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

GB 12955-2024

Fire-resistant doorsets

防火门

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1 Scope

GB 12955-2024 is the Chinese national standard on fire-resistant doorsets, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 28 October 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2026. Classification: ICS 13.220.50, CCS C 82. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the classification, code, specifications, models, general requirements, technical requirements, test methods, inspection rules, marking, packaging, transportation and storage of fire-resistant doorsets. This document applies to the design, manufacture and quality inspection of side hung and side hung folding fire-resistant doorsets used in industrial and civil buildings.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 191, Packaging - Pictorial marking for handling of goods

GB/T 708, Dimension, shape, weight and tolerance for cold-rolled steel plates and sheets

GB/T 709, Dimension shape weight and tolerances for hot-rolled steel plates and sheets

GB/T 5486, Test methods for inorganic rigid thermal insulation

GB/T 5823, Terminology for building windows and doors

GB/T 5824, Size system of opening for windows and doors in building

GB/T 5907.1, Fire protection vocabulary - Part

3 Terms and definitions

For the purpose of this document, terms and definitions given in GB/T 5823, GB/T 5907.1

and GB/T 5907.5, as well as the following apply.

3.1 fire-resistant doorsets Door assemblies consisting of door frame, door leaf and hardware accessories, and with certain fire resistance.

Note. Door assemblies may also include auxiliary materials such as bright windows on the door frame, viewing windows in the door leaf, and various fire-resistant seals. [Source: GB/T 5907.5-2015, 2.14.1.1, modified]

3.2 side hung fire-resistant doorsets Fire-resistant doorsets (3.1) with a pivot located on the side of the door and the door leaf pivoting outwards from the door frame to open. [Source: GB/T 5907.5-2015, 2.14.1.2, modified]

3.3 side hung folding fire-resistant doorsets Fire-resistant doorsets (3.1) with multiple door leaves connected by hinges, which is opened by folding and rotating outwards from the plane of the door frame.

3.4 surface panel of door leaf The panels covering the outermost front and back sides of the door leaf, which serve as protection and shaping.

3.5 filling material for door leaf The formed or shaped material filling the surface panel of door leaf (3.4) in the structure of fire-resistant doorsets.

3.6 normally open fire-resistant doorsets Fire-resistant doorsets (3.1) that are normally kept open and can be closed automatically in case of fire.

4.1 Classification and code

4.1.1 Classification and code by application sites are shown in Table 1.

4.1.2 Classification and code by the number of door leaves are shown in Table 2.

4.1.3 Classification and codes by fire resistance are shown in Table 3.

4.2 Specifications The specifications of fire-resistant doorsets are expressed in the thousands and hundreds digits (the tens digit is rounded off) of the opening size mark width and mark height (in millimeters), arranged in sequence as four digits. If the size is less than 1 000 mm, add 0 in front. The basic specifications of the opening size shall comply with the relevant provisions of GB/T 5824. The relationship between the width and height dimensions of the opening marked on the specifications of fire-resistant doorsets and the width and height dimensions of the fire-resistant doorsets' exterior structure shall be as per the relevant provisions of GB/T 5824. Example

1. The marking width of the fire-resistant doorsets' opening is 900 mm and the marking height is 2 100 mm, and its specification is expressed as 0921. Example

2. The marking width of the fire-resistant doorsets' opening is 2 110 mm and the marking height is 2 370 mm, and its specification is expressed as 2124.

4.3 Model The method for compiling fire-resistant doorsets' models is shown in Figure 1.

5 General requirements

5.1 The materials and manufacturing processes used in fire-resistant doorsets shall not cause harm to humans, the environment, animals or plants. Fire-resistant doorset products shall comply with the relevant requirements of GBZ 1 and GBZ/T 198 during the manufacturing process.

5.2 In addition to the technical requirements specified in this document, other relevant performance requirements for fire-resistant doorsets and their materials, accessories, etc., as well as regular inspection, maintenance and replacement, shall be implemented in accordance with national standards and industry standards if there are any. If there are no national standards and industry standards, the manufacturer shall formulate enterprise standards for regulation, or determine them through consultation between the supply and demand parties.

6.1 Appearance

6.1.1 The surface of fire-resistant doorsets and their accessories shall be smooth and flat, without cracks, gouging marks, burrs or welding slag; the decorative surfaces of fire-resistant doorsets such as paint (spraying), film, and veneer shall be firm and without obvious bubbling, cracks or wrinkles.

6.1.2 Fire-resistant doorsets shall have a permanent product marking plate fixed in a prominent position on the door frame or door leaf, which shall not be pasted. Normally closed fire-resistant doorsets in evacuation passages and small door leaves installed on the door leaf of fire-resistant doorsets for temporary passage of personnel shall have a permanent warning sign with the words "Keep the fire-resistant doorset closed" fixed in a prominent position in the middle of the door leave surface. Product marking plates and warning signs shall comply with the requirements of 9.1.

6.2.1 Material thickness dimensional deviation

6.2.1.1 The deviation between the actual thickness of the steel plates used for fire-resistant doorsets' door panels and door frames and the nominal thickness indicated in the technical documents shall comply with the requirements of GB/T 708 and GB/T 709.

6.2.1.2 The deviation between the actual thickness of the glass used in fire-resistant doorsets and the nominal thickness indicated in the technical documents shall comply with the provisions of GB 15763.1.

6.2.1.3 The deviation between the actual thickness of the non-combustible inorganic compound board used in fire-resistant doorsets and the nominal thickness indicated in the technical documents shall comply with the provisions of GB/T 25970.