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AS/NZS 4234:2008 Heated water systems - Calculation of energy consumption

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Abbreviation

AS/NZS 4234:2008

Amendment

A1, A2, A3 - incorporated.

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Information provider

Standards New Zealand

Author

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Cited By

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Description

This Standard sets out a method of evaluating the annual energy performance of water heaters using a combination of test results for component performance and a mathematical model to determine the standardized annual purchased energy use.

The analysis required by this Standard is based on the TRNSYS simulation model (version 15 or later) with modifications to suit typical packaged solar and heat pump water heaters. The TRNSYS software package is available from the University of Wisconsin (see Appendix E). Weather data and typical modelling data files (TRNSYS deck files) are supplied with PDF purchases of this Standard.

Scope

The procedure is applicable to electric, gas and solar water heaters with integral boosting or preheating into a conventional storage or instantaneous water heater and to heat pump water heaters.

For solar and heat pump water heaters, displaced purchased energy relative to reference water heaters is also calculated. Solar and solar boosted heat pump water heater types not covered in the application of this Standard can be tested under AS 2984 to obtain an annual performance assessment.

There are no product design or operation requirements in this Standard. System operating parameters specified in this Standard

are only for the purpose of performance modelling.

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- [AS/NZS 3500.4:2015](#)

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