

ENGLISH INSTALLATION INSTRUCTION MANUAL



N550 Bakers Oven



CERTIFIED for USA & CANADA | SAFETY TESTED to UL 1482-2011 & ULC-S627-2000

CAUTION!

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

Improper installation could void your warranty!

SAFETY NOTICE:

If this stove is not properly installed, a house fire may result. For your safety, follow the installation instructions. Never use makeshift compromises during the installation of this stove. Contact local building or fire officials about permits, restrictions, and installation requirements in your area.

Pecan Engineering Pty Limited

13 Acorn Road, Dry Creek, South Australia, 5094

Ph: +61 8 8349 8332 | Fax: +61 8 8260 6643 | Email info@pecan-eng.com.au

English & French versions available: www.nectre.com | Français & Anglais versions disponibles: www.nectre.com

READ AND KEEP THIS MANUAL FOR REFERENCE

Congratulations!

You've purchased a cooking stove from Australia's favorite manufacturer of wood burning products. By cooking with wood you're helping to conserve energy.

Wood is our only renewable energy resource. Please do your part to preserve our wood supply. Plant at least one tree each year. Future generations will thank you.

Cautions & Warnings

For use with solid wood fuel only – preferable dry, seasoned cord wood.

- HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.
- DO NOT INSTALL IN A MOBILE HOME.
- DO NOT BURN GARBAGE OR FLAMMABLE CHEMICALS OR FLUIDS SUCH AS GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, NAPHTHA, ENGINE OIL, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS STOVE. SOME OF THESE FUELS CAN GENERATE DEADLY CARBON MONOXIDES. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE STOVE WHILE IT IS IN USED.
- DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.
- DO NOT ELEVATE THE FIRE BY USE OF A LOG CRADLE OR GRATES. BUILD FIRE DIRECTLY ON A 1 INCH LAYER OF ASH SPREAD EVENLY OVER THE BASE OF THE FIREBOX.
- DO NOT STORE FUEL UNDERNEATH THE APPLIANCE, WITHIN THE SPECIFIED INSTALLATION CLEARANCE AREAS, OR WITHIN THE SPACE REQUIRED FOR CHARGING AND ASH REMOVAL.
- ALWAYS CLOSE THE DOOR AFTER THE IGNITION. LEAVING DOOR OPEN CAN CAUSE SMOKE SPILLAGE AND FLAMES TO COME OUT OF THE STOVE AND CREATE DANGEROUS SITUATIONS.
- NORMAL OPERATION OF THE STOVE WILL RESULT IN MOMENTARY EMISSIONS OF SMOKE INTO THE ROOM WHEN THE REFUELING DOOR IS OPENED AND CLOSED. IT IS ALWAYS RECOMMENDED TO INSTALL STRATEGICALLY PLACED SMOKE DETECTORS AWAY FROM THE STOVE AND TO HAVE A FIRE EXTINGUISHER IN A CONVENIENT LOCATION. MAKE SURE THAT THEY ARE NOT INFLUENCED BY SMALL AND NORMAL WISPS OF SMOKE THAT CAN COME OUT OF THE STOVE AT THE IGNITION OR REFUELING BUT CLOSE ENOUGH TO PROVIDE SAFETY.
- NEVER OVER FIRE YOUR STOVE. IF ANY PART OF THE STOVE STARTS TO GLOW RED, OVER FIRING IS HAPPENING. READJUST THE AIR INTAKE CONTROL AT A LOWER SETTING.
- NEVER PUT WOOD ABOVE THE FIREBRICK LINING OF THE FIREBOX.

Certification Label

CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.
CONTACTEZ LE BUREAU DE LA CONSTRUCTION OU LE BUREAU DES INCENDIES AU SUJET DES RESTRICTIONS ET DES INSPECTIONS D'INSTALLATION DANS VOTRE VOISINAGE



PECAN
ENGINEERING

Listed Stove, Solid Fuel Type / Appareil de Poêle, de Combustibles Solides
FOR USE WITH SOLID WOOD FUEL ONLY / POUR USAGE AVEC LE BOIS SEULEMENT

Serial No. / Numéro de Série
Model / Modèle: Nectre Big Bakers Oven
Tested To / Testé à: UL 1482-2011, ULC S627-00

Pecan Engineering Pty Ltd
13 Acorn Road
Dry Creek, South Australia 5094

Tested & Listed By  Portland Oregon USA
OMNI Test Laboratories, Inc.
Report No. / Numéro de Rapport 0226WS002S

"PREVENT HOUSE FIRES"
Install and use only in accordance with manufacturer's Installation Instructions and your local building codes.

CAUTION: Special methods are required when passing chimney through a wall or ceiling, refer to installation instructions and local building codes. Do not pass chimney connector through a combustible surface. Do not connect this unit to a chimney flue serving another appliance. Do not obstruct the space beneath the stove.

NOTE: Replace glass only with 5mm ceramic. Operate with the doors closed.

"PRÉVENTION DES FEUX DE MAISON"
Installez et utilisez en accord avec les Instructions d'installation du fabricant et des codes locaux.

AVIS: Prenez des précautions spéciales lorsque vous faites passer une cheminée à travers un mur ou un plafond, référez-vous aux instructions d'installation et aux codes locaux de la construction. Ne pas faire passer le tuyau de cheminée à travers une surface combustible. Ne pas connecter cet appareil à un tuyau de cheminée servant un autre appareil. Ne pas obstruer l'espace sous le poêle.

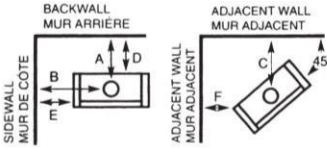
NOTE: Remplacez la vitre avec une céramique de 5mm seulement. Opérez avec les porte fermée.

The stove must be placed on a non-combustible surface with an R-value of 2.12 or greater. It must extend beneath heater, and to the front/sides/rear as indicated. *In Canada, required floor protection must be 18" (450mm) in front and 8" (200mm) on all other sides of the appliance.

BACKWALL
MUR ARRIERE

ADJACENT WALL
MUR ADJACENT

SIDEWALL
MUR DE COTE



**FLOOR PROTECTOR
PROTECTEUR DE PLANCHER**



Le poêle doit être placé sur une surface non-combustible avec une valeur R de 2,12 ou plus. Il doit s'étendre en dessous de l'appareil au devant, aux côtés et à l'arrière de l'appareil comme indiqué. *Au Canada, la protection du plancher doit s'étendre de 18" (450mm) en avant et de 8" (200mm) sur tous les autres côtés de l'appareil.

Installation	Clearance	Chimney & Connector	(Dimensions, in.)						
			A	B	C	D	E	F	
U.S.	Residential	Standard	Note:1	12.5	22.5	15	10	12	5

Note 1: 6 inch diameter, single wall, minimum 24 MSG black or 25 MSG blued steel connector pipe with factory-built chimney listed to either UL 103HT or ULC S629.

Note 2: The minimum clearance from the top of the appliance to the ceiling is 51 inches (1296mm).

Installation	Espaces Libres	Cheminée et Tuyau	(Dimensions, mm)						
			A	B	C	D	E	F	
Canada	Résidentielle	Standard	Note:1	318	572	381	254	305	127

Note 1: Le tuyau connecteur en acier noir de minimum 24 MSG ou en acier bleu de 25 MSG, de 6" de diamètre, pour mur simple, avec cheminée faite en usine, enregistrée sous ULC S-629.

Note 2: La distance minimale à partir de la partie supérieure du foyer et le plafond est de 51 pouces (1296mm).

CAUTION: HOT WHILE IN OPERATION. DO NOT TOUCH. CONTACT MAY CAUSE SKIN BURNS. KEEP CHILDREN, CLOTHING, FURNISHINGS AND COMBUSTIBLE MATERIAL A CONSIDERABLE DISTANCE AWAY. SEE NAMEPLATE AND INSTRUCTIONS. DO NOT OVERFIRE. IF HEATER OR CHIMNEY CONNECTOR GLOWS, YOU ARE OVERFIRING. INSPECT AND CLEAN CHIMNEY AND CONNECTOR FREQUENTLY. UNDER CERTAIN CONDITIONS OF USE, CREOSOTE BUILDUP MAY OCCUR RAPIDLY. DO NOT USE GRATE OR ELEVATE FIRE. BUILD WOOD FIRE DIRECTLY ON HEARTH. DO NOT BURN WITH FEED DOOR OPEN.



ATTENTION: CHAUD LORS DE L'OPÉRATION. NE PAS TOUCHER. LE CONTACT PEUT CAUSER DES BRÛLURES À LA PEAU. GARDEZ LES ENFANTS, LES VÊTEMENTS, LES MEUBLES ET LES MATÉRIEL COMBUSTIBLES LOIN DE L'ESPACE DESIGNÉ DE L'APPAREIL. VOIR L'ÉTIQUETTE ET LES INSTRUCTIONS. NE PAS SURCHAUFFER. SI L'APPAREIL DE CHAUFFAGE OU LE TUYAU DE CHEMINÉE ROUGISSENT, VOUS SURCHAUFFEZ. INSPECTEZ ET NETTOYEZ LA CHEMINÉE ET LE TUYAU CONNECTEUR FREQUEMMENT. SOUS CERTAINES CONDITIONS, IL SE PEUT QUE LA CREOSOTE S'ACCUMULE RAPIDEMENT. N'ÉLEVEZ PAS LE FEU. BATISSEZ LE FEU DE BOIS DIRECTEMENT SUR L'ÂTRE. NE PAS BRÛLER LORSQUE LA PORTE D'OUVERTURE EST OUVERTE.

U.S. ENVIRONMENTAL PROTECTION AGENCY
EXEMPT FROM EPA CERTIFICATION UNDER 40CFR 60.531.
DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ÉTIQUETTE

Date of Manufacture / Date de Fabrication

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Before Installation

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

- 2 side baffles
- Handle for top air control
- Lifter for cook plates
- Allan key for adjustment of top air

Assembling the Stove

The N550 comes mostly assembled, however some parts may need adjusting / to be added before firing the stove. It is important that the following components are used ensure compliance.

INSTALLING THE BY-PASS DAMPER

Before installing the flue, the by-pass damper handle must be fitted. The handle is supplied inside the firebox. Insert the threaded end of the handle into the 10mm hole on left side of stove. Looking down through the flue spigot locate the threaded end of the handle with the extended nut attached to the by-pass damper. Screw the handle all the way into the nut until tight.

The position of the handle should be at approximately 11 o'clock when the damper is open, and 1 o'clock when the damper is shut.

DO NOT ALTER THE DAMPER ADJUSTMENT RANGE TO INCREASE FIRING FOR ANY REASON.

INSTALLING FIRE BRICKS

The stove comes with 4 fire bricks 9" x 4 ½" x 1 ½" (230mm x 115mm x 38mm) and a 19" (480mm) long brick retainer as well as two triangular bricks 2" x 2 ¾" x 10" (50 x 70 x 250mm) for the front. Refer to figure 1

Place the four fire bricks upright, up against the rear wall of the firebox. Place the U-shaped brick retainer over the top of the bricks such that the bricks fit inside the U-section. This will hold them in place. Place the triangular firebricks at the front of the firebox beneath the door opening. (Note: the firebricks may already be in place upon arrival of the new appliance.)

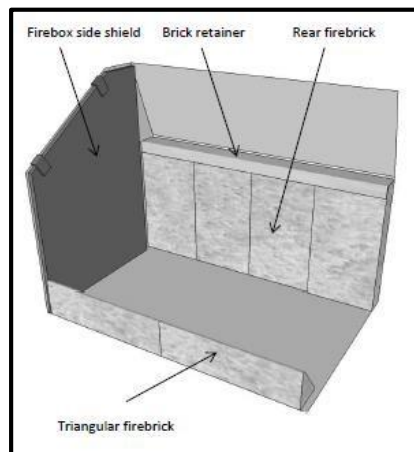


Figure 1. Fire bricks installation

INSTALLING BAFFLE PLATE

The stove comes with a 10" x 12 3/4" x 6" (250(d) x 325(w) x 150(h) mm) baffle plate. This rests on the two lugs welded to the inside front of the firebox and on the brick retainer at the back of the stove.

Position the baffle plate vertically towards the rear of the firebox with the 4" (100mm) strip welded to the baffle at the top facing forward. Bring the top edge towards the front of the stove so that it slides up and over the two support lugs with the 4" (100mm) strip located between them. Raise the lower rear edge of the baffle plate to rest on top of the brick retainer.

With the baffle plate in its correct position, ensure it is pushed all the way back so that it doesn't fall.

INSTALLING TOP AIR CONTROL ROD

A stainless-steel rod with a thread at one end and black knob on the other will have been supplied in the stove. Pass the threaded end of the rod through the hole near the top front corner on the left side of the stove. Push the rod through until one can feel it has located the nut on the air slide, then screw rod until tight. Refer to figure 2. Check that the rod slides freely back and forth.

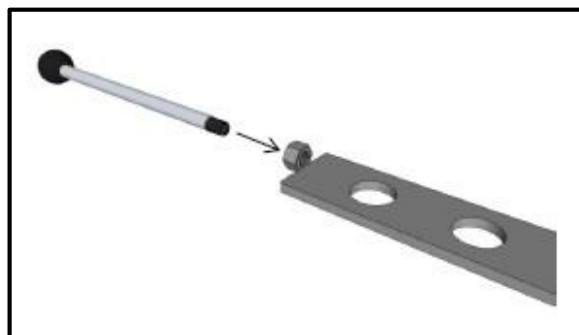


Figure 2. Top air control rod installation

INSTALLING THE FLOOR PROTECTOR

The stove must be placed on a non-combustible floor protector with an R-value of 2.12 or greater. For multiple layers, add R-values of each layer to determine the overall R-value. When manufacturers provide a k-factor or C-factor for the material, you will need to convert these to the R-value.

The following equations can be used to convert these factors to the R-value:

- k-factor, is given with a required thickness (T) in inches: $R = 1/k \times T$
- C-factor, is given:

R=1/C EXAMPLE:

If the floor protector is 4" brick with a C-factor of 1.25, over 1/2" mineral board with a "k" factor of 0.29, the total R-value of the system (R_{total}) is:

4" brick C = 1.25,	$R_{brick} = 1/1.25$	= 0.8
1/2" mineral board K = 0.29,	$R_{mineral} = 1/0.29 \times 0.5$	= 1.724

$R_{total} = R_{brick} + R_{mineral},$	$R_{total} = 0.8 + 1.724$	= 2.524
--	---------------------------	---------

In this example, the R-value is greater than 2.12 required and therefore this floor protector is a suitable combination that provides the required thermal protection.

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. Refer to figure 3.

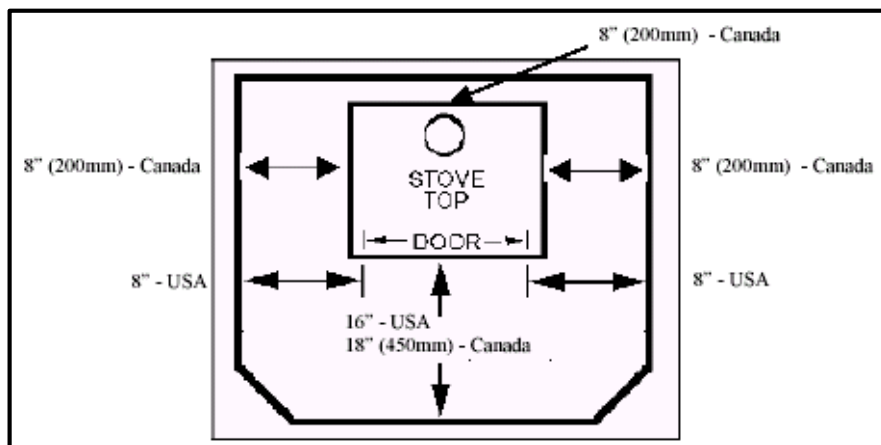


Figure 3. Non-combustible floor protector requirements

In a rear vent installation, the floor protection must also extend under the stove pipe / chimney connector and a minimum of 2" (50mm) beyond each side.

Positioning the Stove

STANDARD INSTALLATION CLEARANCES

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.

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. The following 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 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.

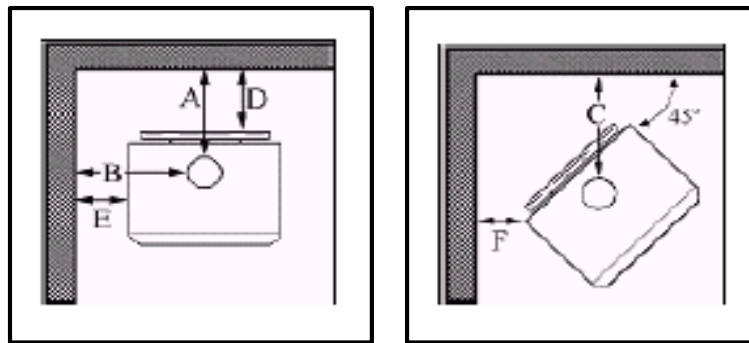


Figure 4. a) Parallel installation, b) Corner installation

Table 1. Clearances to combustible surfaces

Description	Dimension (inches)	Dimension (millimeters)
A – Back Wall to Flue Pipe	12.5"	318mm
B – Side Wall to Flue Pipe	22.5"	572mm
C – Wall to Flue Pipe	15"	381mm
D – Back Wall to Appliance	10"	254mm
E – Side Wall to Appliance	12"	305mm
F – Wall to Appliance	5"	127mm
– Ceiling to Appliance Top	51"	1296mm

Chimney Connection

The chimney connector is a single walled pipe used to connect the stove to the chimney. For use with the N550 Bakers Oven the chimney connector **MUST** be 6" (150mm) in diameter, with a minimum thickness of 24-gauge black steel or 26-gauge blued steel. The chimney connector must be suitable for solid fuel, in good condition, and kept clean.

Aluminum and galvanized steel pipe is not acceptable for use with the N550 Bakers Oven. These materials cannot withstand the extreme temperatures of a wood fire and can give off toxic fumes when fired.

DO NOT USE THE CONNECTOR PIPE AS A CHIMNEY.

Each chimney connector or stove pipe section must be installed to the stove flue collar and to each other with the male (crimped) end toward the stove, as per figure 5.a. Attach each of the sections to one another with three equidistant metal screws, as per figure 5.b.

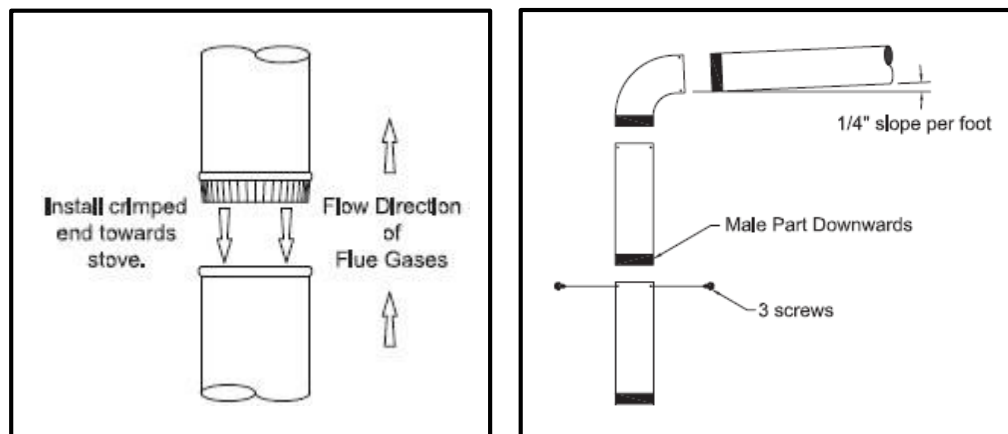


Figure 5. a) Chimney connection, b) Stove pipe attachment

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" (915mm) and a recommended total length of stove pipe should not exceed 10 feet. Always slope horizontal runs upward 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 to NFPA 211 or CAN/CSA-B365, and is also addressed in this manual.

Chimney Requirements

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

This stove must be connected to a 6" (150mm) factory built UL 103 HT chimney (ULC S629, in Canada) or a code- approved masonry chimney with a flue liner.

An effective vapor barrier at the location where the chimney or component penetrates to the exterior of the structure must be maintained as per the installer's complying method.

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 11 for chimney termination requirements.

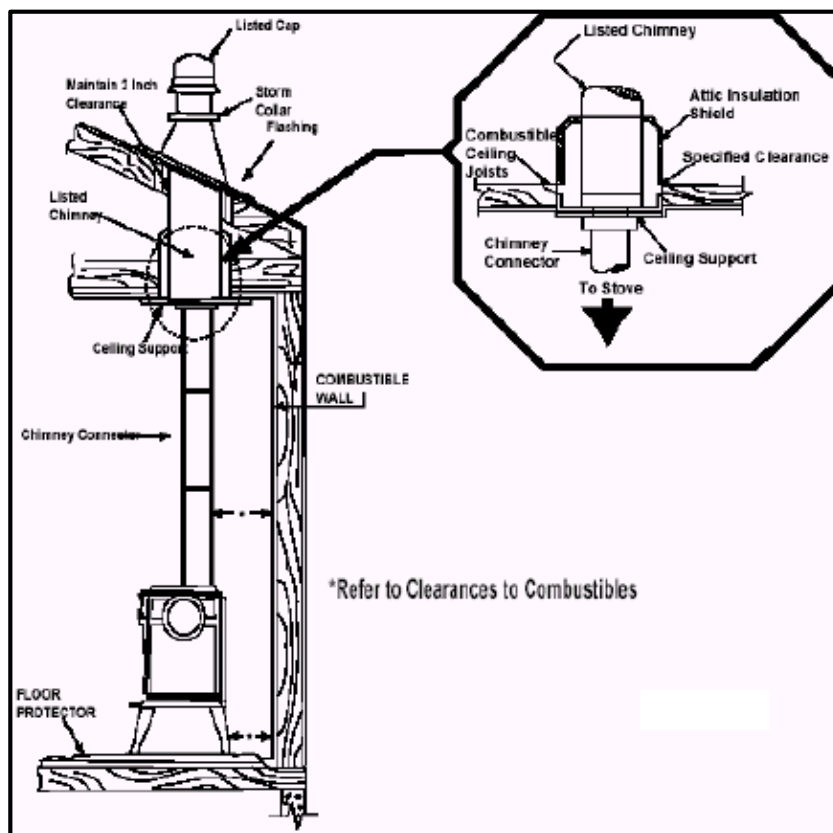


Figure 6. Factory built chimney requirements

Masonry Chimney & Fireplace

The stove may also be connected to a masonry chimney, provided the chimney complies with the construction rules found in the building code enforced locally. To ensure that a masonry chimney meets the minimum standards of the National Fire Protection Association (NFPA) it should be inspected by a professional to make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Also 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 figure 7. The chimney must have either a clay liner or a suitably listed stainless steel liner. If the masonry chimney has a square or rectangular liner that is larger in cross sectional area than a round 6" (150mm) flue, it should be relined with a suitably listed 6" (150mm) stainless steel liner. Do not downsize the flue to less than 6" unless the venting system is straight and exceeds 25ft (7.6mt) in height. When passing through a combustible wall, the use of an insulated listed thimble is required.

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.

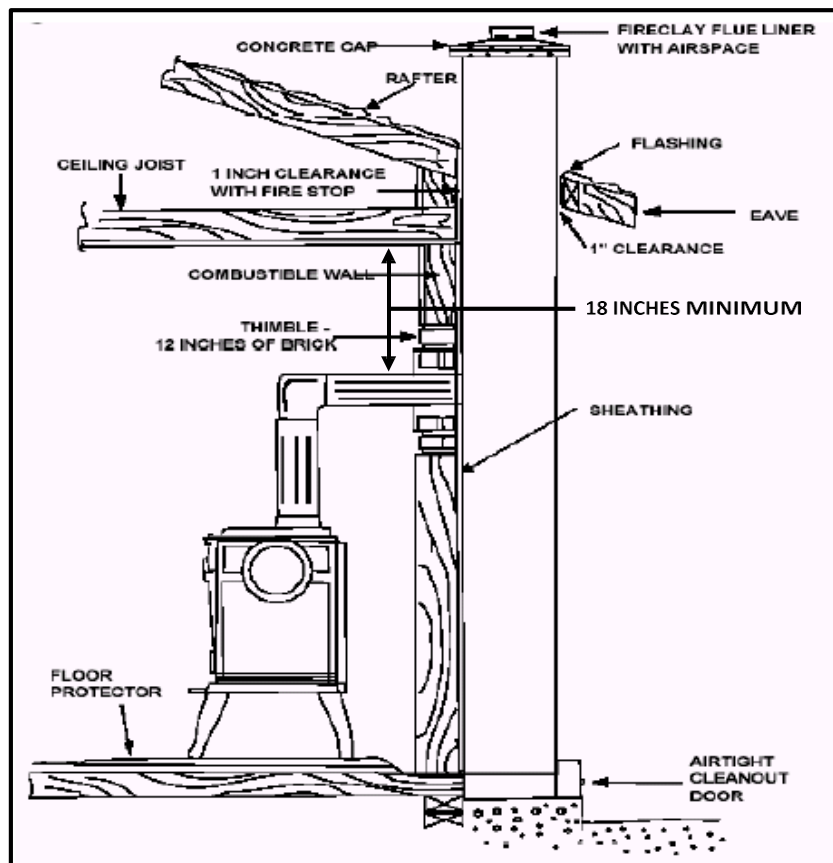


Figure 7. Masonry chimney requirements

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' (900mm) higher than the highest point where it passes through the roof and at least 2' (600mm) higher than the highest part of the roof or structure that is within 10' (3000mm) of the chimney, measured horizontally. Refer to figure 8.

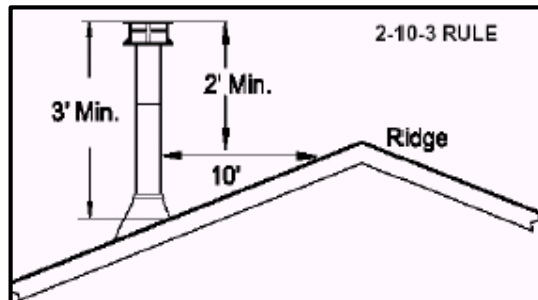


Figure 8. Chimney height requirements

Appliance Dimensions

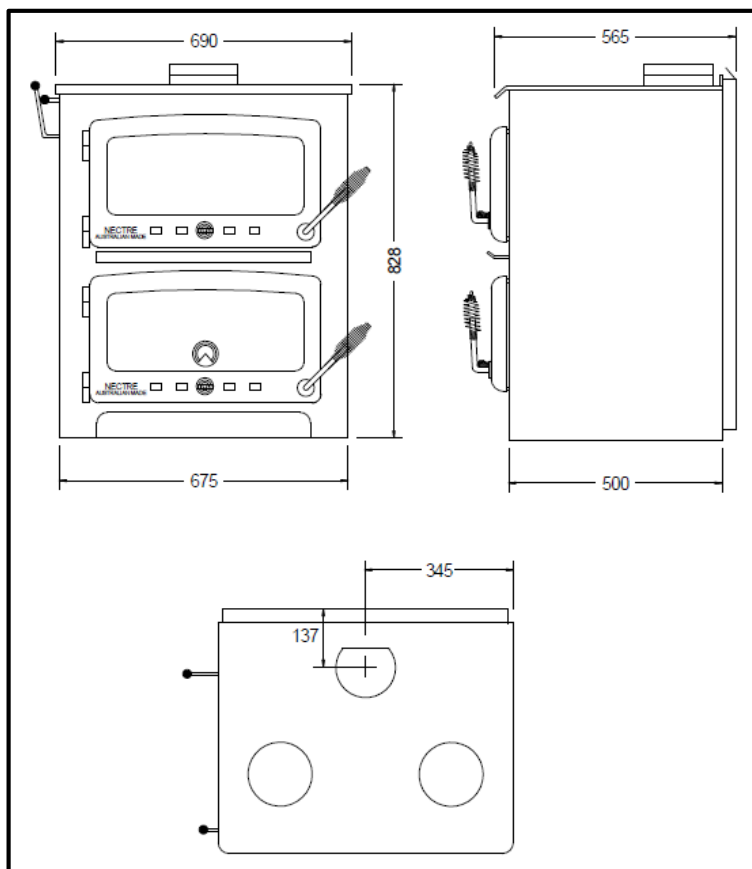


Figure 9. Dimensions (mm) for installer