

ICS 91.060.50

CCS P 32



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 34553-2017

**Test method of door-set opening performance in diagonal
deformation under seismic aspects**

门在地震作用下角变形时的开启性能试验方法

(English Translation)

Issued on: October 14, 2017

Implemented on: September 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Preface

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Test principle

5 Specimen

6 Test equipment

7 Test Procedure

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses redrafted Law Amendment using ISO 15822:2007 "door in the diagonal deformation of the opening performance test method for earthquake Use it. " this standard compared with ISO 15822:2007 in the structure there are more adjustments listed in Appendix A of this standard and ISO 15822:2007 Chapter number control list.

This standard and ISO 15822:2007 technical differences and the reasons are as follows.

--- Use GB/T 5823 instead of ISO 1804 (see Chapter 2) to adapt to China's technical conditions;

--- Modify the definition of the term "in-plane displacement" (see 3.1) to make it more explicit and clear;

--- Modify the unlock torque value of the unit (see 7.2.7), torque value unit from N to N · m;

--- Modify the open door measurement force and the opening force diagram and instructions (see Figure 6), Figure 6 shows the external force from the indoor side to Outdoor side, the description of indoor pull to indoor thrust;

--- Modify the open door to measure the opening force of the force diagram and description (see Figure 7), Figure 7 shows the external force from the indoor side to Outdoor side, the description of the outdoor pull to outdoor thrust;

--- Added "commission request" (see Chapter 9), to make the information more perfect.

This standard made the following editorial changes.

--- Modify the standard name;

--- Measuring point P1, measuring point P2, measuring point P3, measuring point P4 instead of measuring point 1, measuring point 2, measuring point 3, measuring point 4 (see 6.3, 7.2.5,

Figure 4), so that measuring point code and Figure 4 consistent.

This standard proposed by the Ministry of Housing and Urban-Rural Development of the People's Republic of China.

This standard by the National Building Curtain wall Standardization Technical Committee (SAC/TC448) centralized.

This standard was drafted unit. Guangdong Academy of Building Research Group Co., Ltd., China Academy of Building Research, Shenzhen, China and Japan aluminum Co., Ltd., Shenzhen Munroe Technology Co., Ltd., Shanghai building doors and windows inspection station, Guangdong Jian Long Hardware Products Co., Ltd., Shenzhen Xinshan curtain wall Technology Consulting Co., Ltd., Guangdong tide Investment Group Co., Ltd.

Introduction

The test methods provided in this standard determine the degree to which an emergency door can be easily opened during an earthquake to ensure that it is Smooth; fluent.

When the door is deformed under the action of an earthquake Open the performance test method

1 Scope

This standard specifies the opening performance test method when the single door angle deformation under the action of an earthquake.

This standard applies to the use of in-plane static load simulation of the earthquake appeared within the plane diagonal deformation of the single-door.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 5823 building doors and windows terminology

3 Terms and definitions

The following terms and definitions apply to this document.

Plane displacement in-plane displacement the ratio of the difference between the displacement of the upper and lower measurement points to its distance minus the difference between the displacement of the left and right measurement points and its distance.

Note: The amount of in-plane displacement is radian.

Open force opening force the force required to open the door leaf.

Unlock torque unlocking torque value the torque required to unlock the door.

4 Test principle

When the door is diagonally deformed under the static load applied in a stepwise manner, the opening force and the unlocking torque of the door are measured.

5 Test pieces

5.1

The production and installation of test pieces should be consistent with the normal use.

5.2

When the specimen contains glass, should be selected in accordance with the manufacturer's technical requirements of the appropriate thickness of the glass test, or should choose the relevant Specification allows the minimum thickness of the glass.

6.1 Test bench

Test bench should ensure that the specimen installation needs, and in line with the manufacturer's instructions and operating procedures, as shown in Figure 1. Test Bench