



IEC 62552-2

Edition 1.2 2025-08

Corrected version
2026-02

INTERNATIONAL STANDARD

CONSOLIDATED VERSION

**Household refrigerating appliances - Characteristics and test methods -
Part 2: Performance requirements**

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	8
3 Terms, definitions and symbols	8
4 Performance requirements and tests covered in this standard	8
4.1 General.....	8
4.2 Storage test	8
4.3 Cooling capacity test.....	8
4.4 Freezing capacity test.....	8
4.5 Automatic ice-making capacity test	9
4.6 Other tests	9
4.7 Test summary	9
5 General test conditions.....	11
6 Storage test.....	11
6.1 Objective	11
6.2 Preparation of refrigerating appliance	11
6.3 Air temperature sensor location and test and M-package loading	12
6.3.1 Unfrozen compartments (except chill compartment and wine storage compartment)	12
6.3.2 Chill compartments	12
6.3.3 Frozen compartments/sections	14
6.4 Test procedure.....	22
6.4.1 Overview	22
6.4.2 Details	23
6.4.3 Compliance criteria.....	25
6.5 Storage temperature	25
6.6 Data to be recorded	25
7 Cooling capacity test	25
7.1 Objective	25
7.2 Set-up procedure	26
7.2.1 Ambient temperature	26
7.2.2 Installation.....	26
7.2.3 Adjustment of compartments	26
7.2.4 Arrangement of shelves	26
7.3 Test procedure.....	27
7.3.1 General	27
7.3.2 Positioning of the load in the fresh food compartment.....	28
7.3.3 M-packages	28
7.4 Data to be recorded	29
8 Freezing capacity test.....	30
8.1 Objective	30
8.2 Method overview.....	30
8.3 Set-up procedure	30
8.3.1 Ambient temperature	30
8.3.2 Preparation of the refrigerating appliance	30

8.3.3	Loading of refrigerating appliance.....	31
8.4	Test procedure.....	32
8.4.1	Starting conditions.....	32
8.4.2	Setting of control devices.....	33
8.4.3	Freezing of the light load.....	33
8.4.4	Intermediate test data to be recorded.....	34
8.5	Criteria to achieve a four-star compartment rating Determination of the freezing time and freezing capacity and four-star rating.....	34
8.6	Data to be recorded.....	35
9	Automatic ice-making capacity test.....	36
9.1	Objective.....	36
9.2	Procedure.....	36
9.2.1	Ambient and water temperatures.....	36
9.2.2	Preparation of refrigerating appliance.....	36
9.2.3	Test procedures.....	37
9.3	Data to be recorded.....	38
Annex A (normative)	Pull-down test.....	39
A.1	General.....	39
A.2	Method overview.....	39
A.3	Set-up procedure.....	39
A.3.1	Test room ambient temperature.....	39
A.3.2	Installation.....	39
A.3.3	Disconnection of devices.....	39
A.3.4	User-adjustable features.....	39
A.3.5	Internal components.....	40
A.3.6	Determination of compartment temperature.....	40
A.4	Test procedure.....	40
A.4.1	General.....	40
A.4.2	Heat soak.....	40
A.4.3	Pull down.....	41
A.5	Test end-point.....	41
A.6	Data to be recorded.....	41
Annex B (normative)	Wine storage appliances and compartments; storage test.....	42
B.1	Objective.....	42
B.2	Storage temperature requirements.....	42
B.3	Measurement of compartment temperature.....	42
B.4	Preparation of refrigerating appliance.....	43
B.5	Measurements.....	43
B.5.1	General.....	43
B.5.2	Conditions for demonstration of compliance.....	43
B.6	Data to be recorded.....	44
Annex C (normative)	Temperature rise test.....	45
C.1	Objective.....	45
C.2	Procedure.....	45
C.2.1	Ambient temperature.....	45
C.2.2	Preparation of refrigerating appliance.....	45
C.2.3	Operation of the refrigerating appliance.....	45
C.3	Test period and measurements.....	45
C.4	Temperature rise time.....	45

C.5	Data to be recorded	46
Annex D (normative)	Water vapour condensation test	47
D.1	Objective	47
D.2	Procedure	47
D.2.1	Ambient temperature	47
D.2.2	Relative humidity	47
D.2.3	Preparation of refrigerating appliance	47
D.2.4	Operation of the refrigerating appliance	47
D.2.5	Test period	48
D.3	Observations	48
D.4	Data to be recorded	48
Figure 5	– Package placement illustration for non flat surfaces	16
Figure 1	– Location of packages in frozen compartment, showing clearances (1 of 2)	18
Figure 2	– Location of test packages and M-packages, in frozen compartment (1 of 3)	20
Figure 3	– Storage test sequence illustration	24
Figure 4	– Filling of a shelf with test packages and M-packages for cooling capacity test	29
Figure D.1	– Condensation codes	48
Table 1	– Test summary	10
Table 2	– Compartment temperatures	11
Table 3	– Chill compartment storage load	14
Table 4	– Requirements for periods <i>S</i> and <i>E</i>	23
Table 5	– M-Packages in the light load	34
Table A.1	– Pull-down temperatures for compartments	41
Table D.1	– Humidity conversions	47

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Household refrigerating appliances - Characteristics and test methods - Part 2: Performance requirements

FOREWORD

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This consolidated version of the official IEC Standard and its amendments has been prepared for user convenience.

IEC 62552-2 edition 1.2 contains the first edition (2015-02) [documents 59M/62/FDIS and 59M/65/RVD], its amendment 1 (2020-11) [documents 59M/127/FDIS and 59M/133/RVD] and its amendment 2 [documents 59M/187/FDIS and 59M/191/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendments 1 and 2. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 62552-2 has been prepared by subcommittee 59M: Performance of electrical household and similar cooling and freezing appliances, of IEC technical committee 59: Performance of household and similar electrical appliances

IEC 62552-1, IEC 62552-2 and IEC 62552-3 together constitute a technical revision and include the following significant technical changes with respect to IEC 62552:2007:

- a) All parts of the standard have been largely rewritten and updated to cope with new testing requirements, new product configurations, the advent of electronic product controls and computer based test-room data collection and processing equipment.
- b) In Part 1 there are some changes to test room equipment specifications and the setup for testing to provide additional flexibility especially when testing multiple appliances in a single test room.
- c) For more efficient analysis and to better characterise the key product characteristics under different operating conditions, the test data from many of the energy tests in Part 3 is now split into components (such as steady state operation and defrost and recovery). The approach to determination of energy consumption has been completely revised, with many internal checks now included to ensure that data complying with the requirements of the standard is as accurate as possible and of high quality.
- d) Part 3 of the standard now provides a method to quantify each of the relevant energy components and approaches on how these can be combined to estimate energy under different conditions on the expectation that different regions will select components and weightings that are most applicable when setting both their local performance and energy efficiency criteria while using a single set of global test measurements.
- e) For energy consumption measurements in Part 3, no thermal mass (test packages) is included in any compartment and compartment temperatures are based on the average of air temperature sensors (compared to the temperature in the warmest test package). There are also significant differences in the position of temperature sensors in unfrozen compartments.
- f) The energy consumption test in Part 3 now has two specified ambient temperatures (16°C and 32°C).
- g) While, in Part 2 (this part) test packages are still used for the storage test to confirm performance in different operating conditions, in Part 1 they have been standardised to one size (100 mm × 100 mm × 50 mm) to simply loading and reduce test variability. A clearance of at least 15 mm is now specified between test packages and the compartment liner.
- h) A load processing energy efficiency test has been added in Part 3.
- i) A tank-type ice making energy efficiency test has been added in Part 3.
- j) A cooling capacity test has been added in Part 2 (this part).
- k) A pull-down test has been added in Part 2 (this part).
- l) Shelf area and storage volume measurement methods are no longer included. In Part 3 the volume measurement has been revised to be the total internal volume with only components necessary for the satisfactory operation of the refrigeration system considered as being in place.
- m) Tests (both performance (Part 2 – this part) and energy (Part 3)) have been added for wine storage appliances.

The following print types are used in this international standard:

- requirements: in roman type;
- test variables: in *italic type*;
- notes: in small roman type.
- words in **bold** are defined in IEC 62552-1:2015.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62252 series, published under the general title *Household refrigerating appliances – characteristics and test methods*, can be found on the IEC website.

The committee has decided that the contents of this document and its amendment will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

This corrected version of IEC 62552-2:2015+AMD1:2020+AMD2:2025 CSV incorporates the following correction:

- Addition of normative reference IEC 62552-1:2015/AMD1:2020

INTRODUCTION

IEC 62552 is split into 3 parts as follows:

- Part 1: Scope, definitions, instrumentation, test room and set up of refrigerating products;
- Part 2: General performance requirements for **refrigerating appliances** and methods for testing them (this part);
- Part 3: **Energy consumption** and **volume** determination.

1 Scope

This part of IEC 62552 specifies the essential characteristics of household and similar **refrigerating appliances** cooled by internal natural convection or forced air circulation, and **specifies** **establishes** test methods for checking these characteristics.

This part of IEC 62552 describes the methods for the determination of performance requirements. Although there is some commonality in the set-ups for different tests (and so it may be an advantage to apply them all to one sample), these are separate tests to evaluate specific characteristics of the sample being tested. This part of IEC 62552 does not specify a procedure to generalise the results from sample test results to a prediction of the characteristics of the whole population from which that sample was selected.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62552-1:2015, *Household refrigerating appliances – Characteristics and test methods – Part 1: General requirements*

IEC 62552-1:2015/AMD1:2020

IEC 62552-3:2015, *Household refrigerating appliances – Characteristics and test methods – Part 3: Energy consumption and volume*