



Nectre N65

Installation Instructions



Pecan Engineering Pty Ltd
13 Acorn Road
Dry Creek
South Australia 5094
Email info@pecan-eng.com.au
Phone: (08) 8349 8332
Fax: (08) 8260 6643

**THE INSTALLATION INSTRUCTIONS IN THIS
MANUAL APPLY TO THE NECTRE N65.**

**IT HAS BEEN TESTED FOR EMISSIONS AND EFFICIENCY
AND COMPLIES ACCORDING TO AS/NZS 4012:2014 &
AS/NZS 4013:2014.**

1. IMPORTANT INFORMATION

Most building regulatory Authorities require any wood heater installation to comply with Installation Standard AS/NZS 2918:2001. Different councils may have varying regulations. Check local building regulations before installing the appliance.

All Nectre wood heaters have been tested to ensure that they will meet the appropriate safety Standard requirements if the instructions in this manual are followed. As the safety and emissions performance can be affected by altering the appliance, no modifications are allowed without written permission from the manufacturer.

**WE RECOMMEND THAT THE INSTALLATION OF YOUR
NECTRE WOOD HEATER BE CARRIED OUT BY A QUALIFIED
INSTALLER.**

**WARNING: THE APPLIANCE AND FLUE SYSTEM SHALL BE
INSTALLED IN ACCORDANCE WITH AS/NZS 2918:2001 AND
THE APPROPRIATE REQUIREMENTS OF THE RELEVANT
BUILDING CODE OR CODES.**

**WARNING: APPLIANCES INSTALLED IN ACCORDANCE WITH
THIS STANDARD SHALL COMPLY WITH THE REQUIREMENTS
OF AS/NZS 4012 & AS/NZS 4013 WHERE REQUIRED BY THE
REGULATORY AUTHORITY, I.E. THE APPLIANCE SHALL BE
IDENTIFIABLE BY A COMPLIANCE PLATE WITH THE MARKING
'TESTED TO AS/NZS 4012 & AS/NZS 4013'.**

**ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT
BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY
IS CONSIDERED TO BE IN BREACH OF THE APPROVAL
GRANTED FOR COMPLIANCE WITH AS/NZS 4012 & AS/NZS
4013.**

**CAUTION: MIXING OF APPLIANCE OR FLUE-SYSTEM
COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING
THE DIMENSIONAL SPECIFICATION OF COMPONENTS MAY
RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION
IS CONSIDERED, THE MANUFACTURER SHOULD BE
CONSULTED IN THE FIRST INSTANCE.**

**CAUTION: CRACKED AND BROKEN COMPONENTS, EG. GLASS
PANELS OR CERAMIC TILES, MAY RENDER THE INSTALLATION
UNSAFE.**

2. COMPONENTS

The base model N65 wood heater will have come as four boxes:

- Firebox body
- Lower base cabinet
- 8mm thick top plate
- Curved side panels

Inside the firebox are the following components:

- Refractory bricks – 2 @ 285(h) x 170(w) x 25(d)mm
- Vermiculite bricks – 2 @ 285(h) x 170(w) x 25(d)mm
– 2 @ 285(h) x 124(w) x 25(d)mm
– 2 @ 268(h) x 170(w) x 25(d)mm
- Firebrick retainer
- Ash pan
- Air slide handle
- Door handle extension
- Assorted bolts and spacers:
 - 2 screws @ M6 x 6mm
 - 2 washers @ M6
 - 4 screws @ M12 x 60
 - 4 firebox bottom spacers – 46mm x 19mm diameter tube
 - 4 firebox top spacers – 20.5mm x 19mm diameter tube
 - 4mm & 8mm Allen keys

**IMPORTANT NOTE: The compliance plate on the rear of
the heater is wrapped in plastic so as not to scratch
the heater when in transit. Remove this plastic cover
to avoid melting it when fire is lit.**

3. ASSEMBLING THE HEATER

3.1 Assembling the Main Body

- Lay the firebox body down on its "back". Use a towel, rug, or the cardboard box it came in to avoid scratching the heater or the floor.
- Unscrew the four screws fixing firebox body to the pallet using a 5/16 hex socket and ratchet.
- Remove the square base cabinet from the box and position it so that the side with the four holes is adjacent to the base of the firebox body and the curved edge is at the top.
- Pass the M12 x 60mm screws from the inside through the four holes in the base cabinet.

- e. Slide a firebox bottom spacer (46mm x 19mm diameter) over each of the M12 screws.
- f. Thread the four M12 screws into the threaded holes in the base of the firebox.
- g. Before completely tightening the screws with the 8mm Allen key, push the tube spacers out to the sides of the heater as far as possible and then tighten the screw. (The reason for this is so that the ash pan can slide more freely between the spacers.)
- h. With the base cabinet securely fastened to the firebox body, tilt the heater upright, and position it where it will be installed with the flue (Section 4. Installing the Heater).
- i. Place a firebox top spacer (20.5mm x 19mm diameter) over each of the vertical 12mm diameter rods on top of the firebox body.

3.2 Positioning the Top Plate

Remove the 8mm thick top plate from the box and place on top of the heater locating the hole in the plate over the flue spigot. Adjust the position of the top plate so that there is an even space between the top plate and the flue spigot.

3.3 Positioning the Ash pan

The ash pan can now be slid in to the gap created by the 46mm spacers between the firebox body and the base cabinet. This should slide all the way back, enough so that the door can then be closed.

4. INSTALLING THE HEATER

4.1 Positioning the Heater

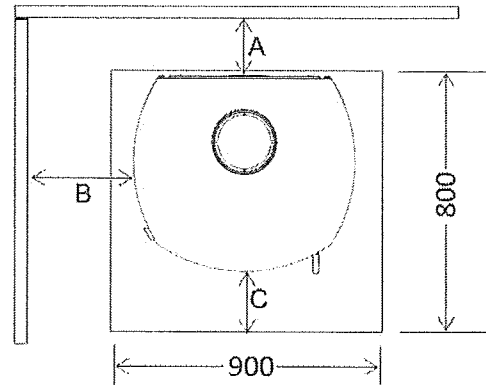
First review the necessary clearances specified before considering where to position the heater.

Also check the practicability of installing the flue system in relation to any obstructing roof beams before positioning the heater.

These clearance distances can only be reduced if the surrounding walls are made of non-combustible material, eg. Stone, brick, or concrete. If non-combustible material, distance can be reduced to 100 mm. Alternatively, shielding of the wall(s) can reduce clearances (refer to next section for more detail).

Depending on the type of flue shielding used, the clearances to combustible surfaces varies.

4.1.1 Standard Installation:

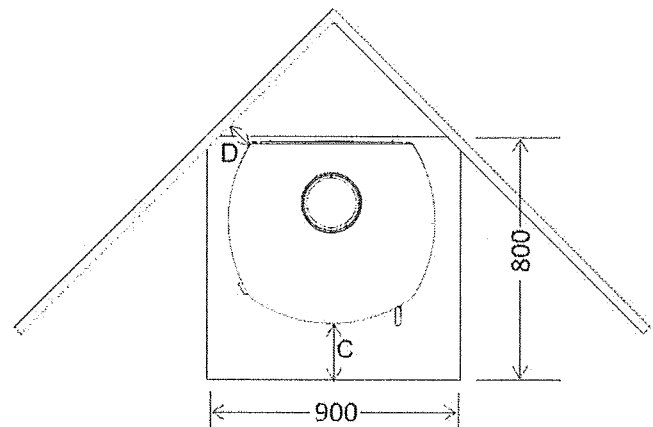


AS/NZS 2918:2001 Standard 6" flue kit

Fitted with 900mm stainless steel flue shield

N65 Model	A (mm)	B (mm)	C (mm)
Curved Sides	125	350	250

4.1.2 Corner Installation:



AS/NZS 2918:2001 Standard 6" flue kit

Fitted with 900mm stainless steel flue shield

N65 Model	C (mm)	D (mm)
Curved Sides	250	150

4.2 Floor Protector (Hearth)

Unless the heater will be standing on a heat resistant floor such as concrete slab with slate or tiles, it will be necessary to provide a floor protector (hearth).

The dimensions given in Section 4.1 are the minimum required for the floor protector. It must extend no less than 300 mm in front of the door opening (250mm from the curved front edge of the heater), no less than 295mm either side of the door opening, and extend under the heater.

If constructed of non-combustible material such as cement sheet or equivalent with a thermal conductivity not greater than $0.33\text{W/m}^{\circ}\text{K}$, the thickness of the floor protector must be no less than 7.5mm with minimum dimensions of 900mm wide x 800mm deep (extending from the rear of the heater to 250mm in front).

If constructed of toughened 10mm thick glass, the floor protector must have the same minimum dimensions as cement sheet, i.e. 900mm wide x 800mm deep. Note that the glass floor protector may be constructed with larger dimensions if customer requests.

For more details and variations on floor protectors refer to AS/NZS 2918:2001 Clause 2.2, 3.3.1, & 3.3.2.

5. REDUCING COMBUSTIBLE WALL CLEARANCES

If it is necessary to install a heater closer to a combustible surface than the stated requirements in Section 4 of this Installation Guide, it must be done in accordance with Australian Standard AS/NZS 2918:2001 Section 3, Tables 3.1 & 3.2.

Shield Construction:- The shield shall be constructed from a heat resistant material. The shield must be fixed to the surface that requires protection and NOT the heater.

The Standard allows three options to reduce stated clearances.

Single layer of continuous material with Minimum Air Gap of 12mm—Clearance Factor = 0.40

Single layer of continuous material with Minimum Air Gap of 25mm—Clearance Factor = 0.30

Two spaced layers of continuous material with Minimum Air Gaps of 12mm + 12mm—Clearance Factor = 0.20

The shielding must be open at the top and bottom (vented) to allow a continuous air flow. It is this air flow that keeps the surface requiring protection cool. Fixings should not impede this air flow.

The shielding needs to go far enough along and up the wall so that the original side and rear required clearances are not compromised. As the flue is now closer to the wall the shielding should also protect the wall from the flue pipe.

For example:

Side wall clearance for the N65 is 350 mm.

A 12mm gapped shield on the wall with a factor of 0.40.

Calculate:- $350\text{ mm} \times 0.40 = 140\text{ mm}$. This is the new side wall minimum clearance.

The shielding needs to be large enough so that none of the original clearances of 350 mm are compromised.

6. INSTALLING THE FLUE

The flue system used when installing the heater MUST comply with the current installation standard AS/NZS 2918.

Full instructions on the installation of the flue will be supplied with the flue kit. These MUST be followed closely, including the minimum exit height from the top of the floor protector being not less than 4.6m, and the minimum exit height above the roof line of roof ridge as detailed in the instructions.

The flue must be fitted with a rear flue shield minimum 900mm long, minimum 160° arc, and made from stainless steel, unpainted. The bottom edge of the flue shield must be positioned 20mm above the top of the heater with a minimum gap of 20mm between the shield and the active flue.

If the draft is insufficient or periodic down drafting occurs and the heater smokes or only burns slowly, extending the flue or fitting a specialised cowl will usually resolve the issue.

8. INSTALLING FIRE BRICKS

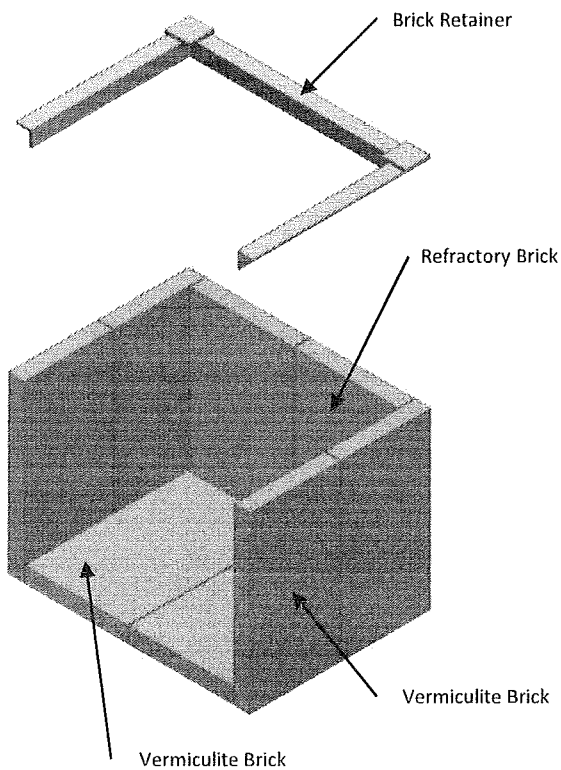
The N65 comes with 8 firebricks in 3 sizes and 2 materials:

- Refractory bricks – 2 @ 285(h) x 170(w) x 25(d)mm
- Vermiculite bricks – 2 @ 285(h) x 170(w) x 25(d)mm
 - 2 @ 285(h) x 124(w) x 25(d)mm
 - 2 @ 268(h) x 170(w) x 25(d)mm

Raise the brick retainer (supplied inside the firebox) and start standing the bricks up against the rear and sides of the firebox, as shown in the following diagram.

Once the vertical bricks are in, fit the retainer over the top to hold them in place.

Then insert the horizontal bricks in the base, as shown in the following diagram.

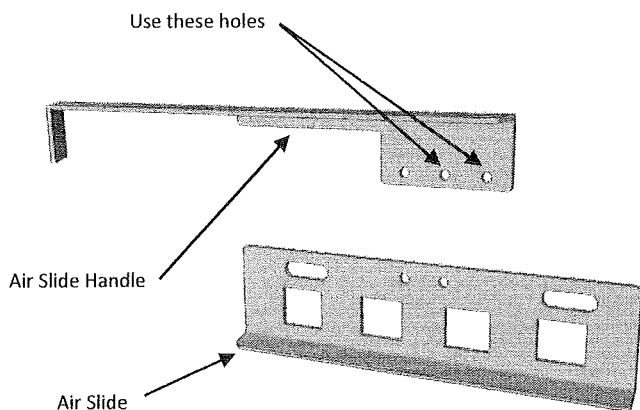


9. FIT AIR SLIDE HANDLE

The Air Slide handle used for controlling the amount of air supplied to the fire needs to be fitted.

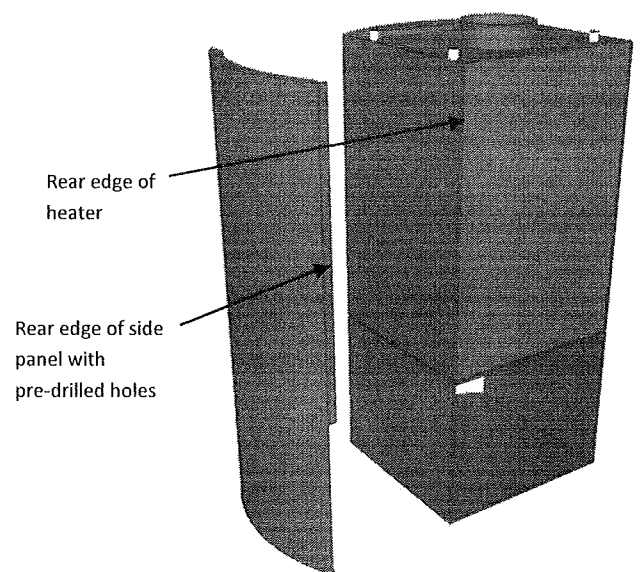
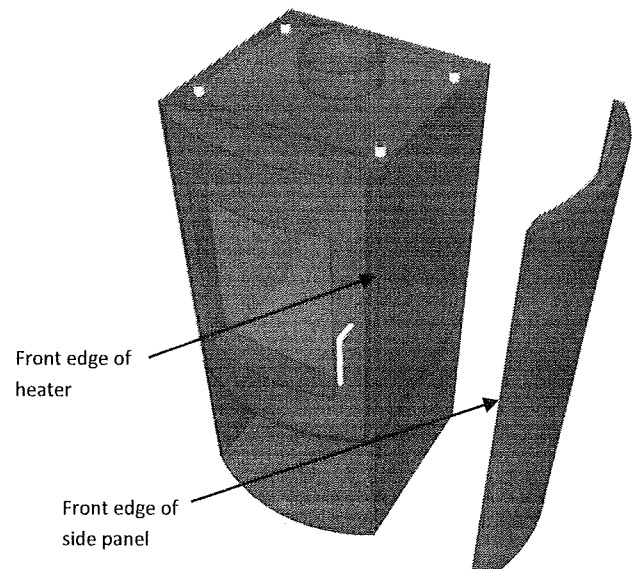
Open the door of the appliance, and position the handle with the two holes in the handle located over the threaded holes in the air slide. Place a washer over each of the M6 x 6mm screws, insert the screw through the handle and screw into the air slide. Tighten with the 4mm Allen key supplied.

Fasten the handle to the air slide using the right and centre holes.



10. FITTING CURVED SIDES

- 1) Position the curved side panel parallel to the corresponding left or right side of the heater.
- 2) Hook the front edge of the side panel over the front edge of the heater.
- 3) While maintaining pressure against the front edge of the panel, bring the rear edge of the panel around so that it overlaps the rear edge of the heater.
- 4) Push the rear edge of the side panel in enough that the three pre-drilled screw holes go past the 6mm thick side panel of the heater.
- 5) Screw three screws (supplied with side panels) in to the pre-drilled holes along the rear edge of the side panel so that the side panel cannot come away from the heater.



11. TECHNICAL DRAWINGS

Overall Dimensions:

