## INTERNATIONAL STANDARD

ISO 24084

First edition 2022-11

**Curtain walling** — **Inter-storey** d. me. displacement resistance — Test



Reference number ISO 24084:2022(E)



© ISO 2022

tation, no part of 'including plot' 'om either'. 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

Contents			Page
Fore	word		iv
1	Scop	ıe	1
2	Norn	native references	1
3	Term	ns and definitions	1
4	Symb	bols and abbreviated terms	4
5	General and testing principle		
6		apparatus and specimens Configuration Installation rig Loading equipment Displacement measuring device	4 5 5
7	<b>Load</b> 7.1 7.2	ling mode Parallelogram method Symmetry method	5
8	Spec	eimen	
9	9.1 9.2 9.3 9.4	procedure Preparation Horizontal in-plane movement test  9.2.1 Displacement transducer  9.2.2 Pre-test  9.2.3 Displacement test Horizontal out-plane movement test  9.3.1 Displacement transducer  9.3.2 Load test Vertical in-plane movement test  9.4.1 Displacement transducer  9.4.2 Load test	
10	10.1	result and evaluation Calculation Evaluation	11
11	Repo	ort	12
Ann	ex A (in:	formative) Combined movement test method	13
Ann		nformative) Evaluation criteria for the compliance to serviceability and safe	
Bibl	iograph	ny	

#### 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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 162, Doors, windows and curtain walling.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

# Curtain walling — Inter-storey displacement resistance — Test method

### 1 Scope

This document specifies the test method to evaluate the inter-storey displacement resistance of curtain walling to three-directional seismic or wind actions when curtain walling is subjected to repeated movement.

The test method allows to determine, depending on the axes of the displacement imposed:

- horizontal inter-storey displacement in-plane resistance;
- horizontal inter-storey out-plane displacement resistance;
- vertical inter-storey in-plane displacement resistance;
- combined inter-storey displacement resistance.

The test method can be used to evaluate the inter-storey displacement either when it is a design requirement or to assess the relative displacement accommodated by the curtain walling assembly.

This test can be addressed manually or automatically depending on the size and/or the shape of the specimen.

#### 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 3010, Bases for design of structures — Seismic actions on structures

#### 3 Terms and definitions

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

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

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="https://www.electropedia.org/">https://www.electropedia.org/</a>

#### 3.1

#### storey height

vertical dimension measured from the centre of a floor slab to the centre of the next consecutive floor slab, represented by the letter H in mm