

# International Standard



# 8275

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

## Doorsets — Vertical load test

*Blocs-portes — Essai de charge verticale*

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## 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.

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 8275 was prepared by Technical Committee ISO/TC 162, *Doors and windows*.

# Doorsets — Vertical load test

## 1 Scope and field of application

This International Standard specifies a method for the determination of the deformations caused when a vertical load is applied to an opened door leaf fixed in its door frame.

It applies to all doorsets, made of any material, with vertically hinged door leaves 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 conditions of test as defined below.

## 2 Reference

ISO 1804, *Doors — Terminology*.

## 3 Definitions

For the purposes of this International Standard, the definitions given in ISO 1804 apply.

## 4 Principle

Application to the top of the door leaf, in a predetermined position, of a vertical static load and determination of resulting deformations of the door in the vertical plane.

## 5 Test surround

A surround shall be constructed for the specimen to be tested. It shall be sufficiently rigid to withstand the test load without deflecting to an extent likely to impair jointing or to impose bending stresses on the test specimen. If the installation conditions are known, the specimen shall, whenever practical, be installed to simulate these.

## 6 Procedure

Open the door leaf through an angle of 45° or 90° (see the figure) and make measurements, to the nearest 0,1 mm, at the lower corner of the door leaf (see the figure).

Apply vertically to the top of the lock-side corner of the door leaf, 50 mm from the opening edge, a static load  $F$  as specified in the appropriate performance standard, or as appropriate for the proposed use of the door (see the figure), and maintain this load for 15 min. At the end of this period, repeat the measurements at the lower corner of the door leaf and remove the load. After 3 min, again repeat the measurements.

## 7 Expression of results

**7.1** Record the deformation of the door in the vertical plane after 15 min under load.

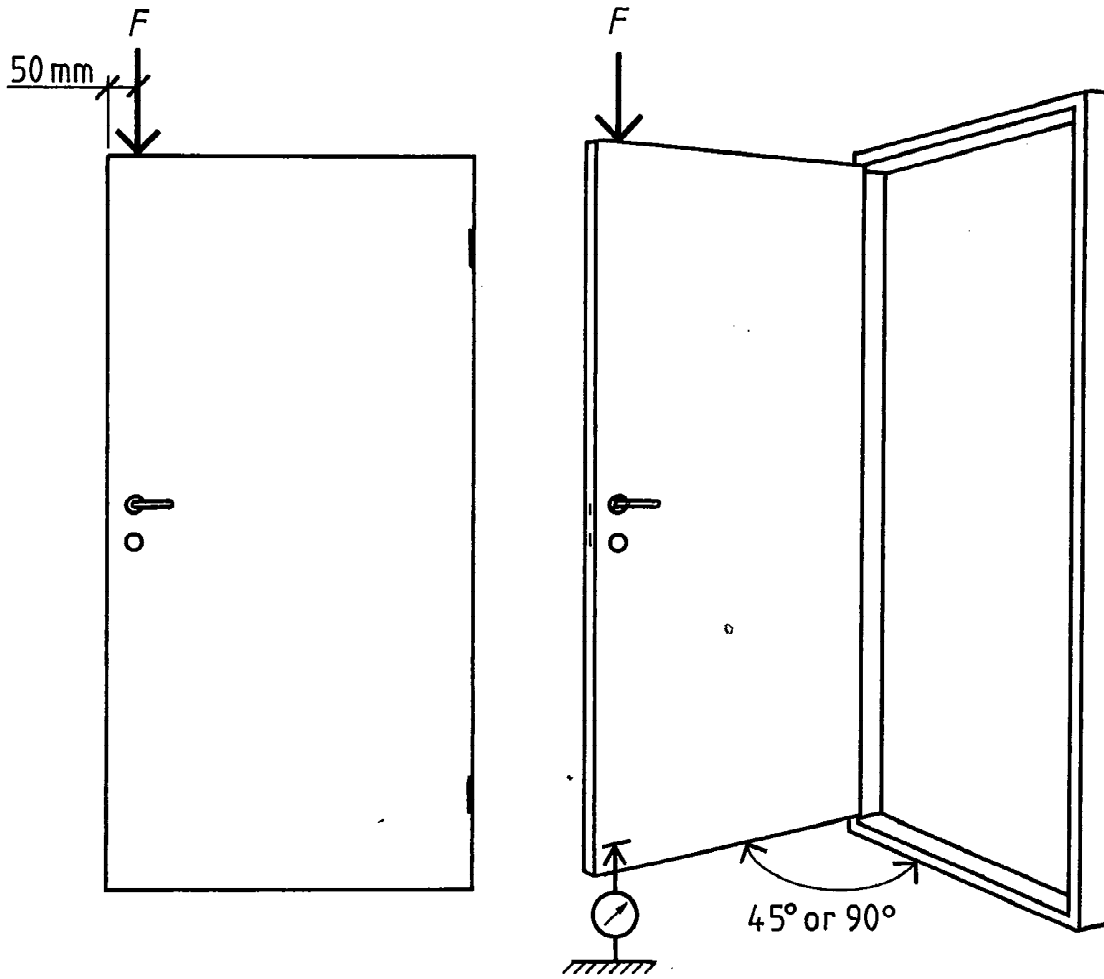
**7.2** Record the residual deformation of the door in the vertical plane 3 min after removing the load.

## 8 Test report

The test report shall include the following information:

- a) relevant details concerning the type, dimensions, mass, form and construction of the doorset;
- b) the type of hardware used and the method of mounting the door leaf;
- c) the load  $F$ , in newtons, applied in the test;
- d) the opening angle, 45° or 90°;
- e) the vertical deformation under load and after removing the load;
- f) details of any damage that appeared during the test.

ISO 8275-1985 (E)



Figure