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NZS 4613:1986 Domestic solar water heaters

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Abbreviation

NZS 4613:1986

Valid from

29/06/1986

Information provider

Standards New Zealand

Author

Standards New Zealand

Information type

New Zealand Standard

Format

PDF

Cited By

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Description

This Standard specifies solar collectors and ancillary equipment for systems with or without auxiliary heating.

Annual performance of complete systems is estimated approximately using a 3 - 4 day test procedure or assessed reliably using a 30 day test.

Scope

This Standard provides a specification for solar collectors and ancillary equipment used in domestic type hot water supply systems. The specification provides a basis for the selection of materials for, and the design and operation of, such equipment to give satisfactory service under general New Zealand conditions.

The specification applies to auxiliary systems as well as systems in which water is heated by solar radiation only.

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- [G12/AS2 \(Third Edition, Amendment 10\)](#)

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- [G12/AS2 \(Third Edition, Amendment 9\)](#)

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- [G12/AS2 \(Third Edition, Amendment 11\)](#)

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- [G12/AS2 \(Third Edition, Amendment 8\)](#)

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- [G12/AS2 \(Third Edition, Amendment 7\)](#)

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- [AS/NZS 3500.4:2003](#)

NZS 4613:1986 is cited by AS/NZS 3500.4:2003 Plumbing and drainage - Part 4: Heated water services

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

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This document CITES:

New Zealand Standards

- [NZS 1300:1965](#)

NZS 4613:1986 cites NZS 1300:1965 General requirements for electrical appliances and accessories

- [NZS 4223 Parts 1&2:1985](#)

NZS 4613:1986 cites NZS 4223 Parts 1 and 2:1985 Code of practice for glazing in buildings - The selection and installation of manufactured sealed insulating glass units

- [NZS 4602:1988](#)

NZS 4613:1986 cites NZS 4602:1988 Low pressure copper thermal storage electric water heaters

Australian Standards

- [AS 1580.408.4-1980](#)

NZS 4613:1986 cites AS 1580.408.4-1980 Paints and related materials - Methods of test - - Adhesion (cross-cut)

- [AS 2535:1986](#)

NZS 4613:1986 cites AS 2535:1986 Solar collectors with liquid as the heat-transfer fluid - Method for testing thermal performance (Supersedes AS 2535:1982)

- [AS 2712:1984](#)

NZS 4613:1986 cites AS 2712:1984 Solar water heaters - Design and construction

- [AS 3142:1986](#)

NZS 4613:1986 cites AS 3142:1986 Approval and test specification - Electric water heaters (Supersedes AS 3142:1982)

Other

- NZS 5224.2:1980 Power driven circulation - Domestic glandless pumps (a link to this resource is not available)

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Appendix

A Determination of solar contribution

B Average radiation – Wellington

C Determination of weighted means for ambient temperature and water draw off

D Variation in inlet water temperature

E Stagnation (no-flow) exposure test for collectors

F Nomenclature

Table 1 Daily demands and delivery temperatures for complete system tests

Figure 1 Example of a linear regression equation of Es on R

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