

Installation and Operating Instructions For The Nectre Bakers Oven

Save These Instructions

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.

Safety Notices

When this room heater is not properly installed, a house fire may result. To reduce the risk of fire, follow the installation instructions. Contact local building, fire officials, or authority having jurisdiction about restrictions, permit and installation inspection requirements in your area.

DO NOT INSTALL IN A MOBILE HOME.

DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.

DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL.

HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.
CONTACT MAY CAUSE SKIN BURNS.

INSTALLATION

Before installation

After unpacking, check that the following parts are included inside the firebox:

2 side baffles

Handle for air control

Lifter for cook plates

Allan key for adjustment of top air.

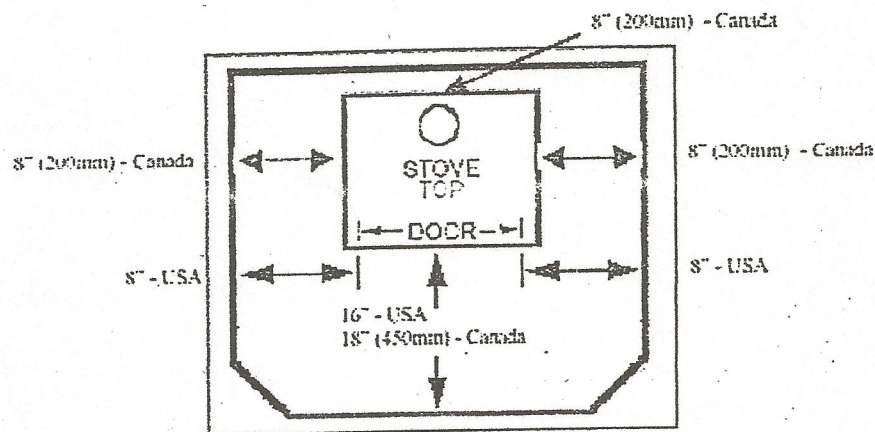
Assembling the Bakers Oven

The Bakers Oven comes fully assembled. In transit the side baffle plates could have shifted. Make sure that they are in place on each side of the firebox. The side baffles hang off the sides of the firebox. Also make sure that the firebricks at the back of the firbox are also in place and not shifted in transit.



One of the main necessary precautions when installing a wood stove is to leave sufficient space between the stove (top, sides, back, front, and under stove pipes) and any other material that can catch fire.

If the stove is to be installed on a combustible floor, it must be placed on an approved 1" (25mm) non-combustible hearth pad with $k = 0.84 \text{ BTU/in ft}^2 \text{ hr } ^\circ\text{F}$. In the USA, the floor protector must extend 8" beyond each side of the flue loading door and 16" to the front. In Canada, the floor protector must extend 8" (200mm) beyond each side and the back of the appliance and 18" (450mm) to the front.



In a rear vent installation the floor protection must also extend under the stovepipe a minimum of 2" (50mm) beyond either side of the pipe.

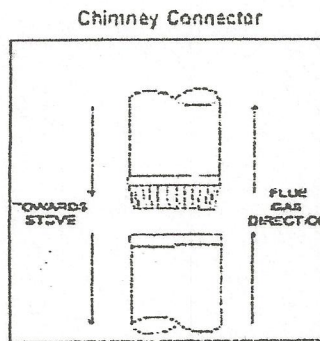
Chimney connection

The chimney connector is a single walled pipe used to connect the stove to the chimney. For use with the Bakers Oven the chimney connector **MUST** be 6" in diameter, with a minimum thickness of 24 gauge black steel or 26 gauge blued steel.

Aluminium and galvanized steel pipe is not acceptable for use with the Bakers Oven. These materials cannot withstand the extreme temperatures of a wood fire and can give off toxic fumes when heated.

Do not use the connector pipe as a chimney.

Each chimney connector or stovepipe section must be installed to the stove flue collar and to each other with the male (crimped) end toward the stove.



This prevents any amount of condensed or liquid creosote from running down the outside of the pipe or the stovetop. All joints, including the flue collar connection must be secured with three sheet metal screws to ensure that the sections do not separate. For the best performance the chimney connector should be as short and direct as possible, with no more than two 90° elbows. The maximum horizontal run is 36" and a recommended total length of stovepipe should not exceed 10 feet. Always slope horizontal runs upward $\frac{1}{4}$ " per foot toward the chimney.

No part of the chimney connector may pass through an attic or roof space, closet or other concealed space, or through a floor ceiling. All sections of the chimney connectors must be accessible for cleaning. Where passage through a wall or partition of combustible construction is desired, the installation must conform with NFPA 211 or CAN/CSA-B365, and is also addressed in this manual.

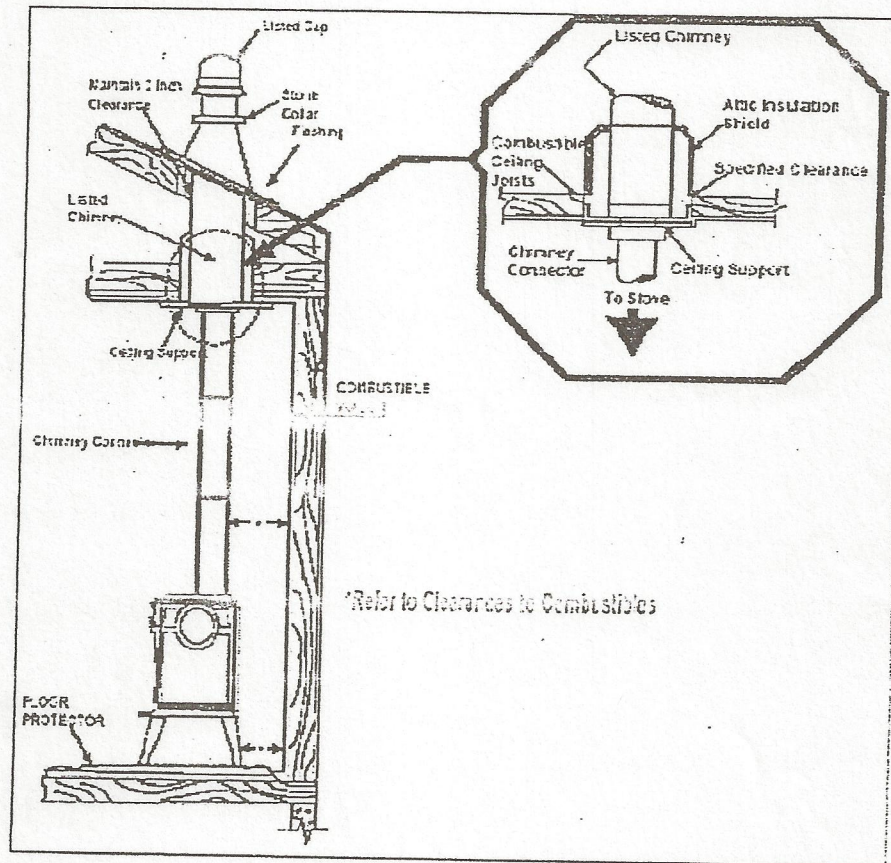
Chimney

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE. DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

This room heater must be connected to a 6" factory built UL 103 HT chimney (ULC S629, in Canada) or a code-approved masonry chimney with a flue liner.

Factory Built Chimney

When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed. You must also purchase (from the same manufacturer) and install the ceiling support package or wall pass-through and "T" section package, firestops (where needed), insulation shield, roof flashing, chimney cap, etc. Maintain proper clearance to the structure as recommended by the manufacturer. The chimney must be the required height above the roof or other obstructions for safety and proper draft operation. See page 8 for chimney termination requirements.

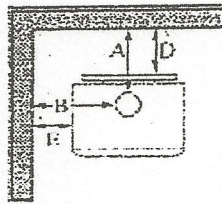


Installation Clearances

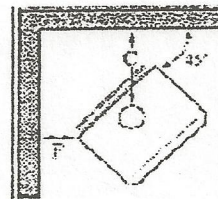
It is extremely important that you respect required installation distances and that you respect local installation regulations. This is for your safety! The manufacturer is not responsible for the product, if it is not installed following these recommendations. These clearances may only be reduced by means approved by the regulatory authority.

A combustible surface is anything that can burn (i.e. sheet rock, wall paper, wood, fabrics etc.) These surfaces are not limited to those that are visible and also include materials that are behind non-combustible materials. If you are not sure of the combustible nature of a material, consult your local fire officials.

Parallel Installation



Corner Installation



	Single wall connector pipe	Double wall connector pipe
A – Chimney Connector to backwall	16.5" (419 mm)	10.5" (267 mm)
B – Chimney Connector to sidewall	22" (559 mm)	18" (457 mm)
C – Chimney Connector to cornerwall	20" (508 mm)	15" (381 mm)
D – Unit to backwall	14" (356 mm)	8" (203 mm)
E – Unit to sidewall	14" (356 mm)	10" (254 mm)
F – Unit to cornerwall	11.5" (292 mm)	6.5" (165 mm)

How to determine if alternate floor protection materials are acceptable.

All floor protection must be non-combustible (i.e., metals, brick, stone, mineral fiber boards, etc.). Any organic materials (i.e., plastics, wood paper products, etc.) are combustible and must not be used. The floor protection specified includes some form of thermal designation such as R-value (thermal resistance) or k-factor (thermal conductivity).

PROCEDURE:

1. Convert specification to R-value:

i. R-value given - no conversion needed.

ii. k-factor is given with a required thickness (T) in inches: $R = \frac{1}{k} \times T$

iii. K-factor is given with a required thickness (T) in inches: $R = \frac{1}{K \times 12} \times T$

iv. r-factor is given with a required thickness (T) in inches: $R = r \times T$

2. Determine the R-value of the proposed alternate floor protector.

i. Use the formula in step (1) to convert values not expressed as "R".

ii. For multiple layers, add R-values of each layer to determine overall R-value.

3. If the overall R-value of the system is greater than the R-value of the specified floor protector, the alternate is acceptable.

EXAMPLE: The specified floor protector should be 3/4-inch thick material with a k-factor of 0.84. The proposed alternate is 4" brick with an r-factor of 0.2 over 1/8" mineral board with a k-factor of 0.29.

Step (a): Use formula above to convert specification to R-value.

$$R = \frac{1}{k} \times T = \frac{1}{0.84} \times 0.75 = 0.893$$

Step (b): Calculate R of proposed system.

4" brick of $r = 0.2$, therefore:

$$R_{\text{brick}} = 0.2 \times 4 = 0.431$$

1/8" mineral board of $k = 0.29$, therefore

$$R_{\text{mineral board}} = \frac{1}{0.29} \times 0.125 = 0.431$$

$$R_{\text{total}} = R_{\text{brick}} + R_{\text{mineral board}} = 0.8 + 0.431 = 1.231$$

Step (c): Compare proposed system R_{total} of 1.231 to specified R of 0.893. Since proposed system R_{total} is greater than required, the system is acceptable.

DEFINITIONS:

$$R = \frac{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})}{\text{Btu}} \quad k = \frac{(\text{Btu})(\text{in})}{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})} = K \times 12 \quad K = \frac{(\text{Btu})(\text{ft})}{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})} \quad r = \frac{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})}{(\text{Btu})(\text{in})} = \frac{1}{k}$$

Operation Instructions

Use clean and dry wood only. Chemical treated wood, painted, varnished etc. or saltwater driftwood will harm the stove over time. Pile and store wood outdoors under cover. Do not place or store wood within stove installation clearances or within the space required for charging and ash removal.

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

The Nectre Bakers Oven has the firebox at the top and the oven below. Heat is directed around the oven by closing the damper, -located next to the flue outlet.

Before lighting your Bakers Oven ensure that the damper control is properly located so that it opens and closes. The damper when lifted up is closed and when pushed down is open. Also ensure that the steel inspection panel in the bottom of the oven is in place (not to be confused with the oven tray).

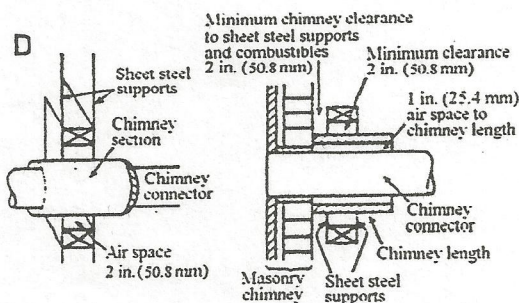
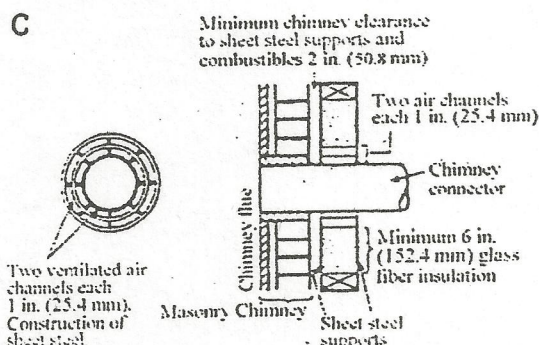
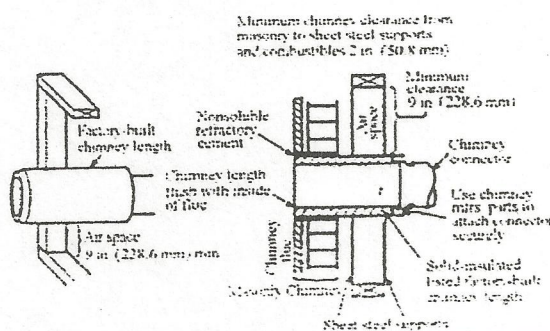
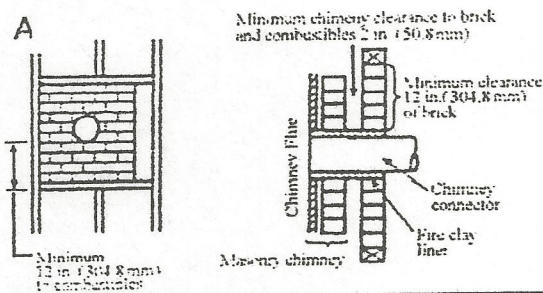
To light your cooker, first make sure that the damper is open and the air spindle control (the spindle control is opened and closed to control the rate of burn) on the firebox door is also open to its full extent. Do not elevate the fire, build wood fire directly on firebox hearth. Light a fire using finely chopped wood and establish it so that it has plenty of flames. As soon as the fire is going briskly, close the damper (Lift handle up). This directs the flames and flue gases down the sides and around the oven. Keep the fire burning briskly until the oven is up to temperature. NOTE: The temperature gauge on the oven door is only a guide to the temperature in the oven. We have found that when the gauge is reading around 100 degrees Celsius, the internal oven temperature is more like 180 degrees Celsius. It is a good idea to use a meat thermometer when cooking. To add more fuel to the fire, it is advisable to open the damper before opening the door (Push handle down). When the firebox is loaded, close the door and then close the damper. This will avoid having smoke come into the room.

The air draft spindle control on the firebox door will control the rate of burn in the firebox. The more it is open (unscrewed) the faster the fire will burn. The more is closed (screwed in) the slower it will burn.

WARNING: Do not overfire. If the stovetop or chimney connector pipe glow red, you are overfiring.

For cooking, always have a brisk fire using small pieces of wood that provide plenty of flames. This type of fire will maintain the oven temperature. For heating and longer burn time, larger pieces of wood can be used and the spindle control closed off. The oven temperature will drop when in this mode of operation.

Combustible Wall Chimney Connector Pass-Throughs



Method A. 12" (304.8 mm) Clearance to Combustible Wall Member: Using a minimum thickness 3.5" (89 mm) brick and a 5/8" (15.9 mm) minimum wall thickness clay liner, construct a wall pass-through. The clay liner must conform to ASTM C315 (Standard Specification for Clay Fire Linings) or its equivalent. Keep a minimum of 12" (304.8 mm) of brick masonry between the clay liner and wall combustibles. The clay liner shall run from the brick masonry outer surface to the inner surface of the chimney flue liner but not past the inner surface. Firmly grout or cement the clay liner in place to the chimney flue liner.

Method B. 9" (228.6 mm) Clearance to Combustible Wall Member: Using a 6" (152.4 mm) inside diameter, listed, factory-built Solid-Pak chimney section with insulation of 1" (25.4 mm) or more, build a wall pass-through with a minimum 9" (228.6 mm) air space between the outer wall of the chimney length and wall combustibles. Use sheet metal supports fastened securely to wall surfaces on all sides, to maintain the 9" (228.6 mm) air space. When fastening supports to chimney length, do not penetrate the chimney liner (the inside wall of the Solid-Pak chimney). The inner end of the Solid-Pak chimney section shall be flush with the inside of the masonry chimney flue, and sealed with a non-water soluble refractory cement. Use this cement to also seal to the brick masonry penetration.

Method C. 6" (152.4 mm) Clearance to Combustible Wall Member: Starting with a minimum 24 gage (.024" [.61 mm]) 6" (152.4 mm) metal chimney connector, and a minimum 24 gage ventilated wall thimble which has two air channels of 1" (25.4 mm) each, construct a wall pass-through. There shall be a minimum 6" (152.4 mm) separation area containing fiberglass insulation, from the outer surface of the wall thimble to wall combustibles. Support the wall thimble, and cover its opening with a 24-gage minimum sheet metal support. Maintain the 6" (152.4 mm) space. There should also be a support sized to fit and hold the metal chimney connector. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure the metal chimney connector, do not penetrate chimney flue liner.

Method D. 2" (50.8 mm) Clearance to Combustible Wall Member: Start with a solid-pak listed factory built chimney section at least 12" (304 mm) long, with insulation of 1" (25.4 mm) or more, and an inside diameter of 8" (2 inches [51 mm] larger than the 6" [152.4 mm] chimney connector). Use this as a pass-through for a minimum 24-gage single wall steel chimney connector. Keep solid-pak section concentric with and spaced 1" (25.4 mm) off the chimney connector by way of sheet metal support plates at both ends of chimney section. Cover opening with and support chimney section on both sides with 24 gage minimum sheet metal supports. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure chimney flue liner.

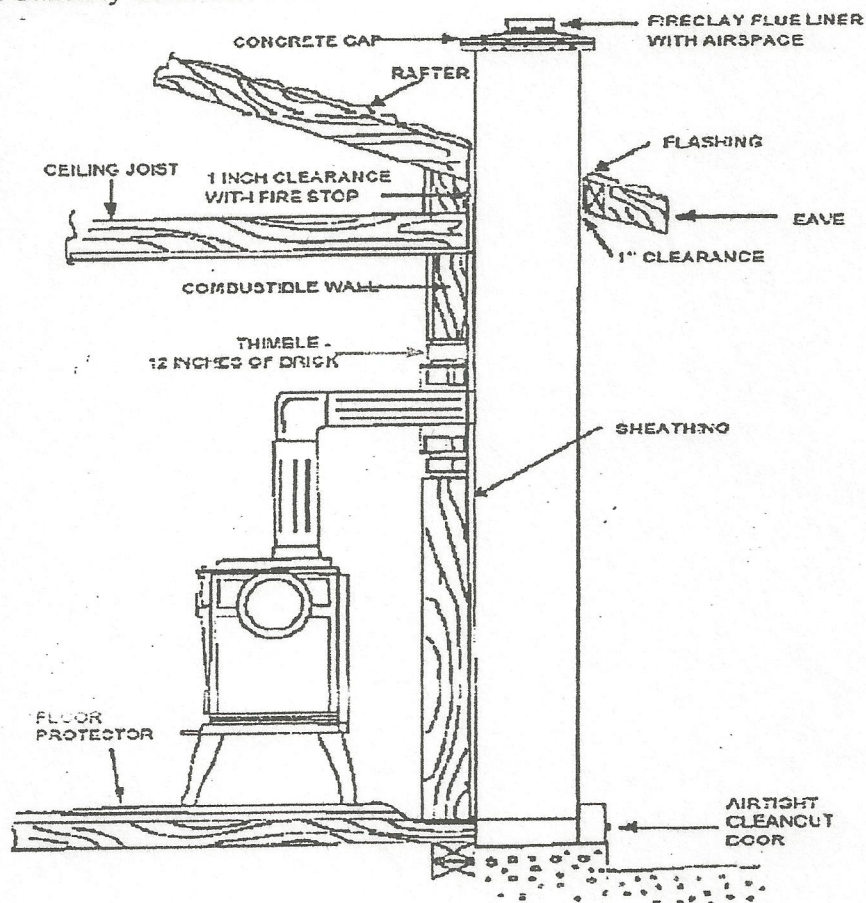
NOTES:

1. Connectors to a masonry chimney, excepting method B, shall extend in one continuous section through the wall pass-through system and the chimney must be tested to meet the requirements of the code.

2. Chimney connectors shall not be installed in attics or roof space, closet or similar concealed space, or a floor, or ceiling.

Masonry Chimney

Ensure that a masonry chimney meets the minimum standards of the National Fire Protection Association (NFPA) by having it inspected by a professional. Make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Have the chimney cleaned before the stove is installed and operated. When connecting the stove through a combustible wall to a masonry chimney, special methods are needed. Refer to Combustible Wall Chimney Connector Pass.

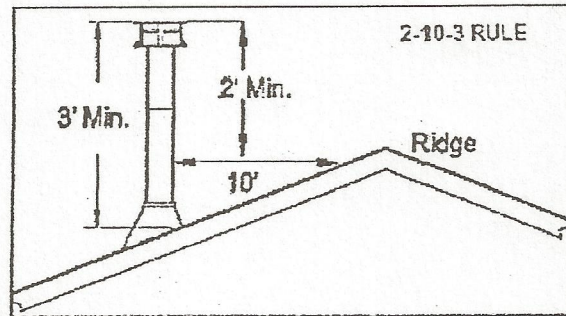


Masonry Fireplace

There are listed kits available to connect a stove to a masonry fireplace. The kit is an adapter that is installed at the location of the fireplace damper. The existing damper may have to be removed to allow installation. As the Bakers Oven is not available in a rear flue option installation into a masonry can only be done if the height of the chimney opening exceeds the height of the Bakers Oven.

Chimney Height

A masonry chimney or a listed factory-build chimney must be the required height above the roof and any other nearby obstructions. The chimney must be at least 3' (90 cm) higher than the highest point where it passes through the roof and at least 2' (60 cm) higher than the highest part of the roof or structure that is within 10' (305 cm) of the chimney, measured horizontally.



Maintenance

The Bakers Oven requires little maintenance, however the flue and oven base should be periodically checked for cleaning. Inside the oven is a removable base plate. This plate should be lifted off and any soot underneath it removed. You can also remove the hotplates on cooking surface of the Bakers Oven and scrape the sides of the oven. The glass on the firebox and oven door can be cleaned with glass cleaner. You can also use a damp cloth and ash. Do not use a cleaner that contains caustic and/or abrasive cleaners.

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 noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed they should be retained in the closed container until all cinders have thoroughly cooled.

Creosote - Formation and need for removal. When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.

The chimney connector and chimney should be inspected at least every two months during the heating season to determine if creosote build up has occurred.

If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

A metal strip at the top of the firebox door can be adjusted in and out with the alan key provided. The strip should be set leaving a gap of about 1mm between the edge of the strip and the front of the Bakers Oven. This gap allows a small trickle of air to wash over the glass.


Nectre Bakers Oven 12 Month Warranty

Pecan Engineering Pty. Ltd. warrants this stove to be able to operate under normal use and service and within 12 months from date of the original purchase on the terms herein shall repair or replace without cost to the original customer any part thereof which shall be returned to our factory, transportation charges prepaid and which our inspection shows would prevent operation. This warranty does not apply to firebricks, brick retainer, baffle, door seal, glass or discoloration of the surface or tarnishing of gold fittings all of which require normal service to maintain them.

Under the terms of this warranty, Pecan Engineering Pty. Ltd. assumes no responsibility for the labor costs involved in removing or replacing the stove. Nor shall Pecan Engineering Pty. Ltd. be liable for any injury, loss, or damage (direct, indirect or consequential) arising out of the use or inability to use the product, or its removal and replacement. All other stove warranties, expressed or implied are excluded to the extent possible at law. Consumers also have rights under relevant State and Commonwealth Laws.

The Retailer does not have the authority to alter this warranty.

For further information, contact:
Pecan Engineering Pty. Ltd.
13 Acom Road
Dry Creek, S.A. 5094

 **Obadiah's**
800-968-8604
249 Silver Dr. Troy, MT 59935
www.woodstoves.net www.stove-parts.net