

Ravelli Elena RV100 Freestanding Wood Pellet Burning Heater



Ravelli Elena RV100 Freestanding Wood Pellet Fire Installation Specifications

Safety testing of the Ravelli Elena Freestanding Wood Pellet
Burning Heater to AS/NZS 2918:2001 ARS 09/1910

Flue kit testing to AS/NZS 2918:2001 App F: ARS 05/1185

Emissions ARS 09/1911

1.1 Deciding where to locate your wood pellet burning heater:

1. Do not install the pellet heater in a bedroom or room where people sleep.
2. Locate the pellet heater in a large and open room that is centrally located in the house. This will optimize heat circulation.
3. Check clearances to combustibles.

1.2 Clearances to Combustibles – Ravelli Elena Freestanding

This pellet heater requires floor protection which must be non-combustible, extending beneath the stove the full width and depth of the unit including (150mm) in front for ember protection.

AS/NZS 2918:2001 states that a 300mm forward projecting and 200mm side projecting floor protector must be used from any door opening extremity as an absolute minimum. Due to the operating nature of the Elena pellet heater, where opening the door it causes a loss of vacuum and the fire will shut down completely, meaning the likelihood of any hot embers or burning fuel escaping from the combustion chamber is extremely minimal. Therefore a 150mm forward projecting floor protector will be sufficient.

Hearth testing of the Ravelli Elena (ARS 09/1910) showed that on exposed combustible surfaces front of the freestanding heater, no measured locations exceeded the temperature limits specified in AS/NZS 2918:2001

From the body of the heater to the side wall	150mm
From the rear of the heater to wall (external flue)	120mm
From the rear of unlined flue to wall (internal flue)	75mm
Rear corners to wall (corner installation)	120mm

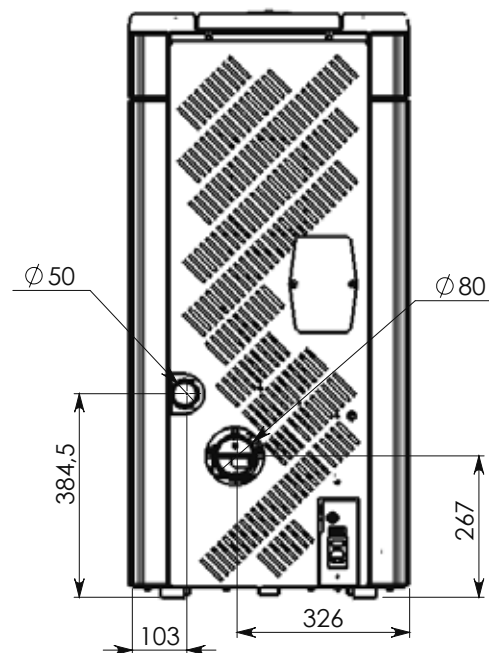
1.3 Exhaust and Fresh Air Intake Locations

Exhaust

	Insert
Hearth to centre of exhaust outlet	267mm
Side of unit to centre of exhaust outlet	326mm
Centre of unit to centre of exhaust outlet	63.5mm

Fresh Air Intake

Hearth to centre of intake	385mm
Side of unit to centre of intake	103mm
Centre of unit to center of intake	159mm

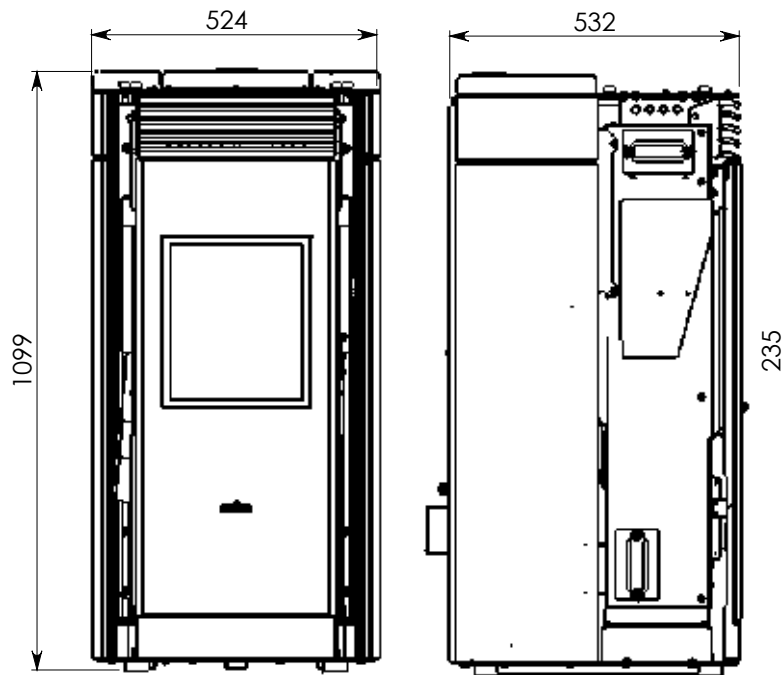


IMPORTANT

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENTING MANUFACTURER

2. Installation

2.1 Dimensions – Elena Freestanding



Refer to Safety Test ARS 09/1910 for all clearances to combustible.

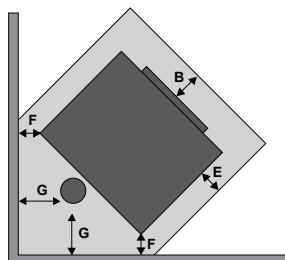
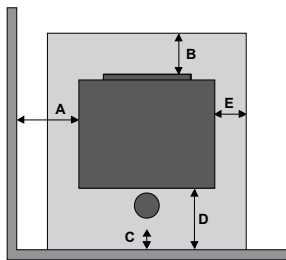
2.2 Clearances & Specifications

Minimum clearances shown are in millimetres. All Ravelli fires are tested to AS/NZS 2918:2001. Specifications were correct at time of printing but may alter and those detailed below should be used as a guide only. Refer to the Installation and Operation Manual supplied with every Ravelli Pellet Fire or if in doubt, consult your Pellet Fire Solutions Retailer.

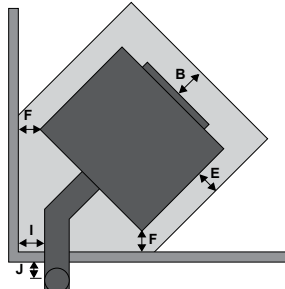
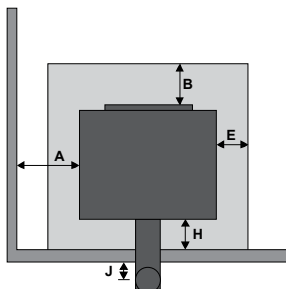
Elena Pellet Fire Clearance to Combustibles



Internal Flue



External Flue



Freestanding
Clearances

Location	Dimension (mm)
A	150
B	150
C*	50
D	n/a
E	75
F	120
G*	50
H	120
I*	50
J*	25

* from shielded flue
* 75mm to unlined flue

Note: AS/NZS 2918:2001 requires a minimum of 100mm clearance for any side requiring access.

Note: These are minimum clearances to combustibles. Actual installation distances may be greater.

Note: The above clearance to combustibles on the flue are only applicable within the fire envelope. Clearance outside this e.g. at a ceiling / wall thimble reverts to 25mm as per ARS flue test 05/1185.

2.3 Minimum Clearance to Combustibles

Side of Unit (A)	150mm
Rear wall to Lined Flue (C, G, I)	25mm
Rear wall to Unlined Flu (C,G, I)	75mm
Rear of Unit (H)	120mm
Rear corners (Corner Installation) (F)	120mm
Floor protection (from glass) (B)	150mm

2.4 Location of the Pellet Fire

Installation of the Ravelli Elena Freestanding Wood Pellet Burning Heater must be undertaken by an experienced installer. Please read the Elena Owners/Technical Manual thoroughly before commencing installation as failure to follow the instruction could cause damage to the pellet fire or property.

2.5 Positioning the fire:

Generally Elena should be installed in a centrally located position within the home. When deciding where to position the appliance in your room you need to consider the following:

2.6 Location of a power source

- Elena has a convection fan which blows air through tubes in the direction that the fire faces, for optimum performance this location should be in a large room centrally located.
- Elena must be installed on a non-combustible surface. This surface must protrude 150mm from the front of the closed pellet fire door.
- Elena has been Safety Tested to AS/NZS 2918:2001 using the Davins manufactured flue. Test Report ARS 08/1185. Installation is not exclusive to these nominated kits, though alternative flue should only be considered following consultation with your local council.
- Please see “Clearances & Specifications” for the required clearances to combustible material also ensure the position of structural elements near the proposed flue.
- Because of the positive pressure in the flue, sealing of all 75mm stainless joints is mandatory – use high temperature Maniseal. Both inner and outer flue joints must be riveted.
- Seismic Restraint: Please see “Seismic Restraint” for requirements.
- Warranty: To validate warranty following installation a copy of the completed Warranty/ Producer Statement must be forwarded to:
Pellet Fire Solutions - info@pelletfiresolutions.co.nz

2.7 Seismic Restraint

All installation scenarios for Elena require the use of hold-down anchors (one on each side).

Fixing to Concrete Floor:

- Minimum M8 expansion anchors (M10 recommended) or min M8 epoxy- set anchors.
- Approved Anchors: Expansion Anchors-Ramset Dynabolt and Trubolt, Hilti HAS.
- Epoxy-set Anchors – Ramset Epcon, Ramset Chemset and Hilti HVU.

2.8 Fixing to Timber Floor Framing

Minimum 14g x 60 screws (6.3mm diameter) or M10 X 90 coach-screws. These shall be fixed a minimum of 40mm into the centre-line of the existing floor joists. If screws cannot be installed directly into an existing floor joist, solid blocking between joists (min size 90x45) shall be provided.

2.9 Installation

Elena should be installed in a centrally located position within the home. This will assist the appliance to perform to the level required. As Elena heats space by convecting air through heat exchange tubes, the heater should face the area the majority of the area to be heated.

Elena requires a power source to function. This is standard mains feed 240v plug-if this is unavailable in close proximity a grounded extension lead may be used.

Elena is to be installed on a non-combustible surface which must have a forward projection of a minimum of 150mm from the glass door.

Ensure all 75mm flue joins are sealed with a high temp silicon (Maniseal).

In accordance with the requirements of AS/NZS 2918:2001 Elena must be secured by seismic restraint.

2.10 Seismic Restraint Locations

