

Australian Standard™

**Refrigerated display cabinets**

**Part 7: Defrosting 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

---

### **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 Standards may also be withdrawn.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](http://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](mailto: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 03212.*

Australian Standard™

## Refrigerated display cabinets

### Part 7: Defrosting test

Originated as AS B220—1966.  
Previous edition AS 1731.7—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 5531 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 1731.7—2000, *Refrigerated display cabinets, Part 7: Defrosting 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*.

This Standard is Part 7 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 (this Standard)
- 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 TEST PROCEDURE.....	4
5 TEST REPORT .....	5

STANDARDS AUSTRALIA

---

**Australian Standard**

**Refrigerated display cabinets**

---

Part 7: Defrosting test

---

## 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 7

This part of AS 1731 specifies the procedure to test the defrosting method of refrigerated display cabinets when tested at the same conditions as those specified for the temperature test (see AS 1731.5). The test is not applicable to cabinets or parts of cabinets intended to be defrosted manually.

## 2 REFERENCED DOCUMENTS

The following documents are referenced in this Standard:

AS

- 1731 Refrigerated display cabinets
- 1731.4 Part 4: General test conditions
- 1731.5 Part 5: Temperature test
- 1731.13 Part 13: Test report

## 3 OBJECTIVE

The objective of this Standard is to establish a procedure for testing defrost operation of refrigerated display cabinets for use by manufacturers, suppliers, purchasers, operators and regulators of these systems.

## 4 TEST PROCEDURE

Locate and load the cabinet as for the temperature test (see AS 1731.4 and AS 1731.5), operate it in accordance with the manufacturer's instructions at the conditions appropriate to the test room climate class for which it is intended, and then operate it for at least 24 h after stable operating conditions have been reached (see AS 1731.4) or during the operating period of cabinets intended to be switched off at night (see AS 1731.5).

NOTE: This test may be carried out just after the temperature test.

At the end of a defrost period, switch off the cabinet, as necessary, and unload it as quickly as possible. Examine all surfaces, excluding test packages, within the refrigerated space for any residual ice, frost, snow, or excessive residual water, after dismantling, as necessary, accessories and parts.