

INTERNATIONAL STANDARD

ISO
9379

First edition
1989-12-01

Doorsets — Repeated opening and closing test

Blocs-portes — Essai de fonctionnement répété



Reference number
ISO 9379:1989(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 9379 was prepared by Technical Committee ISO/TC 162, *Doors and windows*.

Annex A of this International Standard is for information only.

© ISO 1989

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Doorsets — Repeated opening and closing test

1 Scope

This International Standard specifies the method to be used when determining the effect on the doorset of repeated opening and closing the door under normal conditions.

It applies to all doorsets made of any material, with vertically hinged doorleaves in the normal operating condition for which they are designed and installed according to the manufacturer's recommendations as in a finished building, bearing in mind the test conditions defined below. It does not apply to doorsets with self-closing devices, such as fire-proof doors and smoke-control doors.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8274:1985, *Doorsets — Determination of closing force*.

3 Principle

During testing, the door is opened and closed a considerable number of times in a manner similar to normal use. The testing includes the performance of the hardware fitted to the doorset. Before and after testing, the performance of the door is recorded.

4 Apparatus

4.1 A surround for the specimen to be tested shall be prepared. This shall be stiff enough to withstand the test pressures without deflecting to an extent likely to impair jointing or to impose bending stresses on the test specimen. When the installation conditions are known, the specimen shall be installed to simulate these, wherever practical, and otherwise installed in a way that ensures normal operating conditions.

4.2 Four displacement gauges, with an accuracy of $\pm 0,1$ mm, to measure the position of the doorleaf relative to its frame, in its own plane, are installed according to figure 1.

5 Preparation for test

5.1 Lubricate any parts according to the manufacturer's instructions.

5.2 Open and close the door five times and then take a reading of the displacement gauges.

6 Procedure

6.1 Connect the door to a device that opens and closes it with a maximum 15 opening and closing cycles per minute.

6.2 Open the doorleaf $80^\circ \pm 5^\circ$ and close it by pushing the doorleaf without operating the handle. The opening force is applied at the handle. The force when closing the door is also applied at the handle but is removed before the doorleaf strikes the frame.

6.3 Just before contact with the doorframe, the doorleaf shall have an angle velocity of $1 \text{ rad/s} \pm 0,1 \text{ rad/s}$ (around $60^\circ/\text{s}$) or the angle velocity according to the performance requirements of the door. The spring bolt shall grip in the striking plate in every cycle.