

Report 08/1857

August 26th, 2008

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Customer: Glen Dimplex Australasia Ltd
P.O. Box 58-473
Greenmount
AUCKLAND

P1395/2

Attention: Andy Weir

Emissions and Efficiency Testing of the Minos 2 Wood Burning Heater

1.0 Introduction

A sample of the Minos 2 freestanding wood burning heater supplied by Glen Dimplex Australasia Ltd was tested for compliance of its flue gas emissions to the requirements of the joint Australian/New Zealand Standard 4013:1999. The test was carried out in conjunction with a measurement of power output and efficiency using the methods set out in the joint Australian/New Zealand Standard 4012:1999. The tests were carried out at our Beatty St. laboratory during August 2008 by Michael De Vigne and Michael Wilson.

Accreditation

Laboratory Registration Number 395

This laboratory is accredited by International Accreditation New Zealand (IANZ). The tests reported herein have been performed in accordance with the terms of our accreditation. This accreditation does not extend to any opinions or any interpretations of test results contained in this report.



IANZ has a Mutual Recognition Arrangement (MRA) with the National Association of Testing Authorities (NATA), Australia, such that both organizations recognize accreditations by IANZ and NATA as being equivalent. Users of test reports are recommended to accept test reports in the name of either accrediting body.

A photograph of the fully assembled heater as tested.



4.2 Efficiency

Efficiency is estimated on the basis of a gross calorific value of 20.04MJ/kg (dry weight basis) for the fuel burned during the test. This value was determined by measurements of samples of the wood used to prepare the test fuel.

4.2.1 Overall Efficiency

Based on the test results the average overall efficiency of the heater is estimated to be 68%. The average is taken over all the tests reported. The overall efficiency takes into account the heat output to air.

4.2.2 Space Heating Efficiency

Based on the test results the average space heating efficiency of the heater is estimated to be 68%. The average is taken over all the tests reported. The space heating efficiency takes into account the heat output to air only.

Results for efficiency for each burn cycle and means for each burn rate are detailed in Table 2.

5.0 Compliance

The joint Australian/New Zealand Standard 4013:1999 requires that the particulate emission factor calculated by averaging the results for the high, medium and low burns be not greater than 4.0g/kg for an appliance without a catalytic converter.

The average particulate emission factor for the runs presented in this report is 0.6g/kg. On the basis of this result the appliance tested complies with the joint Australian/New Zealand Standard 4013:1999. Manufacturer's instructions must specify front to back loading for this heater.

This report relates only to the item tested. Any subsequent alteration of the equipment tested will invalidate the compliance results.

This report:

Prepared by: M. J. Wilson

Approved by: W.S. Webley

Release Date:

Michael J Wilson
W.S. Webley
12-1-09.

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