



Greenhouse and Energy Minimum Standards (Refrigerated Display Cabinets) Determination 2012¹

Greenhouse and Energy Minimum Standards Act 2012

I, MARK DREYFUS, Parliamentary Secretary for Climate Change and Energy Efficiency, make this Determination under section 23 of the *Greenhouse and Energy Minimum Standards Act 2012*.

Dated 25 October 2012

MARK DREYFUS

Parliamentary Secretary for Climate Change and Energy Efficiency

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1 Name of Determination

This Determination is the *Greenhouse and Energy Minimum Standards (Refrigerated Display Cabinets) Determination 2012*.

2 Commencement

This Determination comes into force the day after it is registered.

3 Definitions

In this Determination:

Act means the *Greenhouse and Energy Minimum Standards Act 2012*.

AS 1731.1-2003 means *Australian Standard 1731.1-2003 Refrigerated display cabinets. Part 1: Terms and definitions*, as it existed on the date this Determination came into force.

Note 1: AS 1731.1-2003 is available from Standards Australia Limited.

Note 2: AS 1731.1-2003 includes all amendments up to and including AS 1731.1-2003/Amdt:1 made on 15 December 2005.

AS 1731.2-2003 means *Australian Standard 1731.2-2003 Refrigerated display cabinets. Part 2: General mechanical and physical requirements*, as it existed on the date this Determination came into force.

Note 1: AS 1731.2-2003 is available from Standards Australia Limited.

Note 2: AS 1731.2-2003 includes all amendments up to and including AS 1731.2-2003/Amdt:1 made on 15 December 2005.

AS 1731.3-2003 means *Australian Standard 1731.3-2003 Refrigerated display cabinets. Part 3: Linear dimensions, areas and volumes*, as it existed on the date this Determination came into force.

Note 1: AS 1731.3-2003 is available from Standards Australia Limited.

Note 2: AS 1731.3-2003 includes all amendments up to and including AS 1731.3-2003/Amdt:1 made on 19 December 2005.

AS 1731.4-2003 means *Australian Standard 1731.4-2003 Refrigerated display cabinets. Part 4: General test conditions*, as it existed on the date this Determination came into force.

Note 1: AS 1731.4-2003 is available from Standards Australia Limited.

Note 2: AS 1731.4-2003 includes all amendments up to and including AS 1731.4-2003/Amdt:1 made on 15 December 2005.

AS 1731.5:2003 means *Australian Standard 1731.5-2003 Refrigerated display cabinets. Part 5: Temperature test*, as it existed on the date this Determination came into force.

Note 1: AS 1731.5:2003 is available from Standards Australia Limited.

Note 2: AS 1731.5:2003 includes all amendments up to and including AS 1731.5:2003/Amdt:1 made on 15 December 2005.

AS 1731.6-2003 means *Australian Standard 1731.6-2003 Refrigerated display cabinets. Part 6: Classification according to temperatures*, as it existed on the date this Determination came into force.

Note 1: AS 1731.6-2003 is available from Standards Australia Limited.

Note 2: AS 1731.6-2003 includes all amendments up to and including AS 1731.6-2003/Amdt:1 made on 15 December 2005.

AS 1731.9-2003 means *Australian Standard 1731.9-2003 Refrigerated display cabinets. Part 9: Electrical energy consumption test*, as it existed on the date this Determination came into force.

Note 1: AS 1731.9-2003 is available from Standards Australia Limited.

Note 2: AS 1731.9-2003 includes all amendments up to and including AS 1731.9-2003/Amdt:1 made on 15 December 2005.

AS 1731.12-2003 means *Australian Standard 1731.12-2003 Refrigerated display cabinets. Part 12: Measurement of the heat extraction rate of the cabinets when the condensing unit is remote from the cabinet*, as it existed on the date this Determination came into force.

Note 1: AS 1731.12-2003 is available from Standards Australia Limited.

Note 2: AS 1731.12-2003 includes all amendments up to and including AS 1731.12-2003/Amdt:1 made on 19 December 2005.

AS 1731.13-2003 means *Australian Standard 1731.13-2003 Refrigerated display cabinets. Part 13: Test report*, as it existed on the date this Determination came into force.

Note 1: AS 1731.13-2003 is available from Standards Australia Limited.

Note 2: AS 1731.13-2003 includes all amendments up to and including AS 1731.13-2003/Amdt 1 made on 15 December 2005

AS 1731.14-2003 means *Australian Standard 1731.14-2003 Refrigerated display cabinets. Part 14: Minimum energy performance Standard (MEPS) requirements*, as it existed on the date this Determination came into force.

Note 1: AS 1731.14-2003 is available from Standards Australia Limited.

Note 2: AS 1731.14-2003 includes all amendments up to and including AS 1731.14-2003/Amdt:2 made on 9 July 2012.

Australian Standard means a standard that is published by Standards Australia Limited denoted by the letters "AS" and identifying numbers and/or letters.

Australian/New Zealand Standard means a standard that is jointly published by Standards Australia Limited and Standards New Zealand, is applicable in both countries and denoted by the letters "AS/NZS" and identifying numbers and/or letters.

CIE Standard means a standard that is published by, or on behalf of, the International Commission on Illumination.

IEC Standard means a standard with letters "IEC" and a number that is published by, or on behalf of, the International Electrotechnical Commission.

integral equipment means equipment that draws power from the refrigerated display cabinet.

M-package temperature class means a form of refrigerated display cabinet classification according to the temperatures of the warmest and coldest M-packages recorded during the temperature test as defined in AS 1731.5-2003.

Note: This is the same meaning as in subclause 4.5.4 of AS 1731.1-2003.

M-package is a test package fitted with a temperature measuring device that is located within the refrigerated display cabinet during testing.

Note: This is the same meaning as in subclause 4.5.3 of AS 1731.1-2003.

non-integral equipment means equipment that does not draw power from the refrigerated display cabinet.

refrigerated display cabinet means a cabinet cooled by a refrigerating system, which enables chilled and frozen foodstuffs placed therein for display to be maintained within prescribed temperature limits.

Note: This is the same meaning as in subclause 4.1.1.10 of AS 1731.1-2003.

standard means an Australian Standard, an Australian/New Zealand Standard, a CIE Standard, an IEC Standard or any other equivalent document.

Note: Several other words and expressions used in this Determination have the meaning given by section 5 of the Act. For example:

- category A product
- covered by
- family of models
- GEMS
- GEMS labelling requirements
- GEMS level requirements
- model
- product classes

4 Interpretation

Applicable definitions of terms or phrases

- (1) If a term or phrase is not defined under the Act, the Regulations to the Act or in this Determination, but the term is defined in a standard mentioned in section 3 of this Determination, the term or phrase is to be read for the purposes of this Determination as having the meaning of the term under the relevant standard.

Note: Notwithstanding this, for convenience to users, the key terms for ascertaining if a product is covered by this Determination are defined in this Determination.

Applicable version of documents incorporated into Standards

- (2) For the purposes of this Determination the applicable version of any document, including a standard, that:
 - (a) is referred to in a standard under the heading ‘Referenced Documents’, or under an equivalent heading in a standard; and
 - (b) must be applied to give effect to this Determination or a standard referred to in this Determination,

is the version of the document, including a standard, that existed at the date this Determination came into force.

Note: For example, clause 1.1 of AS 1731.14-2003 refers to AS 1731.1-2003. The applicable version of AS 1731.1-2003 is the version that existed at the date this Determination came into force.

5 Specified product classes covered by this Determination

- (1) This Determination covers products that are:
- (a) remote refrigerated display cabinets and self-contained refrigerated display cabinets in the product classes set out at subsection (2); and
 - (b) commercial refrigerators and freezers; and
 - (c) ordinarily supplied and used for the sale or display of food products including beverages.

Note 1: This subsection reflects the scope specified in clause 1.1 of AS 1731.14-2003, which references AS 1731.1-2003.

Note 2: This Determination covers commercial refrigerators and freezers irrespective of the context in which they are used. For example, this Determination applies to commercial refrigerators and freezers used in a domestic household.

Note 3: This subsection specifies products that are covered by the Determination. See subsection (3) for products that are not covered.

- (2) The product classes are as follows:

Product class	Products covered by class
1	Type RS1, subclass Unlit Shelves, described at Table A1, Appendix A, AS 1731.14-2003.
2	Type RS1, subclass Lit Shelves, described at Table A1, Appendix A, AS 1731.14-2003.
3	Type RS2, subclass Unlit Shelves, described at Table A1, Appendix A, AS 1731.14-2003.
4	Type RS2, subclass Lit Shelves, described at Table A1, Appendix A, AS 1731.14-2003.
5	Type RS3, subclass Unlit Shelves, described at Table A1, Appendix A, AS 1731.14-2003.
6	Type RS3, subclass Lit Shelves, described at Table A1, Appendix A, AS 1731.14-2003.
7	Type RS4, subclass Glass Door, described at Table A1, Appendix A, AS 1731.14-2003.
8	Type RS6, subclass Gravity Coil, described at Table A1, Appendix A, AS 1731.14-2003.
9	Type RS6, subclass Fan Coil, described at Table A1, Appendix A, AS 1731.14-2003.

Product class	Products covered by class
10	Type RS7, subclass Fan Coil, described at Table A1, Appendix A, AS 1731.14-2003.
11	Type RS8, subclass Gravity Coil, described at Table A1, Appendix A, AS 1731.14-2003.
12	Type RS8, subclass Fan Coil, described at Table A1, Appendix A, AS 1731.14-2003.
13	Type RS9, subclass Fan Coil, described at Table A1, Appendix A, AS 1731.14-2003.
14	Type RS10, subclass Low, described at Table A1, Appendix A, AS 1731.14-2003.
15	Type RS11, described at Table A2, Appendix A, AS 1731.14-2003.
16	Type RS12, described at Table A2, Appendix A, AS 1731.14-2003.
17	Type RS13, subclass Solid Sided, described at Table A2, Appendix A, AS 1731.14.2003.
18	Type RS13, subclass Glass Sided, described at Table A2, Appendix A, AS 1731.14-2003.
19	Type RS14, subclass Solid Sided, described at Table A2, Appendix A, AS 1731.14-2003.
20	Type RS14, subclass Glass Sided, described at Table A2, Appendix A, AS 1731.14-2003.
21	Type RS15, subclass Glass Door, described at Table A2, Appendix A, AS 1731.14-2003.
22	Type RS16, subclass Glass Door, described at Table A2, Appendix A, AS 1731.14-2003.
23	Type RS18, described at Table A2, Appendix A, AS 1731.14-2003.
24	Type RS19, described at Table A2, Appendix A, AS 1731.14-2003.
25	Type HC1, described at Table A3, Appendix A, AS 1731.14-2003.
26	Type HC4, described at Table A3, Appendix A, AS 1731.14-2003.
27	Type VC1, described at Table A3, Appendix A, AS 1731.14-2003.

Product class	Products covered by class
28	Type VC2, described at Table A3, Appendix A, AS 1731.14-2003.
29	Type VC4, subclass Glass Door, described at Table A3, Appendix A, AS 1731.14.2003.
30	Type VC4, subclass Solid Door, described at Table A3, Appendix A, AS 1731.14-2003.
31	Type HF4, described at Table A3, Appendix A, AS 1731.14-2003.
32	Type HF6, described at Table A3, Appendix A, AS 1731.14-2003.
33	Type VF4, subclass Glass Door, described at Table A3, Appendix A, AS 1731.14-2003.
34	Type VF4, subclass Solid Door, described at Table A3, Appendix A, AS 1731.14-2003.

- (3) For subsection 23 (2) of the Act, this Determination does not cover:
- (a) refrigerated vending machines; or
 - (b) ice-makers; or
 - (c) refrigerated cabinets intended for use in catering and similar non retail applications.

Note: This subsection reflects the exclusions specified in clause 1.1 of AS 1731.1-2003.

- (4) In this section:

Fan Coil means a coil within a refrigeration system that is used to allow a compressed cooling chemical (refrigerant), to evaporate from liquid to gas while absorbing heat in the process. In this type of evaporator coil, a fan is used to force air through the evaporator coils to effect cooling of the refrigerated display cabinet.

Gravity Coil means a coil within a refrigeration system that is used to allow a compressed cooling chemical (refrigerant), to evaporate from liquid to gas while absorbing heat in the process. This type of evaporator coil relies on gravity to force air through the evaporator coils to effect cooling of the refrigerated display cabinet.

non retail application means a refrigerated display cabinet used for holding foodstuffs which then require some preparation or processing before sale to the end customer.

remote refrigerated display cabinet means a refrigerated display cabinet that has a condensing unit not built into the cabinet.

Note: This is the same meaning as in subclause 1.5.5 of AS 1731.14-2003.

self-contained refrigerated display cabinet means a refrigerated display cabinet that has the condenser unit built into the cabinet.

Note: This is the same meaning as in subclause 1.5.6 of AS 1731.14-2003.

6 GEMS level requirements

Energy use and greenhouse gas production

- (1) For paragraphs 24 (1) (a) and 25 (a) of the Act, the specified energy use requirements are the requirements mentioned in:
 - (a) for products in product classes 1 to 24, Table 2.1 at clause 2.1 of AS 1731.14-2003; and
 - (b) for products in product classes 25 to 34, Table 2.2 at clause 2.2 of AS 1731.14-2003.

Conducting tests

- (2) For paragraphs 24 (1) (a) and 25 (b) of the Act, the specified requirements for conducting tests for products covered by this Determination are:
 - (a) the requirements mentioned in section 2 of AS 1731.14-2003 in relation to energy use; and
 - (b) for refrigerated display cabinets with non-integral equipment, the refrigerated display cabinet must be tested without the non-integral equipment; and

Note: An example of equipment that is non-integral to the refrigerated display cabinet is signage that is hung from the refrigerated display cabinet but that does not draw its power from the refrigerated display cabinet.

- (c) for refrigerated display cabinets with integral equipment:
 - (i) the refrigerated display cabinet must be tested with the integral equipment, irrespective of whether the integral equipment has been supplied with the refrigerated display cabinet or delivered separately; and
 - (ii) if more than one variant of the integral equipment can be used with the refrigerated display cabinet, the refrigerated display cabinet must be tested with the variant that consumes the maximum electrical energy over the test period; and

Note: An example of equipment that is integral to the refrigerated display cabinet is integrated signage.

- (d) for products in product classes 25 to 34 that do not have a user adjustable temperature controller, the products must be tested as delivered and the M-package temperature class determined in accordance with AS 1731.6-2003; and
- (e) for products in product classes 25 to 34 that:
 - (i) have a user adjustable controller; and
 - (ii) if the user adjustable controller can be set so that the product operates within an M-package temperature range corresponding to an M-package temperature class which is subject to the requirements set out at paragraph 6 (1) (b),

then the product must be tested using the setting which results in operation within the lowest M-package temperature class which is subject to the requirements set out at paragraph 6 (1) (b) that the product can attain.

Note: An example for paragraph (e) is where setting A for a product results in the highest temperature of the warmest M-package being equal to +5 °C and the lowest temperature of the coldest M-package equal to -1 °C and setting B for the same product results in the highest temperature of the warmest M-package being equal to +7 °C and the lowest temperature of the coldest M-package equal to -1 °C, then the product must be classified as M1, meaning that M-package temperature class and testing for energy consumption must be conducted at setting A.

7 GEMS labelling requirements

Labelling information and communication requirements

There are no GEMS labelling requirements for products covered by this Determination.

8 Other GEMS requirements

High efficiency level

- (1) For subsection 24 (2) and paragraph 27 (1) (a) of the Act, the specified requirements for products covered by this Determination to meet the high efficiency level are the requirements mentioned in:
 - (a) for products in product classes 1 to 24, Table 3.1 at clause 3.1 of AS 1731.14-2003; and
 - (b) for products in product classes 25 to 34, Table 3.2 at clause 3.2 of AS 1731.14-2003.

Note: This subsection specifies the requirements a product must meet in order to be designated as 'high efficiency'.

Conducting tests

- (2) For subsection 24 (2) and paragraph 27 (1) (e) of the Act, the specified requirements for conducting tests for products covered by this Determination in relation to paragraph 27 (1) (b), are:
 - (a) the requirements mentioned in section 3 of AS 1731.14-2003; and
 - (b) for refrigerated display cabinets with non-integral equipment, the refrigerated display cabinet must be tested without the non-integral equipment; and

Note: An example of equipment that is non-integral to the refrigerated display cabinet is signage that is hung from the refrigerated display cabinet but that does not draw its power from the refrigerated display cabinet.

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- (c) for refrigerated display cabinets with integral equipment:
 - (i) the refrigerated display cabinet must be tested with the integral equipment, irrespective of whether the integral equipment has been supplied with the refrigerated display cabinet or delivered separately; and
 - (ii) if more than one variant of the integral equipment can be used with the refrigerated display cabinet, the refrigerated display cabinet must be tested with the variant that consumes the maximum electrical energy over the test period; and

Note: An example of equipment that is integral to the refrigerated display cabinet is integrated signage.

- (d) for products in product classes 25 to 34 that do not have a user adjustable temperature controller, the product must be tested as delivered and the M-package temperature class determined in accordance with AS 1731.6-2003; and

- (e) for products in product classes 25 to 34 that:
 - (i) have a user adjustable controller; and
 - (ii) if the user adjustable controller can be set so that the product operates within an M-package temperature range corresponding to an M-package temperature class which is subject to the requirements set out at paragraph 6 (1) (b),

then the product must be tested using the setting which results in operation within the lowest M-package temperature class which is subject to the requirements set out at paragraph 6 (1) (b) that the product can attain.

Note: An example for paragraph (e) is where setting A for a product results in the highest temperature of the warmest M-package being equal to +5 °C and the lowest temperature of the coldest M-package equal to -1 °C and setting B for the same product results in the highest temperature of the warmest M-package being equal to +7 °C and the lowest temperature of the coldest M-package equal to -1 °C, then the product must be classified as M1, meaning that M-package temperature class and testing for energy consumption must be conducted at setting A.

9 Families of models

For section 28 of the Act, the specified circumstances in which 2 or more models from a single product class covered by this Determination are in the same family of models, are the circumstances mentioned in subclause 1.5.1 of AS 1731.14-2003.

10 Product Categories

For section 29 of the Act, the products covered by this Determination are category A products.

Note

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See <http://www.frli.gov.au>.