

JIS

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JAPANESE INDUSTRIAL STANDARD

Fireproof Metal AMADO for Dwellings

JIS A 4902-1983



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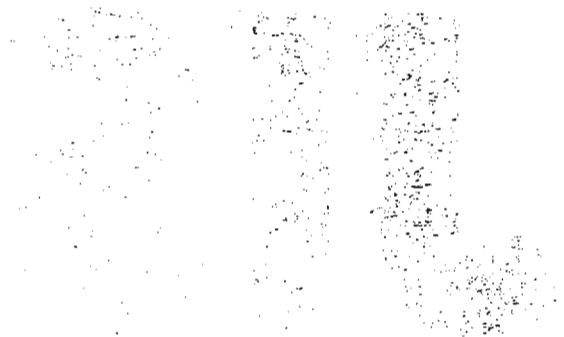
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Fireproof Metal AMADO for Dwellings

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1. Scope

This Japanese Industrial Standard specifies the fireproof metal AMADO to be used for dwellings, hereinafter referred to as the "fireproof AMADO".

Remark: The units and numerical values given in { } in this standards are in accordance with the International System of Units (SI), and are appended for reference.

2. Main Components

The names of the main components of fireproof AMADO shall be as given in Appendix Fig. 1.

3. Classes and Symbols

The classes and symbols of fireproof AMADO shall be as given in the following (1) to (4).

- (1) Division by Fireproof Property The division by fireproof property shall be as in accordance with the Table 1.

Table 1

Division by fireproof property		Symbol	Remark
Fireproof AMADO Grade 1	Class A	Fireproof AMADO Class A 1	See Table 3 for the divisions of Grade 1 and Grade 2, and further, Class A and Class B
	Class B	Fireproof AMADO Class B 1	
Fireproof AMADO Grade 2	Class A	Fireproof AMADO Class A 2	
	Class B	Fireproof AMADO Class B 2	

- (2) Division by Strength The division by strength shall be as follows: (See 4.2)

50, 80, 120

- (3) Division by Opening and Closing Methods The division by opening and closing methods shall be in accordance with Table 2.

Applicable Standards: See page 19.

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Table 2

Division by opening and closing method	Symbol
Sliding type	S
Folding type	F
Roll-up type	R

(4) Division by Dimensions The division by dimensions shall be in accordance with Table 6.

4. Performance

4.1 Fireproof Property In performing the heating test of 5. of JIS A 1311 for each division shown in Table 3, the fireproof property of fireproof AMADO shall comply with the specifications as given in Table 3.

Table 3

Division by the fireproof property	Specifications
Fireproof AMADO class A 1	To pass the specifications of 5.8 in performing the fireproof Grade 1 heating test specified in 5. of JIS A 1311.
Fireproof AMADO class B 1	To pass the specifications of 5.9 in performing the fireproof Grade 1 heating test specified in 5. of JIS A 1311
Fireproof AMADO class A 2	To pass the specifications of 5.8 in performing the fireproof Grade 2 heating test specified in 5. of JIS A 1311
Fireproof AMADO class A 2	To pass the specifications of 5.9 in performing the fireproof Grade 2 heating test specified in 5. of JIS A 1311

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4.2 Strength The fireproof AMADO shall be free from falling-off of panel and residual deformations harmful to opening and closing, when testing it according to the method given in 9.1 for each division shown in Table 4.

Table 4

Unit: kgf/m²{N/m²}

Division by strength	Force loaded on the fireproof AMADO
50	50 {490.33}
80	80 {784.53}
120	120 {1176.8 }

4.3 Durability due to Opening and Closing The durability of the fireproof AMADO due to the repeated opening and closing shall be as follows: When testing it by the method given in 9.2, it shall be free from deformations harmful to opening and closing such as looseness, strain, warpage, fallings-off, etc.

4.4 Durability of Paint Film The durability of paint film of fireproof AMADO shall be as follows: When performing each test shown in Table 5 in accordance with the test methods given in 9.3, the fireproof AMADO shall comply with the specifications given in Table 5.

Table 5

Test item		Specifications
Salt spray test		To be free from rust, lifting of paint film and peeling-off
Adhesion test		To be free from peeling-off
Hardness test		Not less than H
Accelerated weathering test	Percentage of glossiness preservation	75 % min.
	Discoloration	To be free from remarkable discoloration
Alkaliproof test		To be free from abnormalities

5. Construction

The structure shall be as follows:

- (1) The fireproof AMADO shall be so constructed that the opening and closing operation can be performed easily by installing sash rollers and the like.

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- (2) The overlapping part of the circumference of the opening part for installing the fireproof AMADO and the fireproof AMADO shall be so constructed that it is effective for fire prevention.

6. Dimensions

6.1 Reference of the Dimensions of Fireproof AMADO The reference of the dimensions of fireproof AMADO shall be in accordance with Attached Figs. 2 (1) to (5).

6.2 Module Nominal Size of Width and Height The module nominal size of width and height shall be as follows:

- (1) The standard module nominal size of width and height shall be a combination connected with the size of sash, specified in 4.1.1 of JIS A 4706 and the classification shall be as shown in Table 6 (1).
- (2) Dimensions of Standing Fireproof AMADO The dimensions of standing fireproof AMADO shall be a combination connected with the size of sash, used in general, specified in 4.1.2 of JIS A 4706 and its classification shall be as shown in Table 6 (2) to (3). In this case, the drawing and specification on the position of the reference plane of sash, the workmanship of AMADO and the nominal size shall be made out previously and further, they shall be shown by catalogues and other appropriate methods.
- (3) Dimensions of Ordered Goods The dimensions of ordered goods shall be decided in accordance with the drawing and specifications by the interested parties.

7. Surface Treatment

The surface treatment shall be as follows:

- (1) The rust preventive treatment of steel frame, panel and surface of rail (or style) shall be in accordance with 7.1.3 of JIS A 4706. However, the treatment does not apply to dressed metal plates.
- (2) The anodic oxidation coating treatment of aluminum alloy frame, panel and rail shall be in accordance with 7.2.3 of JIS A 4706. However, the treatment does not apply to dressed metal plates.

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Table 6 (1) For Reinforced Concrete Construction, Steel Construction and Wooden Building

Unit: mm

Nominal size (1) of width of fireproof AMADO		1700	1900	2100	2500	3300	4100
Nominal size (2) of height of fireproof AMADO	Nominal size of modular width of sash ▼W	1600	1800	2000	2400	3200	4000
	Nominal size of modular height of sash▼H						
500	400	1604	1804	2004	2404	3204	4004
700	600	1606	1806	2006	2406	3206	4006
900	800	1608	1808	2008	2408	3208	4008
1100	1000	1610	1810	2010	2410	3210	4010
1300	1200	1612	1812	2012	2412	3212	4012
1700	1600	1616	1816	2016	2416	3216	4016
2100	2000	—	1820	2020	2420	3220	4020
2350	2250	—	1822	2022	2422	3222	4022
2500	2400	—	1824	2024	2424	3224	4024

Notes (1) The manufacturing size of width of fireproof AMADO may be taken as nominal size + (0 to 10) mm.

(2) The manufacturing size of height of fireproof AMADO may be taken as nominal size + (0 to 20) mm.