

JIS

JAPANESE INDUSTRIAL STANDARD

**Components of rolling fire door
for buildings**

JIS A 4705—1991

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In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

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Components of rolling fire door
for buildings

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1. Scope

This Japanese Industrial Standard specifies the components ⁽¹⁾ of rolling fire doors of the size not more than 8.0 m in inside width and 4.0 m in inside length to be used for buildings and works (hereafter referred to as the "components"). However, the side rolling or the horizontal rolling types are excluded.

Note ⁽¹⁾ This herein means the components before assembling.

Further, the assembled rolling fire doors are (hereafter referred to as the "rolling doors").

Remarks 1. Applicable standards in this Standard shall be given in Attached Table 1.

2. The units and numerical values given in { } in this standard are based on the International System of Units (SI), and are informative reference values.

2. Names of components

The name of each component shall be as follows (see Informative Reference Attached Fig. 1):

- (1) Slat
- (2) Bottom board
- (3) Roller shaft
- (4) Bearing part
- (5) Guide rail (including smoke insulator)
- (6) Lintel (including smoke insulator)
- (7) Case
- (8) Closing gear
- (9) Shaft roller chain, shaft sprocket
- (10) Electric equipment (control panel, push-button switch, limit switch)
- (11) Manual closing device
- (12) Interlocking device (heat or smoke sensor, interlocking regulator, automatic closing device, reserve power source)
- (13) Thermal fuse device

3. Classification

Classification of the rolling doors to be installed for buildings or works according to use shall be as given in Table 1.

Table 1. Classification according to use

Class	Division	Use	Incidental condition
Rolling fire doors for outside wall	Division by strength Division by the grade of fire prevention	Opening of outside wall	
Rolling fire doors for indoor	Division by the grade of fire prevention	Fire prevention area	To be able to close at any time by manual operation. To be able to close automatically by smoke or heat.
Rolling smoke doors for indoor ⁽²⁾	Division by the grade of fire prevention Division by smoke insulating performance		To be able to close at any time by manual operation. To be able to close automatically by smoke.

Note ⁽²⁾ Rolling smoke doors are those having the smoke insulating property among the rolling fire doors.

Remarks: There are the electric and the manual types of operating systems for every class.

3.1 Division by strength Division by strength shall be as follows:

120: It shall withstand wind pressure of 1200 N/m² {122 kgf/m²}.

80: It shall withstand wind pressure of 800 N/m² {81.6 kgf/m²}.

50: It shall withstand wind pressure of 500 N/m² {51.0 kgf/m²}.

3.2 Division by grade of fire prevention The division according to the grade of fire prevention shall be as given in Table 2.