



**Space heating and cooling and
ventilation systems — Calculation of
energy and comfort performance**



AS 5389:2019

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The following are represented on Committee CS-028:

- Australian Building Codes Board
- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Institute of Refrigeration Air Conditioning and Heating
- Clean Energy Council
- Clean Energy Regulator
- Consumer Electronics Suppliers Association
- CSIRO
- Electrical Compliance Testing Association of Australia
- Gas Appliance Manufacturers Association of Australia
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Preface

This Standard was prepared by the Standards Australia Committee CS-028, Solar Water Heaters, to supersede AS 5389(Int)—2013, *Solar heating and cooling systems — Calculation of energy consumption*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide a method for calculating energy consumption and determining the comfort performance of space heating and cooling systems and ventilator systems. It uses a combination of test results for component performance, mathematical models of representative buildings, and parameters for comfort condition. It includes methodologies for —

- (a) calculating annual purchased energy use;
- (b) calculating displaced purchased energy relative to reference heating and cooling devices; and
- (c) determining comfort performance.

Statements in notes expressed in mandatory terms in text to tables are deemed to be requirements of this Standard.

The terms “normative” and “informative” have been used in this Standard to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

Contents

Preface	ii
Section 1 Scope and general	1
1.1 Scope.....	1
1.2 Application.....	1
1.3 Normative references.....	2
1.4 Terms and definitions.....	3
1.5 Notation.....	4
Section 2 Building performance evaluation	8
2.1 General.....	8
2.2 Standardized annual task performance.....	8
2.3 Building models.....	8
2.3.1 General.....	8
2.3.2 Adding cooling, heating and ventilation components to a building model.....	9
2.3.3 Balancing of air flow rates.....	9
2.4 Thermal comfort.....	9
2.5 Comfort conditions.....	9
2.5.1 General.....	9
2.5.2 Domestic buildings.....	10
2.5.3 Commercial buildings.....	11
2.6 Assessing products with fixed building sizes.....	11
2.6.1 General.....	11
2.6.2 Load-scale factor.....	12
2.6.3 Maximum floor area and energy use for unscaled product application.....	12
2.7 Modelling sequence.....	14
2.8 Weather data.....	14
2.8.1 General.....	14
2.8.2 Climate zones.....	15
2.9 Thermal energy loads.....	15
2.9.1 Load scheduling.....	15
2.9.2 Sanitary hot water heating loads.....	16
2.9.3 Cold water inlet temperature.....	16
2.9.4 Building air leakage.....	16
2.9.5 Pipe and duct heat losses and gains.....	17
2.10 System energy savings.....	18
2.10.1 General.....	18
2.10.2 Energy use by reference system.....	18
2.10.3 Displaced energy.....	18
2.10.4 Purchased energy savings relative to reference system — Combined system energy savings.....	19
2.10.5 Calculation of specific carbon dioxide emission from space heating and cooling systems and heated water systems.....	19
2.11 Documentation of product performance.....	19
Section 3 Solar desiccant cooling systems	21
3.1 General.....	21
3.2 Test method for desiccant-based air conditioners.....	21
3.2.1 General.....	21
3.2.2 Test installation.....	21
3.2.3 Test measurements.....	22
3.3 Test conditions.....	22
3.3.1 General.....	22
3.3.2 Air flow rate.....	23
3.3.3 Evaporative/spray water flow rate.....	24
3.3.4 Heat transfer fluid flow rate.....	24
3.3.5 Evaporative/spray water inlet temperature.....	24

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