

# A Guide to Installing a Heater

Homeowners around the country are opting to install a solid fuel heating appliance for its economy and efficiency in heating a room. Whether you use an existing fireplace or choose a freestanding heater, you are required to get a Building Consent from Council, and the installation must be checked and approved by a Building Control Officer before the first fire is lit.

## Top Tips for Heaters

- Insist on a fully tested model.
- Always follow the manufacturer's recommendations for installation and usage. Ask for assistance if there are any points you are unsure of.
- The manufacturers specified clearances to framing timber and combustible materials must be adhered to.
- Appliances must only be used with the fuel they were designed for.
- All free standing and inbuilt heating appliances (including flue pipes and chimneys) must be regularly cleaned and checked for soundness.
- Emission standards must be adhered to.
- All heaters, both inbuilt and free standing, must be secured to prevent movement during an earthquake.

## What information is required for the Building Consent?

When lodging a Building Consent application for the installation of a heater, the following information must be included:

- A floor plan showing the position of the heater, the adjacent windows and doors and location of smoke detectors.

- The manufacturer's installation details of your chosen heater.
- The name and registration details of your plumber if the heater is to be connected to a wetback.
- The flue height details.

## **What must be done prior to installation?**

### **Inbuilt Heaters**

Once your building consent has been approved you will need to arrange for an inspection of your existing fireplace before the new appliance is installed. The inspection will ensure that the chimney and fireplace are structurally sound and suitable for the heater and that any gaps or holes within the fireplaces have been adequately sealed.

The existing hearth will also be checked for soundness and width in accordance with the manufacturer's specifications. If your current fireplace and chimney are constructed of masonry (brickwork) then the inspector will check its double thickness, unless otherwise specified by the manufacturer.

### **Free Standing Heaters**

Once your building consent has been approved, and the heater installed, you will need to arrange an inspection of your new heating appliance to ensure compliance with the manufacturer's specifications, prior to the heater being used.

### **Hearths**

The hearth must provide protection from the floor from the physical hazards of falling embers, as well as downward heat radiation from the appliance. The fixing and materials of the hearth should be strictly as directed by the manufacturer, and it should be secured to the floor.

### **Wall Clearance**

Space between the appliance and the wall takes into account both short and long term temperature effects. The distance may only be reduced if a flue or heat shield is used between the appliance and the wall.

Materials for heat shields may include sheet metal, bricks, suitable mineral board or a test combination of these three. There must be a gap at the top and bottom of the shield to allow air to circulate behind it.

### **Ceiling Flues**

The main flue and flue shields passing through the ceiling must be clear of all ceiling and roof timbers. Structural members (for example beams, rafters or trusses) must not be cut.

### **What are the requirements for smoke detectors?**

Whenever work is carried out on a dwelling that requires a Building Consent, (no matter how minor the work) the whole dwelling must be upgraded with smoke detectors to comply, not just the area being altered.

Smoke detectors must be located on the 'escape' routes on all levels within the dwelling. On all levels containing sleeping spaces, the smoke detectors should be located in either every sleeping space or within 3 metres of every sleeping space door, so that the alarm is audible to occupants on the other side of a closed door.

The smoke detectors may be battery powered, and are not required to be interconnected. In addition, they should provide a hush facility having a minimum duration of 60 seconds.

### **Who should I contact for further information?**

Please contact a Building Control Officer if you require further information or assistance.

### **What are the requirements for wood burners?**

The Ministry for the Environment has regulations that must be followed in regards to the control of emissions and the efficiency of solid fuel burning appliances, which are the main cause of domestic air pollution in most New Zealand towns and cities. Woodburner design standards assist in limiting emissions of harmful pollutants such as carbon monoxide, volatile organic compounds, hydrocarbons, toxins and dioxins.

The standards apply to all new wood burners installed in urban areas after 1 September 2005, but do not include an open fire, a multi fuel heater, a pellet fire, a coal burning heater or a stove that is designed and used for cooking and is heated by burning wood. An urban area is designed as a property with a lot size of 2 hectares or less.

The standard does not apply to wood burners installed prior to the above date, unless they are reinstalled. You are still able to install and operate open fires, multi fuel burners, pellet fires and wood or coal stoves unless the District Plan prevents it.

### **The role of the Council**

Compliance with the Ministry's wood burning standards will be checked during the Building Consent process, as new wood burners require consent for fire safety reasons. In addition to ensuring the wood burner meets Building Code requirements (for example safety and structural integrity), a Building Control Officer will also check that the wood burner meets the national environmental standards.