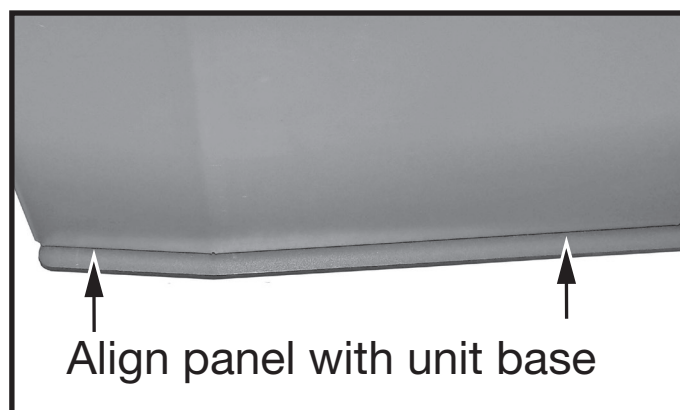


Figure 6: Base of panel and alignment.

## Residential Installation

**Warning:** Under no circumstances is this heater to be installed in a makeshift or "temporary" manner. It may be fired only after the following conditions have been met.

- DO NOT ATTEMPT TO CONNECT THIS HEATER TO ANY AIR DISTRIBUTION DUCT.
- Outside combustion air or fresh air into the room may be required in your area, consult local building codes (see Combustion Air section).
- It is recommended that the unit be anchored to the hearth pad or floor for stability.

The services of a competent or certified installer, (certified by the Wood Energy Technical Training program (WETT) - in Canada, Hearth Education Foundation (HEARTH) - in U.S.A.,) are strongly recommended.

**BOTH CHIMNEY SYSTEM AND CONNECTOR MUST BE LISTED TO: IN CANADA - ULC S-641 LISTED CONNECTOR AND ULC-S-629 LISTED CHIMNEY, IN USA - UL-103 HT LISTED CONNECTOR AND CHIMNEY**

### Clearances

1. This heater may be installed using a single-wall connector (smoke pipe) or listed double-wall connector. See "Mobile Home Installation" on page 16.
2. Clearances to combustible surfaces and materials using single-wall connector are shown in Figure 8. Clearances may be reduced with various heat insulating materials. Consult local fire codes and authorities for approval.
3. Alternately, for close clearances, use a listed double-wall connector. See "Figure 7" on page 15.

### Chimney and Connector

Connect to a listed chimney or a chimney suitable for use with solid fuel that is lined and in good condition and meets local building codes. The chimney flue size should be the same as the stove outlet for optimal performance. Reducing or increasing the flue size may adversely affect stove performance. Chimney flue exit is to be 3 feet (1 m.) above roof and two feet (0.6 m.) above highest projection within 10 feet (3 m.). The installation must meet all local codes. Do not connect this unit to a chimney flue serving another appliance. Minimum system height is 15 feet (4.6 m.) (measured from base of appliance).

### Double-Wall Connector

- Use a listed double-wall connector.
- Install all components to the chimney connector manufacturer's installation requirements.

### Single-Wall Connector

Smoke pipe must be:

- as short and straight as possible, use six inch diameter, 24 gauge black pipe that is clean and in new condition.
- secured at every joint and collar with 3 sheet metal screws.
- installed with the crimped or male ends pointing down. This will carry any liquid creosote or condensation back into the stove.
- The chimney connector shall not pass through an attic, roof space, closet or similar concealed space, floor, or ceiling. Where passage through a wall, or partition of combustible material is desired, the installation shall conform to CAN/CSA-B365, Installation Code for Solid-Fuel-Burning Appliances and Equipment or in the U.S., NFPA 211: Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances.



## Procedure

1. If a listed chimney and double-wall connector is to be connected to the stove, install all components to the chimney manufacturer's installation requirements - (Outside combustion air may be required, consult local building codes. See "Combustion Air" on page 18.
2. If it is desirable to use smoke pipe in conjunction with the insulated chimney, see step 4.
3. If a roof or ceiling support is used in the installation, you will find the chimney manufacturer's complete instructions packed with the roof support.
4. To start installing smoke pipe (chimney connector), slip crimped edge of the pipe inside the stove collar. Use holes provided in collar to secure pipe with three screws.
5. Install the remaining lengths of pipe one on top of the other to the finished height of the chimney connector and secure to each other.

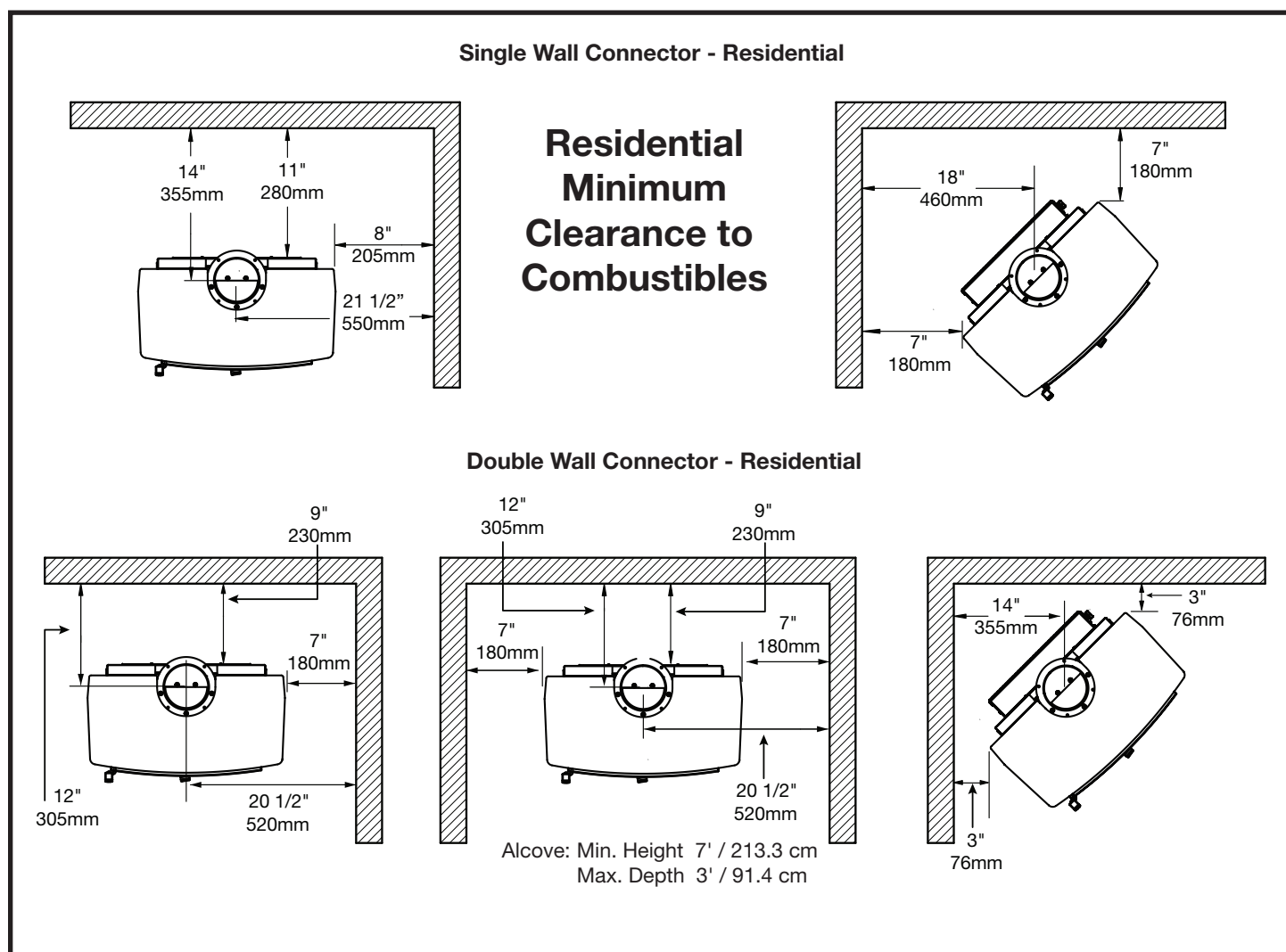


Figure 7: Residential clearances.

# Mobile Home Installation

**Warning:** Under no circumstances is this heater to be installed in a makeshift or "temporary" manner. It may be fired only after the following conditions have been met.

- **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**
- **DO NOT INSTALL IN A SLEEPING ROOM.**
- **BOTH CHIMNEY SYSTEM AND CONNECTOR MUST BE LISTED TO: IN CANADA - ULC S-641 LISTED CONNECTOR AND ULC-S-629 LISTED CHIMNEY, IN USA - UL-103 HT LISTED CONNECTOR AND CHIMNEY**
- Outside air supply must be used for Mobile Home installations. See "Figure 11" on page 20.
- Remove the chimney down to the roof flashing to allow for transportation of the mobile home.

## Clearances

This heater must be installed with a listed double-wall connector and compatible chimney system.

Clearances to combustible surfaces and materials are shown in Figure 8 below.

Clearances may be reduced with various heat insulating materials. Consult local fire codes and authorities for approval.

**NOTE:** Longer chimney lengths and different pitch flashings may be used. All other parts listed must be installed (See Figure 11 on page 20) Install all components to the connector or chimney manufacturer's installation requirements. Consult your chimney supplier for installation advice.

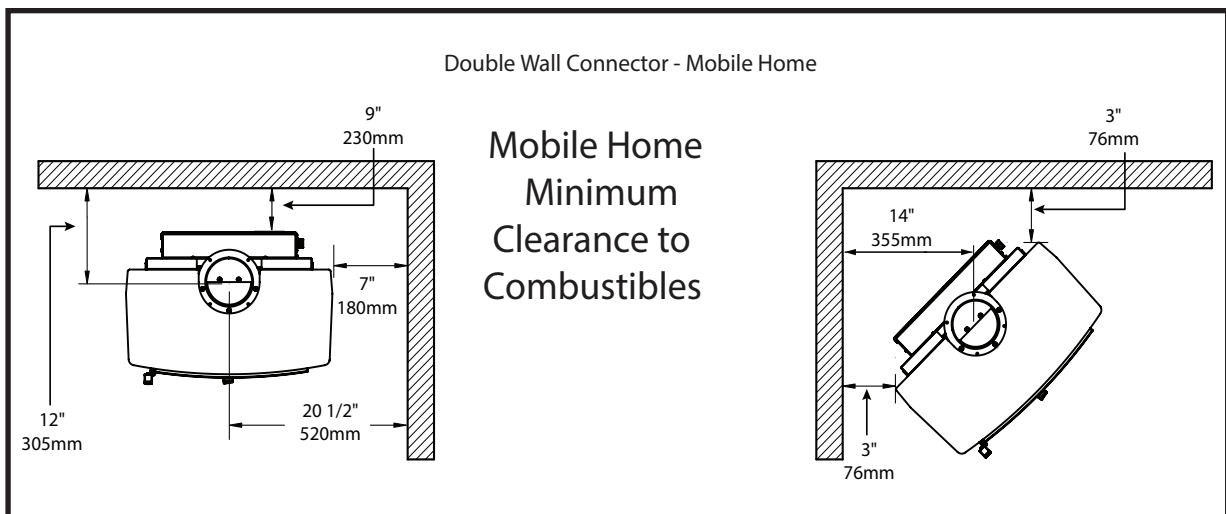


Figure 8: Mobile home clearances.

**Procedure:****CAUTION: THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL AND CEILING/ROOF MUST BE MAINTAINED.**

The services of a competent or certified installer, (certified by the Wood Energy Technical Training program (WETT) - in Canada, Hearth Education Foundation (HEARTH) - in U.S.A.,) are strongly recommended.

Note: See "Combustion Air" on page 18

1. Position stove and floor protection with hole for combustion air in accordance with the clearances as stated on the label and in Figure 8.
2. Mark the position for the hole in the ceiling and roof by using a string and plumb-bob.
3. Check that the intended location will not interfere with floor joists, ceiling joists or rafters before proceeding further.
4. Cut a hole in the ceiling and roof to suit the chimney system and frame in the sides. The chimney support is mounted to the framing.
5. If the chimney connector exits the mobile home less than 7 feet above the ground then a guard must be installed to cover the connector up to a height of 7 feet (2.13m).
6. The guard must not have opening larger than 3/8"(10mm) and must maintain a space of 4"(102mm) minimum around the chimney connector.
7. Assemble chimney sections so the finished length is resting on the support and protruding through the roof. Avoid having joints between ceiling and roof. Install radiation shield. Assemble flashing and storm collar and be sure to maintain the vapour barrier at this point. (Seal securely.) Attach rain cap and check flashing for leaks.
8. Install connector as per manufacturer's instructions.
9. Attach stove to flooring using two 1/4" x 2" or longer lag screws.

## Floor Protector

The stove may be installed on a combustible floor provided ember protection made from a non-combustible material such as steel, ceramic tile, brick etc. is used. - This protection must extend as follows:

In Canada: 18" (457 mm) on the firing side and 8" (203 mm) to the other sides - See Figure 9.

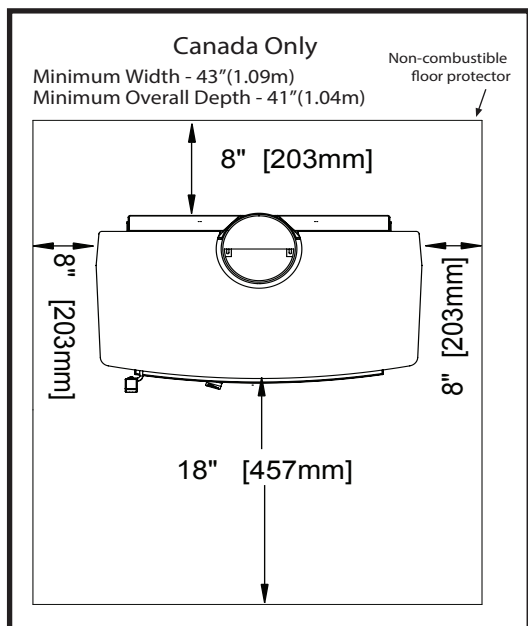


Figure 9: Ember protector for Canada.

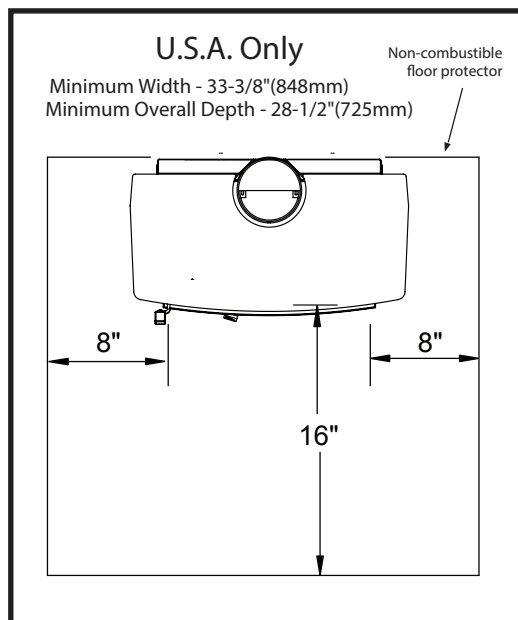


Figure 10: Ember protector for USA.

In USA: 16" (406 mm) to the front and 8" (203 mm) to the sides of the fuel loading door opening - See Figure 10. This protection is also required under the chimney connector and 2" (51 mm) beyond each side when using horizontal pipe.

## Combustion Air

Intake or combustion air can be supplied to the stove in one of two ways. Consult your local building code or CAN/CSA-B365, Installation Code for Solid-Fuel-Burning Appliances and Equipment before proceeding. The unit must have adequate air for combustion provided in the room the unit is installed in.

- 1. Outside air supply** - (Necessary for mobile home installation, optional for residential installation.) Outside air may be drawn from either underneath the stove or from behind.

Attach the intake starter to the bottom of the stove with the screws provided.

To draw outside air through the floor, Cut or drill a 3-1/4" (83mm) diameter hole directly below the intake starter (on the bottom of the intake box). Connect intake starter through the floor with a 3" (102mm) inside diameter non-combustible tubing. .

This hole must get its air from a ventilated crawl space or be extended with duct to the outdoors (See "Figure 12" on page 21). The use of outside combustion air for residential installation requires the unit to be secured to the structure to prevent dislodging of the air duct.

To draw outside air from behind the stove, cut or drill a 3-1/4" (83mm) hole through the wall behind the unit. Use an appropriate household 3" (76mm) inlet. Connect the inlet to the intake starter section under the unit, with non-combustible tubing

**Note:** This unit is not designed to be operated with the firing door open. In addition to the obvious hazard of sparks landing on combustibles, an open fire door will cause the heater to draw air from the living space and possibly cause suffocation.

- 2. Room air supply** - Remove the cover plate or knockout from the bottom of the Intake box. The stove will now draw its air from the room through this opening and into the firebox intake.

**Note:** The living space around the heater must be well ventilated with good air circulation. Anything that may cause a negative pressure can cause gases or fumes to be pulled into the living area. During extremely cold weather, and especially when burning at very slow rates, the upper parts of the exposed chimney may ice up, partially blocking the flue gases. If blockage occurs, flue gases may enter living space.

**Note:** An outside air pipe shield is available to place in front of the pipe used to bring outside air into the unit. Instructions for installation are provided with the shield. (Part #NE12.7875.34)

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## Optional Blower

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The optional blower kit (WODC.BLOW) is equipped with a three prong power cord and may be installed at any time. Follow installation instructions supplied with the kit. Route power supply cord away from heater.

Electrical rating: 115 volts A.C., 60Hz, .5 amps.

Fan output rating: 125 CFM

### Blower Operation

Proper blower speed matched with air control setting will ensure peak performance from your stove. Operate as follows:

- Air control set to "L" (low), operate blower speed control on "Low".
- Air control set between "L" and "H" (low and high), operate blower speed control at desired setting.

**Automatic:** To operate the blower automatically, set the rocker switch on the side of the fan housing to "Auto" and set the speed control to desired setting. This will allow the fan to turn on as the stove heats up to operating temperature. It will also shut the blower off after the fire has gone out and the unit cooled to below a useful heat output range.

**Manual:** To manually operate the blower, set the rocker switch to "Man" and set the speed control to desired setting. This will bypass the sensing device and allow full control of the blower. Switching from "Auto" to "Man" or selecting speed may be done anytime.

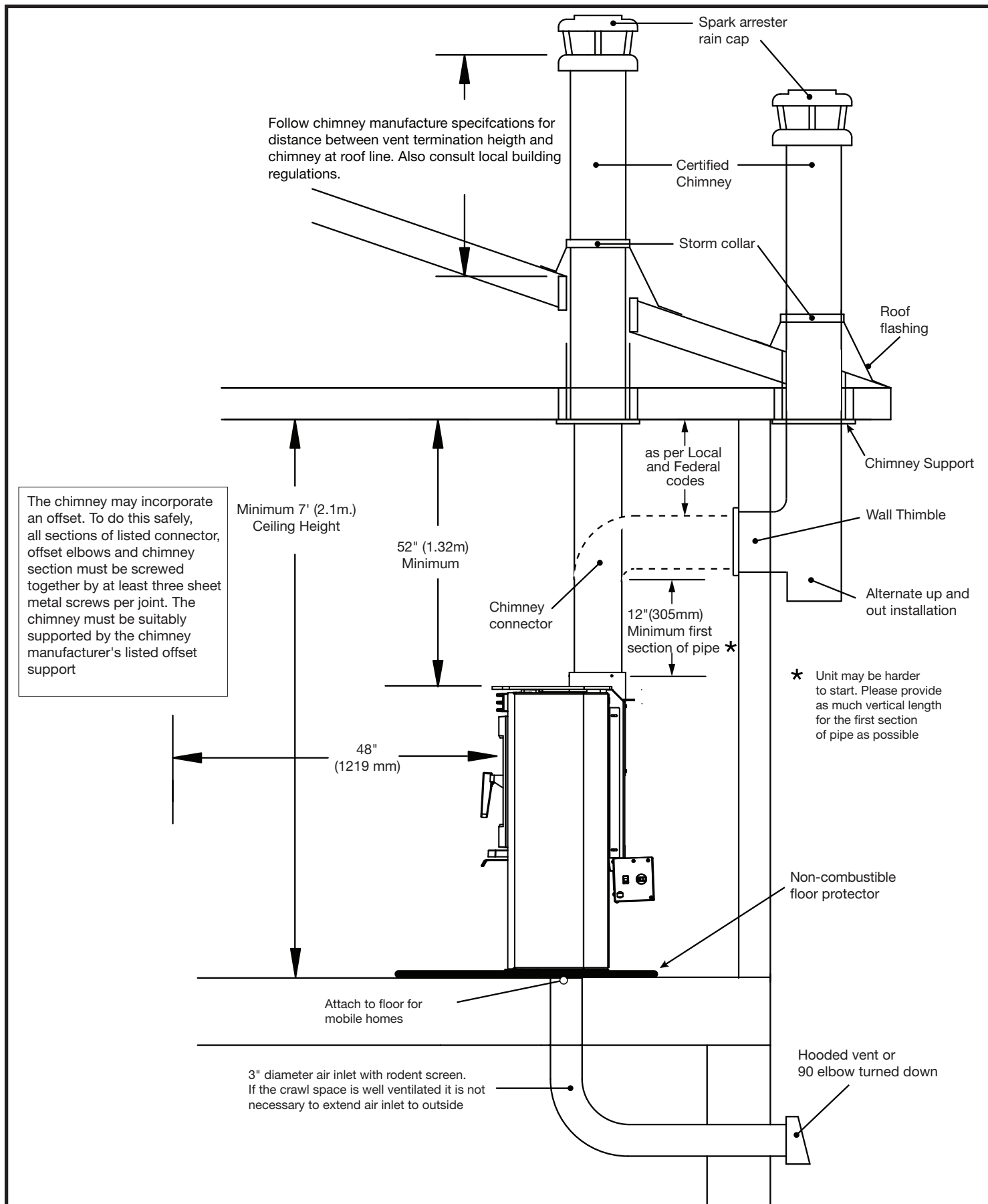


Figure 11: Common residential venting configuration.



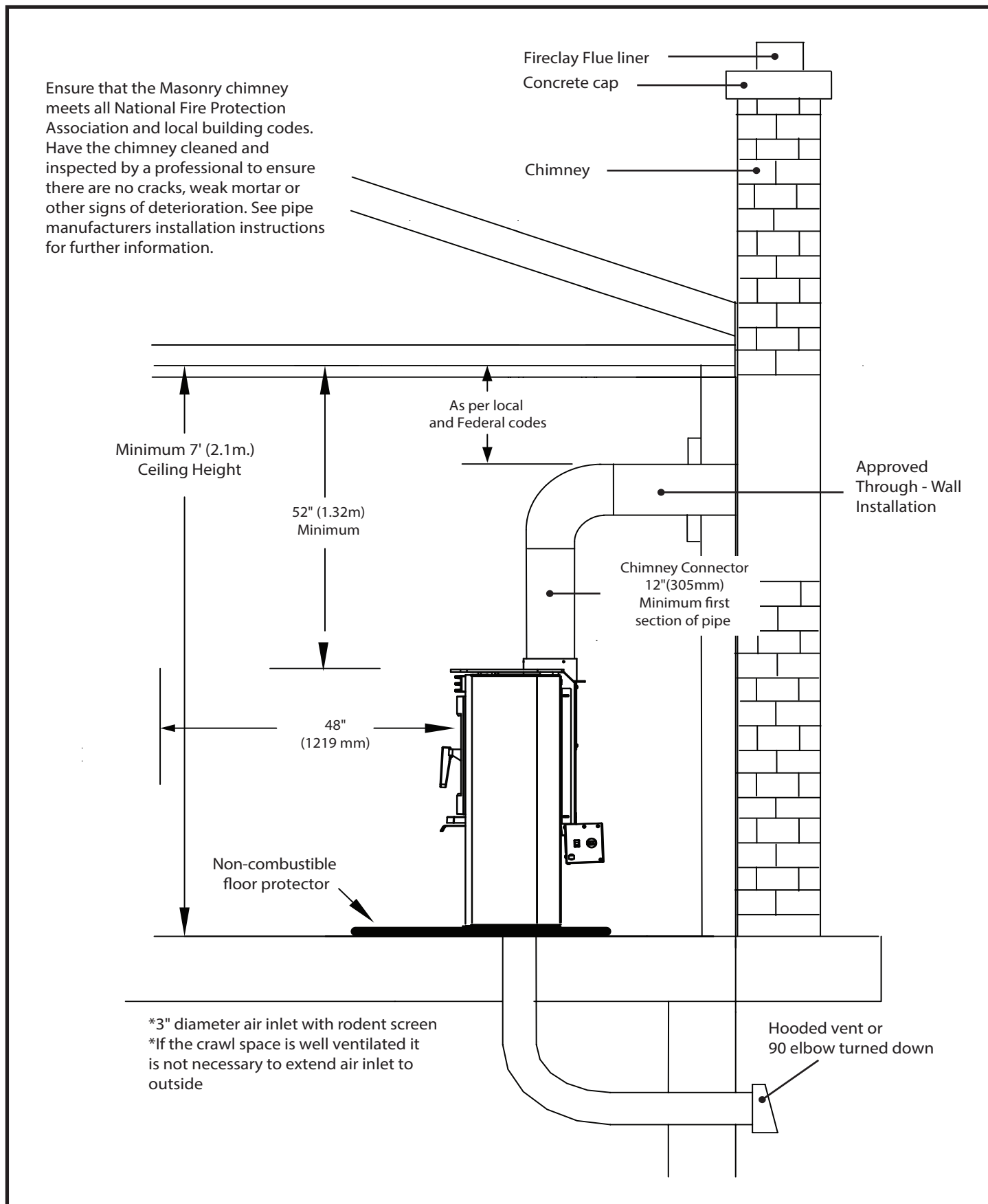


Figure 12: Venting to a masonry chimney.

# NEO 1.2 Firebrick Installation Instructions

THIS PACKAGE CONTAINS 6 FULL-SIZE FIREBRICKS AS WELL AS 6 VARIOUS CUT-SIZE BRICKS.

WITH THE HEATER IN THE UPRIGHT POSITION, INSTALL FIREBRICKS AS FOLLOWS:

- PLACE 4 FULL-SIZE FIREBRICKS AT THE BACK OF THE HEATER FIRST.
- NEXT, INSTALL THE SIDE FIREBRICKS, 1 FULL-SIZE AND 1 BRICK "B" EACH SIDE ABOVE BRICK "C" SLIDING IT BACK BEHIND THE REAR BRICK RETAINER.
- LASTLY, INSTALL "A" AND "D" FIREBRICKS AS SHOWN IN THE BOTTOM OF THE FIREBOX.

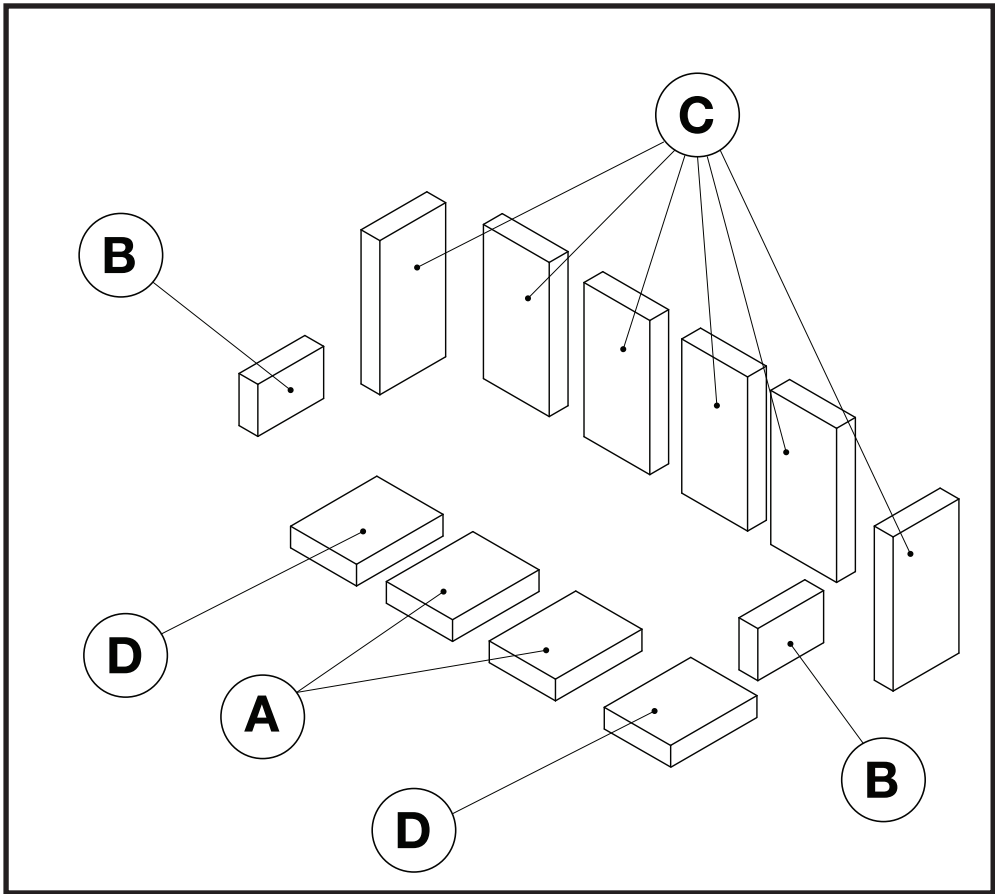


Figure 13: NEO 1.2 Firebricks.

ITEM	Part Number
Complete Brick Set.....	NE12.BRIC-A
A 4 1/2" X 5 1/2" X 1 1/4" .....	(39 mm x 115 mm x 32 mm)
B 3" X 4 1/2" X 1 1/4".....	(77 mm x 115 mm x 32 mm)
C 9" X 4 1/2" X 1 1/4".....	(230 mm x 115 mm x 32 mm)
D 4 1/2" X 5 1/2" X 1 1/4" .....	(39 mm x 115 mm x 32 mm)

# Replacement Parts - NEO 1.2

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

ITEM	DESCRIPTION	PART NO.
1.....	Enamel Panel Set .....	NE12.32PPXXA (XX = Color Codes)
1(A).....	Painted Panel Set .....	NE12.32PMBKA
2.....	Door Catch .....	NE16.7825
3.....	Gasket Guide/Glass Retainer.....	NE16.7818
4.....	Replacement Glass (c/w Tape) ....	NE16.5034700
5.....	Door Casting, Black.....	NE16.5037700
6.....	Door Handle Assembly.....	NE16.7817
7.....	Ash Lip, Black.....	NE16.5037701
8.....	Air Shutter Assembly .....	NE16.7826
9.....	Optional Blower.....	WODC.BLOW
10.....	Firebrick Set .....	NE12.BRIC
11.....	Door Gasket.....	NE16.WODC.NEODGKIT
12.....	Baffle Assembly.....	PERP787520-A
13.....	Brick rail set.....	PERP787516-A
14.....	Brick rail shield .....	PERP787533-A

ITEM	DESCRIPTION	PART NO.
* NOT SHOWN		
15.....	Outside Air Pipe Shield.....	NE12.7875.34

Color Codes, XX:

Black .....	BK	Black Pearl .....	BP
Ivory.....	IY	Coffee Brown .....	CB
Blue .....	BE	Copper .....	CU
Red.....	RD	Titanium .....	TI

All parts may be ordered from your nearest Pacific Energy dealer.  
Contact Pacific Energy for the location of the dealer nearest you.

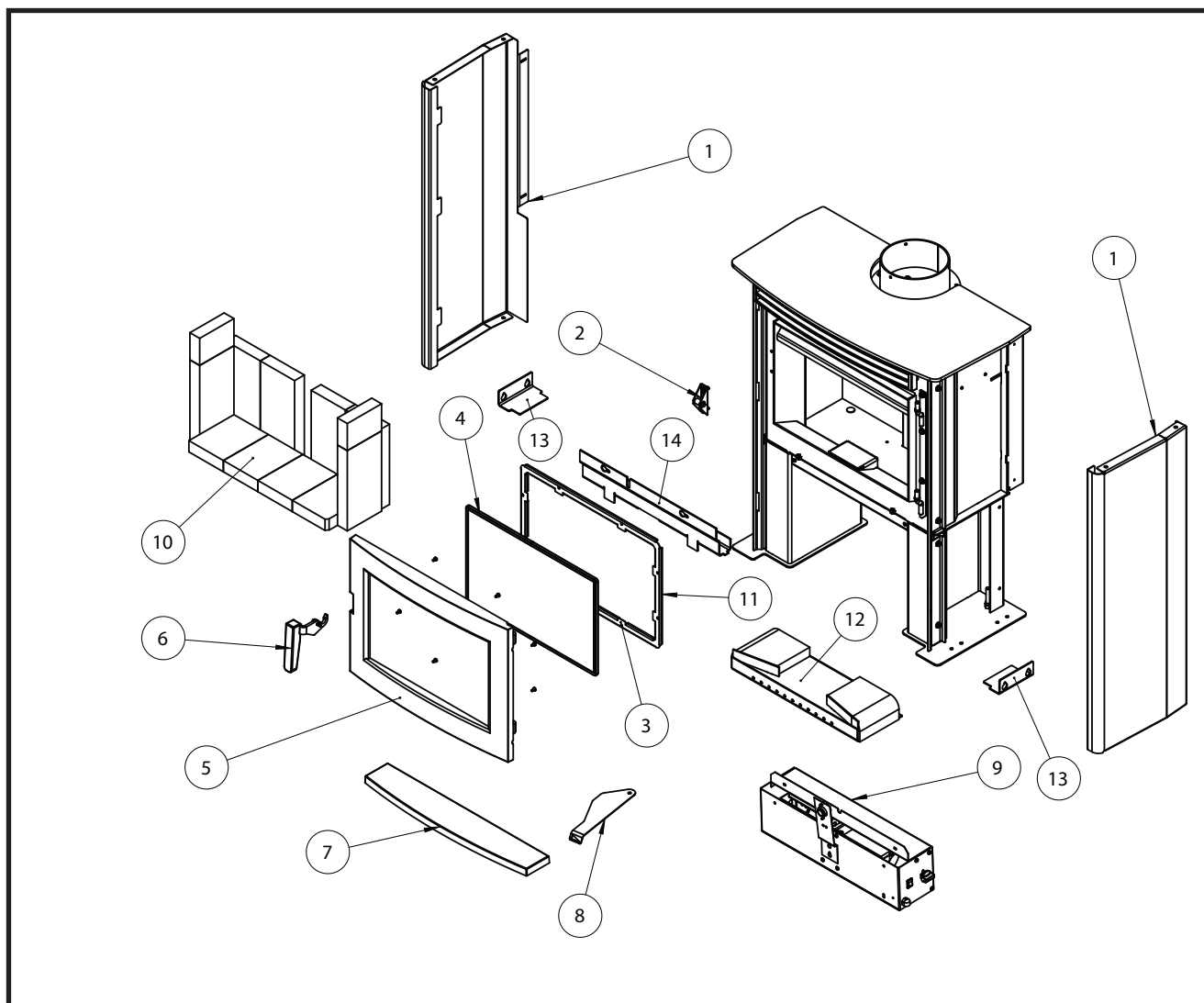
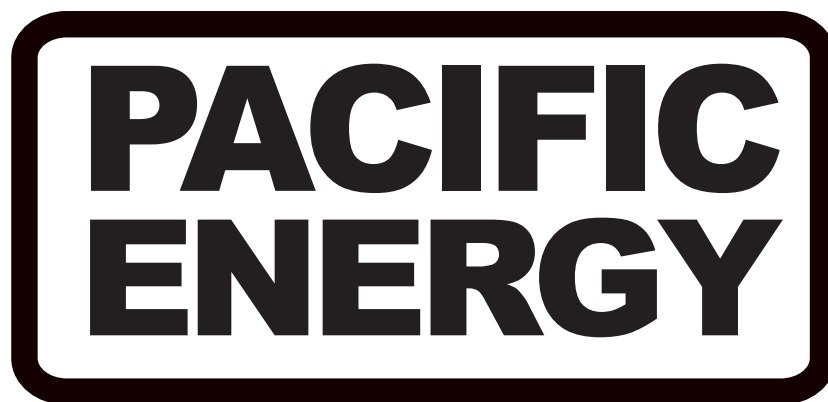


Figure 14: NEO1.2 Replaceable parts.

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**PACIFIC ENERGY FIREPLACE PRODUCTS LTD.**

**2975 Allenby Rd., Duncan, B.C. V9L 6V8**

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