

Australian Standard™

Refrigerated display cabinets

Part 4: General test conditions



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

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 03209.

Australian Standard™

Refrigerated display cabinets

Part 4: General test conditions

Originated as AS B220—1966.
Previous edition AS 1731.4—2000.
Second edition 2003.
Reissued incorporating Amendment No. 1 (December 2005).

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 5528 3

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 1731.4—2000, *Refrigerated display cabinets, Part 4: General test conditions*. 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 4 of a series of Standards on 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 (this Standard)
- 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
- 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 reports
- 1731.14 Part 14: Minimum energy performance standard (MEPS) requirements

CONTENTS

	<i>Page</i>
1 SCOPE.....	4
2 REFERENCED DOCUMENTS.....	4
3 OBJECTIVE	4
4 GENERAL TEST CONDITIONS.....	4
5 TESTING EQUIPMENT	7
6 PREPARATION OF TEST CABINET AND GENERAL INFORMATION ON TEST PROCEDURES	19
7 TEST REPORT.....	20

STANDARDS AUSTRALIA

Australian Standard
Refrigerated display cabinets

Part 4: General test conditions

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 4

This Part of AS 1731 specifies general conditions for testing refrigerated display cabinets.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 1731 Refrigerated display cabinets
- 1731.3 Part 3: Linear dimensions, areas and volumes
- 1731.5 Part 5: Temperature test
- 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
- 1731.13 Part 13: Test report

AS/NZS

- 1677 Refrigerating systems
- 1677.1 Part 1: Refrigerant classification

3 OBJECTIVE

The objective of this Standard is to specify the general test conditions for refrigerated display cabinets, for use by manufacturers, suppliers, purchasers, operators and regulators of these systems.

4 GENERAL TEST CONDITIONS

4.1 General

General test conditions deal with the measurement of the following characteristics:

- (a) Temperature (see AS 1731.5).
- (b) Defrosting (see AS 1731.7).
- (c) Water vapour condensation (see AS 1731.8).
- (d) Energy consumption (see AS 1731.9).