INTERNATIONAL STANDARD

ISO 5658-2

Second edition 2006-09-15 **AMENDMENT 1** 2011-11-01

Reaction to fire tests — Spread of flame —

Part 2:

Lateral spread on building and transport products in vertical configuration

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Essais de réaction au feu — Propagation du feu —

Partie 2: Propagation laterale sur les produits de bâtiment et de https://standards.iteh.transport en position verticale bc2-46a5-8e81-

11845eafdf2d/iso-5658-2-2006-amd-1-2011 AMENDEMENT 1



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

Amendment 1 to ISO 5658-2:2006 was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 1, *Fire initiation and growth*.

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AMENDMENT 1

Page 22, Clause 12

Add the following sentence at the end of the text after the first dash:

The longest time used in this calculation shall correspond to flame arrival at a position at least 30 mm before the position of furthest flame propagation on the centreline of the test specimen.

Page 28, Annex E

After Table E.3, add the following text and Tables E.4, E.5 and E.6:

A third inter-laboratory trial was conducted by ISO/TC 92/SC 1/WG 3 during 2008 to check the revised impinging pilot flame procedure with a variety of products. The description of these products is given in Table E.4.

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Table E.4 Description of products tested in the third inter-laboratory trial

Product	Thickness	Density	
	mm	kg/m ³	
Plywood	11	7,3	
Fire-retarded plywood	12	7,5	
Gypsum board	16	11,9	
Aluminium-foil-faced polyisocyanurate foam board	39	1,5	
Polycarbonate sheet	6	5,5	
Fire-retarded particleboard	12	9,5	
PVC-coated steel sheet	1,4	9,3	

Seven laboratories participated and performed tests on the seven products listed in Table E.4 using the procedure in this part of ISO 5658. The results for critical flux at extinguishment (CFE) and heat for sustained burning ($Q_{\rm sb}$) are summarized in Tables E.5 and E.6. When analysing the results for $Q_{\rm sb}$, it was considered that extra clarification of the calculation method concerning the data for the longest time was needed. In the interests of harmonization between ISO and IMO, an additional sentence from Clause 3.8 Annex of IMO Resolution A.653 (16) has been added after the first dash in Clause 12.

The data for the critical flux at extinguishment, in kilowatts per square metre (kW/m²), and heat for sustained burning, in megajoules per square metre (MJ/m²), were analysed according to ISO 5725-2.

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Table E.5 — Repeatability and reproducibility of critical heat flux at extinguishment (CFE)

Product	No. of laboratories	Mean	Repeatability		Reproducibility	
		m	r	r/m %	R	R/m %
Plywood	7	6,29	0,33	5,2	1,06	16,9
Fire-retarded plywood	7	20,54	0,78	3,8	5,94	28,9
Gypsum board	7	20,90	0,64	3,1	4,89	23,4
Aluminium-foil-faced PIR foam board	4	50,70	NC	NC	NC	NC
Polycarbonate sheet	7	18,59	0,50	2,7	3,81	20,5
Fire-retarded particleboard	6	47,08	NC	NC	NC	NC
PVC-coated steel sheet	7	31,93	0,41	1,3	5,31	16,6
NC: Value could not be calculated due to lack of flame spread data.						

Table E.6 — Repeatability and reproducibility of heat for sustained burning (Q_{Sb})

Product	No. of	Mean	Repe	atability	Reproducibility	
i	Teh STA	NDA	RD' PI	RE% IF	R	R/m %
Plywood	7(stai	1,29	s.9,14eh	10,9	0,16	12,4
Fire-retarded plywood	7	3,64	0,48	13,2	1,57	43,1
Gypsum board	7 <u>ISO</u>	565 <u>2</u> ,98200	6/Amalel:20	11 5,4	0,36	12,1
Aluminium-foil-faced PIR foam board	1 1/845eafd£	alog standar 2d/is n© 658	-2-2 N@ -an	nd-1- MC 1	NC	NC
Polycarbonate sheet	7	7,23	0,36	5,0	1,34	18,5
Fire-retarded particleboard	3	NC	NC	NC	NC	NC
PVC-coated steel sheet	7	2,62	0,14	5,3	0,30	12,9
NC: Value could not be calculated due to lack of flame spread data.						

Page 33, Bibliography

Add the following references:

[12] ISO 5725-2:1994, Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method

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