

This is a preview of "ISO 12543-4:2021". [Click here to purchase the full version from the ANSI store.](#)

Third edition
2021-12

Glass in building — Laminated glass and laminated safety glass —

Part 4: Test methods for durability

*Verre dans la construction — Verre feuilleté et verre feuilleté de
sécurité —*

Partie 4: Méthodes d'essai concernant la durabilité



Reference number
ISO 12543-4:2021(E)

© ISO 2021



COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of "ISO 12543-4:2021". Click here to purchase the full version from the ANSI store.

Contents

	Page
Foreword.....	iv
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Test specimens.....	1
5 High-temperature test.....	2
5.1 Principle.....	2
5.2 Size and number of test specimens.....	2
5.3 Procedures.....	2
5.3.1 General.....	2
5.3.2 Procedure A (short high temperature test).....	2
5.3.3 Procedure B (long high temperature test).....	2
5.4 Expression of results.....	2
5.5 Test report.....	3
6 Humidity test.....	3
6.1 Principle.....	3
6.2 Size and number of test specimens.....	3
6.3 Procedures.....	3
6.3.1 Test with condensation.....	3
6.3.2 Test without condensation.....	4
6.4 Expression of results.....	4
6.5 Test Report.....	4
7 Radiation tests.....	4
7.1 Principle.....	4
7.2 Size and number of test specimens.....	5
7.3 Simulated solar radiation methods.....	5
7.3.1 Method A: Radiation wall.....	5
7.3.2 Method B: Mercury vapour arc lamp.....	6
7.3.3 Method C: Xenon arc source.....	6
7.4 Procedure.....	7
7.5 Expression of results.....	7
7.5.1 Laminated glass and laminated safety glass.....	7
7.5.2 Fire-resistant laminated glass and fire-resistant laminated safety glass.....	7
7.6 Test report.....	8
Annex A (normative) Retesting guidelines for durability testing of laminated glass and laminated safety glass.....	9
Annex B (informative) Possible arrangement of the test apparatus for the radiation test described in 7.3.1.....	10
Bibliography.....	12

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 160, *Glass in building*, Subcommittee SC 1, *Product considerations*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 129, *Glass in building*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 12543-4:2011), which has been technically revised.

The main changes compared to the previous edition are as follows:

- editorial changes have been made;
- the clause on radiation tests has been revised and a new type of lamp has been added;
- the expression of the results of the radiation tests has been modified.

A list of all parts in the ISO 12543 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.