

KS

KOREAN INDUSTRIAL STANDARD

Doorsets – Static loading test

KS F 2634: 2000

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The original standard in Korea is to be evidence.**

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(ISO 8269 : 1985)

Doorsets – Static loading test

Introduction This standard is revised to correspond to the **ISO 8269(1985) : Doorsets – Static loading test**, without altering the technical content.

1. Scope

This Standard specifies a method of testing the behaviour of doorsets under static loading.

It applies to doorsets with one pivoting leaf, without fixed parts other than the door frame itself, and for which special requirements against static loading apply, for example requirement relating to burglar resistance.

2. Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of the standard. The most recent editions of the standards indicated below should be applied.

KS F 1550 Doorsets—Terminology

Remarks **ISO 1804** : 1972 Doors - Terminology

3. Definitions

For the purposes of this standard, the definitions given in **KS F 1550** apply.

4. Principle

Application, by means of a steel plate or shackle, of perpendicular and parallel compressive forces on the face of the door leaf in the opening direction, or on the door frame, in order to unbolt the door or to obtain a possibility of passage.

5. Apparatus

The apparatus comprise the following

- a) Adjustable test rig, in which doorsets of various sizes can be mounted in a manner similar to their installation in practice; the rig shall be sufficiently rigid to ensure that any deformations that occur in the rig during testing will have a negligible effect on the test result.
- b) Jacks.
- c) Rigid rectangular steel plates, of length 100mm and width “d” at least equal to the thickness of the door leaf (see figure 1).

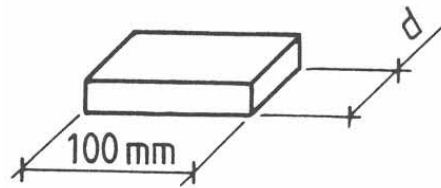


Figure 1 Steel plate

- d) Rigid steel shackle, used as a bridge over the lock or bolt (see figure 2).

Dimensions in millimeters

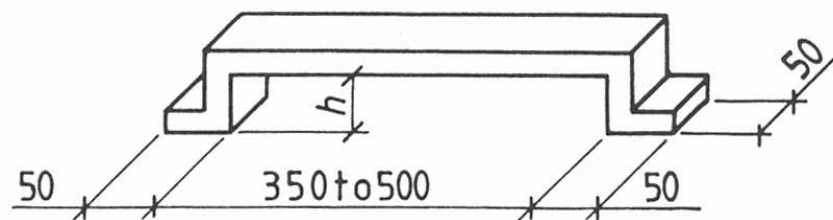


Figure 2 Steel shackle

- e) Several displacement gauges.
f) Two timers, to time the test and also to time the duration of any interruptions due to technical incidents.

6. Procedure

6.1 Secure the door frame

Secure the door frame firmly to the test rig by means of an adjustable fixing device with a block if necessary.
The rigidity of fixing to the door frame shall be sufficient to ensure that the results are not affected by it.

6.2 Compressive forces

Apply compressive forces as follows:

- Force F_1 at the edge of the door leaf in the position, or positions, which seem to be the weakest, using the rectangular plate (5.3) or shackle (5.4) when the plate is not convenient (parallel or perpendicular force) (see figure 3)
- Force F_2 on the free corners of the door leaf as shown in figure 4 or, if this is not possible, in the closest areas.
- Force F_3 at every hinge level, the geometrical center of the plate (5.3) being located on one of the axes as shown in figure 5 or, if this is not possible, in the closest areas.
- Force F_4 at the lock or bolt level in the closed position, using the plate (5.3) or shackle (5.4), whichever is the more convenient, and taking into consideration, for its position, one of the axes shown in figure 6.