

Report No #0178



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**(This report is endorsed)**

**Test Report No:** 0178

Issue Date 16/03/2010

**Subject**

Sample: Built-In Wood Fire (Zero Clearance)  
Manufacturer: Glen Dimplex  
Model: I9000 (Hard-Wood) Built-In Wood Burning Heater

**Client reference**

Attention: Mr Andrew Weir  
Company: Glen Dimplex  
Address: P O Box 58-743 Greenmount, Auckland  
Phone: 09-274-8265

**Purchase Order:** P001330

**Standard Specification and Scope:**

AS/NZS 2918-2001 Appendix B Thermal testing of installation clearances;  
Appendix B sets out the method for determining the maximum temperature rise above ambient temperature of heat sensitive materials as specified installation clearances from a solid fuel burning appliance.

**Instructions:**

1. The client has requested that the solid fuel heater to be tested in the parallel position with three alternative installation settings;
  - Without a front fascia wall installed
  - With a front fascia wall installed.
  - With a fascia wall and a mantel shelf at 1200mm from heater base.
2. Temperature monitoring was conducted across the top front of the fire; within the framing forming the test cavity, and on a simulated mantelpiece.

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**Supplied Documentation:**

**Testing Laboratory**  
Applied Research

**Report Number**  
09/2126

**Dated**  
December 10<sup>th</sup> 2009

For additional information relating to the design and construction of the I9000 (Hard-Wood) Built-In Wood Burning Heater reference must be made to the Applied Research test report 09/2126

**Summary**

The solid fuel heater complied with the standard AS/NZS 2918-2001 Appendix B Thermal testing of installation clearances when installed to the clearances stated in the test results are on page six of this test report.

  
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Checked by  
Philip Sparrow  
Authorized Signatory

  
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Tested by  
Poyang Chen  
Compliance Engineer

## 1. Manufactures details and Description of the fire

Manufactures name: Glen Dimplex  
Address: P O Box 58-743, Greenmount, Auckland

### a) Heater external dimensions, constructions, surface finish and material used:

The I9000 (Hard-Wood) built-in wood burning heater dimensions are shown in Applied Research test report number 09/2126, minor changes have been made with regards to the front fascia design as detailed later in this report.

For dimensions relating to the zero clearance enclosure used refer to the drawing contained on page thirteen of this report.

For dimensions relating to the front fascia used refer to the drawing contained on page twelve of this report.

### b) Flue gas outlet:

The flue gas outlet spigot was positioned centrally when viewed from the front of the firebox and the spigot's axial centre is 339 mm from the front of the door frame. The flue spigot has an inside diameter of 152 mm.

## 4. Clearances

Make and Model      I9000 (Hard-Wood) Built-In Wood Burning Heater  
Standard              AS/NZS 2918 - 2001 Appendix B

Installation Clearances (Dimensions in mm)

### Parallel Position:

The sides of the heater are parallel to the walls of the test rig.

The side and rear walls were at the following distances from the heater:

### Minimum Wooden Cabinet Clearances

Flue centre to interior rear wall	305mm
Flue centre to interior Side wall	478mm
Flue centre to Exterior Side wall	760mm

### Mantelpiece Clearance

Top of fascia to the lower surface the mantelpiece	345mm
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## 5. Floor protector

The heater was tested with an insulated hearth present which consisted of a 50mm thick layer of heat resistant material measuring 525mm deep and 1025mm wide (matching the width of the sheet metal Fascia).

An insulated hearth of the above dimensions will be required at installation.

The floor surface in front of firebox at distances greater than 555mm complied with the requirements of AS/NZS 2918.

At distances greater than 555mm no temperatures on the exposed test rig floor exceeded the specified limits during either the high fire or flash fire tests.

**Note:** The AS/NZS 2918 standard section 3.3.2 places minimum requirements for the floor protector dimensions.

## 6. Ventilation

The clearance box was ventilated with a total cross sectional area of 13273 mm<sup>2</sup>  
The maximum height of the ventilation openings was 180mm from the floor surface, it is therefore required that the installation be provided with a minimum of 13273 mm<sup>2</sup> at a height no greater than 180mm.