



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS A 1321 : 1994

(Reaffirmed : 2001)

Testing method for incombustibility of internal finish material and procedure of buildings

ICS 91.180; 13.220.40

Descriptors : interior walls, interior wall coverings, interior cladding, interior
decorating, floor coverings, fire-resistant materials, fire tests, buildings,
combustibility

Reference number : JIS A 1321 : 1994 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Construction through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

Date of Establishment: 1959-10-22

Date of Revision: 1994-12-15

Date of Reaffirmation: 2001-06-12

Date of Public Notice in Official Gazette: 2001-06-12

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Architecture

JIS A 1321 : 1994, First English edition published in 2002-05

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2002

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

Testing method for incombustibility of internal finish material and procedure of buildings

1 Scope This Japanese Industrial Standard specifies the testing method for incombustibility of materials used for internal finish and procedure of buildings in the early stage of fire.

The incombustibility test shall conform to basic material test, surface test and annexed test according to the class of incombustibility, as shown in Table 1.

Remarks : The normative references of this Standard shall be as follows.

JIS A 5413 *Asbestos cement perlite boards*

JIS C 1602 *Thermocouples*

JIS G 3459 *Stainless steel pipes*

JIS G 3532 *Low carbon steel wires*

JIS G 4305 *Cold rolled stainless steel plates, sheets and strip*

JIS G 4309 *Stainless steel wires*

JIS R 2305 *High alumina brick*

Table 1

Classification	Testing method
Grade 1 incombustibility	Basic material test specified in 2 and surface test specified in 3
Grade 2 incombustibility	Surface test specified in 3
Grade 2A incombustibility	Surface test specified in 3 and annexed test specified in 4
Grade 3 incombustibility	Surface test specified in 3

2 Basic material test

2.1 Test piece The test piece shall be as follows:

- (1) The material and construction of the test piece shall be the same as in the case of the one used actually. The layer of coating or other dressing to be applied on the surface, however, may be omitted.
- (2) The number of test pieces shall be three.
- (3) The size of test piece shall be 50 ± 3 mm in height and 40 ± 2 mm each in other two sides, and shall be sampled from the specimen taken for the test. If the material is thinner than this size, as shown in Fig. 1-2, make the bulk specific gravity nearly equal to that of the specimen, and pile the test pieces up so that they will contain as much combustibles as possible. Then join them together closely with iron wire with the diameter not more than 0.5 mm specified in JIS G 3532.

- (4) After manufactured, the test pieces shall stand in a well ventilated room for about more than one month. Then they shall be dried in a drier at 35 °C to 45 °C for more than 120 h, after that, they shall be kept in the desiccator for more than 24 h to be cured.
- (5) The supporting frame of test piece shall be made of cold rolled stainless steel sheet specified in **JIS G 4305** and stainless steel wire specified in **JIS G 4309**, and their quality shall be **SUS 304** and they shall be made as shown in Fig. 1-3 with the mass not more than 15 g. The supporting rod of test piece shall be made of stainless steel pipe of quality **SUS 304** specified in **JIS G 3459**, having outside diameter 4 ± 0.1 mm, wall thickness 1 mm or less and length 300 ± 1 mm, as shown in Fig. 1-4. The stopper shall be fitted on the supporting rod, so that the test piece can be inserted quickly in the heating furnace at the position specified in **2.3 (4)**.

2.2 Heating furnace The heating furnace shall be as follows:

- (1) The construction of heating furnace shall be as shown in Fig. 1-1.
- (2) The heat source of heating furnace shall be an electric heater equipped with voltage regulator.
- (3) Two thermocouples shall be set for measuring the inside temperature of furnace, as shown in Fig. 1-1, in such a way that their hot junctions are 10 ± 1 mm apart from the inside wall and are positioned symmetrically with the central axis at the middle of the height of the inside wall of furnace.
- (4) When the reference material specified in **2.3 (3)** is inserted and heated, the heating furnace shall be able to heat continuously for more than 30 min under the condition that the indication of two thermocouples (hereafter referred to as "furnace inside temperature") specified in (3) is 750 ± 10 °C each.