Selwyn DISTRICT COUNCIL

Information Guide

Information required for solid fuel heater applications

A guide to filling in the building consent application for your solid fuel heater, and supporting documents required with your consent application.

The intention of this document is to provide a step by step process that clearly identifies the required documentation, compliance pathways and the necessary information to be provided with your solid fuel heater application.

What to check and supply

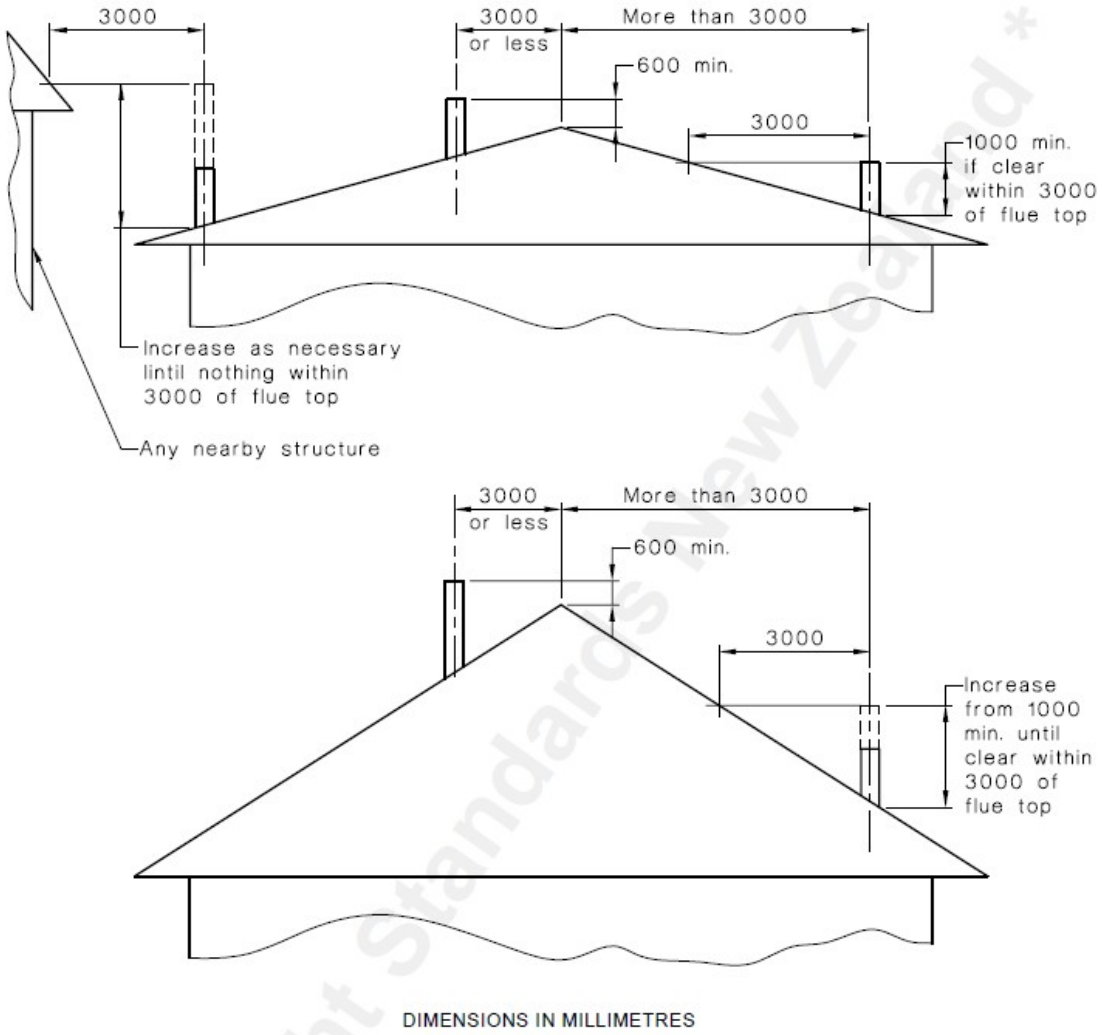
- ☐ Ensure you include the exact make and model of your appliance
- ☐ Consistencies between the appliance described and the corresponding ECAN number
- ☐ Complete and up to date installation instructions and specifications
- ☐ Clear indication if a wetback is to be installed
- ☐ Floor plans are inadequate – the basic requirements of any floor plan submitted should have
  - ☐ location of all walls, windows and doors with all rooms named
  - ☐ dimension of hearth to be installed or re-used
  - ☐ the location of fire and smoke detectors
  - ☐ at least overall dimensions and be of a standard so it may be easily determined if smoke detectors are within 3m of bedrooms and the DEOP can be determined
  - ☐ location of the existing water cylinder if a wetback/hot water booster is to be fitted
- ☐ Evidence such as photos or a details plan showing how clearances from combustibles (e.g. curtains, blinds, electrical outlets, existing chimney(s) will be met
- ☐ The type of roof cladding and compliant flashings to be used
- ☐ Details of seismic restraint of the fire
- ☐ Flue bracing details
- ☐ Details of the type of hearth to be installed, including materials and dimensions – if using an existing hearth check the materials and dimensions are appropriate
- ☐ When using an existing flue, the means of compliance for B2
- ☐ Complete and correct means of compliance showing how each clause complies – for example by providing links to appropriate documentation, compliance pathways and building code clauses.

Means of compliance – examples of advisory notes

1. Flue height

The minimum flue heights specified in AS/NZS 2918:2001 (Solid Fuel/Liquid Fuel Heaters) or the manufacturer's installation instruction may be insufficient if combustion problems and smoke or odour nuisance are to be avoided. Consideration should be given to extending the flue height above those required by the manufacturer or AS/NZS 2918:2001.

Note: If the flue height exceeds 1.2m above the roofline, consideration needs to be given to NZ Building Code performance B1.3.3. The flue will need lateral bracing to withstand wind-load. If applicable please include details of complying bracing.



DIMENSIONS IN MILLIMETRES

FIGURE 4.9 MINIMUM HEIGHT OF FLUE SYSTEM EXIT

2. Insert or inbuilt installation

Third party statement/report on condition of chimney, providing verification of the structural integrity of the existing fireplace/chimney where the installation involves an insert or inbuilt type appliance.

Verification includes a report from a suitably qualified or competent person and could including photos, etc.

3. Using an existing outer flue casing

The use of a second hand outer flue casing does not comply with NZBC B2.2 Durability.

Re-using the existing outer flue is an Alternative Solution and as such it is necessary to provide evidence from a suitably qualified expert demonstrating how weather-tightness and compliance with NZBC B2.2 Durability will be achieved.

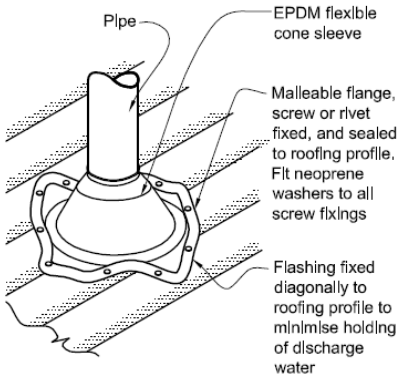
Other requirements

Any pipe penetration over 200mm (in any dimension in any direction) through the roofing material requires additional trimming out with timber framing to support the roofing material.

Maximum length of roofing material above the flue penetration is 12 metres (corrugated) and 18 metres (trapezoidal & trough profile) as shown in table 17 NZBC E2.

For material section, material compatibility and roofing underlay acceptability refer to Tables 20 to 23 in Section 10 of the NZBC Acceptable Solution E2/AS1.

Figure 53: Flashing for small pipes
Paragraphs 8.3.10, 8.4.17, 9.6.8.5 and 9.6.9.6



NOTE:
(1) Max. roof pitch for this flashing 45°, minimum pitch 10° if base of flange covers one or more complete troughs.
(2) For pipes up to 85 mm diameter.

The alternative solutions (in brief)

All other flashing configurations must be treated as an alternative solution. This has to meet the function and performance requirements as well as the objectives of the NZBC. However, as the name suggests, the solution chosen does not have to reflect that acceptable solution in its entirety.

In the instance of a flue flashing, the variations from the acceptable solution may be minor but any change from the acceptable solution is seen as an alternative.

For alternative solutions, refer to the Building Research Association of New Zealand – go to www.branz.co.nz. The following documents are relevant to fitting of a solid fuel heater flue flashing

- BRANZ Weathertight Solutions Volume 5: Roofing
- NZ Metal Roofing Manufacturers Code of Practise (use latest version).

Also refer to the manufacturer's literature for the product you have chosen. Here you should find information showing how your chosen product will meet the requirements of the NZ Building Code. If this information is not available in store or on the internet, the product you have chosen may not have been tested with independent opinions given. For ease of achieving compliance, you may need to reconsider your options.

Figure 54: Soaker flashing for pipe penetrations
Paragraph 8.4.17