

Australian Standard™

**Refrigerated display cabinets**

**Part 11: Installation, maintenance and  
user guide**

**STANDARDS**  
Australia



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.

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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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**Part 11: Installation, maintenance and  
user guide**

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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 1731.11—2000, *Refrigerated display cabinets, Part 11: Installation, maintenance and user guide*. 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 ISO 23953-2:2003, *Refrigerated display cabinets, Part 2: Classification, requirements and test conditions*.

This Standard is Part 11 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
- 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 (this Standard)
- 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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Part 11: Installation, maintenance and user guide

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## 1 SCOPE

### 1.1 Scope of 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 11

This Part of AS 1731 gives information concerning the installation and maintenance of refrigerated display cabinets and includes a guide for users.

## 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1731 Refrigerated display cabinets

1731.2 Part 2: General mechanical and physical requirements

## 3 OBJECTIVE

The objective of this Standard is to provide guidance on installation and maintenance practices for use by manufacturers, suppliers, purchasers, operators and regulators of these systems.

## 4 IMPORTANT SETTING CONDITIONS

### 4.1 Climate

In order to keep the ambient climate at the place of installation within agreed limits, it may be necessary to install airconditioning. Such an installation should include control of the relative humidity, as excessive humidity is detrimental to cabinet performance. It can be more economical to dehumidify the air by airconditioning than through cabinet evaporators operating at lower temperatures, as the latter is not energy efficient.

The grouping of cabinets in a defined area will be advantageous in terms of performance and operating costs; however, it may also cause customer discomfort.

### 4.2 Air draughts

The location of the cabinets should be such that air draughts are minimized or avoided. Cabinets should not be installed adjacent to doors or in areas where exposure to considerable air movement will be experienced, e.g., from airconditioning, ventilation and heating outlets.