PD ISO/TS 21486:2022



BSI Standards Publication

Glass in building — Retesting requirements for laminated solar photovoltaic glass for use in buildings

bsi.

National foreword

This Published Document is the UK implementation of ISO/TS 21486:2022.

The UK participation in its preparation was entrusted to Technical Committee B/520, Glass and glazing in building.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

This publication is not to be regarded as a British Standard.

© The British Standards Institution 2022
Published by BSI Standards Limited 2022

ISBN 978 0 539 13135 2

ICS 27.160; 81.040.20

Compliance with a Published Document cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 July 2022.

Amendments/corrigenda issued since publication

Date	Text affected

PD ISO/TS 21486:2022

TECHNICAL SPECIFICATION

ISO/TS 21486

First edition
2022-03-08

Glass in building — Retesting requirements for laminated solar photovoltaic glass for use in buildings

Verre dans la construction — Exigences relatives aux contre-essais pour le verre feuilleté photovoltaïque pour utilisation dans les bâtiments

Reference number
ISO/TS 21486:2022(E)

© ISO 2022



COPYRIGHT PROTECTED DOCUMENT

© ISO 2022, Published in Switzerland

All rights reserved. Unless otherwise specified, 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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

© ISO 2022 – All rights reserved

Contents

Page

Foreword ..... **iv**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Retesting criteria **1**
4.1 Glass modifications 1
4.2 Solar cell modifications 2
4.2.1 Crystalline silicon solar cells 2
4.2.2 Thin-film solar cells 3
4.3 Interlayer modifications 4
4.4 Interconnector modifications 4
4.5 Insulating strip modifications 5
4.6 Termination modifications 6

5 Testing requirements **7**
5.1 Appearance 7
5.2 Dimensions and edge finishing 7
5.3 High temperature test 7
5.4 Damp heat test 7
5.5 Radiation test 7
5.6 Thermal cycling test 7
5.7 Humidity freeze test 7
5.8 Hot-spot endurance test 7
5.9 Impact test 7
5.10 Ball drop test 7
5.11 Insulation test 7
5.12 Wet leakage current test 8
5.13 Robustness of terminations test 8

6 Retesting samples **8**

7 Testing procedures **8**

8 Test report **8**

9 Others **8**

© ISO 2022 – All rights reserved

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*.

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.

© ISO 2022 – All rights reserved

TECHNICAL SPECIFICATION **ISO/TS 21486:2022**

Glass in building — Retesting requirements for laminated solar photovoltaic glass for use in buildings

1 Scope

This document specifies requirements for retesting laminated solar photovoltaic (PV) glass for use in buildings.

This document applies to laminated solar PV glass.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12543-5, *Glass in building — Laminated glass and laminated safety glass — Part 5: Dimensions and edge finishing*

ISO/TS 18178:2018, *Glass in building — Laminated solar photovoltaic glass for use in buildings*

ISO 29584, *Glass in building — Pendulum impact testing and classification of safety glass*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Retesting criteria

4.1 Glass modifications

For glass modification, retesting shall be performed in accordance with Table 1.

© ISO 2022 – All rights reserved