Vikrant Gogia

Govt. Approved Customs House Agent

Ref. No.....

Date : .....

Dated:- 13.05.2024

To,
The Joint Secretary,
Ministry of Textiles,
Udyog Bhawan, New Delhi.

Subject:- Clarification / Classification of Upholstered Composites Used for Non-Domestic Furniture – BIS Standard 15768:2008 – Applicability on Imported Upholstered Furniture Clarification – reg.

Respected Sir / Madam,

I, Vikrant Gogia as Managing Committee Members of "Delhi Customs Broker Associations", hereby authorized by Several Users / Importers of Office Furniture & Furniture Parts to represent and submit documents on their behalf pertain to BIS issues for Import of Upholstered Composites Used for Non-Domestic Furniture.

We wish to brief some clarification on BIS related issues as per below:-

1) This has reference to the Protective Textiles (Quality Control) Order, 2022 dated 10th April 2023 for Serial No. 2 (Upholstered Composites used for Non-Domestic Furniture) as per Indian Standard IS 15768 : 2008. The copy of the said order is enclosed herewith further, it may be perused at Ministry of Textiles website (https://texmin.nic.in/notification) and same is implemented w.e.f. 07th October 2023 as per amended notification dated – 24th May 2023.

2) Several Users / Importers of Office Furniture & Furniture Parts covered under HS Code – 9401 and 9403 are suffering for Import clearances.

3) We have been observed that the said standard is applicable to the textiles and upholstered composites which are used in manufacture of Non-domestic Furniture. Hence the CCR instructions in the HS Code 9401 & 9403 seem to be erroneous.

4) The perusal of Annex-A to the Product manual for IS 15768:2008 (which provides the Guidelines for Grant of License under this standard and wherein details to be provided by manufactures of Textiles have been specified. Further clarifies that the standard is applicable only to the Textile and not Furniture or Parts of Furniture.

5) Upholstered Composites used for Non-Domestic Furniture applications have submitted that they use / import several types of Upholstered composites from many countries. And Importers in India does not able to arrange BIS from Supplier / Manufacturer for every types of Fabrics. Even supplier / Manufacturer of Furniture also imported the Upholstered Composites from many countries.

6) According to Shipper / Manufacturers the Upholstery Composites are pre-certified as per International Standards. Hence it may not be mandatory for certifications. The detailed information has been provided in Serial No. 7 & Serial No. 8 as per BIS FAQs.

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Kolkata : 568, Motilal Colony, No. 3, P.S. Airport Gate, PO - Rajbari, Kolkata-700081

7) International Standard pre-certified for manufacturing of Furniture & Furniture Parts as per below:-

Goods or Article	Title of Standards	Indian Standard	International Standard	International Standard Country Details
Upholstered Composites used for Non-domestic Furniture	Textiles – Resistance to Ignition of Upholstered Composites used for non-domestic furniture - Specification	IS 15768 : 2008	British Standard – BS 7176 : 1995	This British Standard specifies requirements for the resistance to ignition of upholstered furniture used for seating when tested in accordance with BS 5852, BS EN 1021-1 or BS EN 1021-2, as appropriate.
Furniture – Strength, Durablility and safety – Requirements for Non-domestic seating	a) This European Standard specifies requirements for the safety, strength and durability of all types of nondomestic seating intended to be used by adults with a weight of not more than 110 kg, including office visitor chairs. b) This European Standard does not apply to ranked seating, office work chairs, chairs for educational institutions, outdoor seating and to links for linked seating for which European Standards or drafts exist. It does also not apply to work chairs for industrial use.	IS 15768 : 2008	EN 16139	CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.
Furniture – Assessment of the Ignitability of Upholstered Furniture	As per GB 17927.2-2011 GB NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA, The tests measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporation these materials.	IS 15768 : 2008	International Standard – ISI 8191-1	NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA
Furniture – Assessment of the Ignitability of	As per GB 17927.2-2011 GB NATIONAL STANDARD OF THE	IS 15768 : 2008	International Standard – ISI 8191-2	NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

Upholstered Furniture	PEOPLE'S REPUBLIC OF CHINA, The tests measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporation these materials.			

8) As per BIS – FAQs (Updated (Revision 12): June 2018) Serial No. 48 of Part - I : Generic Issues"-
Are the plugs and sockets conforming to other International Standards acceptable?

The plugs/sockets may be pre-certified to international standards. However, the configuration and dimensions of pins of sockets and plugs or plug part of products with built-in plugs should be as per the current edition of IS : 1293. However, ISI marking on plugs and sockets is not mandatory.

9) This British Standard BS 7176:2007 specifies requirements for the resistance to ignition of upholstered furniture used for seating when tested in accordance with BS 5852, BS EN 1021-1 or BS EN 1021-2, as appropriate.

10) As per Note 1 of BS 7176:2007, It should be noted that in BS 5852:2006, Clause 11, materials used for upholstery are tested as a composite, in a realistic arrangement, on a test rig (simulating the junction between an upholstered seat and upholstered back) rather than on a complete item of furniture. Individual covers and fillings cannot be assessed separately by this method of test. BS 5852 includes advice on the limitations of the use of the test results and their significance in relation to real fires.

11) As per European Standard – EN 16139 - The European Standard does not apply to ranked seating, office work chairs, chairs for educational institutions, outdoor seating and to links for linked seating for which European Standards or drafts exist. It does also not apply to work chairs for industrial use.

12) As per BIS – FAQ's - Updated (Revision 12): June 2018 – regarding Import of "Highly Specialized Equipment" (HSE) and is it covered under BIS CRS order or not. **In this regards, BIS FAQ's provided exemption vide Sr. No. 40 of BIS FAQ's 2018 stating that the** Highly Specialized Equipment (HSE), as per the criteria given below, shall stand exempted from the application of this Order provided they are manufactured / imported in less than 100 units per model per year

a. Equipment Powered by Three phase power supply, or
b. Equipment Powered by Single phase power supply with current rating exceeding 16 Ampere, or
c. Equipment with dimensions exceeding 1.5 m x 0.8 m, or
d. Equipment with weight exceeding 80 Kg.

13) In similar case, the Ministry of Steel was provided exemption relation to the Stainless Steel Products (Quality Control) (Amendment), Order, 2016 vide F.No. 1(6)/2016-TD, Dated – 21.10.2016, wherein Several Users/Importers of Stainless Steel for automotive/industrial and engineering applications have submitted that they use/import several grades/types of stainless

steel sheet products which are not covered in the IS : 6911. Hence they have requested Ministry of Steel to issue suitable clarification to customs clearly indicating the customized Stainless Steel Grades which are not covered in the notified Stainless Steel Standard IS : 6911. **In this regards,** the matter has been examined / looked by Ministry of Steel in consultation with BIS, representatives of SIAM / Automakers, Experts, Members / Chief of the Panel of BIS, and the list of customized Stainless Steel Products has been prepared. Accordingly it has been clarified that the list of customized SS Grades as given in Annexure are either not matching with the Grades given in the IS : 6911 or are totally different grades than those specified in the IS : 6911. Hence the provided Grades specified in Annexures would fall outside the purview of the QCO, unless & until the Standard is amended / revised to include these grades. **In addition,** the Ministry of Steel forwarded a list of 30 additional Stainless Steel products to be exempted from the purview of the Stainless Steel, QCO, 2016 vide Notification No. F. No. 1(1)/2017-TD, Dated – 19th September 2017.

14) The CCR Instructions pertaining to the IS 15768: 2008 may be made applicable to Textiles & Textiles Articles covered under CTH 52, 54, 55 & 58 instead of Furniture and Furniture parts covered under CTH 9401, 9403.

15) It is requested that the above clarification may be sent to all Customs Authorities so that clearance of Imported consignments is facilitated.

Enclosed :-

1. Protective Textile (Quality Control) Order 2022 Copy
2. Product Manual of IS 15768 : 2008 along with Annex - A
3. IS 15768 : 2008 Copy
4. European Standard EN 16139 copy
5. China Standard - GB 17927 along with ISO 8191-1 & ISO 8191-2 copy
6. BIS FAQ's – Page No. 1, 10 & 11 Copy
7. British Standard – BS 7176 : 2007 Copy
8. BIS FAQ's – Page No. 9 – relates HSE Equipment
9. Exemption Notification / Copy issued by Ministry of Steel are attached herewith.
10. Enclosed herewith Importers (Haworth India, Teknion India & Technigroup) clarification letter for your perusal.

You are requested to kindly review the above all indicated points & provide clarification on the same.

Your kind cooperation in this regard will be highly appreciated.

Thanking you,

For Vikrant Gogia

Authorized Signatory
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रजिस्ट्री सं. डी.एल.- 33004/99

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 1628] नई दिल्ली, बुधवार, अप्रैल 12, 2023/चैत्र 22, 1945
No. 1628] NEW DELHI, WEDNESDAY, APRIL 12, 2023/CHAITRA 22, 1945

वस्त्र मंत्रालय

आदेश

नई दिल्ली, 10 अप्रैल, 2023

का.आ. 1707(अ).—भारतीय मानक ब्यूरो अधिनियम, 2016 (2016 का 11) की धारा 17 और धारा 25 के उप-खंड (3) के साथ पठित धारा 16 के उप-खंड (1) और (2) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, केंद्र सरकार की राय है कि ऐसा करना लोकहित में आवश्यक है और भारतीय मानक ब्यूरो से परामर्श करने के बाद, एतदद्वारा निम्नलिखित आदेश करती है, अर्थात्: -

1. **संक्षिप्त नाम और प्रारंभ-** (1) इस आदेश का संक्षिप्त नाम प्रोटेक्टिव टेक्सटाइल्स (गुणवत्ता नियंत्रण) आदेश, 2022 है।

   (2) यह सरकारी राजपत्र में इसके प्रकाशन की तारीख के **180 दिवस पश्चात लागू होगा।**

2. **प्रयोज्य-** यह आदेश, इस आदेश के साथ संलग्न अनुसूची के कॉलम (2) में विनिर्दिष्ट माल या वस्तुओं के संबंध में लागू होगा, लेकिन यह निर्यात से संबंधित माल या वस्तुओं पर लागू नहीं होगा।

3. **मानक चिह्न का अनिवार्य उपयोग -** उक्त अनुसूची के कॉलम (2) में निर्दिष्ट माल या वस्तु तत्संबंधी कॉलम (3) में विनिर्दिष्ट तदनुरूपी भारतीय मानक के अनुरूप होंगे और उन पर भारतीय मानक ब्यूरो (अनुरूपता निर्धारण) विनियम, 2018 की अनुसूची-II की योजना-I के अनुसार ब्यूरो की अनुज्ञप्ति के तहत मानक चिह्न लगे होंगे।

4. **प्रमाणन और प्रवर्तन प्राधिकारी** – ब्यूरो उक्त अनुसूची के कॉलम (2) में निर्दिष्ट माल या वस्तुओ का प्रमाणन और प्रवर्तन प्राधिकारी होगा।

5. **उल्लंघन के लिए शास्ति** - जो भी व्यक्ति इस आदेश के उपबंधों का उल्लंघन करेगा, भारतीय मानक ब्यूरो अधिनियम, 2016 (2016 का 11) के उपबंधों के अनुसार दंडनीय होगा।

अनुसूची

क्र.सं.	माल या वस्तु	भारतीय मानक (आईएस)	भारतीय मानक का शीर्षक
(1)	(2)	(3)	(4)
1	कर्टेंस और ड्रेप्स	आईएस 15741 : 2007	टेक्सटाइल्स – कर्टेंस और ड्रेप्स के प्रज्वलन का प्रतिरोध - विशिष्टता
2	गैर-घरेलू फर्नीचर के लिए प्रयुक्त अपहोल्स्टर्ड कंपोजिट्स	आईएस 15768 : 2008	टेक्सटाइल्स - गैर-घरेलू फर्नीचर के लिए प्रयुक्त अपहोल्स्टर्ड कंपोजिट्स के प्रज्वलन का प्रतिरोध - विशिष्टता
3	अग्निशामकों के लिए सुरक्षात्मक वस्त्र	आईएस 16890 : 2018	टेक्सटाइल्स - अग्निशामकों के लिए सुरक्षात्मक वस्त्र - विशिष्टता
4	अग्निशामकों के लिए सुरक्षात्मक दस्ताने	आईएस 16874 : 2018	टेक्सटाइल्स - अग्निशामकों के लिए सुरक्षात्मक दस्ताने - विशिष्टता
5	गर्मी के संपर्क में आने वाले औद्योगिक श्रमिकों के लिए सुरक्षात्मक वस्त्र	आईएस 15748 : 2022	टेक्सटाइल्स - गर्मी के संपर्क में आने वाले औद्योगिक श्रमिकों के लिए सुरक्षात्मक वस्त्र (अग्निशामकों और वेल्डरों के वस्त्रों को छोड़कर)
6	सीमित लौ फैलाने वाली सामग्री और ताप और लौ से सुरक्षा प्रदान करने वाली सामग्री असेम्ब्लीज़ से बने वस्त्र	आईएस 15742 : 2007	टेक्सटाइल्स - सीमित लौ फैलाने वाली सामग्री और ताप और लौ से सुरक्षा प्रदान करने वाली सामग्री असेम्ब्लीज़ से बने वस्त्रों की आवश्यकताएं – विशिष्टता
7	हाई विजिबिलिटी चेतावनी वाले वस्त्र	आईएस 15809 : 2017	हाई विजिबिलिटी चेतावनी वाले वस्त्र - विशिष्टता (पहला संशोधन)
8	वेल्डिंग और संबद्ध प्रक्रियाओं में उपयोग के लिए सुरक्षात्मक वस्त्र	आईएस 16655 : 2017	टेक्सटाइल्स - वेल्डिंग और संबद्ध प्रक्रियाओं में उपयोग के लिए सुरक्षात्मक वस्त्र
9	टैक्टिकल 3 प्वांइट स्लिंग	आईएस 16725 : 2018	टेक्सटाइल्स - टैक्टिकल 3 प्वांइट स्लिंग सार्वभौमिक - विशिष्टता
10	विघटनकारी पैटर्न नायलॉन - 66 से बने गोला-बारूद और हथगोले के लिए पाउच	आईएस 16726 : 2018	टेक्सटाइल्स - विघटनकारी पैटर्न नायलॉन 66 से बने गोला-बारूद और हथगोले के लिए पाउच - विशिष्टता
11	बुलेट प्रतिरोधी जैकेट्स	आईएस 17051 : 2018	टेक्सटाइल्स - बुलेट प्रतिरोधी जैकेट्स - प्रदर्शन की आवश्यकताएं
12	वाटर प्रूफ बहुउद्देशीय रेन पोंचो	आईएस 17286 : 2019	टेक्सटाइल्स - बाइवैक के रूप में परिवर्तनीयता के साथ वाटर-प्रूफ बहुउद्देशीय रेन पोंचो - विशिष्टता

नोट : अनुसूची के प्रयोजनों के लिए, यह स्पष्ट किया जाता है कि भारतीय मानक ब्यूरो अधिनियम, 2016 (2016 का 11), की धारा 2 के खंड (17) के प्रावधानों के अनुसार समय-समय पर ब्यूरो द्वारा स्थापित और प्रकाशित भारतीय मानकों का नवीनतम संस्करण, इसके प्रकाशन की तारीख से लागू होगा।

[सं. 6/1/2021-आर एंड डी (भाग 3)]

राजीव सक्सेना, संयुक्त सचिव

MINISTRY OF TEXTILES

ORDER

New Delhi, the 10th April, 2023

S.O. 1707(E).—In exercise of the powers conferred by sub-sections (1) and (2) of section 16 read with section 17 and sub-section (3) of section 25 of the Bureau of Indian Standards Act, 2016 (11 of 2016), the Central Government is of the opinion that it is necessary so to do in the public interest and after consulting the Bureau of Indian Standards, hereby makes the following Order, namely:-

1. **Short title and commencement.**– (1) This Order may be called the Protective Textiles (Quality Control) Order, 2022.

(2) It shall come into force on the **180 days after** its publication in the Official Gazette.

2. **Application** – This Order shall apply to goods or article specified in column (2) of the Schedule annexed to this Order, but shall not apply to such goods or article meant for export.

3. **Compulsory use of Standard Mark.** – The goods or article specified in column (2) of the said Schedule shall conform to the corresponding Indian Standard specified in column (3) thereof and shall bear the Standard Mark under a licence from the Bureau in accordance with Scheme-I of Schedule-II to the Bureau of Indian Standards (Conformity Assessment) Regulations, 2018.

4. **Certification and enforcement authority.** – The Bureau shall be the certifying and enforcing authority in respect of the goods or article specified in column (2) of the said Schedule.

5. **Penalty for contravention.** – Any person who contravenes the provisions of this Order shall be punishable in accordance with the provisions of the Bureau of Indian Standards Act, 2016 (11 of 2016).

SCHEDULE

Sl. No.	Goods or article	Indian Standard (IS)	Title of Indian Standard
(1)	(2)	(3)	(4)
1	Curtains and Drapes	IS 15741 : 2007	Textiles – Resistance to ignition of curtains and drapes - Specification
2	Upholstered composites used for non-domestic furniture	IS 15768 : 2008	Textiles - Resistance to ignition of upholstered composites used for non-domestic furniture – Specification
3	Protective clothing for firefighters	IS 16890 : 2018	Textiles - Protective Clothing for Firefighters – Specification
4	Protective gloves for firefighters	IS 16874 : 2018	Textiles - Protective Gloves for Firefighters - Specification
5	Protective clothing for industrial workers exposed to heat	IS 15748 : 2022	Textiles - Protective clothing for Industrial workers exposed to heat (excluding firefighters' and welders' clothing)
6	Clothing made of limited flame spread materials and material assemblies affording protection against heat and flame	IS 15742 : 2007	Textiles - requirements for clothing made of limited flame spread materials and material assemblies affording protection against heat and flame - specification
7	High visibility Warning Clothes	IS 15809 : 2017	High visibility warning clothes - Specification (first revision)
8	Protective Clothing for use in welding and allied processes	IS 16655 : 2017	Textiles - Protective clothing for use in welding and allied processes
9	Tactical 3 point sling	IS 16725 : 2018	Textiles - Tactical 3 point sling universal - Specification

10	Pouch for ammunition and grenades made of disruptive pattern nylon-66	IS 16726 : 2018	Textiles - Pouch for ammunition and grenades made of disruptive pattern nylon 6 6 - Specification
11	Bullet resistant jackets	IS 17051 : 2018	Textiles - Bullet resistant jackets - Performance requirements
12	Water-proof multipurpose rain poncho	IS 17286 : 2019	Textiles - Water-proof multipurpose rain poncho with convertibility as bivouac - Specification

Note : For the purposes of the Schedule, it is clarified that the latest version of Indian Standards established and published by the Bureau from time to time in accordance with the provisions of clause (17) of section 2 of the Bureau of Indian Standards Act, 2016 (11 of 2016), shall apply from the date of such publication.

[No. 6/1/2021-R&D (Pt.3)]

RAJEEV SAXENA, Jt. Secy.

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

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वस्त्र मंत्रालय

आदेश

नई दिल्ली, 24 मई, 2023

का.आ. 2332(अ).—भारतीय मानक ब्यूरो अधिनियम, 2016 (2016 का 11) की धारा 17 और धारा 25 के उप-खंड (3) के साथ पठित धारा 16 के उप-खंड (1) और (2) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, केंद्र सरकार की राय है कि ऐसा करना लोकहित में आवश्यक है और भारतीय मानक ब्यूरो से परामर्श करने के बाद, एतदद्वारा निम्नलिखित आदेश करती है, नामत:-

1. **लघु शीर्षक और प्रारंभ.**-(1) इस आदेश को प्रोटेक्टिव टेक्सटाइल्स (गुणवत्ता नियंत्रण) संशोधन आदेश, 2022 कहा जाएगा।

   (2) यह सरकारी राजपत्र में इसके प्रकाशन की तारीख से लागू होगा।

2. प्रोटेक्टिव टेक्सटाइल्स (गुणवत्ता नियंत्रण) आदेश, 2022 के पैरा 1 में, उप-पैराग्राफ (2) के स्थान पर, निम्नलिखित उप-पैरा को प्रतिस्थापित किया जाएगा, नामत:-

   "(2) यह आदेश 7 अक्टूबर ,2023 से लागू होगा "

[फा. सं. 6/1/2021-आर एंड डी (भाग 3)]

राजीव सक्सेना, संयुक्त सचिव

नोट : मूल आदेश भारत के राजपत्र, असाधारण भाग II, खंड 3, उपखंड (ii) में दिनांक 10 अप्रैल, 2023 की अधिसूचना संख्या का.आ. 1707(अ) के तहत प्रकाशित हुआ था।

MINISTRY OF TEXTILES

ORDER

New Delhi, the 24th May, 2023

S.O. 2332(E).—In exercise of the powers conferred by sub-sections (1) and (2) of section 16 read with section 17 and sub-section (3) of section 25 of the Bureau of Indian Standards Act, 2016 (11 of 2016), the Central Government is of the opinion that it is necessary so to do in the public interest and after consulting the Bureau of Indian Standards, hereby makes the following Order, namely:-

1. **Short title and commencement.**–(1) This Order may be called the Protective Textiles (Quality Control) Amendment Order, 2022.

(2) It shall come into force from the date of its publication in the official Gazette.

2. In the Protective Textiles (Quality Control) Order, 2022, in paragraph 1, for sub-paragraph (2), the following sub- paragraph shall be substituted, namely :-

" (2) *This order shall come into force on the 7th October, 2023.*"

[F. No. 6/1/2021-R&D (Pt.3)]

RAJEEV SAXENA, Jt. Secy.

Note : The principal order was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (ii) vide notification number S.O. 1707(E) dated 10th April, 2023.

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उत्पाद मैन्युअल

कपड़ा - के लिए इस्तेमाल असबाब कपड़े के प्रज्वलन के लिए प्रतिरोध गैर-घरेलू फर्नीचर - विनिर्देश

IS 15768:2008 के अनुसार

PRODUCT MANUAL FOR TEXTILES - RESISTANCE TO IGNITION OF UPHOLSTERY FABRICS USED FOR NON-DOMESTIC FURNITURE - SPECIFICATION

According to IS 15768:2008

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम 2018 की स्कीम-I के तहत यह उत्पाद मैनुअल प्रमाणीकरण की संचालन रीति में सुसंगता और पारदर्शिता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेन्स धारियों द्वारा संदर्भ सामग्री के रूप मे उपयोग किया जाएगा। बीआईएस लाइसेन्स/प्रमाण पत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	उत्पाद **Product**	:	**IS 15768:2008**
	शीर्षक **Title**	:	TEXTILES - RESISTANCE TO IGNITION OF UPHOLSTERY FABRICS USED FOR NON-DOMESTIC FURNITURE - SPECIFICATION
	संशोधन संख्या **No. of amendments**	:	1
2.	नमुनाकरण दिशानिर्देश **Sampling Guidelines**		
a)	कच्चा माल **Raw material**	:	No Specific requirement
b)	समूहिकरण दिशानिर्देश **Grouping Guidelines**	:	Please refer Annex-A
c)	नमूने का परिमाण **Sample Size**	:	10 Nos. of upholstery fabrics
3.	परीक्षण उपकरणो की सूची **List of Test Equipment**	:	Please refer Annex –B

4.	**निरीक्षण व परीक्षण स्कीम** **Scheme of Inspection and Testing**	:	Please refer Annex - C
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**	:	Testing done on preconditioned samples for the following requirements: 1. Ignitability 2. Durability of flame retardant property

6.	**लाइसेन्स का कार्यक्षेत्र/ Scope of the License:**	
	License is granted to use Standard Mark as per IS 15768:2008 with the following scope:	
	Name of the product	TEXTILES - RESISTANCE TO IGNITION OF UPHOLSTERY FABRICS USED FOR NON-DOMESTIC FURNITURE
	Nature & Composition of upholstery material	Polyester/ Cotton blended/Any other Material
	Length, Width & Mass	……mm length, ….mm width & ….g/m^2 mass
	Hazard Occupancies	Low/ Moderate/ High

ANNEX-A

Grouping Guidelines for Textiles - Resistance to Ignition of Upholstery Fabrics used for Non-Domestic Furniture as per IS 15768:2008

The following grouping guidelines shall apply for Grant of Licence (GoL)/Change in Scope of Licence (CSoL):

i. Material and composition of the Upholstery Fabrics may be Polyester/Cotton blended/Any other material.
ii. Hazard Occupancies may be Low/Moderate/High.
iii. The manufacturer shall declare the sizes (length x width) of Upholstery Fabrics being manufactured and intended to be covered in the scope of licence.
iv. The Upholstery Fabrics of the largest size (length x width) sample of each nature and composition of fabric (Polyester/Cotton blended/Any other material) and of each hazard occupancies (Low/Moderate/High) to be drawn and tested to cover all the sizes of particular nature and composition of fabric and of particular hazard occupancy of Upholstery Fabrics in the scope of licence.
v. The scope of licence shall be restricted based on the manufacturing and testing capabilities.

During the operation of licence, each size of Upholstery Fabrics covered in the scope shall be tested in rotation, to the extent possible.

ANNEX-B

LIST OF TESTING EQUIPMENT

Major test equipment essentially required to test as per requirements of Indian Standard.

S. No.	Test used in with Clause reference	Test equipment
1	Ignitability, Cl. 4.1	Mounting frame, Gas burner, Specimen holder, Suitable flat and rigid template, Gas, Timing device
2	Durability of fire retardant property, Cl. 4.2	Automatic washing machine equipped with a Horizontal rotating drum with reversing action, Soft water, Ballast, Low foaming detergent, Iron or Press
3	Toxicity index, Cl. 4.3	Toxicity chamber (An airtight enclosure of atleast 1m3 volume lined with opaque plastic sheeting having a hinged or sliding door, fitted with a transparent plastic panel), Burner, Specimen support, Timing device, Analytical equipment, Gas sampling
4	Visibility due to smoke released on combustion, Cl. 4.4	Smoke chamber of Height-1000±5mm, Length-750±5mm, Width-750±5mm, Incandescent electric bulb 220V, 100W, Light meter, Plate of non-combustible, fire proof and non-heat conducting material, Stainless steel plate, Burner, Specimen frame, Device for adjusting the distance between the specimen frame and burner
5	Smouldering Cigarette test, Cl. 4.1, Table-1	A suitable test rig as per Fig. 1 & Fig. 2 of IS 12467 (Part 1):2006, Test enclosure, Clock, Smouldering Cigarette, Conditioning Chamber to maintain Temperature 27±2°C and Relative Humidity-65±2%
6	Match Flame equivalent test, Cl. 4.1, Table-1	A suitable test rig as per Fig. 1 & Fig. 2 of IS 12467 (Part 2):2006, Test enclosure, Clock, Ignition source, Gas flow control, Conditioning Chamber to maintain Temperature-27±2°C and Relative Humidity-65±2%
7	Crib test, Cl. 4.1, Table-1	A suitable test rig as per Fig. 1 & Fig. 2 of IS 12467 (Part 1):2006, Test enclosure, Propane-2-ol, Graduated Glass Syringe, Stop clock, Crib ignition sources, Conditioning Chamber to maintain Temperature-25±5°C and Relative Humidity-50±20%

Note: The above is an indicative list for the purpose of guidance only

ANNEX-C

SCHEME OF INSPECTION AND TESTING

1. **LABORATORY** - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare and implement calibration plan for the test equipment.

2. **TEST RECORDS** – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. **LABELLING & MARKING** – The Standard Mark as given in the Schedule of the license and Licence Number (i.e., CM/L.....) shall be incorporated on each roll and on the packaging, and the marking shall be done as per the provisions of the Indian Standard, provided always that the product thus marked conforms to all the requirement of the specification.

4. **CONTROL UNIT** – All upholstery fabric pieces/rolls of identical type and composition manufactured in a day, delivered to a buyer against one dispatch note shall constitute a Control unit.

5. **LEVELS OF CONTROL** - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. **REJECTIONS** – Disposal of non-conforming product shall be done in such a way to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1: LEVELS OF CONTROL

(Para 5 of Scheme of Inspection and Testing)

(1)				(2)	(3)		
Test Details					**Levels of Control**		
Clause	**Requirement**	**Test Method**		**Test equipment requirement** R: Required (or) S: Subcontracting permitted	**No. of Samples**	**Frequency**	**Remarks**
		Clause	**Reference**				
4.1	Ignitability	4.1 & 4.1.1	IS 15612 (Part 1) & IS 15589	R	One	Each Control Unit	
4.2	Durability of flame retardant property	4.2	Annex-C of Amendment 1 to IS 15768	R	One	Each Control Unit	
4.3	Toxicity index	4.3	Annex-D of Amendment 1 to IS 15768	S	One	Once in 6 months	To be carried out whenever there is change in raw material/Composition/ Supplier
4.4	Visibility due to smoke released on combustion	4.4	IS 15782	S	One	Once in 6 months	To be carried out whenever there is change in raw material/Composition/ Supplier
4.1, Table-1	Smouldering Cigarette test	4.1	IS 12467 (Part 1)	S	One	Once in a month	
Cl. 4.1, Table-1	Match Flame equivalent test	4.1	IS 12467 (Part 2)	S	One	Once in a month	
Cl. 4.1, Table-1	Crib test	4.1	Annex-B of IS 15768	S	One	Once in a month	

Note-1: Whether test equipment is required, or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub- contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empaneled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval to BO Head.

IS 15768 (2008): Textiles - Resistance to ignition of upholstered composites used for non-domestic furniture [TXD 32: Textiles Protective Clothing]

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भारतीय मानक

वस्त्रादि — व्यवसायिक सोफासाजी के लिए फर्नीचर की अग्नि अवरोधकता — विशिष्टि

Indian Standard

TEXTILES — RESISTANCE TO IGNITION OF UPHOLSTERED COMPOSITES USED FOR NON-DOMESTIC FURNITURE — SPECIFICATION

ICS 13.220.40; 97.140

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

June 2008

Price Group 5

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Chemical Methods of Test Sectional Committee had been approved by the Textile Division Council.

There have been many fire incidents in recent years in public buildings/places, the origin of which could be many, such as, electric short circuiting, ignition, etc. The origin of fire may not be that much dangerous and hazardous as the ease of ignition and spreading of fire due to combustible materials, such as, textiles, plastics, upholstered furniture, etc. Depending upon the type of materials encountered in burning, its ease of ignition and its fire spread properties, the extent of damage to the life and property could be enormous. In order to prevent or minimize the damage to life and property due to such fire risks, formulation of this standard needs no emphasis.

Specification for resistance to ignition of textile materials and assemblies for use in the public buildings/places exist in various developed countries as a fall out of various legislation, Rules or Acts, etc, or directions of local bodies. The trend is increasing in other countries also and India should be no exception to this. This standard lays emphasis on matching the magnitude of threat posed in various places/buildings with commensurate performance levels of fire resistant textile materials so as to ensure safety of the life and property.

This standard is based on BS 7176 : 1995 'Resistance to ignition of upholstered furniture for non-domestic seating by testing composites'. The list of buildings/places under different fire hazard categories have been included as per SP 7 : 2005 'National Building Code of India 2005'.

The composition of the Committee responsible for the formulation of this standard is given in Annex C.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TEXTILES — RESISTANCE TO IGNITION OF UPHOLSTERED COMPOSITES USED FOR NON-DOMESTIC FURNITURE

1 SCOPE

This standard specifies requirements for the resistance to ignition of upholstered composites used for non-domestic furniture.

NOTE — The levels of ignition resistance have been set after careful consideration of the fire risk of the particular end-use environment involved. These levels do not necessarily reflect the behaviour of the upholstered seating in a fully developed fire.

2 REFERENCES

The following standards contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreement based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	*Title*
6359 : 1971	Method for conditioning of textiles
12467	Textiles — Assessment of ignitability of upholstered furniture:
(Part 1) : 2005	Ignition source: Smouldering cigarette (*first revision*)
(Part 2) : 2005	Ignition source: Match-flame equivalent
15612 (Part 2) : 2005	Textiles — Burning behaviour of curtains and drapes: Part 2 Measurement of flame spread of vertically oriented specimens with large ignition source
SP 7 : 2005	National Building Code of India 2005
SP 45 : 1988	BIS Handbook on glossary of textile terms

3 TERMINOLOGY

For the purposes of this standard the definitions given in SP 45 together with the following shall apply.

3.1 Fire Hazard — Potential for loss of life (or injury) and/or damage to property, by fire.

3.2 Fire Risk — Probability of fire causing loss of life (or injury) and/or damage to property.

3.3 Ignition Risk — The probability that ignition will result if a source of heat is allowed into close proximity or contact with a combustible material.

3.4 Composite — A realistic model arrangement of materials used in the finished product.

4 PERFORMANCE REQUIREMENTS FOR RESISTANCE TO IGNITION

4.1 Ignitability

The upholstered composite shall meet the levels of ignition resistance given in Table 1 when tested in accordance with the test methods specified in Table 1 for the various categories of hazardous places/buildings as specified in Annex A in accordance with SP 7.

NOTE — The ignitability performance specified for upholstered furniture for different end-uses varies according to the level of risk associated with a particular environment as shown in Table 1.

4.2 Durability of Treatment

4.2.1 Carry out the water soaking treatment by the procedure prescribed in Annex D of IS 12467 (Part 1) by subjecting the covering fabric (excluding non-visible cloths such as undersides and platform covers) or fire-barrier fabric before it is conditioned prior to testing in accordance with IS 6359, except that the test specimen shall be dried by any method suitable for the fabric type.

4.2.2 Dry clean the covering fabric or fire-barrier material which is claimed to be dry cleanable as described in Annex C of IS 15612 (Part 2) before it is conditioned prior to testing.

NOTE — Durability of flame retardants can be best ensured only by inherent flame retardant material. Such materials should always be preferred in comparison to those that merely pass the testing as per IS 12467 (Part 1) or IS 12467 (Part 2) after water soaking or dry cleaning as per **4.2.1** or **4.2.2**.

5 SAMPLING

5.1 Lot

The quantity of upholstered furniture material of identical type delivered to a buyer against one dispatch note shall constitute a lot.

NOTE — 'Identical' in this clause means that there has been no major basic alteration to a furniture specification. That is, that fibre content, weave and mass per unit area of fabric, density and type of filling, and materials manufacturers have

Table 1 Performance Requirements and Notes on Application of Hazard Categories

(*Clause* 4.1)

Hazard Category	Requirements[1)]	Typical Examples of Places/Buildings	Methods of Test
Low Hazard Category	To pass the:	Annex A	
	a) Smouldering cigarette test		IS 12467 (Part 1)
	b) Match flame equivalent test		IS 12467 (Part 2)
Moderate Hazard Category	To pass the:	Annex A	
	a) Smouldering cigarette test		IS 12467 (Part 1)
	b) Match flame equivalent test		IS 12467 (Part 2)
	c) Crib test, source 1		Annex B
	To pass the:	Annex A	
	a) Smouldering cigarette test		IS 12467 (Part 1)
	b) Match flame equivalent test		IS 12467 (Part 2)
	c) Crib test, source 2		Annex B

[1)] If a particular premises in the low hazard area is also used for sleeping purposes then that premises shall be assigned the next higher hazard

NOTES

1 It is important to realize that the listing of types of premises under different hazard categories in Table 1 is given for guidance only and that the classification of a particular premises into one of the hazard categories is a decision for staff responsible for fire safety.

2 The examples cited in Table 1 for each hazard category cannot be exhaustive and do not cover all types of possible premises in a hazard category. It will be noted that some of the examples appear in more than one hazard category. This reflects the range of hazards possible under different circumstances for particular types of premises. Other examples, whether or not listed in Table 1, could also fall into more than one hazard category. However; when all the relevant factors have been considered, a particular premises can then be assigned to one hazard category.

3 The classification of a particular premises into one of the hazard categories in Table 1 is a decision for staff responsible for fire safety, for example, building control, fire brigade, licensing authorities, or environmental health authorities. Government departments and other organizations often have their own classifications for upholstered furniture where all the hazards have been assessed and a general policy has been adopted. Such classifications may be different from the examples given in Table 1. Attention is drawn to the following factors when classifying a hazard area:

a) Statutory requirements and other recommendations;
b) The Building Regulations and Local Authority Bye-Laws;
c) Consumer Protection Acts and Safety Regulations;
d) The National Building Code of India, 2005;
e) Fire precautions in existing places of work that require clearance from fire authorities;
f) Fire precautions in existing residential care premises;
g) Fire precautions in existing places of entertainment and like premises;
h) Fire precautions in premises used as hotels and boarding houses which require a fire certificate;
j) Fire safety management in hotels and boarding houses;
k) Whether or not people sleep at premises;
m) The level of occupancy;
n) Whether, in the case of fire, occupants could be expected on their own or whether they would need assistance, for example, babies, children, old and infirm, the invalid, the sick, and those retained by locked doors;
p) The presence or absence of an automatic fire detection and alarm system, or an automatic fire extinguishing system;
q) Any special hazards, such as, cooking, heating, live flame effects, smoke effects, low lighting levels, strobe lighting, loud music, drinking, use after dark;
r) Whether or not the premises are, during times of use, under the control of staff trained in appropriate evacuation procedures; and
s) The location of the hazard area, namely of floors, whether or not high rise and/or below ground and/or windowless.

all remained the same during the production of the units. Changes in the colour of a product or minor changes in the pattern or weave, for example of the order of 2 picks/cm may be disregarded.

5.2 Random samples from the lot shall be drawn in accordance with the relevant standard on material specification or as per the agreement between the buyer and the seller.

5.3 In absence of relevant Indian Standard or agreement between the buyer and the seller, the upholstered composite material shall be tested every 2 500 units produced or once per month, whichever occurs earlier. Re-sampling shall be done when there is any major basic alteration to a furniture specification (for example, of fibre content, weave or mass per unit area

of fabric, density or type of filling or change of materials manufacturer). Changes in the colour of a product or minor changes in the pattern or weave, for example, of the order of 2 picks/cm, shall not be deemed sufficient reason to necessitate re-testing.

6 MARKING

6.1 Each piece of upholstered composite material shall carry a permanently stitched and clearly readable label with the following information:

a) Nature and composition of the upholstery material, for example, polyester/cotton blended (50 : 50 percent);
b) Length and width, in mm and mass, in g/m²;
c) Name and address of the manufacturer or his trade-mark(s);
d) The words 'FIRE RESISTANT'; and
e) Any other information as required by the law in force.

6.2 The minimum size of the graphic part of the label shall be 50 mm × 50 mm. The colour of the label shall be white with a green border and the words 'FIRE RESISTANT' shall be white and of minimum height 5 mm.

6.3 The following wording shall also appear on the label:

a) 'Complies with this standard; direct test/ predictive test for low hazard (not recommended for use in higher hazard areas); or
b) 'Complies with this standard for medium hazard (not recommended for use in higher hazard areas)' or
c) 'Complies with this standard for high hazard (not recommended for use in higher hazard areas)'.

6.3.1 The letters of the wording shall be easily legible and of minimum height 2 mm.

7 PACKING

The upholstery other composite material shall be packed as per the relevant Indian Standard or as agreed to between the buyer and the seller.

ANNEX A

(*Clause* 4.1 and *Table* 1)

BROAD CLASSIFICATION OF INDUSTRIAL AND NON-INDUSTRIAL OCCUPANCIES INTO DIFFERENT DEGREE OF HAZARD

A-1 LOW HAZARD OCCUPANCIES

a) Analytical and/or Q.C. laboratories;
b) Assembly buildings small;
c) Clubs;
d) Day centres;
e) Dwellings, lodges, dormitories, etc;
f) Educational and research institutions;
g) Office premises;
h) Places of worship; and
j) Residential buildings (except hotels).

A-2 MODERATE HAZARD OCCUPANCIES

a) Airport and other transportation terminal buildings;
b) Assembly buildings;
c) Casinos;
d) Computer installations;
e) Hospitals including 'X' ray and other diagnostic clinics (institutional buildings);
f) Hostels;
g) Mercantile occupancies (departmental stores, shopping complex, shopping malls, etc);

h) Museums, archives, record rooms;

j) Places of public entertainment (exhibitions, marriage pandals, theatres, cinema halls, etc);

k) Public buildings;

m) Public halls;

n) Public houses and bars; and

p) Residential apartments, hotels, cafes, restaurants.

A-3 HIGH HAZARD OCCUPANCIES

a) Hazardous occupancy buildings;

b) Offshore installations;

c) Prison cells;

d) Sleeping accommodation in certain hospital wards and in certain hostels; and

e) Underground shopping complexes and underground shopping malls.

ANNEX B

(*Table* 1)

CRIB TEST

B-1 PRINCIPLE

Materials forming an upholstery composite are assembled together on the test rig appropriate to the ignition source being used.

B-2 APPARATUS

B-2.1 Test Rig, as specified in Fig. 1 and 2 of IS 12467 (Part 1), consisting of two rectangular frames hinged together and capable of being locked at right angles to each other. The frames shall securely hold the expanded steel platforms and a standard edging section may be used around the expanded steel to give protection and greater rigidity. The hinge rod shall be continuous across the back of the rig. The frame shall be lockable at right angles to each of the pairs of the members forming the back legs.

B-2.2 Test Enclosure, either a room with a volume greater than 20 m^3 (which contains adequate oxygen for testing), or a smaller enclosure with a thorough flow of air (between 0.02 m/s to 0.2 m/s) equipped with inlet and extraction systems.

B-2.2.1 The atmosphere within the enclosure during the test shall have a temperature of 25 ± 5°C and a relative humidity of 50 ± 20 percent. A means of extracting smoke and toxic gases shall be provided for all such enclosures.

B-2.3 Propane-2-ol

B-2.4 Graduated Glass Syringe, or other suitable measuring instrument, capable of measuring 1.4 ± 0.1 ml of propane-2-ol.

B-2.5 Stop Clock, accurate to 1 s and capable of measuring at least 1h.

B-2.6 Crib Ignition Sources

B-2.6.1 *Materials and Construction*

The cribs shall be constructed from the following:

a) Dry planks of the softwood *Pinus Kesiya* (Khasi Pine) which have been stored in warm dry conditions for a minimum of one week;

b) Absorbent surgical lint; approximately 200 g/m^2 which is cut into nominal squares 40 mm × 40 mm (each square having a mass of approximately 0.3 g); and

c) Polyvinyl acetate or other suitable wood adhesive for gluing together the sticks and lint.

B-2.6.2 *Assembly of the Cribs*

B-2.6.2.1 The crib assembly shall have the parameters as specified in Tables 2 and 3. The arrangements of cribs are illustrated in Fig. 1 and 2. The suggested methods of construction are given in **B-2.7**.

B-2.6.2.2 Select the required number and sizes of sticks conditioned in accordance with **B-3** to provide the required total mass and assemble into cribs with the square of lint incorporated, fluffy side uppermost when the crib is standing on its base. The sticks in each layer shall be parallel to one another and at right angles to the sticks in the adjacent layer. The sticks in each layer shall be placed as far away from each other as possible, but without undue overhang at their ends, glued together and the lint secured with small amounts of the adhesive.

Table 2 Parameters of Crib 1 (Ignition Source 1)

(*Clause* B-2.6.2.1)

Sl No.	Parameter	Requirement
(1)	(2)	(3)
i)	Stick length, mm	40 ± 2
ii)	Stick square section, mm	6.5 ± 0.5
iii)	Number of sticks	20
iv)	Total mass of sticks, g	17 ± 1
v)	Number of layers each of two sticks	10
vi)	Approximate lint dimensions, mm	40 × 40

Table 3 Parameters of Crib 2 (Ignition Source 2)

(*Clause* B-2.6.2.1)

Sl No.	Parameter	Requirement
(1)	(2)	(3)
i)	Main crib stick length, mm	80 ± 2
ii)	Main crib stick square section, mm	12.5 ± 0.5
iii)	Number of sticks, main crib	18
iv)	Number of layers each of two sticks in main crib	9
v)	Ignition crib base stick length, mm	80 ± 2
vi)	Ignition crib stick length, mm	40 ± 2
vii)	Square section of all sticks in the ignition crib, mm	6.5 ± 0.5
viii)	Number of ignition crib base sticks	4
ix)	Number of ignition crib sticks	6
x)	Number of layers each of two sticks in ignition crib	5
xi)	Total mass of main and ignition crib sticks, g	126 ± 4
xii)	Approximate lint dimensions, mm	40 × 40

B-2.7 Suggested Methods of Construction

B-2.7.1 *Crib* 1

Glue together 18 sticks to form the main crib body. Stick one square of lint across the main crib body. Stick one square of lint across the crib square section and then glue on the remaining two sticks to form the base (*see* Fig. 1).

B-2.7.2 *Crib* 2

Glue together 16 of the main crib sticks to form the main crib body to make construction A. Glue together the six ignition crib sticks plus two of the ignition crib base sticks to form the ignition crib body; stick one square of lint across the ignition crib square section and then glue on the remaining two ignition crib base sticks to form the ignition crib; glue on the remaining two main crib sticks to make construction B (*see* Fig. 2A). When the adhesive is set, invert construction B and glue it to construction A (*see* Fig. 2B).

NOTE — A simple way to ensure that the core of the crib is correct is to build the crib around a former. A smooth hardwood block nominally 27 mm × 27 mm × 100 mm is suitable for crib 1 and inner side of crib 2. A hardwood block nominally 55 mm × 55 mm × 155 mm is suitable for crib 2. The sticks are glued around the block and block removed before the glue sets. For example, crib 1 is made by gluing 18 sticks together, removing the block, fixing lint in place on top and then gluing on the remaining two sticks.

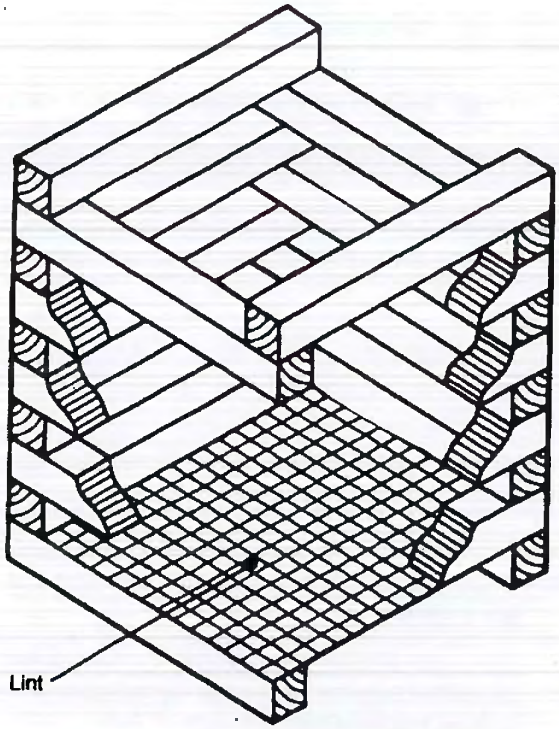


FIG. 1 CRIB 1

B-3 CONDITIONING

The sticks and the cribs shall be conditioned immediately before the test for 72 h in indoor ambient conditions and then for at least 16 h at 25 ± 5°C and 50 ± 20 percent relative humidity.

B-4 TEST SPECIMENS

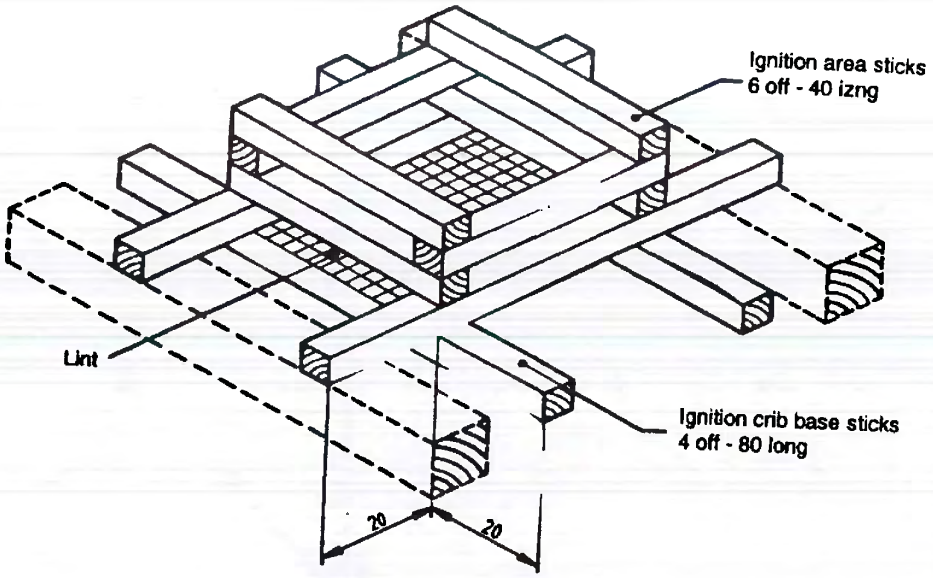
B-4.1 General

The test specimen shall comprise a structure with vertical and horizontal parts of the composite of upholstery materials under test. These materials shall be representative of the cover, filling and other components to be used in the upholstery composites.

B-4.2 Cover Material and Fabric Inter-Liner

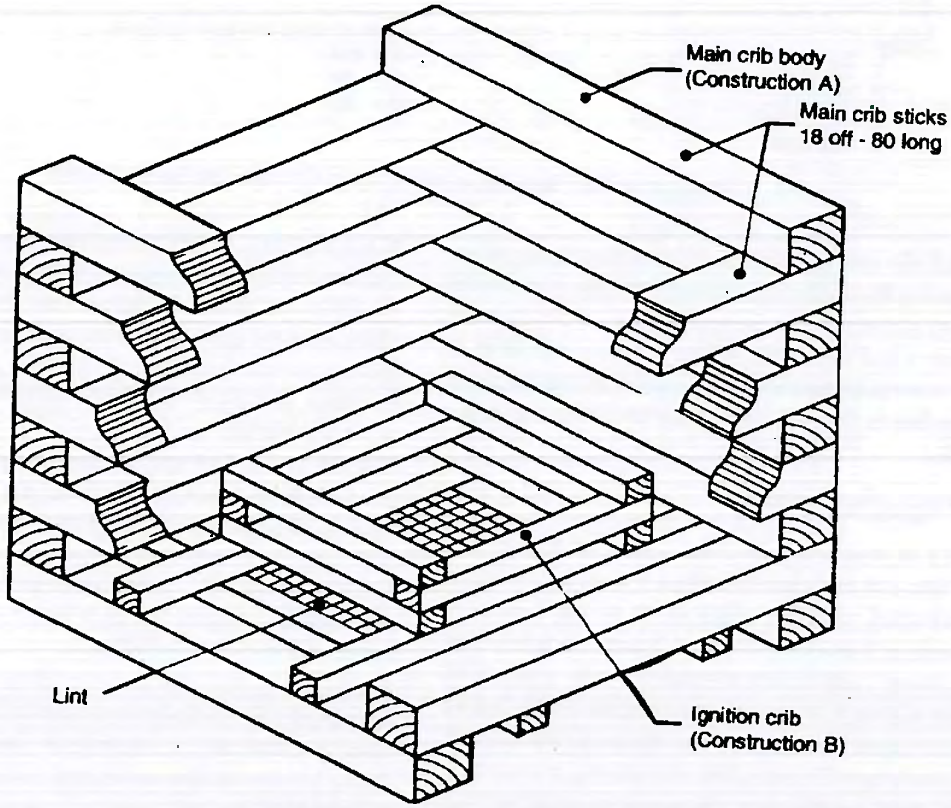
B-4.2.1 Test specimens used shall be as shown in Fig. 3.

B-4.2.2 The long dimension shall be cut parallel to the machine direction. The cover may be constructed from smaller pieces of test materials provided that the resulting seams do not occur within 100 m, of the area likely to be affected by the test or they are located behind the pivot bar. If lack of test materials requires the use of additional alternative material, for example, side extension, their use shall be stated in the test report.



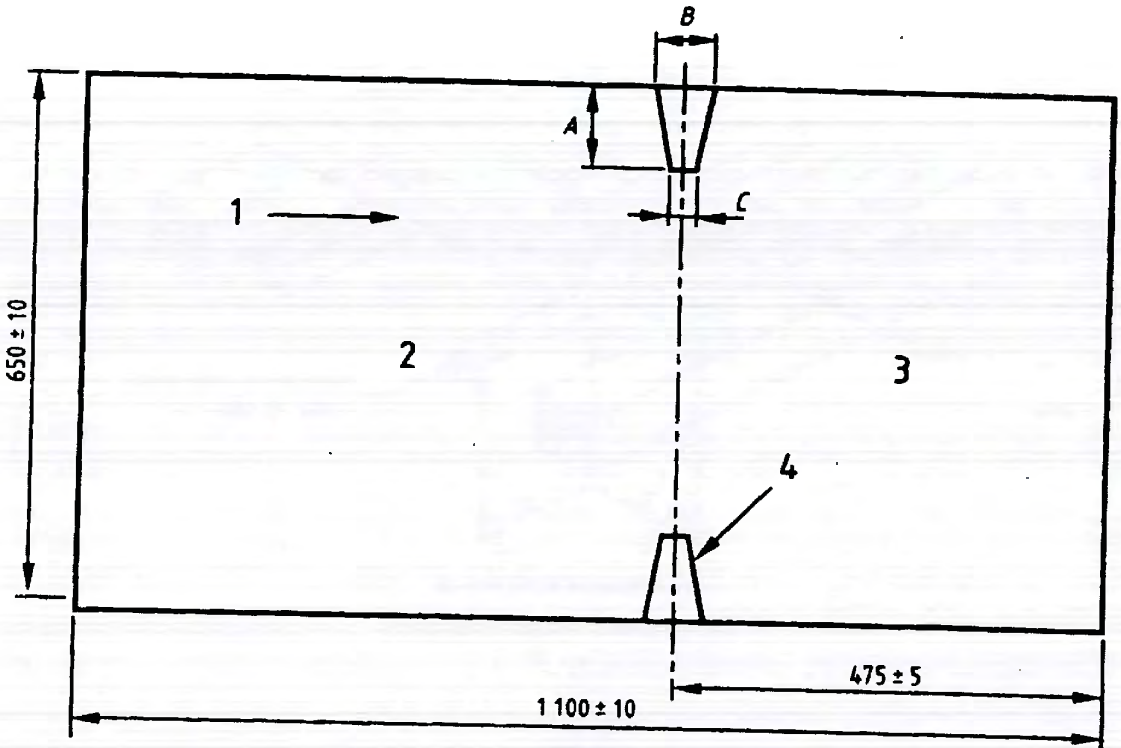
All dimensions in millimetres.

FIG. 2A Crib 2 — Construction B



2B Complete Crib 2

FIG. 2 CONSTRUCTION OF THE CRIBS



Key
1 Lie of pile
2 Vertical
3 Horizontal
4 Cut-outs

Approximate cut-out dimensions
A : 110
B : 50
C : 20

FIG. 3 DETAILS OF TEST SPECIMENS FOR FABRIC COVERS AND INTER-LINERS

B-4.2.3 The cut-outs shall be positioned such that when assembled on the test rig, the lie of the pile is down the vertical assembly and from the hinge to the front of the horizontal assembly. Where a fabric inter-liner is used, it is cut to the same dimensions, and in the same orientation as the cover, for fitting to the rest rig under the cover.

B-4.3 Upholstery Filling

B-4.3.1 It shall consist of two pieces of filling, one (450 mm ± 5 mm) × (450 mm ± 5 mm) × (75 mm ± 2 mm) thick and the other (450 mm ± 5 mm) × (300 mm ± 5 mm) × (75 mm ± 2 mm) thick for each test. Some cushioning assemblies may consist of several layers that may be typically felt, wadding or various foams. Where the total thickness exceeds 75 mm, the upper 75 mm of the cushioning assembly is reproduced, except that the upper layer(s) are not continued over and round the edges of the assembly.

B-4.3.2 Where this filling is less than 75 mm thick the test piece shall be built up to the required thickness by adding to the underside a further layer of the bottom material.

B-4.3.3 If lack of test materials requires the use of additional alternative materials such as side extensions, the additional materials shall not be positioned within 100 mm of the ignition source, or above the top of the ignition source if used in the vertical part of the test specimen. The use of additional materials shall be noted in the test report.

B-4.3.4 In case of the loose filling material, for example, foam crumb or feathers, the filling shall be built up beneath the covering materials to reproduce the 75 mm thickness of the assembly at a realistic filling density. Where necessary, a finer grid material or air porous fabric may be laid over the expanded metal of the test rig to retain the filling.

B-4.3.5 If, in use, the loose infill is enclosed in an interlining (or ticking), two bags of the inter-lining suitably filled and to the overall dimensions given above for use as the upholstery filling beneath the cover(s) shall be used.

NOTE — The tests described in this section are unsuitable when used with composites where the loose filling materials flows out of the assembly during the test and either extinguishes, moves or adversely affects the burning of the ignition sources. A more positive result may be obtained with such materials are tested as a complete item of furniture.

B-5 CRITERIA OF IGNITION

B-5.1 General

The ignition criteria shall include both the progressive smouldering and flaming ignition and shall be assessed separately.

B-5.2 Progressive Smouldering Ignition

The following types of behaviour shall be considered as progressive smouldering ignition:

a) any test specimen that displays escalating smouldering combustion behaviour so than it is unsafe to continue the test and forcible extinction is required;

b) any test specimen that smoulders until it is essentially consumed or that smoulders to the extremities or the specimen, that is to either side or to the full thickness of the specimen, within the duration of the test;

c) any test specimen that produces externally detectable amounts of smoke, heat or glowing 60 min after ignition of the crib; and

d) any test specimen that, on final examination shows evidence of charring within the filling (other than discoloration) more than 100 mm in any direction apart from upwards from the nearest part of the original position of the source.

NOTE — In practice it has been found that there is usually a clear distinction between materials that char under the influence of the ignition source but that do not propagate further (non-progressive) and those where smouldering develops in extent and spreads (progressive).

B-5.3 Flaming Ignition

The following types of specimens shall be considered as flaming ignition.

a) any test specimen that displays escalating flaming combustion behaviour so that it is unsafe to continue the test and forcible extinction is required;

b) any test specimen that burns until it is essentially concerned within the test duration;

c) any test specimen on which any flame front reaches the extremities of the specimen other than the top of the vertical part of the test specimen or passes through the full thickness of the specimen within the duration of the test;

d) for flaming ignition source 1 any test specimen that continues to flame for more than 10 min after ignition of the crib;

e) for flaming ignition source 2 any test specimen that continues to flame for more than 13 min after ignition of the crib; and

f) for all sources; any test specimen from which debris causes an isolated floor fire not meeting the requirements of items (d) or (e).

NOTE — It is recommended that composites which fail criterion (c), for example because the full thickness is penetrated by molten material rather than by flames, are tested as a complete item of furniture.

B-6 PROCEDURE

NOTE — For safety, all tests should be carried out in a suitably constructed enclosure.

B-6.1 Preparation

B-6.1.1 Ensure that the means of fire extinguishing are close to hand.

B-6.1.2 Open out the test rig and thread the covering fabric and, if used, the fabric inter-liner, behind the hinge bar so that the cut outs are aligned with the hinge bar.

B-6.1.3 Place the filling pieces under the covering fabric(s) and locate the filling pieces in the frame recesses.

B-6.1.4 Lock the frames are right angles by the bolts or pins ensuring that the filling components are not displaced. Fasten the fabric(s) over the top, bottom and sides of the frame using clips and secure the fabric(s) under even tension by allowing approximately 20 mm of fabric to wrap around the frame so that the edge of the fabric just contacts the expanded metal.

B-6.2 Wood Crib Tests (Ignition Sources 1 and 2)

B-6.2.1 Use a new specimen for each test. After the assembly of a crib (*see* **B-2.6.2**) and after conditioning (*see* **B-3**) it add slowly 1.4 ± 0.1 ml of propane-2-ol to the centre of the lint. Place the crib on the horizontal part in contact with the vertical part of the test specimen, centrally between the sides of the rig. The base sticks of the crib shall be parallel to the vertical surface of the test specimen.

B-6.2.2 Within 2 min of adding the propane-2-ol to the lint, ignite the alcohol from the front and above the lint, using a match, small gas flame or hot wire ignition, and simultaneously start the clock.

B-6.2.3 If the crib collapses causing embers to be scattered over a distance greater than 100 mm measured from the edge of the crib, repeat the test with a new crib placed in position on a new test specimen.

B-6.2.4 Observe for evidence of ignition (*see* **B-5**) in the interior and/or cover.

B-6.2.5 If flaming or progressive smouldering of the upholstery composites is observed (*see* **B-5**) extinguish

the test specimen and record ignition for the ignition source used.

B-6.2.6 If flaming or progressive smouldering of the upholstery composites is observed (*see* **B-5**) repeat the test. If flaming or progressive smouldering is not observed in this retest, record non-ignition for the ignition source used, unless the test specimen fails the final examination specified in **B-6.2.3**. In this case, extinguish the test specimen and record ignition.

B-7 FINAL EXAMINATION

As cases of progressive smouldering undetected from the outside have been reported, immediately after completion of the test programme on the test specimen, dismantle and examine the filling for progressive smouldering. If this is present, extinguish the test specimen and record ignition for the relevant ignition source. For safety reasons ensure that all smouldering has ceased before the rig is left unattended.

ANNEX C

(Foreword)

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This Indian Standard has been developed from Doc : No. TXD 05 (829).

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SLOVENSKI STANDARD
SIST EN 16139:2013

01-april-2013

Pohištvo - Trdnost, trajnost in varnost - Zahteve za sedežno pohištvo za javno uporabo

Furniture - Strength, durability and safety - Requirements for non-domestic seating

Möbel - Festigkeit, Dauerhaltbarkeit und Sicherheit - Anforderungen an Sitzmöbel für den Nicht-Wohnbereich

Mobilier - Résistance, durabilité et sécurité - Exigences applicables aux sièges à usage non domestique

Ta slovenski standard je istoveten z: EN 16139:2013

ICS:

97.140	Pohištvo	Furniture

SIST EN 16139:2013 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16139

March 2013

ICS 97.140

English Version

Furniture - Strength, durability and safety - Requirements for non-domestic seating

Mobilier - Résistance, durabilité et sécurité - Exigences applicables aux sièges à usage collectif

Möbel - Festigkeit, Dauerhaltbarkeit und Sicherheit - Anforderungen an Sitzmöbel für den Nicht-Wohnbereich

This European Standard was approved by CEN on 12 January 2013.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 16139:2013: E

Contents

Foreword

This document (EN 16139:2013) has been prepared by Technical Committee CEN/TC 207 "Furniture", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard has been developed as a merging project out of the following European Standards:

— EN 15373:2007, *Furniture – Strength, durability and safety – Requirements for non-domestic seating*

— EN 13761:2002, *Office furniture – Visitors chairs*

All requirements in EN 16139 are taken from these two standards, where the new test level 2 reflects test level 3 of EN 15373 and the new test level 1 reflects test level 2 of EN 15373 and the former EN 13761.

The correspondent test method standard for this document, EN 1728, was also under revision in the same time period. In order to avoid a further revision of EN 16139 for the alignment with EN 1728, this project was slowed down until the final draft of EN 1728 was available.

1 Scope

This European Standard specifies requirements for the safety, strength and durability of all types of non-domestic seating intended to be used by adults with a weight of not more than 110 kg, including office visitor chairs.

This European Standard does not apply to ranked seating, office work chairs, chairs for educational institutions, outdoor seating and to links for linked seating for which European Standards or drafts exist. It does also not apply to work chairs for industrial use.

This European Standard does not include requirements for the durability of upholstery materials, castors, reclining and tilting mechanisms and seat height adjustment mechanisms.

This European Standard does not include requirements for the resistance to ageing, degradation and flammability.

Annex A contains additional tests.

Annex B contains information on the level of test severity in relation to applications.

Annex C contains dimensional requirements for office visitor chairs.

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.

EN 1022, *Domestic furniture – Seating – Determination of stability*

EN 1335-2:2009, *Office furniture – Office work chair – Part 2: Safety requirements*

EN 1335-3:2009, *Office furniture – Office work chair – Part 3: Test methods*

EN 1728:2012, *Furniture – Seating – Test methods for the determination of strength and durability*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
accessible part
part to which access can easily be gained by the user when the seating is in its intended configuration of use and for which the probability of unintentional user contact is high

3.2
part accessible during setting up and folding
part to which access can only be gained when setting up and folding the furniture

3.3
shear and squeeze points
shear and squeeze points exist if the distance between two accessible parts moving relatively to each other is less than 25 mm and more than 8 mm for adults and children older than 3 years in any position during movement

3.4
castors
castors assembly comprising a housing, one or more wheels, an axle and, if required, accessories

3.5
leg rest
extension of the seat area intended to support the legs of the sitter

Note 1 to entry: A leg rest may or may not be permanently attached to the seat.

3.6
foot rail
component intended as an occasional support for the feet or to assist getting on and off a high chair or stool

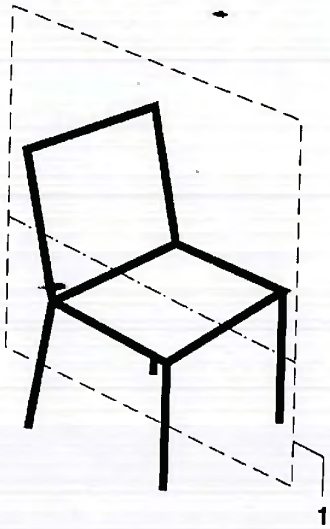
Note 1 to entry: A foot rail may be a part of the structure of the underframe of a chair or stool.

3.7
visitor chair
seating for one person used in the office environment additional to the office work chair

Note 1 to entry: It is used for meetings or consultations as well as for reading, writing, listening and waiting.

3.8
median plane
vertical plane passing through the geometric centre of the seat, dividing the seat from side to side into two equal parts

Note 1 to entry: See Figure 1.



Key

1 median plane

Figure 1 — Median plane

4 Safety

4.1 General

The seating shall be so designed as to minimise the risk of injury to the user.

All accessible parts (3.1) shall be so designed that physical injury and damage are avoided.

This requirement is met when:

a) accessible corners are rounded or chamfered;

b) the edges of the seat, back rest and arm rests which are in contact with the user when sitting in the chair are rounded or chamfered;

c) the edges of handles are rounded or chamfered in the direction of the force applied;

d) all other edges are free from burrs and rounded or chamfered;

e) the ends of hollow components are closed or capped.

Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided.

It shall not be possible for any load bearing part of the seating to come loose unintentionally.

All parts which are lubricated to assist sliding shall be designed to protect users from lubricant stains when in normal use.

4.2 Shear and squeeze points

4.2.1 Shear and squeeze points when setting up and folding

Unless 4.2.2 or 4.2.3 are applicable, shear and squeeze points that are created only during setting up and folding, including tipping seat actions, are acceptable, because the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately upon experiencing pain.

The edges of parts moving relative to each other and creating shear and squeeze points shall be as specified in 4.1.

4.2.2 Shear and squeeze points under influence of powered mechanism

With the exception of tipping seats there shall be no shear and squeeze points created by parts of the seating operated by powered mechanisms, e.g. springs and gas lifts.

4.2.3 Shear and squeeze points during use

There shall be no shear and squeeze points created by forces applied during normal use as well as during normal movements and actions, see Table 1.

4.3 Stability

4.3.1 General

The seating shall not overturn under the following conditions:

a) by pressing down on the front edge of the seat surface in the median plane (3.8);

GB 17927.2-2011 (GB17927.2-2011)

Standard ID	Contents [version]	USD	STEP2	[PDF] delivered in	Name of Chinese Standard	Status
GB 17927.2-2011	English	205	Add to Cart	0-9 seconds. Auto-delivery.	Upholstered furniture -- Assessment of the resistance to ignition of mattress and sofa -- Part 2: Match flame equivalent	Valid

Standards related to: GB 17927.2-2011

GB 17927.2-2011: PDF in English

GB 17927.2-2011
GB
NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA
ICS 97.140
Y 80
Upholstered furniture - Assessment of the resistance
to ignition of mattress and sofa -
Part 2: Match flame equivalent
(ISO 8191-2:1988, Furniture - Assessment of the ignitability of upholstered
furniture - Part 2: Ignition source: match flame equivalent, NEQ)
ISSUED ON: JUNE 16, 2011
IMPLEMENTED ON: DECEMBER 01, 2011
Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the PRC;
Standardization Administration of the PRC.
Table of Contents

Upholstered furniture - Assessment of the resistance
to ignition of mattress and sofa -
Part 2: Match flame equivalent
1 Scope
This Part of GB 17927 specifies the method and assessment rules for the test of the resistance to ignition of upholstered furniture by using an ignition source of match flame equivalent.
This Part is applicable to the test and assessment of the resistance to ignition

of upholstered furniture such as mattress and sofa used in public places. The test and assessment of the resistance to ignition of upholstered furniture unit can refer to it for implementation.

2 Terms and definitions

The following terms and definitions apply to this document.

2.1

Progressive smouldering

An exothermic oxidation reaction without flames. After being separated from the ignition source, it will spread by itself, sometimes accompanied by incandescent luminescence.

2.2

Flaming

A gaseous combustion process accompanied by luminescence.

2.3

Afterflame

The continuous flaming of the specimen after the ignition source is removed under the specified test conditions.

2.4

a) The afterglow characteristics gradually intensify on the specimen, which will endanger the safety if the test is continued; and effective fire extinguishing measures must be taken;

b) During the test, the upholstered part is almost completely ignited by afterglow;

c) During the test, the specimen is ignited to the end by afterglow; that is, the upper edge, lower edge, side, or the entire thickness of the specimen;

d) In the final inspection, in any direction except that closest to the top of the ignition source, outside the range of 100 mm away from the ignition source, any scorching phenomenon other than discoloration appears on the specimen.

However, any smouldering extinguished within 120 s after the ignition source is removed is not counted.

3.2 Flaming ignition

In this Part, the following conditions are regarded as flaming ignition:

a) The afterflame phenomenon gradually intensifies on the specimen, which will endanger the safety if the test is continued; and effective fire extinguishing measures must be taken;

b) During the test, the upholstered part is almost completely ignited by afterflame;

c) During the test, the front end of the combustion flame has reached the lower edge, side or through the entire thickness of the specimen.

However, any flaming extinguished within 120 s after the ignition source is removed is not counted.

4 Principle

Use a match flame equivalent as the ignition source to conduct an ignition test on the upholstered furniture, to determine the resistance to ignition of the whole upholstered part including the fabric, lining and filler of the specimen. However, the test results do not indicate the resistance to ignition of a certain constituent material.

5 Test safety facilities

5.1 Test room

The test room can be a room with a volume greater than 20 m3 (containing enough oxygen for the test), or a small space with ventilation facilities. The air flow rate, supplied by the air supply and exhaust system, around the test bench is 0.02 m/s~0.2 m/s. It shall contain enough oxygen and does not interfere with the combustion test.

5.2 Fire extinguishing device

Considering that certain material combinations may produce violent combustion during the test, it is necessary to provide sufficient effective fire extinguishing facilities.

6 Test apparatus

6.1 Timer

The timing range of the timer shall not be less than 1 h, with an accuracy of 1 s.

6.2 Ignition source system

Use butane, which is equivalent to a match flame, as the ignition source. The design of the ignition source can provide the heat equivalent to that of a burning match. The ignition source system includes:

a) Stainless steel combustion tube: One; the outer diameter is (8.0±0.1)mm; the inner diameter is (6.5±0.1)mm; the length is (200±5)mm;

b) Hose: The length shall be 2.5 m~3 m; the inner diameter shall be (7±1)mm; it shall be connected to the stainless steel combustion tube;

c) Flow control system: It includes a flowmeter, fine-tuning valve, on-off valve, and pressure-regulating valve; is connected to the butane cylinder. The flow rate calibrated by the flowmeter shall be able to meet the requirement

of measuring the flow of butane gas at 25 °C to be (45±2)mL/min. The nominal output pressure provided by the system is 2.8 kPa.

Note 1: A stainless steel combustion tube similar in size to a) can also be used. However, within the 50 mm length of the combustion tube from the nozzle (flame port), the inner and outer diameters must be machined to reach the specified size.

in the groove of the quilting line, or on the button for testing. At the same time, start the timer to start timing. The combustion tube shall be placed in horizontal contact with the specimen. After the combustion tube burns on the specimen for (15±1)s, it is carefully moved away from the test part, to terminate the ignition.

8.3.2 Sofa

Place the combustion tube along the joint between the seat cushion and the backrest of the sofa; or place it in other parts where the sofa is most likely to be ignited, e.g. local depressions such as the inner side of the seam and the pits of the quilting line. And make the distance between the ignition source and the two ends of the specimen or the trace left by the previous test at least 50 mm. At the same time, start the timer to start timing. After the combustion tube burns on the specimen for (15±1)s, it is carefully moved away from the test part, to terminate the ignition.

8.4 Observation and recording of the combustion process

Observe and record all afterflame or afterglow on the surface and inside of the specimen. Any combustion phenomena such as afterflame or afterglow, which extinguish themselves within 120 s after the combustion tube is removed, need not be recorded.

If after the combustion tube is removed for 120 s and up to 1 h, afterflame or afterglow is observed, it indicates that the specimen has not passed the test of resistance to ignition by a match flame equivalent. The test shall be stopped immediately for fire extinguishing treatment. Record the elapsed time from placing the ignition source to extinguishing the ignited specimen; complete the test report.

If no afterflame or afterglow is found within 1 h, these phenomena shall be recorded. And in other positions that meet the requirements of 8.3.1 or 8.3.2, repeat the above test. If there is still no afterflame or afterglow phenomenon, it shall be recorded; and carry out the final inspection of the specimen.

8.5 Final inspection

Carefully check the surface and interior of the specimen for any undetected afterflame or afterglow phenomenon. If so, immediately extinguish the specimen. And measure the range of the burned part; record the range (maximum length, width and depth) of the burned part (horizontal, vertical) in mm.

For safety reasons, the test personnel shall ensure that, before leaving, the specimen is completely extinguished.

8.6 Assessment of resistance to ignition

When the test and inspection are carried out in accordance with the provisions of 8.3, 8.4 and 8.5, if the combustion tube is removed for 120 s and up to 1 h, and no afterflame or afterglow phenomenon is observed on the surface or inside of the specimen; the specimen is regarded as resistance-to-ignition level II and to pass the test of resistance to ignition by a match flame equivalent. Otherwise, the specimen is regarded not to pass the test of resistance to ignition by a match flame equivalent; and record the range of the burned part.

Note: Refer to Appendix B for the test procedure.

9 Product identification

The manufacturer shall identify the resistance-to-ignition level of the product.

10 Test report

The test report shall include the following:

1) The standard name and standard number used in the test;

2) A brief description of the structure of the specimen;

3) The type of ignition source;

4) Whether the specimen is ignited each test. Carry out the test according to 8.4; if the repeated test finds afterflame or afterglow, the overall result is assessed as "failing the test of resistance to ignition by a match flame equivalent". According to the final inspection of 8.5, if afterflame or afterglow phenomenon is found, the result is also assessed as "failing the test of resistance to ignition by a match flame equivalent";

5) Record the range (length, width, and depth) of the burned part (horizontal, vertical) of each test;

6) Fire extinguishing measures for each test;

7) Specimen pretreatment environment, time, test environment;

8) Typical characteristics of combustion: Such as melting, dripping, scorching, the development process from afterglow to afterflame;

9) The time of the main items, such as the time for specimen afterflame or afterglow, the time for the fabric to crack, and the time for the specimen to

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INTERNATIONAL STANDARD

ISO 8191-1

First edition
1987-02-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Furniture — Assessment of the ignitability of upholstered furniture —

Part 1:
Ignition source: iTeh STANDARD PREVIEW

Ameublement — Évaluation de l'allumabilité des meubles rembourrés —

Partie 1: Source d'allumage: cigarette en combustion

Reference number
ISO 8191-1 : 1987 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8191-1 was prepared by Technical Committee ISO/TC 136, *Furniture*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Printed in Switzerland

Furniture — Assessment of the ignitability of upholstered furniture —

Part 1: Ignition source: smouldering cigarette

0 Introduction

This part of ISO 8191 is one of a series of standards concerned with the ignitability of upholstered furniture using different ignition sources. The ignition source used in this part is a smouldering cigarette.

It is the intention to publish further parts utilizing a series of flaming ignition sources of increasing severity. Part 2 will use a gas flame representing a match equivalent flame as the first step in the series and it is anticipated that later parts will extend the range by using larger gas flames and either wooden cribs or filled paper bags.

1 Scope and field of application

This part of ISO 8191 lays down a method of test for assessing the ignitability of material combinations, such as covers and fillings used in upholstered seating when subjected to a smouldering cigarette as an ignition source.

The tests measure only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporating these materials. They give an indication of, but cannot guarantee, the ignition behaviour of the finished item of furniture.

2 Reference

ISO 139, *Textiles — Standard atmospheres for conditioning and testing.*

3 Definitions

For the purposes of this part of ISO 8191, the following definitions apply.

3.1 progressive smouldering: Exothermic oxidation, not accompanied by flaming, that is self-propagating, i.e. independent of the ignition source. It may or may not be accompanied by incandescence.

3.2 flaming: Undergoing combustion in the gaseous phase with the emission of light.

4 Criteria of ignition

4.1 Progressive smouldering ignition

For the purposes of this part of ISO 8191, all the following types of behaviour are considered to be progressive smouldering ignitions:

a) any test assembly that displays escalating combustion behaviour so that it is unsafe to continue the test and requires active extinction;

b) any test assembly that smoulders until it is essentially consumed within the test duration;

c) any test assembly that smoulders to the extremities of the specimen, viz upper or lower margins, either side or to its full thickness, within the duration of the test;

d) any test assembly that, on final examination, shows evidence of charring other than discoloration, for more than 100 mm in any direction apart from upwards from the nearest part of the original position of the source.

NOTE — In practice it has been found that there is usually a clear distinction between materials which may char under the influence of the ignition source but which do not propagate further (non-progressive combustion) and those where smouldering develops in extent and spreads (progressive combustion).

4.2 Flaming ignition

For the purposes of this part of ISO 8191, all the following types of behaviour are considered to be flaming ignitions:

a) any test assembly that displays escalating combustion behaviour so that it is unsafe to continue the test and requires active extinction;

b) any test assembly that burns until it is essentially consumed within the test duration;

c) any test assembly on which any flame front reaches the lower margin, either side or passes through its full thickness within the duration of the test.

5 Principle

Subjecting an assembly of upholstery materials to a smouldering cigarette ignition source. The assembly is arranged to represent in stylized form a junction between a seat and back (or

seat and arm) such as might occur in a typical chair. Determination of the ignitability of an assembly by applying smoker's material such as a cigarette. The test method measures the ignitability of the overall composite of materials, i.e. cover(s), interliner, infill material, etc., as constructed on the test rig. The results shall not be stated as being applicable to the general behaviour of any individual component (see also annex A).

6 Health and safety of operators

6.1 General

The test method specified in this part of ISO 8191 presents a considerable hazard; suitable precautions shall be taken.

6.2 Enclosure

For safety, the tests should be conducted in a non-combustible fume cupboard. If such a cupboard is not available, an enclosure should be constructed so that the operator is protected from the fumes.

6.3 Extinguishers

Adequate means of extinguishing the assembly should be provided bearing in mind that some combinations can show severe flaming during the test. A hand sprayer or mister with water spray which can be directed over the burning area can be useful. Other means such as fire extinguishers (dry powder or halogenated hydrocarbons), fire blankets and a bucket of water will assist.

In some cases smouldering may burn completely and complete immersion in water may be necessary.

7 Apparatus

7.1 Test rig

A suitable test rig is illustrated in figures 1 and 2. It shall consist of two rectangular frames hinged together and capable of being locked at right angles to each other.

The frames shall be made from nominal 25 mm × 3 mm steel flat bar and shall securely hold mesh steel platforms set 6 ± 1 mm below the top edge of the frames (mesh size should be such that an open mesh area of approximately 15 to 150 mm^2 exists).

The internal width and height of the back frame shall be 450 ± 2 mm × 300 ± 2 mm and the width and depth of the base frame 450 ± 2 mm × 150 ± 2 mm. A standard edging section may be used around the mesh steel platform to give protection and greater rigidity.

The sides of the frame shall extend beyond the back of each frame to provide for the hinge holes and to form the back legs. The hinge rod shall be of nominal 10 mm diameter steel, continuous across the back of the rig and its axis 22,5 ± 0,5 mm beyond the back member of each frame.

The frames shall be lockable at right angles by a bolt or pin through each of the pairs of members forming the back legs. The front legs may be welded across the front corners of the base frame. The height of the legs shall be such as to leave a gap not less than 50 mm high between the base and frame and the supporting surface.

For the tests the rig shall be sited within the enclosure (see 6.2) and the testing shall be performed in a basically draught-free environment permitting an adequate supply of air and removal of smoke from the area of the apparatus.

7.2 Test enclosure

The test enclosure shall consist of either a room with a volume greater than 20 m^3 (which contains adequate oxygen for testing) or a smaller enclosure with a through flow of air. Inlet and extraction systems providing air flow rates of 0,02 to 0,2 m/s in the locality of the rig provide adequate oxygen without disturbing the burning behaviour.

7.3 Clock

The clock shall be capable of measuring to at least 1 h with an accuracy of 1 s.

7.4 Ignition source: smouldering cigarette

... complying with the following requirements shall be used:

length: 70 ± 4 mm

diameter: 8 ± 0,5 mm

The smouldering rate shall be 12,0 ± 3,0 min/50 mm, when tested as follows.

Mark the cigarette, conditioned as described in 8.1, at 5 mm and 55 mm from the end to be lit. Light it as described in 10.2 and impale it horizontally in air (draught 0,02 to 0,2 m/s) on a horizontal wire spike inserted not more than 13 mm into the unlit end. Record the time taken to smoulder from the 5 mm to the 55 mm mark.

8 Atmospheres for conditioning and testing

(see also ISO 139)

8.1 Conditioning

The materials to be tested and the cigarettes shall be conditioned for 16 h immediately before the test in one of the following atmospheres:

a) temperature: 20 ± 2 °C
relative humidity: (65 ± 2) %

b) temperature: 23 ± 2 °C
relative humidity: (50 ± 5) % } (preferred)

c) temperature: 27 ± 2 °C
relative humidity: (65 ± 5) %

d) any other conditioning atmosphere as agreed by the parties concerned.

8.2 Testing

The test shall be carried out in an atmosphere having a temperature between 10 and 30 °C and a relative humidity between 15 % and 80 %.

9 Test assembly

9.1 General

The test assembly materials shall be representative samples of the cover, filling and other components such as any interliner, which may be used in a real assembly.

NOTE — The test assemblies may be made up with identical materials in the horizontal and vertical sections.

9.2 Cover material and interliner

9.2.1 Rig cover material

The cover size needed for each test shall be 800 $^{+10}_{0}$ mm × 650 $^{+10}_{0}$ mm.

The long dimension shall be cut parallel to the machine direction. The cover may be constructed from [illegible] material provided that the location of the resulting seams does not occur within 100 mm of the area likely to be affected by the test.

The cover shall have cut-outs 325 mm from one end on both sides. The cut-outs shall be positioned so that when assembled on the test rig, the lay of the pile is down the back assembly and from the hinge to the front of the base frame. The size of these cut-outs shall be approximately 50 mm base width × 100 mm height × 25 mm top width.

Where fabric interliner is used, it shall be cut to the same dimensions, and in the same orientation as the cover, for fitting to the test rig under the cover.

9.3 Upholstery filling

Two test assemblies are necessary for each test, with the following dimensions:

a) one piece 450 ± 5 mm × 300 ± 5 mm × 75 ± 2 mm thick;

b) one piece 450 ± 5 mm × 150 ± 5 mm × 75 ± 2 mm thick.

Some cushioning assemblies may consist of several layers that may be typically felt, wadding or different foams. Where the total thickness exceeds 75 mm, reproduce the upper 75 mm of the cushioning assembly except that the upper layer(s) shall not be continued over and round the edges of the assembly.

Where the filling is less than 75 mm thick, the test assembly shall be built up to the required thickness by adding a further layer of the bottom material to the underside.

Some kinds of loose packing materials (e.g. foam crumb, feathers) may be evaluated by this method of test. In these cases the loose packing shall be built up beneath the covering materials to reproduce the 75 mm thickness of the assembly at a realistic packing density. Where necessary, a finer grid material or air-porous fabric may be laid over the expanded metal of the test rig to retain the filling.

If used, the loose infill is enclosed in an interlining (or ticking); it is acceptable to make up two bags of the interlining suitably filled and to the overall dimensions given above for use as the upholstery filling beneath the cover(s).

The method is unsuitable and cannot be used with composites where the loose infill material flows out of the assembly during the test and either extinguishes, moves, or adversely affects the burning of the ignition source.

10 Test procedure

10.1 Preparation

10.1.1 Open out the test rig and thread the cover fabric and fabric interliner, if any, behind the hinge bar.

10.1.2 Place the filling samples under the covering fabric, locating them in the frame recesses.

10.1.3 Allow a 20 mm overlap on the inside of the frame, and fasten the fabric over the top, bottom and sides using clips.

NOTE — This action places the cover under some tension and it may be found easier to carry out if the frames are folded together to compress the upholstery partially.

10.1.4 Ensure that the fabric is secure and under even tension. Then lock the frames at right angles by the bolts or pins.

10.2 Ignition source application

10.2.1 Light a cigarette and draw air through it until the tip glows brightly. Not less than 5 mm and not more than 8 mm of the cigarette shall be consumed in this operation.

10.2.2 Position the smouldering cigarette along the junction between the vertical and horizontal test assemblies so that the cigarette is not less than 50 mm from the nearest side edge, or from any marks left by any previous test and simultaneously start the clock.

10.2.3 Observe the progress of combustion, and record any evidence of progressive smouldering or flaming in the interior and/or cover.

NOTE — The detection of smouldering may be difficult and is eased by watching for smoke emerging at points at a distance from the cigarette. Smoke is most easily viewed by looking down a rising column by means of a mirror.

10.2.4 If progressive smouldering (see 3.1) or flaming (see 3.2) of the upholstery components is observed at any time within 1 h of placing the cigarette, extinguish the test assembly and record this, together with the time elapsed between placing and extinguishing. In these circumstances discontinue testing and complete the test report (see clause 11).

If progressive smouldering or flaming is not observed within the 1 h period, or if the cigarette fails to smoulder its complete length, record this and repeat the test with a new cigarette placed in a fresh position not less than 50 mm from any previous test damage. If progressive smouldering or flaming is not observed in this retest or if the cigarette fails to smoulder its complete length, record this and carry out the final examination (see 10.3).

NOTE — If preferred this repeat test may be carried out concurrently with the first test.

10.3 Final examination

10.3.1 Measure the extent of the damage in millimetres (maximum length, width and depth) of the assemblies tested.

10.3.2 Cases of progressive smouldering undetected from the outside have been reported. Immediately after completion of the test programme on the assembly, dismantle and examine it internally for progressive smouldering. Extinguish the test assembly, and record a failed result for the relevant test source. For safety reasons ensure that smouldering has ceased before the rig is left unattended.

11 Test report

The test report, using the form shown in annex B, shall give the following information:

a) a reference to this part of ISO 8191;

b) whether ignition occurred in each test. If only two tests have been run yielding one ignition and one non-ignition, the overall result is taken as ignition;

c) for each test, the extent of the damage in millimetres (in length, width, depth) for the horizontal and vertical assembly;

d) for each test, the burning time of the cigarette, whether the cigarette failed to smoulder to its full length, and whether the test assembly was extinguished, or if the test assemblies were found to be smouldering when dismantled.

The report shall contain details of any features of the test assemblies or procedures that may have affected the results. Such features are:

e) conditioning of the test assembly, including the atmosphere (see 8.1);

f) special features of burning, for example melting, dripping, flaming, emission of flames from smouldering;

g) times of major events, for example ignition of test assemblies, cover splitting, extinction.

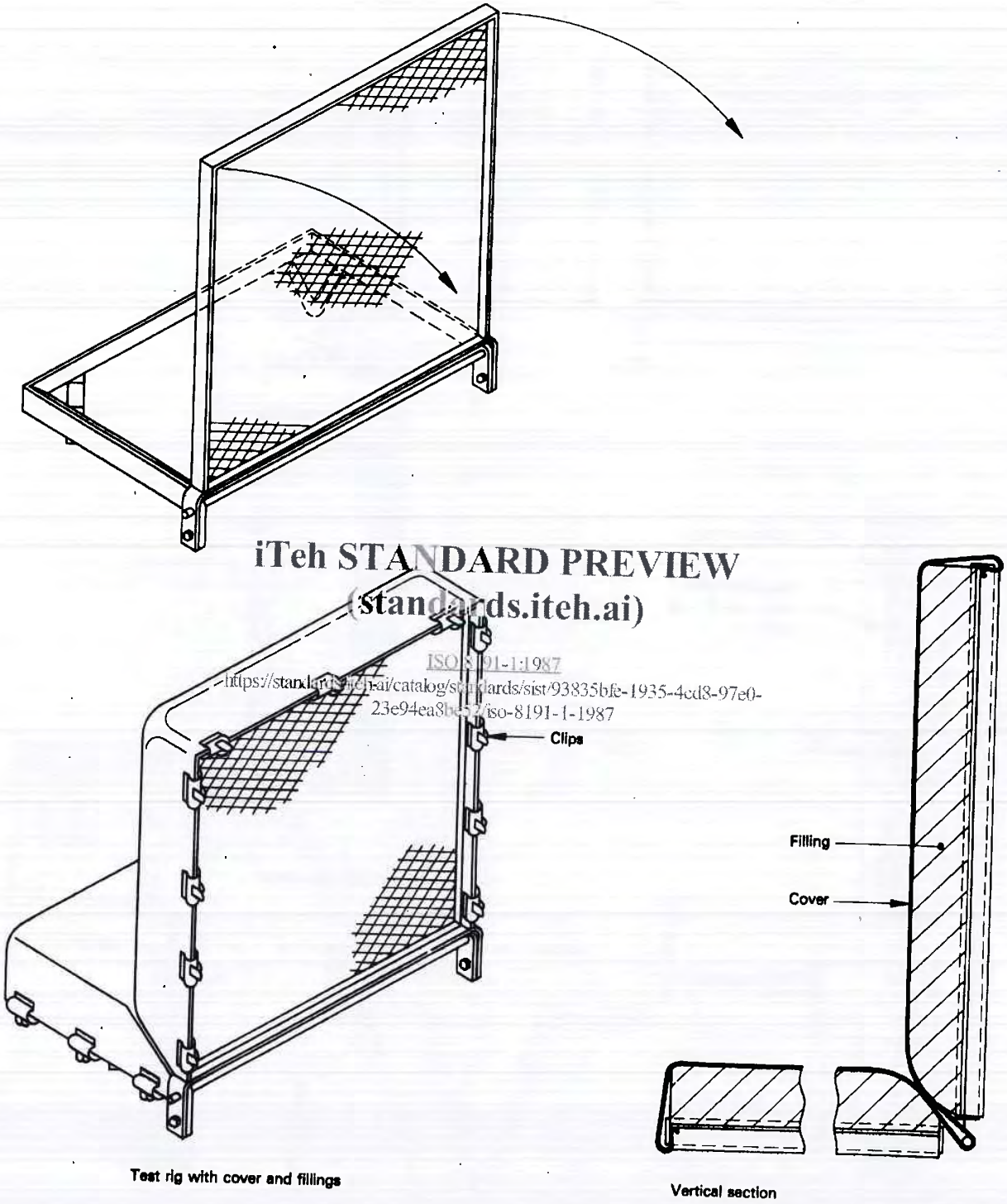
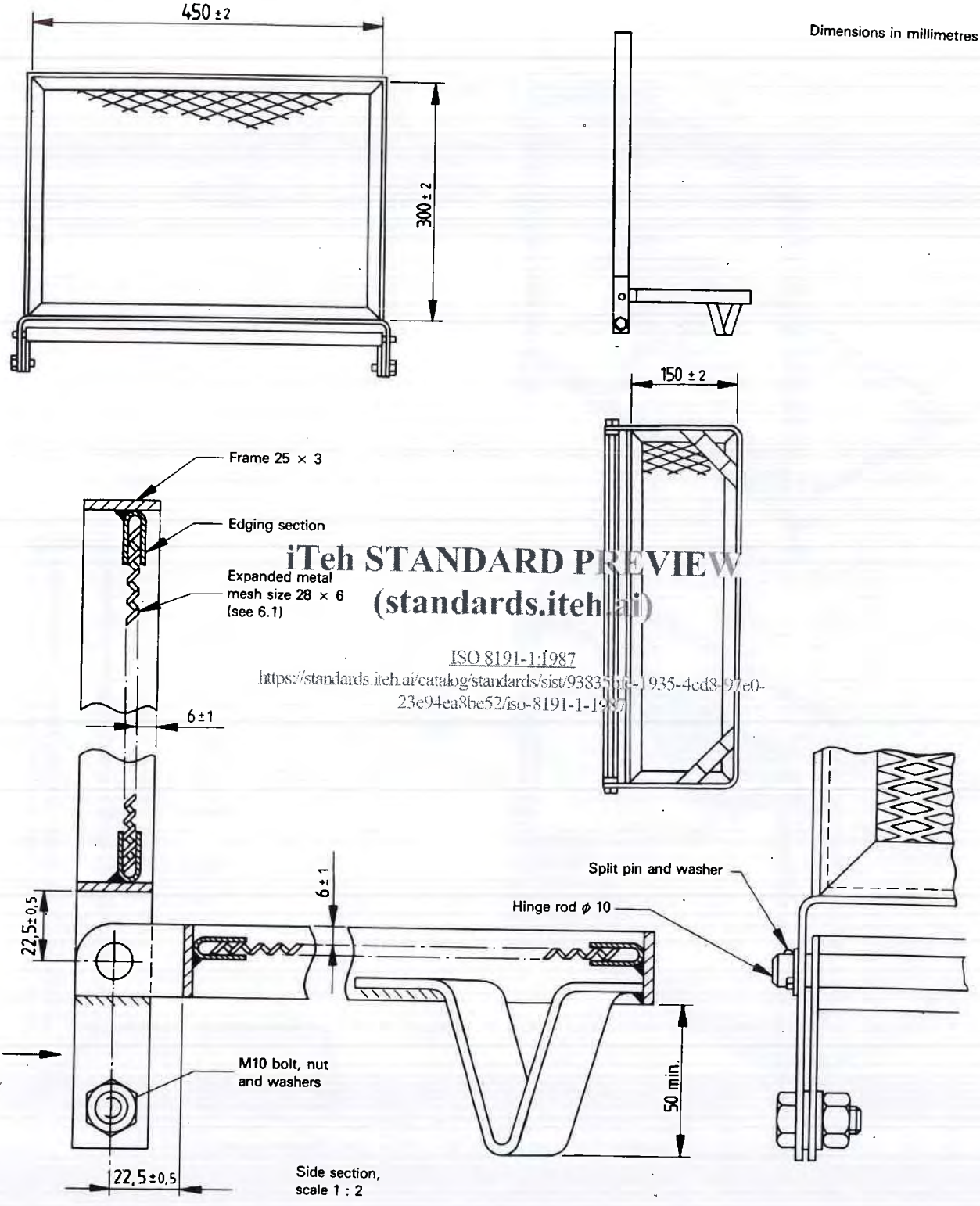


Figure 1 — Test rig assembly

Dimensions in millimetres



NOTES

1 Unless tolerances are indicated, dimensions are nominal.

2 All parts are of steel.

Figure 2 — Test rig detail

Annex A

Guidance notes for designers and specifiers

A.1 This part of ISO 8191 lays down methods for examining the ignitability, in defined circumstances, of an assembly of upholstery materials. These materials are combined together in a way intended to be generally representative of their end use in upholstered seating and the ignition sources are selected so that most may be related to everyday sources.

Thus the potential ignitability of a particular cover, filling and interliner in combination can be assessed.

However, there are two important limitations, as follows:

a) The tests are concerned only with ignitability, and any controls of fire hazard have to consider, in addition, other aspects of fire performance such as rate of fire development, heat output, rate and quantity of smoke production and toxic gas evolution. Ideally, any attempts to reduce ignitability ought not to affect these other properties adversely.

b) The limitation detailed [illegible] design features of the furniture can greatly affect its fire properties; any ignitability tests of a piece of furniture will therefore need to be carried out on the actual item and not on component materials or mock-ups. However, limited information on ignitability more specifically related to an intended design may be obtained as indicated in clauses A.2 and A.3.

A.2 This part of ISO 8191 lays down laboratory tests for an assembly of materials which will give general guidance on the ignitability of finished furniture, but where more specific information is required, for example tip-up seats or in critical areas of end use, the principles may be applied to complete items or sub-assemblies of furniture or to suitably modified test assemblies, some examples of which are given below. In such cases the source described in 7.4 may be applied at positions which, as a general rule, correspond to those where the hazard of ignition occurs in use.

Example 1

If a chair has a gap between the seat and back cushions, the placing of ignition sources in the angle of the test apparatus is inappropriate. Instead, face ignition, where the source is placed on the horizontal and vertical surfaces, is more meaningful.

Example 2

The test apparatus may be used to model the junction of any vertical and horizontal surfaces so that both arm and back constructions, if different, may be tested separately in conjunction with the seat.

[illegible] ferent materials in a back and seat of a chair may be reproduced in the test, two different cover fabrics being joined by sewing or with staples behind the hinge bar.

A.3 The ability of a cover material to provide protection against ignition can be indicated by testing it in a combination with a substrate of known flammability. Similarly, the role of a filling can be established by using it in conjunction with covers with different types of behaviour. Such information about the individual materials does not eliminate the need to test the actual combination, but it can help in the short-listing of material combinations and so reduce the overall amount of testing required.

INTERNATIONAL STANDARD

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Furniture — Assessment of ignitability of upholstered furniture —

Part 2: Ignition source: match-flame equivalent

Ameublement — Évaluation de la facilité d'allumage des meubles rembourrés —

Partie 2: Source d'allumage: flamme si[illegible]

Reference number
ISO 8191-2 : 1988 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8191-2 was prepared by Technical Committee ISO/TC 136, *Furniture*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Printed in Switzerland

Furniture — Assessment of ignitability of upholstered furniture —

Part 2:
Ignition source: match-flame equivalent

0 Introduction

This part of ISO 8191 is one of a series of standards concerned with the ignitability of upholstered furniture using various ignition sources.

The ignition source used in this part of ISO 8191 is a gas flame which is equivalent to a match flame.

The three annexes contained in this part of ISO 8191 do not form integral parts of the Standard.

1 Scope and field of application

This part of ISO 8191 lays down a test method to assess the ignitability of material combinations, such as covers and fillings used in upholstered seating, when subjected to a small flame as an ignition source.

The tests measure only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporating these materials. They give an indication of, but cannot guarantee, the ignition behaviour of the finished item of furniture.

2 Reference

ISO 139, *Textiles — Standard atmospheres for conditioning and testing.*

3 Definitions

For the purposes of this part of ISO 8191, the following definitions apply.

3.1 progressive smouldering: Exothermic oxidation, not accompanied by flaming, that is self-propagating, i.e. independent of the ignition source. It may or may not be accompanied by incandescence.

3.2 flaming: Undergoing combustion in the gaseous phase with the emission of light.

4 Criteria of ignition

4.1 Progressive smouldering ignition

For the purposes of this part of ISO 8191, all the following types of behaviour are considered to be progressive smouldering ignitions:

a) any test assembly that displays escalating combustion behaviour so that it is unsafe to continue the test and active extinction is necessary;

b) any test assembly that smoulders until it is essentially consumed within the test duration;

c) any test assembly that smoulders to the extremities of the specimen, viz upper or lower margins, either side or to its full thickness, within the duration of the test;

d) any test assembly that, on final examination, shows evidence of charring other than discoloration, for more than 100 mm in any direction apart from upwards from the location closest to the position of the source.

Disregard any smouldering which ceases within 120 s after removal of the burner tube.

NOTE — In practice it has been found that there is usually a clear distinction between materials which may char under the influence of the ignition source but which do not propagate further (non-progressive combustion) and those where smouldering develops in extent and spreads (progressive combustion).

4.2 Flaming ignition

For the purposes of this part of ISO 8191, all the following types of behaviour are considered to be flaming ignitions:

a) any test assembly that displays escalating combustion behaviour so that it is unsafe to continue the test and active extinction is necessary;

b) any test assembly that burns until it is essentially consumed within the test duration;

c) any test assembly on which any flame front reaches the lower margin, either side or passes through its full thickness within the duration of the test.

Disregard any flaming which ceases within 120 s after removal of the burner tube.

5 Principle

To subject an assembly of upholstery materials to a match-flame equivalent ignition source. The assembly is arranged to represent in stylized form a junction between a seat and back (or seat and arm) such as might occur in a typical chair. Determination of the ignitability of an assembly by applying smoker's material such as a match-flame equivalent. The test method measures the ignitability of the overall composite of materials, i.e. cover(s), interliner, infill material, etc., as constructed on the test rig. The results shall not be stated as being applicable to the general behaviour of any individual component (see also annex A).

6 Health and safety of operators

6.1 General

The test method specified in this part of ISO 8191 presents a considerable hazard; suitable precautions shall be taken.

6.2 Enclosure

For safety, the tests should be conducted in a fume cupboard. If such a cupboard is not available, a test enclosure should be constructed (see 7.2) so that the operator is protected from the fumes.

6.3 Extinguishers

Adequate means of extinguishing the assembly should be provided, bearing in mind that some combinations may produce severe flaming during the test. A hand and/or a fixed water spray which can be directed over the burning area can be useful. Other means such as fire extinguishers (water and halogenated hydrocarbons), fire blankets and a bucket of water will assist.

In some cases smouldering may be difficult to extinguish completely and complete immersion in water may be necessary.

7 Apparatus

7.1 Test rig

A suitable test rig is illustrated in figures 1 and 2. It shall consist of two rectangular frames hinged together and capable of being locked at right angles to each other.

The frames shall be made from nominal 25 mm × 3 mm flat steel bar and shall securely hold mesh steel platforms set 6 ± 1 mm below the top edge of the frames (mesh size should be such that an open mesh area of approximately 15 to 150 mm^2 exists).

The internal width and height of the back frame shall be 450 ± 2 mm × 300 ± 2 mm and the width and depth of the base frame 450 ± 2 mm × 150 ± 2 mm. A standard edging section may be used around the mesh steel platform to give protection and greater rigidity.

The sides of the frames shall extend beyond the back of each frame to provide for the hinge holes and to form the back legs. The hinge rod shall be of nominal 10 mm diameter steel, continuous across the back of the rig and its axis 22,5 ± 0,5 mm beyond the back member of each frame.

The frames shall be lockable at right angles by a bolt or pin through each of the pairs of members forming the back legs. The front legs may be welded across the front corners of the base frame. The height of the legs shall be such as to leave a gap not less than 50 mm high between the lower surface of the base frame and the supporting surface.

For the tests the rig shall be sited within the enclosure (see 6.2) and the testing shall be performed in a basically draught-free environment permitting an adequate supply of air and removal of smoke from the area of the apparatus.

7.2 Test enclosure

The test enclosure shall consist of either a room with a volume [illegible] contains adequate oxygen for testing) or a smaller enclosure with a through flow of air. Inlet and extraction systems providing air flow rates of 0,02 to 0,2 m/s in the locality of the rig provide adequate oxygen without disturbing the burning behaviour.

7.3 Clock

The clock shall be capable of measuring for a period of at least 1 h with an accuracy to 1 s.

7.4 Ignition source: gas-flame ignition source 1, which is a match-flame equivalent

NOTE — This source has been designed to give a calorific output approximating to that of a burning match. It is envisaged that larger flaming ignition sources will be covered by further parts of ISO 8191.

A burner tube consisting of a length of stainless steel tube (8 ± 0,1 mm outside diameter, 6,5 ± 0,1 mm internal diameter and 200 ± 5 mm in length) is connected by flexible tubing to a cylinder containing propane or butane via a flowmeter, fine control valve, on-off valve (optional) and cylinder regulator providing an outlet pressure of nominal 2,8 kPa[1)].

NOTE — Where tubing of these dimensions is not readily available, stainless steel tubing of approximately similar dimensions may be used provided that the 50 mm length at the "flame" end of the tube is machined to the given size.

The flowmeter shall be calibrated to supply a propane or butane gas flow rate at 25 °C of 45 ± 2 ml/min. The flexible tubing connecting the output of the flowmeter to the burner tube shall be 2,5 to 3 m in length with an internal diameter of 7 ± 1 mm.

1) 1 kPa = 10^3 N/m^2 = 10 mbar

7.5 Gas flow control

It is essential that the rate of supply of gas to the burner tube conforms to the flow rate specified. Some difficulties have been reported with the supply and measurement of the gas, particularly where the gas cylinder has, of necessity, to be stored in an environment cooler than the defined test conditions and/or at some distance from the test rig.

In these cases, and other situations where difficulties occur, it is important that there should be a sufficient length of tubing inside the controlled environment (10 to 30 °C) to ensure that the gas equilibrates to the required temperature before flow measurement. One way to assist this is to pass the gas (before flow measurement) through a metal tube immersed in water maintained at 20 °C (which is one of the temperatures specified for a stated flow of gas) so that flow corrections for temperature variations can be avoided.

Great care also needs to be exercised with the measurement and setting of the flow rate of the gas. Direct reading flowmeters, even those obtained with a direct gas calibration, need to be checked when initially installed and also at regular intervals during testing by a method capable of accurately measuring the absolute gas flow at the burner tube. One way of doing this is to connect the burner tube with a short length of tubing (about 7 mm inside diameter) to a soap bubble flowmeter, such that the upward passage of a soap bubble meniscus in a glass tube of calibrated volume (e.g. a burette) over a known period of time gives an absolute measurement of the flow.

8 Atmospheres for conditioning and testing

(see also ISO 139).

8.1 Conditioning

The materials to be tested shall be conditioned for 16 h immediately before the test in one of the following atmospheres:

a) temperature: 20 ± 2 °C
relative humidity: (65 ± 2) %

b) temperature: 23 ± 2 °C
relative humidity: (50 ± 5) % (preferred)

c) temperature: 27 ± 2 °C
relative humidity: (65 ± 5) %

d) any other conditioning atmosphere as agreed by the parties concerned.

8.2 Testing

The test shall be carried out in an atmosphere having a temperature between 10 and 30 °C and a relative humidity between 15 % and 80 %.

9 Test assembly

9.1 General

The test assembly materials shall be representative samples of the cover, filling and other components, such as any interliner, which may be used in a real assembly.

NOTE — The test assemblies may be made up with identical materials in the horizontal and vertical sections.

9.2 Cover material and interliner

9.2.1 Rig cover material

The cover size needed for each test shall be $800\ ^{+10}_{0}$ mm × $650\ ^{+10}_{0}$ mm.

The long dimension shall be cut parallel to the machine direction. The cover may be constructed from smaller pieces of material provided that the location of the resulting seams does not occur within 100 mm of the area likely to be affected by the test.

The cover shall have cut-outs 325 mm from one end on both sides. The cut-outs shall be positioned so that when assembled on the test rig, the lay of the pile is down the back assembly and from the hinge to the front of the base frame. The size of these cut-outs shall be approximately 50 mm base width × 100 mm height × 25 mm top width.

Where fabric interliner is used, it shall be cut to the same dimensions, and in the same orientation as the cover, for fitting to [illegible] cover.

9.3 Upholstery filling

Two test assemblies are necessary for each test, with the following dimensions:

a) one piece 450 ± 5 mm × 300 ± 5 mm × 75 ± 2 mm thick;

b) one piece 450 ± 5 mm × 150 ± 5 mm × 75 ± 2 mm thick.

Some cushioning assemblies may consist of several layers that may be typically felt, wadding or various foams. Where the total thickness exceeds 75 mm, reproduce the upper 75 mm of the cushioning assembly except that the upper layer(s) shall not be continued over and round the edges of the assembly.

Where the filling is less than 75 mm thick, the test assembly shall be built up to the required thickness by adding a further layer of the bottom material to the underside.

Some kinds of loose packing materials (e.g. foam crumb, feathers) may be evaluated by this test method. In these cases the loose packing shall be built up beneath the covering materials to reproduce the 75 mm thickness of the assembly at a realistic packing density. Where necessary, a finer grid material or air-porous fabric may be laid over the expanded metal of the test rig to retain the filling.

If used, the loose infill is enclosed in an interlining (or ticking); it is acceptable to make up two bags of the interlining suitably filled and to the overall dimensions given above for use as the upholstery filling beneath the cover(s).

The method is unsuitable and cannot be used with composites where the loose infill material flows out of the assembly during the test and either extinguishes, moves, or adversely affects the burning of the ignition source.

10 Test procedure

10.1 Preparation

10.1.1 Open out the test rig and thread the cover fabric and fabric interliner, if any, behind the hinge bar.

10.1.2 Place the filling samples under the covering fabric, locating them in the frame recesses.

10.1.3 Allow a 20 mm overlap on the inside of the frame, and fasten the fabric over the top, bottom and sides using clips.

NOTE — This action places the cover under some tension and it may be found easier to carry out if the frames are folded together to compress the upholstery partially.

10.1.4 Ensure that the fabric is secure and under even tension. Then lock the frames at right angles by the bolts or pins.

10.2 Ignition source application

10.2.1 Light the gas emerging from the burner tube, adjust the gas flow to the specified rate (see 7.4) and allow the flame to stabilize for at least 2 min.

10.2.2 Position the burner tube axially along the joint between the seat and back so that the flame is not less than 50 mm from the nearest side, edge, or from any marks left by any previous test, and simultaneously start the clock.

10.2.3 Allow the gas to burn for a period of 20 ± 1 s, then terminate the ignition process by carefully removing the burner tube from the test piece.

10.2.4 Observe the progress of combustion, and record any evidence of progressive smouldering or flaming in the interior and/or cover. Disregard any flames, afterglow, smoking or smouldering that cease within 120 s of the removal of the burner tube.

10.2.5 If progressive smouldering (see 3.1) or flaming (see 3.2) of the upholstery components is observed after 120 s from the removal of the burner tube, up to 1 h after the application of the ignition source, extinguish the test assembly and record this. In these circumstances discontinue testing and complete the test report (see clause 11).

If progressive smouldering or flaming is not observed within the 1 h period, repeat the test in a fresh position not less than 50 mm from any previous test damage. If progressive smouldering or flaming is not observed in this retest, record this and carry out the final examination (see 10.3).

NOTE — If preferred this repeat test may be carried out concurrently with the first test.

10.3 Final examination

10.3.1 Measure the extent of the damage in millimetres (maximum length, width and depth) of the test assemblies.

10.3.2 Cases of progressive smouldering undetected from the outside have been reported. Immediately after completion of the test programme on the assembly, dismantle and examine it internally for progressive smouldering. If this is found, extinguish the test assembly, and record a failed result for the relevant test source. For safety reasons ensure that all smouldering has ceased before the rig is left unattended.

11 Test report

The test report, of which the form shown in annex B is an example, shall give the following information:

a) a reference to this part of ISO 8191;

b) whether ignition occurred in each test. If only two tests have been run yielding one ignition and one non-ignition, the overall result is taken as ignition;

c) for each test, the extent of the damage in millimetres (in length, width, depth) for the horizontal and vertical test assemblies;

d) for each test, whether the test assembly was extinguished, or whether the test assemblies were found to be smouldering when dismantled.

The report shall contain details of any features of the test assemblies or procedures that may have affected the results. Such features are:

e) conditioning of the test assembly, including the atmosphere (see 8.1);

f) special features of burning, e.g. melting, dripping, charring, development of flames from smouldering;

g) times of major events, e.g. ignition of test assemblies, cover splitting, extinction.

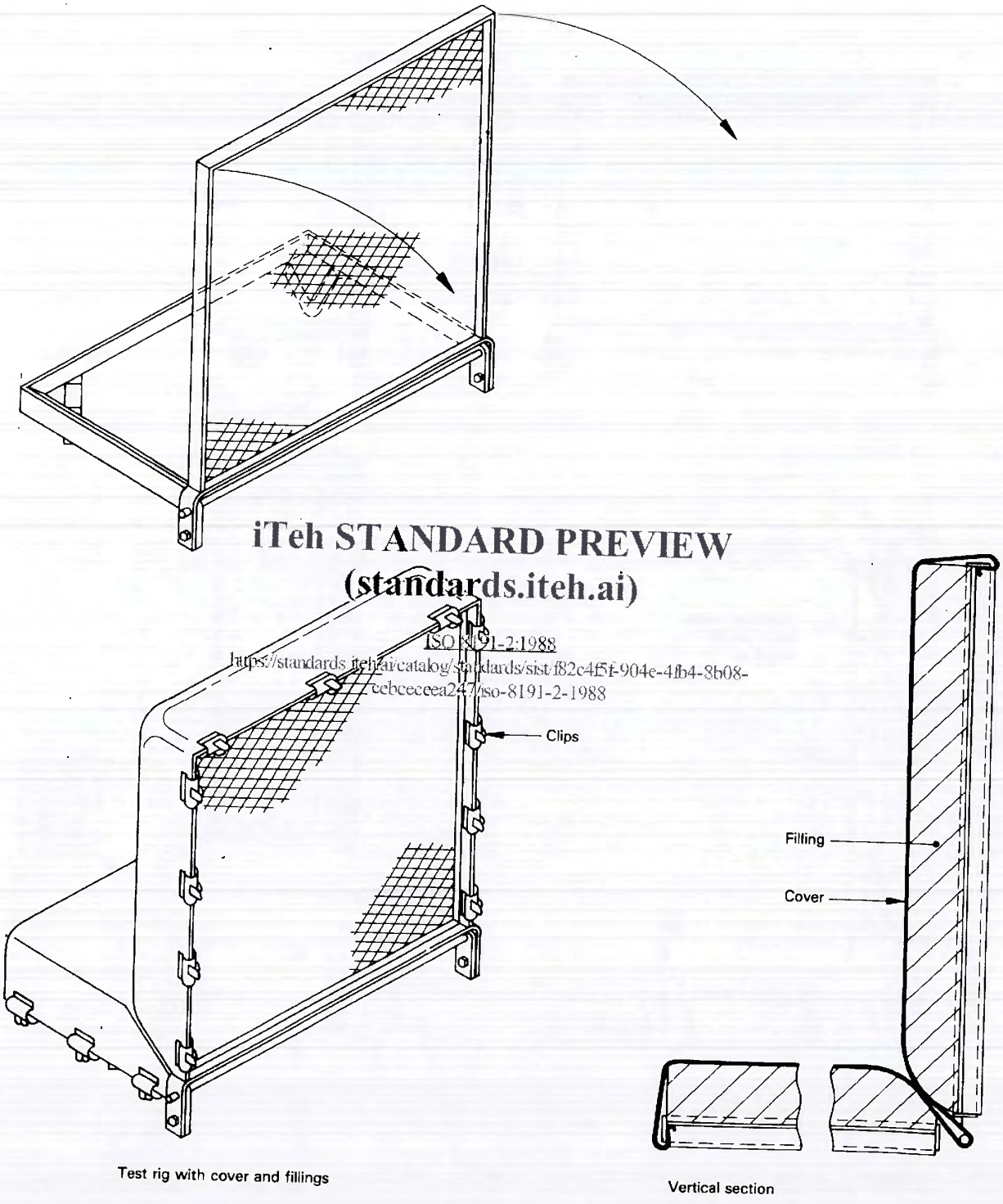
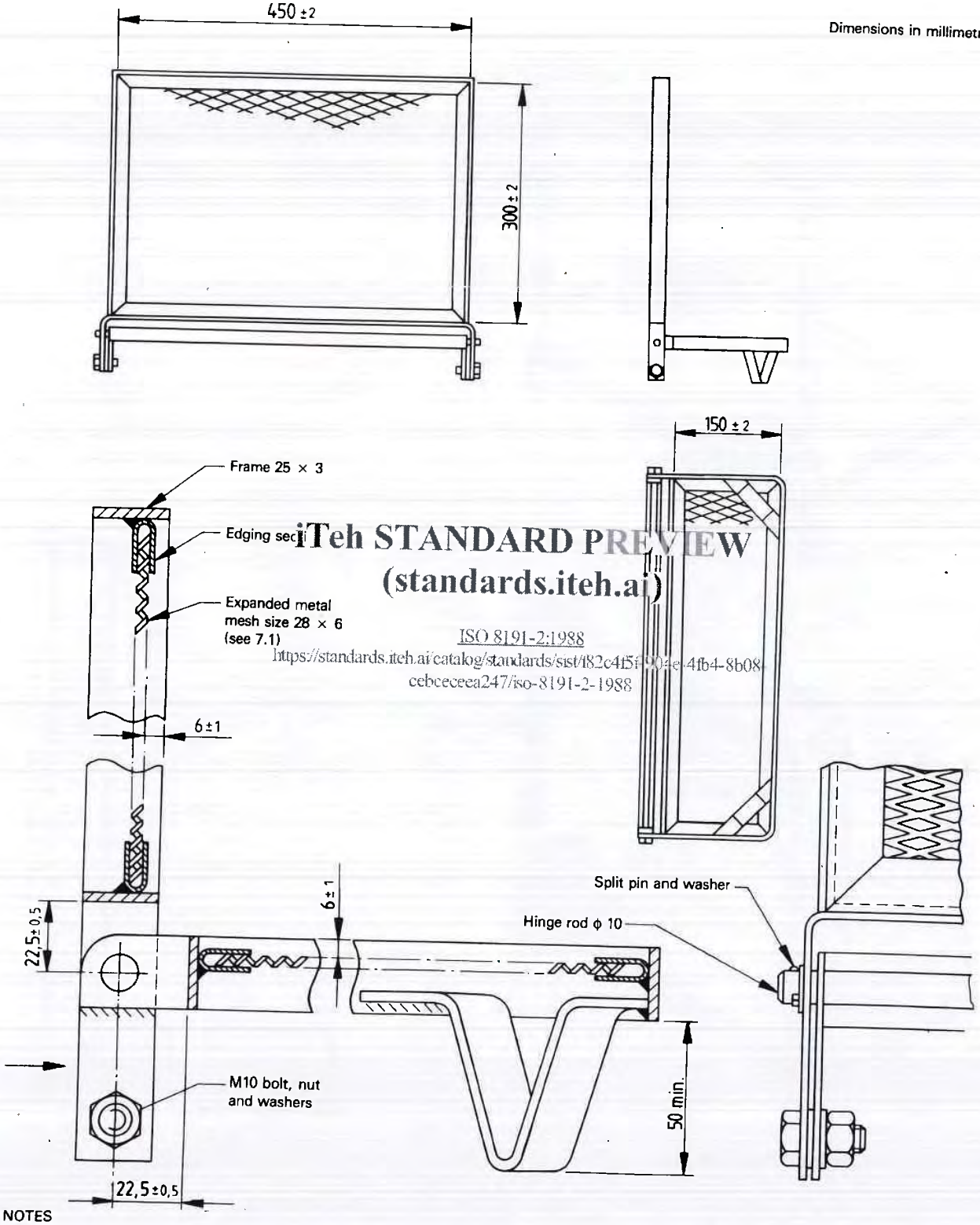


Figure 1 — Test rig assembly

Dimensions in millimetres



NOTES

1 Unless tolerances are indicated, dimensions are nominal.

2 All parts are made of steel.

Figure 2 — Test rig detail

Annex A

Guidance notes for designers and specifiers

(This annex does not form an integral part of the Standard.)

A.1 This part of ISO 8191 lays down methods for examining the ignitability, in defined circumstances, of an assembly of upholstery materials. These materials are combined together in a way intended to be generally representative of their end use in upholstered seating and the ignition sources are selected so that most may be related to everyday sources.

Thus the potential ignitability of a particular cover, filling and interliner in combination can be assessed.

However, there are two important limitations, as follows.

a) The tests are concerned only with ignitability, and any controls of fire hazard have to consider, in addition, other aspects of fire performance such as rate of fire development, heat output, rate and quantity of smoke production and toxic gas evolution. Ideally, any attempts to reduce ignitability ought not to affect these other properties adversely.

b) The limitation detailed in clause 1 occurs because design features of the furniture can greatly affect its fire properties; any ignitability tests of a piece of furniture would therefore need to be carried out on the actual item and not on component materials or mock-ups. However, limited information on ignitability may be obtained as indicated in clauses A.2 and A.3.

A.2 This part of ISO 8191 lays down laboratory tests for an assembly of materials which will give general guidance on the ignitability of finished furniture, but where more specific information is required, for example tip-up seats or in critical areas of end use, the principles may be applied to complete items or sub-assemblies of furniture or to suitably modified test assemblies, some examples of which are given below. In such cases the source described in 7.4 may be applied at positions which, as a general rule, correspond to those where the hazard of ignition occurs in use.

Example 1

If a chair has a gap between the seat and back cushions, the placing of ignition sources in the angle of the test apparatus is inappropriate. Instead, face ignition, where the source is placed on the horizontal and vertical surfaces, is more meaningful.

Example 2

The test apparatus may be used to model the junction of any vertical and horizontal surfaces so that both arm and back constructions, if different, may be tested separately in conjunction with the seat.

Example 3

The use of different materials in a back and seat of a chair may be reproduced in the test, two different cover fabrics being joined by sewing or with staples behind the hinge bar.

A.3 The ability of a cover material to provide protection against ignition can be indicated by testing it in a combination with a substrate of known flammability. Similarly, the role of a filling can be established by using it in conjunction with covers with different types of behaviour. Such information about the individual materials does not eliminate the need to test the actual combination, but it can help in the short-listing of material combinations and so reduce the overall amount of testing required.

Frequently Asked Questions

Part - I :Generic Issues

1. **The Compulsory Registration order will be effective based on manufacturing date or import date?**

   The date of manufacturing for domestically produced goods and date of landing of consignments in India for goods manufactured overseas would apply for consideration against deadlines notified.

2. **What would be the status of goods already in stock and in the market?**

   The products manufactured / imported before the due date of coming into effect of Order are not covered under the ambit of the Order.

3. **What will happen to goods ordered and expected to come on or after the due date (on account of deferment of shipments) or in transit?**

   The goods landing at Indian ports on or after the due date must comply with the requirements of Order.

4. **Who is eligible to get Unique Registration Number – the manufacturer or importer?**

   The manufacturer is eligible to apply and get unique registration number which is linked to manufacturer, location of factory, product and brand.

5. **What are list of document and test results to be submitted for registration?**

   Kindly refer to BIS website http://crsbis.in/BIS/howtoapply.do

6. **If being manufactured by OEM and the product is already carrying CE, UL & FCC mark or tested as per International safety standard in overseas lab or a CB testing lab - do these products have to be retested or submission of test report from OEM supplier is enough for registration.**

   The BIS Rules require a valid test report (not older than 90 days) from any BIS recognised test laboratory to be submitted while applying for Compulsory Registration. The test reports issued by BIS Recognised Labs as per the notified Indian Standards are only accepted for Registration.

intended for assembly in a portable battery is a portable cell". The products laptop, mobile phone are portable appliances as per above definition.

45. **How will the battery of a product be tested if it is an integral part of the product and cannot be detached?**

Sealed Secondary Cells/Batteries are covered under the Compulsory Registration Order with effect from 01.06.2016 and hence require mandatory BIS registration even if they form an integral part of the host product provided the host product is also covered under the Order. For products that are not covered under the order (for e.g shavers and trimmers etc), the batteries which are integral part of the product are not covered.

46. **What registration number will a consolidated product (like laptop / mobile) using the battery and adaptor display?**

Registration is required for Power Adaptors & Batteries also, as these are independently notified under CRO, and hence these items must independently be registered, and in turn, support the registration label. Similarly, the consolidated product (*e.g.* laptop / mobile) would only bear the registration no. of the overall product, i.e., Laptop/Mobile itself. Label for respective sub parts, like: Adaptor & Battery would independently be visible on these subparts when these items are disintegrated from the main product.

47. **Will UPS / Inverter only include standalone units or Electronics and IT Goods (Requirement for Compulsory Registration) Order, 2012 will also cover UPS / Inverter units that are installed in a host system? Will such components also require registration?**

Only standalone UPS / Inverters are covered under Electronics and IT Goods (Requirement for Compulsory Registration) Order, 2012.

48. **Are the plugs and sockets conforming to other International Standards acceptable?**

The plugs/sockets may be pre-certified to international standards. However, the configuration and dimensions of pins of sockets and plugs or plug part of

products with built-in plugs should be as per the current edition of IS : 1293. However, ISI marking on plugs and sockets is not mandatory.

49. How are the power adapters or battery chargers for the products which are not covered under CRO to be treated?

The power adapters for IT equipment, Audio/video equipment and household& similar electronic equipment are covered under CRO.

50. Is the latest / revised edition of IEC 62133 (*i.e.* 2nd Edition) applicable for CRO?

Indian Standard (IS 16046), as adopted and notified by BIS on any date, shall apply.

51. Does BIS Registration require original test report to be submitted for each brand covered based on the common testing report for multiple brands?

For registration of multiple brands, photocopies of original report authenticated by the test lab could be submitted to BIS.

52. Can the ADP type of sample (e.g., huge servers) be tested on-site at manufacturer's premises?

The goods covered under CRS are required to be tested at BIS recognized Labs only. Power supply and other areas of the equipment crucial for electrical safety may be extracted from the equipment and tested separately, in case of such a situation of huge size, etc.

53. Whether samples of all models, for products covered in a series, need to be submitted to the Labs?

Samples of all models for products covered in a series need not be submitted to the Labs. Worst case sample must be tested and documentary support should be provided to justify the series formation.

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BRITISH STANDARD

Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites

ICS 97.140

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Contents

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 14, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI and came into effect on 31 August 2007. It was prepared by Technical Committee FW/6, *Flammability performance and fire tests for furniture*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 7176:1995, which is withdrawn.

Relationship with other publications

The requirements, which relate to upholstered furniture for seating used in different areas of risk, are based on the methods of test given in BS 5852.

The Technical Committee responsible for the publication of BS 5852 has recommended that ignitability performance requirements for defined end-use environments be produced by the selection of specific ignition sources related to the level of the fire hazard envisaged for that environment.

It is important to note that the test report in BS 5852 contains the statement that the test results relate only to the ignitability of the combination of materials under the particular conditions of test and are not intended as a means of assessing the full potential fire hazard of the materials in use.

Information about this document

This is a full revision of the standard, and introduces changes arising from revisions to related standards. References to legislation have also been updated.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Although at present there is no legislation directly controlling the ignitability of contract and office furniture, there are statutory and other requirements in use as indicated in the important notes following Table 1.

Separate restrictions on the fire behaviour of materials used in domestic upholstered furniture for seating ordinarily intended for private use in a dwelling are imposed by the Furniture and Furnishing (Fire) (Safety) Regulations 1988 (SI No. 1324) [1], the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 (SI No. 2358) [2] and the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1993 (SI No. 207) [3].

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1 Scope

This British Standard specifies requirements for the resistance to ignition of upholstered furniture used for seating when tested in accordance with BS 5852, BS EN 1021-1 or BS EN 1021-2, as appropriate. The levels of ignition resistance have been set after careful consideration of the fire risk of the particular end-use environment involved. These levels do not necessarily reflect the behaviour of the upholstered seating in a fully developed fire.

Upholstered seating for domestic use and transport is not covered by this standard.

NOTE Guidance on the applicability of hazard categories to particular premises is given in the Notes to Table 1.

2 Normative references

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

BS 5852:2006, *Methods of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources*

BS 5852-2:1982, *Fire tests for furniture – Part 2: Methods of test for the ignitability of upholstered composites for seating by flaming sources* [1)]

BS EN 1021-1:2006, *Furniture – Assessment of the ignitability of upholstered furniture – Part 1: Ignition source smouldering cigarette*

BS EN 1021-2:2006, *Furniture – Assessment of the ignitability of upholstered furniture – Part 2: Ignition source match flame equivalent*

3 Terms and definitions

For the purposes of this British Standard the definitions given in BS 5852 apply, together with the following.

3.1 fire hazard
potential for loss of life (or injury) and/or damage to property, by fire

3.2 fire risk
probability of fire causing loss of life (or injury) and/or damage to property

(Terms and definitions continued on page 4.)

1) Referred to in the Furniture and Furnishings (Fire) (Safety) Regulations 1988 [1], Schedules 1 and 2.

Table 1 **Performance requirements for composites and notes on application of hazard categories** [A), B)]
(When using this table it is essential to consult the notes which follow it.)

Hazard category	Requirements	Typical examples (see Notes 1 and 2)
Low hazard	Resistant to ignition source: smouldering cigarette as specified in BS EN 1021-1:2006. Resistant to ignition source: match flame equivalent as specified in BS EN 1021-2:2006.	Colleges Day centres Exhibitions Museums Offices Schools Universities
Medium hazard	Resistant to ignition source: smouldering cigarette as specified in BS EN 1021-1:2006. Resistant to ignition source: match flame equivalent as specified in BS EN 1021-2:2006. Resistant to ignition source 5 for upholstery composites as specified in BS 5852:2006, Clause **11**.	Casinos Hospitals Hostels Hotel bedrooms Places of public entertainment Public buildings Public halls Public houses and bars Restaurants Services' messes
High hazard	Resistant to ignition source: smouldering cigarette as specified in BS EN 1021-1:2006. Resistant to ignition source: match flame equivalent as specified in BS EN 1021-2:2006. Resistant to ignition source 7 for upholstery composites as specified in BS 5852:2006, Clause **11**.	Offshore installations Sleeping accommodation in certain hospital wards and in certain hostels
Very high hazard	Resistant to ignition source: smouldering cigarette as specified in BS EN 1021-1:2006. Resistant to ignition source: match flame equivalent as specified in BS EN 1021-2:2006. Resistant to ignition source 7 as specified in BS 5852:2006, Clause **11** (upholstery composites) or Clause **12** (complete item of furniture). Additional requirements at the discretion of the specifier with high hazard requirements as a minimum	Locked psychiatric accommodation Prison cells

A) If a particular premises in the low hazard area is also used for sleeping purposes then consideration should be given to specifying a higher performance level.

B) Upholstered furniture which is ordinarily intended for private use in a dwelling is subject to government regulations (see Foreword).

IMPORTANT NOTES: Application of hazard categories and use of Table 1

NOTE 1 Table 1 lists four different hazard categories and specifies the ignitability performance of upholstery composites for use in these areas. As stated in Clause 1 the methods of test are those described in BS EN 1021-1:2006, BS EN 1021-2:2006 and BS 5852:2006. It should be noted that in BS 5852:2006, Clause 11, materials used for upholstery are tested as a composite, in a realistic arrangement, on a test rig (simulating the junction between an upholstered seat and upholstered back) rather than on a complete item of furniture. Individual covers and fillings cannot be assessed separately by this method of test. BS 5852 includes advice on the limitations of the use of the test results and their significance in relation to real fires.

NOTE 2 The examples cited in Table 1 for each hazard category cannot be exhaustive and do not cover all types of possible premises in a hazard category. It will be noted that some of the examples appear in more than one hazard category. This reflects the range of hazards possible under different circumstances for particular types of premises. Other examples, whether or not listed in Table 1, could also fall into more than one hazard category. However, when all the relevant factors have been considered, a particular premises can then be assigned to one hazard category. Government departments and other organizations often have their own classifications for upholstered furniture where all the hazards have been assessed and a general policy has been adopted. Such classifications might be different from the examples given in Table 1.

NOTE 3 Attention is drawn to the following factors when classifying a hazard area:

a) statutory requirements and other recommendations such as:

1) the Regulatory Reform (Fire Safety) Order 2005 [4];

2) the Building Regulations 2000, as amended [5], and the equivalent legislation in Scotland [6] and Northern Ireland [7];

3) local authority byelaws;

4) regulations enacted under the Consumer Protection Act 1987 [8];

5) the General Product Safety Regulations 2005 [9];

6) the Furniture and Furnishings (Fire) (Safety) Regulations 1988 (SI No. 1324) [1], the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 (SI No. 2358) [2], and the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1993 (SI No. 207) [3];

7) DCLG fire safety guides [10–20];

8) the Housing Act 1985 [21];

9) Health Technical Memorandum 05-03, Part C [22];

10) the Public Contracts Regulations 2006 [23].

b) whether or not people sleep at premises;

c) the level of occupancy;

d) whether, in the case of fire, occupants could be expected to escape on their own or whether they would need assistance;

e) the presence or absence of an automatic fire detection and alarm system, or an automatic fire extinguishing system;

f) any special hazards, such as cooking, heating, live flame effects, smoke effects, low lighting levels, strobe lighting, loud music, drinking, use after dark;

g) whether or not the premises are, during times of use, under the control of staff trained in appropriate evacuation procedures;

h) the location of the hazard area, namely of floors, whether or not high rise and/or below ground and/or windowless.

3.3 ignition risk
probability that ignition will result if a source of heat is allowed into close proximity or contact with a combustible material

3.4 composite
realistic model arrangement of the fabrics and filling materials used in a finished product

3.5 unit
single finished item of furniture

NOTE For modular furniture, e.g. public area seating assembled from benches and corners, each module is a separate unit.

4 Performance requirements for resistance to ignition

NOTE It is important to realize that the listing of types of premises under different hazard categories in Table 1 is given for guidance only and that the classification of a particular premises into one of the hazard categories is a decision to be made by the nominated responsible person accountable for the fire safety of the premises and its contents.

4.1 Ignitability

4.1.1 The composite shall meet the levels of ignition resistance given in Table 1 when tested in accordance with the test methods specified in Table 1 (see Clause **5**).

Furniture which has been demonstrated to meet the requirements of the Furniture and Furnishings (Fire) (Safety) Regulations 1988 (SI 1324:1988 [1], SI 2358:1989 [2] and SI 207:1993 [3]) shall be deemed to meet the requirements for the low hazard category. It shall also be deemed to meet the requirements for medium, high and very high hazard categories for resistance to ignition by a smouldering cigarette and match flame equivalent source.

NOTE The ignitability performance specified for upholstered furniture for different end-uses varies according to the level of risk associated with a particular environment as shown in Table 1.

4.1.2 All filling materials for all hazard categories shall pass the relevant test contained in the annexes given in Table 2.

NOTE These annexes reproduce test methods given in the Furniture and Furnishings (Fire) (Safety) Regulations 1988 [2] *[1]. These test methods refer to the earlier British Standard BS 5852-2:1982.*

It is permitted for filling materials that are layered-up to be tested as a composite filling instead of testing each filling material separately. However, if the composite filling contains more than one type of foam, either in layers or as a crumb, each foam material shall additionally pass the relevant single foam test as specified in Table 2. Any filling contained separately elsewhere in the furniture shall pass the relevant single material test as specified in Table 2.

Table 2 **Test methods relevant to types of filling (all hazard categories)**

Type of filling	Annex containing test method
Polyurethane foam in block or cushion form	Annex A
Polyurethane foam in crumb form (crumbs to be made from block foam conforming to Annex A)	Annex B
Latex rubber foam	Annex C
Non-foam fillings singly	Annex D
Composite fillings	Annex E

4.2 Durability of treatment

All outer covers and inner covers that have been chemically treated to reduce their ignitability shall be subjected to the water soaking and drying procedure specified in BS 5852:2006, Annex E prior to being conditioned. This shall be carried out for all methods of treatment, including backcoating, that are applied to covers that are finished in all other respects. It shall not be carried out when the cover material is manufactured from materials that are formulated to be, or are inherently, flame-retarded (e.g. fabric woven from flame-retarded yarns) provided that it is not further treated as a finished cover material. Where it is not known whether the material has been treated or not, the water soaking and drying procedure shall be performed.

NOTE Flame-retardant treatments are sometimes applied to seating or its components to improve resistance to ignition. Such treatments can deteriorate during use or through cleaning, including dry cleaning.

[2] The Furniture and Furnishings (Fire) (Safety) Regulations 1988 cover domestic furniture and furnishings.

5 Sampling and frequency of testing

Each upholstery composite shall be tested in accordance with the relevant tests identified in Table 1 for the appropriate hazard category every 2 500 units produced or once per month. Retesting shall be carried out where there is any major basic alteration to a furniture specification (e.g. of fibre content, construction, flame-retardant finish or mass per unit area of fabric, density or type of filling or change of materials manufacturer). Changes in the colour (where the fabric was flame-retardant finished in the same batch) of the product or minor changes in the pattern or construction, e.g. of the order of 2 picks/cm, shall not be deemed sufficient reason to necessitate retesting.

6 Labelling and identification

NOTE Domestic upholstered furniture is subject to the labelling requirements of government regulations.

Each unit of upholstered furniture shall carry a permanently attached and clearly readable label (see Figures 1 to 4). The size of the graphic part of the label shall be not less than 50 mm × 50 mm. The base colour of the label shall be white with a green border. The word "RESISTANT" shall be white and of minimum height 5 mm. The smouldering cigarette flaming match, flame and ignition source number(s) shall be black.

The following wording[3)] shall appear on the label (see also Note):

a) "Conforms to BS 7176:2007 for low hazard (not recommended for use in higher hazard areas)"; or

b) "Conforms to BS 7176:2007 for medium hazard (not recommended for use in higher hazard areas)"; or

c) "Conforms to BS 7176:2007 for high hazard (not recommended for use in higher hazard areas)"; or

d) "Conforms to BS 7176:2007 to agreed level for very high hazard"[4)].

The letters of the wording shall be easily legible and of minimum height 2 mm.

---

3) Marking BS 7176:2007 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is solely the claimant's responsibility. Such a declaration is not to be confused with third-party certification of conformity, which might also be desirable.

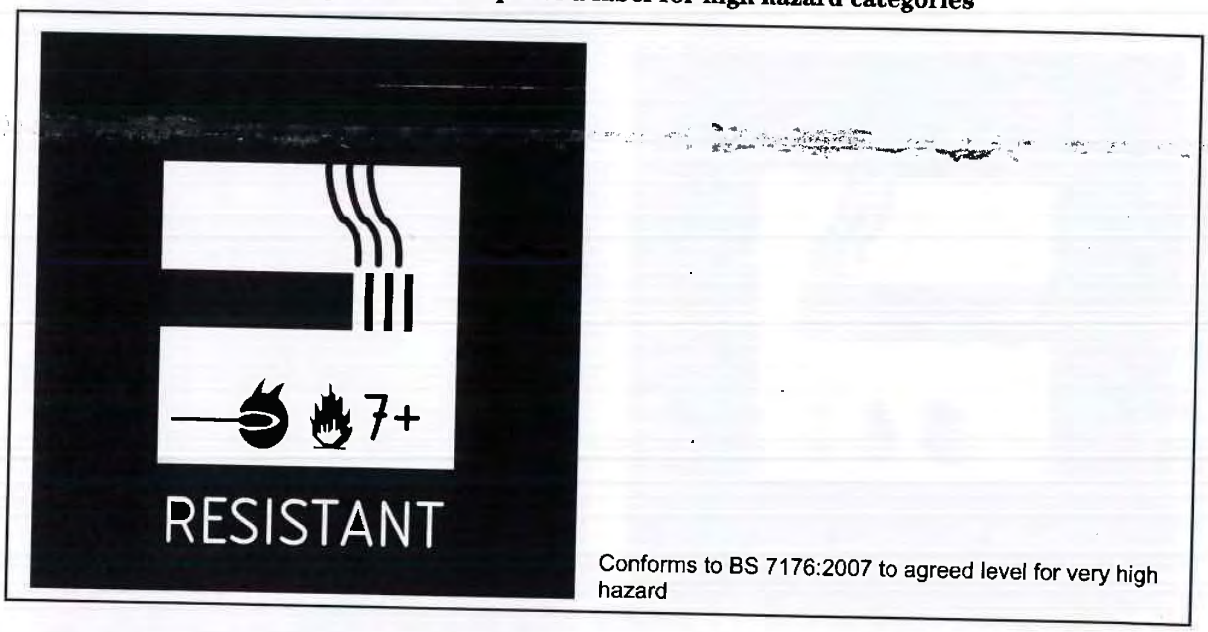
4) Add full details of level reached.

Figure 1 **Example of a label for low hazard categories**

Figure 2 **Example of a label for medium hazard categories**

Figure 3 **Example of a label for medium hazard categories**

Figure 4 **Example of a label for high hazard categories**



Annex A (normative) Ignitability test for polyurethane foam in slab or cushion form

NOTE 1 The Furniture and Furnishings (Fire) (Safety) Regulations 1988[5] [1], Schedule 1, Part I is reproduced under the terms of Crown Copyright Policy Guidance issued by The Stationery Office.

NOTE 2 The specification for the fabric has been modified by ***A.2****.*

A.1 The foam shall be tested in accordance with the method set out in BS 5852-2:1982 using cover fabric corresponding to the specification set out in **A.2**.

A.2 The fabric shall be made of 100% flame-retardant polyester fibre. Its construction shall be woven to a plain weave. The fabric shall be woven to (20.5 ± 1) yarn threads per centimetre in the warp and (12.5 ± 1) yarn threads per centimetre in the weft. The fabric finish shall be scoured and heat set. Its mass shall be 220 g/m^2 ± 5%.

A.3 The test rig as specified in BS 5852-2:1982, **6.1.1** shall have expanded steel platforms of not less than 28 mm × 6 mm mesh size. The test rig is placed on a metal tray of sufficient dimensions to collect any debris falling from specimens being tested. The rig and debris tray shall be mounted on a weighing balance with a remote readout having a full-scale deflection of at least 0 kg to 20 kg to accuracy of 2 g.

A.4 The foam under test, cut to the specified dimensions is placed on the test rig, covered with the fabric specified in **A.2** and tensioned with clips as set out in BS 5852-2:1982. An ignition source 5 crib is placed in position. The mass of the complete assembly is determined ("initial mass"). The test shall be carried out in accordance with BS 5852-2:1982. In particular flaming or smouldering failure shall be determined against the criteria of BS 5852-2:1982, Clause **4**. After flaming and smouldering has ceased, any debris which has become detached from the specimen shall be removed. The remaining mass of the assembly ("final mass") is then recorded.

A.5 If failure against the criteria of BS 5852-2:1982, Clause **4**, has occurred but only by way of damage exceeding the limits defined in **4.1**e), **4.1**f) and **4.2**f) and provided that the resultant mass loss (initial mass less final mass) is less than 60 g the foam passes the ignitability test.

[5] The Furniture and Furnishings (Fire) (Safety) Regulations 1988 cover domestic furniture and furnishings.

Annex B (normative) Ignitability test for polyurethane foam in crumb form

NOTE 1 The Furniture and Furnishings (Fire) (Safety) Regulations 1988[6] [1], Schedule 1, Part II is reproduced under the terms of Crown Copyright Policy Guidance issued by The Stationery Office.

NOTE 2 The specification for the fabric has been modified by ***B.2****.*

B.1 The foam shall be tested in accordance with the method set out in BS 5852-2:1982 using cover fabric corresponding to the specification set out in **B.2**.

B.2 The fabric shall be made of 100% flame-retardant polyester fibre. Its construction shall be woven to a plain weave. The fabric shall be woven to (20.5 ± 1) yarn threads per centimetre in the warp and (12.5 ± 1) yarn threads per centimetre in the weft. The fabric finish shall be scoured and heat set. Its mass shall be 220 g/m^2 ± 5%.

B.3 The test rig panels are lined with the fabric specified in **B.2**. Sufficient crumb foam shall be placed upon the seat and back panels so that when the cover fabric piece is placed over them, both are stuffed to the density used in the furniture as intended. The test is then carried out in accordance with BS 5852-2:1982 using ignition source 2 as specified therein.

B.4 If smouldering or flaming failure against the criteria of BS 5852-2:1982, Clause **4**, has not occurred or has occurred only by way of damage exceeding the limits defined in **4.1**e), **4.1**f) and **4.2**f), the crumb foam passes the ignitability test.

[6] The Furniture and Furnishings (Fire) (Safety) Regulations 1988 cover domestic furniture and furnishings.

Annex C (normative) Ignitability test for latex rubber foam

NOTE 1 The Furniture and Furnishings (Fire) (Safety) Regulations 1988 [7] [1], Schedule 1, Part III is reproduced under the terms of Crown Copyright Policy Guidance issued by The Stationery Office.

NOTE 2 The specification for the fabric has been modified by C.2.

C.1 The foam shall be tested in accordance with the method set out in BS 5852-2:1982 using cover fabric corresponding to the specification set out in **C.2**.

C.2 The fabric shall be made of 100% flame-retardant polyester fibre. Its construction shall be woven to a plain weave. The fabric shall be woven to (20.5 ± 1) yarn threads per centimetre in the warp and (12.5 ± 1) yarn threads per centimetre in the weft. The fabric finish shall be scoured and heat set. Its mass shall be 220 g/m^2 ± 5%.

C.3 The foam under test cut to the specified dimensions is placed on the test rig, covered with the fabric specified in **C.2** and tensioned with clips as set out in BS 5852-2:1982. The test is then carried out using ignition source 2 as specified therein.

C.4 If smouldering or flaming failure against the criteria of BS 5852-2:1982, Clause **4**, does not occur, the latex rubber foam passes the ignitability test.

7) The Furniture and Furnishings (Fire) (Safety) Regulations 1988 cover domestic furniture and furnishings.

Annex D (normative) Ignitability test for non-foam filling materials singly

NOTE The Furniture and Furnishings (Fire) (Safety) Regulations 1988[8] [1], Schedule 2, Part I is reproduced under the terms of Crown Copyright Policy Guidance issued by The Stationery Office.

D.1 The filling material shall be tested in accordance with the method set out in BS 5852-2:1982 using cover fabric to the specification in **A.2**.

D.2 The specimen comprising the filling material to be tested and the specified cover fabric shall be tested with ignition source 2 as specified in BS 5852-2:1982. Where the filling material is loose it shall be packed as indicated in **B.3**.

D.3 If smouldering or flaming failure against the criteria of BS 5852-2:1982, Clause **4**, has not occurred or has occurred only by way of damage exceeding the limits defined in **4.1**e), **4.1**f) and **4.2**f) the non-foam filling passes the ignitability test.

Annex E (normative) Ignitability test for composite fillings for furniture other than mattresses, bed bases, cushions and pillows

NOTE The Furniture and Furnishings (Fire) (Safety) Regulations 1988[8] [1], Schedule 2, Part II is reproduced under the terms of Crown Copyright Policy Guidance issued by The Stationery Office.

The composite fillings, covered with the primary cover are built up on the test rig as described in BS 5852-2:1982. The covering fabric shall be that specified in **A.2**. The test procedure with the use of ignition source 2 specified in BS 5852-2:1982 and the criteria of failure shall be as specified therein.

[8] The Furniture and Furnishings (Fire) (Safety) Regulations 1988 cover domestic furniture and furnishings.

Bibliography

Standards publications

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

[1] GREAT BRITAIN. Furniture and Furnishing (Fire) (Safety) Regulations 1988 (SI No. 1324). London: HMSO.

[2] GREAT BRITAIN. Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 (SI No. 2358). London: HMSO.

[3] GREAT BRITAIN. Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1993 (SI No. 207). London: HMSO.

[4] GREAT BRITAIN. Regulatory Reform (Fire Safety) Order 2005 (SI No. 1541 2005). London: The Stationery Office.

[5] GREAT BRITAIN. Building Regulations 2000 (SI No. 2000 2531) and subsequent amendments. London: The Stationery Office.

[6] SCOTLAND. Building (Scotland) Regulations 2004 (SI No. 2004 406). Edinburgh: The Stationery Office.

[7] GREAT BRITAIN. Building Regulations (Northern Ireland) 2000 (SI No. 2000 389). London: The Stationery Office.

[8] GREAT BRITAIN. Consumer Protection Act 1987 and subsequent modification orders. London: HMSO.

[9] GREAT BRITAIN. General Product Safety Regulations 2005 (SI No. 1803 2005). London: The Stationery Office.

[10] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Offices and shops*. London: The Stationery Office, 2006.

[11] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Factories and warehouses*. London: The Stationery Office, 2006.

[12] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Sleeping accommodation*. London: The Stationery Office, 2006.

[13] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Residential care*. London: The Stationery Office, 2006.

[14] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Educational premises*. London: The Stationery Office, 2006.

[15] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Small and medium places of assembly*. London: The Stationery Office, 2006.

[16] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Large places of assembly*. London: The Stationery Office, 2006.

[17] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Theatres, cinemas, concert halls and similar premises*. London: The Stationery Office, 2006.

[18] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Outdoor events and venues*. London: The Stationery Office, 2006.

[19] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Healthcare premises*. London: The Stationery Office, 2006.

[20] DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). *Fire safety – Risk assessment – Transport premises and facilities*.[9)]

[21] GREAT BRITAIN. Housing Act 1985. London: HMSO.

[22] DEPARTMENT OF HEALTH. *Firecode – Fire safety in the NHS. Health Technical Memorandum 05-03: Operational provisions – Part C: Textiles and furnishings*. London: The Stationery Office, 2007.[10)]

[23] GREAT BRITAIN. Public Contracts Regulations 2006 (SI No. 5 2006). London: The Stationery Office.

9) In preparation; to be published by The Stationery Office.
10) Available from Stationery Office bookshops.

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W4 4AL

40. What is "Highly Specialized Equipment" (HSE) and is it covered by this order?

Highly Specialized Equipment (HSE), as per the criteria given below, shall stand exempted from the application of this Order provided they are manufactured / imported in less than 100 units per model per year –

a. Equipment Powered by Three phase power supply, or

b. Equipment Powered by Single phase power supply with current rating exceeding 16 Ampere, or

c. Equipment with dimensions exceeding 1.5 m x 0.8 m, or

d. Equipment with weight exceeding 80 Kg.

41. What kind of batteries are covered under the Order?

The scope of coverage is as defined in the clause 1.1 of the standard IS 16406. This is deemed to cover rechargeable batteries / single cells (other than button) like Lithium ion batteries, Nickel-Cadmium and Nickel-Metal Hydride cells.

42. Would cells and batteries require to be independently registered?

These items are required to be independently registered. However, a battery using registered cells would only list cells in the CDF of the battery and testing on registered cell is not expected to be done as part of battery.

43. What is implied by cells of same construction design in series guidelines issued by MeitY?

Cells of same construction design means the shape in which these cells are normally available, *i.e.* "Cylindrical", "Prismatic", etc.

44. What is the definition of portable application? Batteries, cells, power banks themselves are portable but they can be used in non-portable devices laptop, mobile phone, etc.

It is clearly defined in clause 1.3.14 of the standard IS 16046 :applicable to Secondary Cells/ Batteries. As per the definition "a battery for use in a device or appliance which is conveniently hand carried is a portable battery and cells

F. No. 1(6)/2016-TD
Government of India
(Technical Wing)
Ministry of Steel

Udyog Bhawan, New Delhi
Dated: 21st October, 2016

To,

The Joint Secretary,
Ministry of Finance,
Department of Revenue
Room No. 156-B,
North Block, New Delhi- 110001

Kind Attn: Shri L Satya Srinivas, Joint Secretary (Customs)

Subject : Clarification / Classification of Stainless Steel Products in relation to the Stainless Steel Products (Quality Control) (Amendment), Order, 2016.

Dear Sir,

This has reference to the Stainless Steel Products (Quality Control), (Amendment), Order 2016 dated 9th September, 2016 whereby extension in date of implementation / enforcement has been allowed up to 3 months in respect of all the three Stainless Steel Standards. The copy of the said order is enclosed herewith further, it may be perused at Ministry of Steel website (http://steel.nic.in).

2.0 Several users/importers of stainless steel for automotive/industrial and engineering applications have submitted that they use/import several grades/types of stainless steel sheet products which are not covered in the Indian Standard IS:6911. They have also submitted that mapping these customized grades viz-a-viz the grades available in Indian Standard is technically complex issue. Therefore, they have requested Ministry of Steel to issue suitable clarification to customs clearly indicating the customized Stainless Steel Grades which are not covered in the notified Stainless Steel Standard IS: 6911.

3.0 The matter has been looked into in the Ministry of Steel in consultation with BIS, representatives of SIAM / Automakers, Experts, Members / Chief of the Panel of BIS, and the list of Customized Stainless steel products has been prepared. Accordingly, it is clarified that the list of customized Stainless steel grades as given in Annexure are either not matching with the grades given in the Indian Standard (IS: 6911) or are totally different grades than those specified in the Indian Standard (IS: 6911). Hence, these grades would fall outside the purview of the Quality Control Order, unless & until the standard (IS: 6911) is amended / revised to include these grades.

4.0 It is requested that the above clarification may be sent to all Customs authorities so that clearance of imported consignment is facilitated.

These issues with the approval of Competent Authority.

Encl: as above

(S.K. Bhatnagar)
Deputy Industrial Advisor
Tel No. 011-23062490

Copy to:

1. Shri J.K. Bakhroo, Sc –F- & Head (MTD),
Metallurgical Engineering Department, Bureau of Indian Standards,
Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi- 110002

Customer Specific stainless steel flat rolled products/grades for auto/industrial/engineering applications (i.e. other than utensils/kitchenware applications) NOT covered under Stainless Steel Products (Quality Control) Order, 2016	
Customer Specific Grades/designations	Equivalent Standard, if any
1.4003	S40977
409	S40910
410S	S41008
439	S43035
301L	S30103
301LN	S30153
304H	S30409
304LN	S30409
304N	S30451
	S30815
309S	S30908
EQ309L	
310S	S31008
316H	S31609
316LN	S31653
317	S31700
317L	S31703
2304	S31803
2205	S32304
	S32506
2507	S32750
	S32808
N1	
N2	
N3	
JFE432LTM	
JFE436LT	
JFE410DB	
JFE20-SUSR	
JFE-MH1	
JFE-TF1	
SUH 409L	
SUS 432T	
SUS 436J1L	
JFE 429EX	
SUS 409	
SUS 429	
SUS 436L	
HFS429M	
HFS409L	
HFS436L	
NSSHR-2	

NSS 409 M1(SUS409L)	
NSS409M1	
NSS409M1ST	
NSSC 304L	
NSSC 439(SUS439)	
NSSC 436(SUS436)	
NSSC 432(SUS432)	
SUS 444	
NSS 445 M2	
NSS 410 M4	
NSSN 409 (SUS409)	
NSSC 410DA	
NSSC 410DE	
NSSC 409L	
SUS 301H	
SUS 301L DLT	
SUS 301-CSP H	
NSSMC-NAR-301L HS1	
SUS 301 3/4H	
NSS 410M4	
AISI 441	
POSCO410B	
SUS 439L	
NSSC 436 S	
JFE 18-3USR	
JFE 409L	
JFE 443CT	
NSSC 409 L-M	
NSSC 436 S-E	
NSAINSC 409L	
NSSC 109EM	
NSSC 448 EM	
HSS 430 Cu	
JFE443CT	
Z7CNU16.04	EN10088-3
Z8CND17.4	EN10088-3
X5CrNiCuNb16-4	EN10083-3
36NICRMO16	EN10083-3
NS-BP28W	

F. No. 1(1)/2017-TD
Government of India
Ministry of Steel
Technical Division

Udyog Bhawan, New Delhi
Dated 19th September, 2017

OFFICE MEMORANDUM

Subject : Clarification/classification of Stainless steel products in relation to the Stainless Steel Products (Quality Control) Order, 2016.

This has reference to this Ministry's OM No. 1(6)/2016-TD (Vol. II) dated 9th August, 2017 on the above mentioned subject thereby forwarding a list of 30 additional stainless steel products to be exempted from the purview of the Stainless Steel Products (Quality Control) Order, 2016.

The aforesaid list has since been modified in respect to entries at Sl. No. 5 thereby substituting the EN specification "1.442" with "1.4420" and from Sl. No. 24 to Sl. No. 30 substituting the end usages. A modified/corrected list is attached herewith for onward transmission to all the Customs Authorities.

Bhatnagar

(S. K. Bhatnagar)
Deputy Industrial Adviser
Tel : 23062490

To,

Ministry of Finance
Department of Revenue
(Kind Attn: Shri Udai Singh Kumawat)
Joint Secretary (Revenue & NC),
Room No – 46-NB, North Block, New Delhi – 110 001

Copy to :

Shri J. K. Bakhroo, SC – F & Head (MTD),
Metallurgical Engineering Department, Bureau of Indian Standards,
Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi – 110 002.

Exemption List for customer specific grades not covered under the Stainless Steel Products (Quality Control)Order, 2016			
Sl. No.	**Customized Grades**	**Equivalent Grades/Specification**	
		UNS	EN
1	439M	S43932	
2	201LN	S20153	1.4372
3	4509	S43940	1.4509
4	21% Cr	S44330	1.4622
5	316 plus	S31655	1.4420
6	444	S44400	1.4521
7	321H	S32109	1.4878
8	153MA	S30415	1.4818
9	314	S31400	1.4841
10	LD X 2101	S32101	1.4162
11	LD X 2404	S82441	1.4662
12	SD X 100	S32760	1.4501
13	FD X 25	S82012	1.4635
14	FD X 27	S82031	1.4637
15	904L	N08904	1.4539
16	254 SMO	S31254	1.4547
17	317LMN	S31726	1.4439
18	Ultra 725LN	S31050	1.4466
19	Ultra 6XN	N08926/N08367	1.4529
20	Ultra 4565	S34565	1.4565
21	654 SMO	S32654	1.4652
22	AISI 305		
23	AMS 5510	(i) TS 483 to 758 MPa, YS 172 Mpa min & Elongation 20% min for thickness over 0.05 to 0.08 mm (incl.) (ii) TS 483 to 724 Mpa, YS 172 Mpa (min) & Elongation 30% (min) for thickness over 0.08 to 0.10 mm (incl.) (iii) manufacturing of brackets, tubes & manifold for Aircraft Engine.	
24	Sandvik 11R51	For Auto/Industrial/Engineering Applications and Formed Parts, Springs	
25	Sandvik 12R11	For Auto/Industrial/Engineering Applications and Formed Parts, Springs	
26	Sandvik 13C26	For Auto/Industrial/Engineering/Medical Applications and Razor Blades, Knives	
27	Sandvik 14C28N	For Auto/Industrial/Engineering/Medical Applications and Knives	
28	Sandvik 9RU10	For Auto/Industrial/Engineering Applications and Formed Parts, Springs	
29	Sandvik HIFLEX	For Auto/Industrial/Engineering/Medical Applications and Compressor Valves	
30	Sandvik 7C27MO2	For Auto/Industrial/Engineering/Medical Applications and Compressor Valves, Blades, Saws, Tools	

HAWORTH

Dated: - 30.04.2024

To,
The Joint Secretary,
Ministry of Textiles,
Udyog Bhawan, New Delhi.

Subject: - Authorization Letter to Represent the BIS Related issues for Import of Upholstered Composites Used for Non-Domestic Furniture – (IS 15768:2008)– reg.

Respected Sir / Madam,

We do hereby authorize Mr. Vikrant Gogia - Managing Director, M/s. Group a Logistics India Pvt. Ltd., to represent and submit documents on our behalf pertain to BIS issues for Import of Upholstered Composites Used for Non-Domestic Furniture.

Your kind cooperation in this regard will be highly appreciated.

Thanking You,
Yours faithfully

For,
HAWORTH INDIA PVT LTD.,

Name: Ketki Bajpai
Designation: National Manager Logistics

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HAWORTH

Dated: - 29.04.2024

To,
The Joint Secretary,
Ministry of Textiles,
Udyog Bhawan, New Delhi.

Subject:- Clarification / Classification of Upholstered Composites Used for Non-Domestic Furniture – BIS Standard 15768:2008 – Applicability on Imported Upholstered Furniture Clarification – reg.

Respected Sir / Madam,

1) This has reference to the Protective Textiles (Quality Control) Order, 2022 dated 10th April 2023 for Serial No. 2 (Upholstered Composites used for Non-Domestic Furniture) as per Indian Standard IS 15768 : 2008. The copy of the said order is enclosed herewith further, it may be perused at Ministry of Textiles website (https://texmin.nic.in/notification) and same is implemented w.e.f. 07th October 2023 as per amended notification dated – 24th May 2023.

2) Several Users / Importers of Office Furniture & Furniture Parts covered under HS Code – 9401 and 9403 are suffering for Import clearances.

3) We have been observed that the said standard is applicable to the textiles and upholstered composites which are used in manufacture of Non-domestic Furniture. Hence the CCR instructions in the HS Code 9401 & 9403 seem to be erroneous.

4) The perusal of Annex-A to the Product manual for IS 15768:2008 (which provides the Guidelines for Grant of License under this standard and wherein details to be provided by manufactures of Textiles have been specified. Further clarifies that the standard is applicable only to the Textile and not Furniture or Parts of Furniture.

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7) International Standard pre-certified for manufacturing of Furniture & Furniture Parts as per below:-

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Stage, Bangalore 560008, India

T +91 80679 77600
haworth.com/ap
Info.IN@Haworth.com

HAWORTH

Goods or Article	Title of Standards	Indian Standard	International Standard	International Standard Country Details
Upholstered Composites used for Non-domestic Furniture	Textiles – Resistance to Ignition of Upholstered Composites used for non-domestic furniture - Specification	IS 15768 : 2008	British Standard – BS 7176 : 1995	This British Standard specifies requirements for the resistance to ignition of upholstered furniture used for seating when tested in accordance with BS 5852, BS EN 1021-1 or BS EN 1021-2, as appropriate.
Furniture – Strength, Durablility and safety – Requirements for Non-domestic seating	a) This European Standard specifies requirements for the safety, strength and durability of all types of nondomestic seating intended to be used by adults with a weight of not more than 110 kg, including office visitor chairs. b) This European Standard does not apply to ranked seating, office work chairs, chairs for educational institutions, outdoor seating and to links for linked seating for which European Standards or drafts exist. It does also not apply to work chairs for industrial use.	IS 15768 : 2008	EN 16139	CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.
Furniture – Assessment of	As per GB 17927.2-2011 GB	IS 15768 : 2008	International Standard – ISI	NATIONAL STANDARD OF THE

the Ignitability of Upholstered Furniture	NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA, The tests measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporation these materials.		8191-1	PEOPLE'S REPUBLIC OF CHINA
Furniture – Assessment of the Ignitability of Upholstered Furniture	As per GB 17927.2-2011 GB NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA, The tests measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporation these materials.	IS 15768 : 2008	International Standard – ISI 8191-2	NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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Are the plugs and sockets conforming to other International Standards acceptable?

The plugs/sockets may be pre-certified to international standards. However, the configuration and dimensions of pins of sockets and plugs or plug part of products with built-in plugs should be as per the current edition of IS : 1293. However, ISI marking on plugs and sockets is not mandatory.

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HAWORTH

11) As per European Standard – EN 16139 - The European Standard does not apply to ranked seating, office work chairs, chairs for educational institutions, outdoor seating and to links for linked seating for which European Standards or drafts exist. It does also not apply to work chairs for industrial use.

12) The CCR Instructions pertaining to the IS 15768:2008 may be made applicable to Textiles & Textiles Articles covered under CTH 52, 54, 55 & 58 instead of Furniture and Furniture parts covered under CTH 9401, 9403.

13) It is requested that the above clarification may be sent to all Customs Authorities so that clearance of Imported consignments is facilitated.

Enclosed:-

1. Protective Textile (Quality Control) Order 2022 Copy
2. Product Manual of IS 15768 : 2008 along with Annex - A
3. IS 15768 : 2008 Copy
4. European Standard EN 16139 copy
5. China Standard - GB 17927 along with ISO 8191-1 & ISO 8191-2 copy
6. BIS FAQ's – Page No. 1, 10 & 11 Copy
7. British Standard – BS 7176 : 2007 Copy

Thanking You,
Yours faithfully

For, HAWORTH INDIA PVT LTD.,

Name: Ketki Bajpai
Designation: National Manager Logistics

teknion

To,
The Joint Secretary,
Ministry of Textiles,
Udyog Bhawan, New Delhi.

Dated:- 26.04.2024

Subject: - **Authorization Letter to Represent the BIS Related issues for Import of Upholstered Composites Used for Non-Domestic Furniture – (IS 15768:2008)– reg.**

Respected Sir / Madam,

We do hereby authorize **Mr. Vikrant Gogia - Managing Director, M/s. Group a Logistics India Pvt. Ltd**., to represent and submit documents on our behalf pertain to BIS issues for Import of Upholstered Composites Used for Non-Domestic Furniture.

Your kind cooperation in this regard will be highly appreciated.

Thanking you,

Yours truly,
For **Teknion Furniture system (India) Pvt Ltd**

Authorized Signatory
Name of Authorized Signatory: Nataraj Dev
Designation: Director of Operations
Mobile No.: 9845900665
Email ID: Nataraj.Dev@teknion.com

teknion.com

TEKNION FURNITURE SYSTEMS (INDIA) PVT LTD
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Registered Office:
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Bangalore - 560038

Telephone 080 – 4549 7600
Fax: 080 – 4549 7603
Email enquiry.india@teknion.com

teknion

Dated:- 26.04.2024

To,
The Joint Secretary,
Ministry of Textiles,
Udyog Bhawan, New Delhi.

Subject:- Clarification / Classification of Upholstered Composites Used for Non-Domestic Furniture – BIS Standard 15768:2008 – Applicability on Imported Upholstered Furniture Clarification – reg.

Respected Sir / Madam,

1) This has reference to the Protective Textiles (Quality Control) Order, 2022 dated 10th April 2023 for Serial No. 2 (Upholstered Composites used for Non-Domestic Furniture) as per Indian Standard IS 15768 : 2008. The copy of the said order is enclosed herewith further, it may be perused at Ministry of Textiles website (https://texmin.nic.in/notification) and same is implemented w.e.f. 07th October 2023 as per amended notification dated – 24th May 2023.

2) Several Users / Importers of Office Furniture & Furniture Parts covered under HS Code – 9401 and 9403 are suffering for Import clearances.

3) We have been observed that the said standard is applicable to the textiles and upholstered composites which are used in manufacture of Non-domestic Furniture. Hence the CCR instructions in the HS Code 9401 & 9403 seem to be erroneous.

4) The perusal of Annex-A to the Product manual for IS 15768:2008 (which provides the Guidelines for Grant of License under this standard and wherein details to be provided by manufactures of Textiles have been specified. Further clarifies that the standard is applicable only to the Textile and not Furniture or Parts of Furniture.

5) Upholstered Composites used for Non-Domestic Furniture applications have submitted that they use / import several types of Upholstered composites from many countries. And Importers in India does not able to arrange BIS from Supplier / Manufacturer for every types of Fabrics. Even supplier / Manufacturer of Furniture also imported the Upholstered Composites from many countries.

6) According to Shipper / Manufacturers the Upholstery Composites are pre-certified as per International Standards. Hence it may not be mandatory for certifications. The detailed information has been provided in Serial No. 7 & Serial No. 8 as per BIS FAQs.

7) International Standard pre-certified for manufacturing of Furniture & Furniture Parts as per below:-

TEKNION FURNITURE SYSTEMS (INDIA) PVT. LTD.

Authorised Signature

Goods or Article	Title of Standards	Indian Standard	International Standard	International Standard Country Details
Upholstered Composites used for Non-domestic Furniture	Textiles – Resistance to Ignition of Upholstered Composites used for non-domestic furniture - Specification	IS 15768 : 2008	British Standard – BS 7176 : 1995	This British Standard specifies requirements for the resistance to ignition of upholstered furniture used for seating when tested in accordance with BS 5852, BS EN 1021-1 or BS EN 1021-2, as appropriate.
Furniture – Strength, Durablility and safety – Requirements for Non-domestic seating	a) This European Standard specifies requirements for the safety, strength and durability of all types of nondomestic seating intended to be used by adults with a weight of not more than 110 kg, including office visitor chairs. b) This European Standard does not apply to ranked seating, office work chairs, chairs for educational institutions, outdoor seating and to links for linked seating for which European Standards or drafts exist. It does also not apply to work chairs for industrial use.	IS 15768 : 2008	EN 16139	CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.
Furniture – Assessment of the Ignitability of Upholstered Furniture	As per GB 17927.2-2011 GB NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA, The tests measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporation these materials.	IS 15768 : 2008	International Standard – ISI 8191-1	NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA
Furniture – Assessment of the Ignitability of Upholstered Furniture	As per GB 17927.2-2011 GB NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA, The tests measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporation these materials.	IS 15768 : 2008	International Standard – ISI 8191-2	NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

TEKNION FURNITURE SYSTEMS (INDIA) PVT. LTD.

Authorised Signature

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Are the plugs and sockets conforming to other International Standards acceptable?

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12) The CCR Instructions pertaining to the IS 15768:2008 may be made applicable to Textiles & Textiles Articles covered under CTH 52, 54, 55 & 58 instead of Furniture and Furniture parts covered under CTH 9401, 9403.

13) It is requested that the above clarification may be sent to all Customs Authorities so that clearance of Imported consignments is facilitated.

Enclosed:-

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Thanking you,

For Teknion Furniture Systems (India) Pvt Ltd

TEKNION FURNITURE SYSTEMS (INDIA) PVT. LTD.

Authorised Signature

Authorized Signatory
Name of Authorized Signatory : Nataraj Dev
Designation Director of Operations – India
Mobile No. 9845900665
Email ID :

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TECHNIGROUP
International Pvt. Ltd.

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Email Id: shiuyi.lin@technigroup.com.sg
CIN: U36100MH2005PTC155180

To,
The Joint Secretary,
Ministry of Textiles,
Udyog Bhawan, New Delhi.

26.04.2024

Subject:- Clarification / Classification of Upholstered Composites Used for Non-Domestic Furniture – BIS Standard 15768:2008 – Applicability on Imported Upholstered Furniture Clarification – reg.

Respected Sir / Madam,

1) This has reference to the Protective Textiles (Quality Control) Order, 2022 dated 10th April 2023 for Serial No. 2 (Upholstered Composites used for Non-Domestic Furniture) as per Indian Standard IS 15768 : 2008. The copy of the said order is enclosed herewith further, it may be perused at Ministry of Textiles website (https://texmin.nic.in/notification) and same is implemented w.e.f. 07th October 2023 as per amended notification dated – 24th May 2023.

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Email Id: shiuyi.lin@technigroup.com.sg
CIN: U36100MH2005PTC155180

Goods or Article	Title of Standards	Indian Standard	International Standard	International Standard Country Details
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Furniture – Assessment of the Ignitability of Upholstered Furniture	As per GB 17927.2-2011 GB NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA, The tests measures only the ignitability of a combination	IS 15768 : 2008	International Standard – ISI 8191-1	NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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7. British Standard – BS 7176 : 2007 Copy

Thanking you,

For Importer Name: Technigroup International Private Limited

Authorized Signatory
Name of Authorized Signatory: Kulbhushan Verma
Designation: Sr. Director
Mobile No: +91 70111 71698
Email ID: Kulbhushan.verma@technigroup.com.sg