INTERNATIONAL STANDARD

ISO 22752

First edition
2021-10

Railway applications — Bodyside windows for rolling stock

Applications ferroviaires — Fenêtres latérales pour le matériel roulant

Reference number
ISO 22752:2021(E)

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

Contents

Page

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 269, *Railway applications*, Subcommittee SC 2, *Rolling stock*.

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.

Railway applications — Bodyside windows for rolling stock

1 Scope

This document defines the classification, technical requirements, and markings for the following bodyside windows:

a) standard windows:

   1) standard fixed windows;

   2) standard movable windows;

b) emergency windows:

   1) emergency escape windows;

   2) emergency access windows.

NOTE In certain situations, emergency escape windows and emergency access windows are the same window.

This document applies to bodyside windows constructed from glazing materials only.

This document sets out requirements that apply to the glazing with its associated mounting arrangement.

This document applies to all windows mounted to the side of all types of railway vehicles, including heavy and urban rail vehicles. This includes windows mounted on the side of saloons, restaurant/buffet cars, vestibules, toilets, driving cabs, crew compartments and technical rooms.

This document does not apply to on-track machines.

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 3917:2016, *Road vehicles — Safety glazing materials — Test methods for resistance to radiation, high temperature, humidity, fire and simulated weathering*

ISO 7892:1988, *Vertical building elements — Impact resistance tests — Impact bodies and general test procedures*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological 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/

3.1
bodyside window
glazing unit (3.3) or *window unit* (3.2), with its mounting arrangement, fitted to the side of a vehicle, including the cab

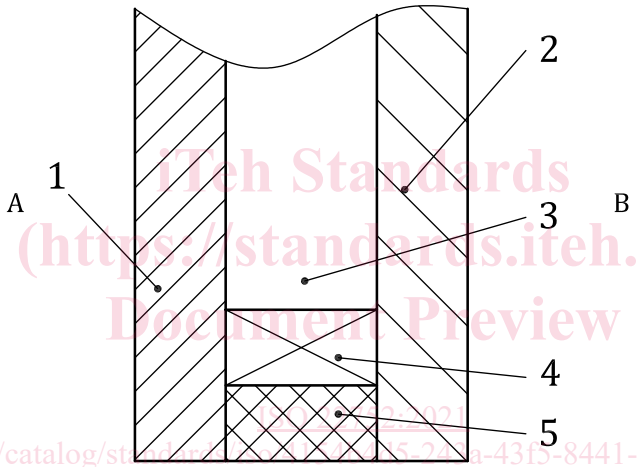
Note 1 to entry: Mounting arrangements can include frames, rubber gaskets, adhesives, etc.

Note 2 to entry: Some types of windows do not have frames. In this case, the *glazing unit* and the *window unit* are the same concept.

3.2
window unit
assembly of a *glazing unit* (3.3) with a set of frames for mounting to the car body shell

3.3
glazing unit
assembly of one or more sheets of *glazing material* (3.4), including any interlayer, *edge seal* (3.10), or spacer bar

Note 1 to entry: An example of a *glazing unit* is given in Figure 1.



Key
A exterior of the vehicle
B interior of the vehicle
1 outer glazing material
2 inner glazing material
3 *cavity* (3.9) (if any)
4 spacer bar (if any)
5 *edge seal* (3.10) (if any)

Figure 1 — Example of glazing unit

3.4
glazing material
material that allows the transmittance of light

3.5
tempered glass
toughened glass
glazing material (3.4) consisting of a single layer of glass which has been subjected to special thermal treatment to increase its mechanical strength and to condition its fragmentation after shatter

Note 1 to entry: Semi-tempered glass is not considered as *tempered glass* or *toughened glass* in this document.