Australian Standard™

Refrigerated display cabinets

Part 5: Temperature test

This Australian Standard was prepared by Committee ME-008, Refrigerated Display Cabinets. It was approved on behalf of the Council of Standards Australia on 26 September 2003.

This Standard was published on 1 October 2003.

The following are represented on Committee ME-008:

Australian Greenhouse Office
Australian Retailers Association
Commercial Refrigeration Manufacturers Association of Australia
Food Science Australia
Institution of Engineers Australia
Refrigeration Air Conditioning Companies Association

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AS 1731.5—2003
(Incorporating Amendment No. 1)

Australian Standard™

Refrigerated display cabinets

Part 5: Temperature test

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-008, Refrigerated Display Cabinets, to supersede AS 1731.5—2000, *Refrigerated display cabinets*, Part 5: *Temperature test.* After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

This Standard incorporates Amendment No. 1 (December 2005). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard is based on International Standard prEN 23953-2:2003, *Refrigerated display cabinets*, Part 2: *Classification, requirements and test conditions*.

The Standard forms Part of a series of Standards for refrigerated display cabinets, as follows:

AS		
1731	Refrigerated display cabinets	
1731.1	Part 1:	Terms and definitions
1731.2	Part 2:	General mechanical and physical requirements
1731.3	Part 3:	Linear dimensions, areas and volumes
1731.4	Part 4:	General test conditions
1731.5	Part 5:	Temperature test (this Standard)
1731.6	Part 6:	Classification according to temperatures
1731.7	Part 7:	Defrosting test
1731.8	Part 8:	Water vapour condensation test
1731.9	Part 9:	Electrical energy consumption test
1731.10	Part 10:	Test for absence of odour and taste
1731.11	Part 11:	Installation, maintenance and user guide
1731.12	Part 12:	Measurement of the heat extraction rate of the cabinets when the condensing unit is remote from the cabinet
1731.13	Part 13:	Test report
1731.14	Part 14:	Minimum energy performance standard (MEPS) requirements

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1 SCOPE

1.1 Scope of the Standard

A1 This Standard specifies terminology, general mechanical and physical requirements, test conditions as well as installation and maintenance, for commercial refrigerators and freezers used for the sale or display of food products including beverages.

This Standard does not cover refrigerated vending machines, ice-makers, cabinets intended for use in catering and similar non-retail applications.

1.2 Scope of Part 5

This Part of AS 1731 specifies methods for the determination of test package temperatures in refrigerated display cabinets.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS
1731 Refrigerated display cabinets
1731.4 Part 4: General test conditions
1731.13 Part 13: Test report

3 OBJECTIVE

The objective of this Standard is to specify the requirements for conducting a temperature test for refrigerated display cabinets.

4 TEST PROCEDURE

4.1 Preparation of test cabinet

The cabinet is installed in the test room and the test is prepared according to AS 1731.4.

4.2 Loading the cabinet—General

The cabinet shall be loaded with filler packages and M-packages (see AS 1731.4) up to the load limit, as illustrated in Figures 1 to 12. These packages shall have previously been brought to a temperature equal to that expected during the test.

The test packages shall be arranged so as to form an even level.

Each refrigerated shelf area shall be loaded with test packages arranged in such a way that they form rows with a length of 200 mm, by the depth of the cabinet, in the direction of the airflow in the cabinet.

A clearance of 25 mm ±5 mm shall be left between package rows and adjacent to the internal end walls of the cabinet. For units with perforated discharge panels a clearance of up to 25 mm between the rear panel and the filler package is permitted.

