SLOVENSKI STANDARD
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Pohištvo - Razvrstitev površin pohištva po odpornosti proti toploti, hladnim tekočinam, obrabi in razenju

Furniture - Classification for properties for furniture surfaces

Möbel - Klassifizierung von Möbeloberflächen

Ta slovenski standard je istoveten z: **FprCEN/TS 16209**

<u>**ICS:**</u>

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TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

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**FINAL DRAFT
FprCEN/TS 16209**

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ICS

English Version

Furniture - Classification for properties for furniture surfaces

Möbel - Klassifizierung von Möbeloberflächen

This draft Technical Specification is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 207.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. FprCEN/TS 16209:2010: E

FprCEN/TS 16209:2010 (E)

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Foreword

This document (FprCEN/TS 16209:2010) has been prepared by Technical Committee CEN/TC 207 "Furniture", the secretariat of which is held by UNI.

This document is currently submitted to the Formal Vote.

Introduction

This document is a working document for the classification of the resistance of furniture surfaces according to the following properties:

— Resistance to dry heat

— Resistance to wet heat

— Resistance to cold liquids

— Resistance to abrasion

— Resistance to scratching

NOTE   Classification for other important properties for furniture surfaces, such as adhesion or light fastness, are included in EN ISO 2409:2007 and EN 15187:2006.

FprCEN/TS 16209:2010 (E)

1 Scope

This Technical Specification specifies a system for the classification of the resistance to:

⎯ Dry heat

⎯ Wet heat

⎯ Cold liquids

⎯ Abrasion

⎯ Scratching

For resistance to dry heat, resistance to wet heat, and resistance to cold liquids, this Technical Specification applies to all furniture surfaces regardless of materials, except finishes on leather and fabrics.

The classification for the surface resistance to abrasion applies to foil, laminate, melamine faced boards, pigmented and transparent coatings. It does not apply to the surfaces covered by EN 14434.

The classification for the surface resistance to scratching has 2 methods, A and B. Method A applies to all types of surface coatings and coverings except for melamine faced boards and HPL. Method B applies to all types of surfaces. It does not apply to finishes on leather and fabrics.

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.

EN 12720, *Furniture – Assessment of surface resistance to cold liquids*

EN 12721, *Furniture – Assessment of surface resistance to wet heat*

EN 12722, *Furniture – Assessment of surface resistance to dry heat*

prEN 15185:2010, *Furniture – Assessment of the surface resistance to abrasion*

prEN 15186:2010, *Furniture – Assessment of the surface resistance to scratching*

EN 14434:2010, *Writing boards for educational institutions – Ergonomic, technical and safety requirements and their test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12720, EN 12721, EN 12722, prEN 15185:2010 and prEN 15186:2010 apply.

4   Classification

4.1 General

This is a classification system for 5 properties.

Each property relates to 5 classes, from A to E, by decreasing the requirements asked for each class, as stated in 4.2 to 4.6.

4.2 Classification of the resistance to dry heat

Table 1 — Resistance to dry heat

Temperature °C	Class				
	A	**B**	**C**	**D**	**E**
55					≥4
70				≥4	
100			≥4		
140		≥4			
180	≥4				

4.3 Classification of the resistance to wet heat

Table 2 — Resistance to wet heat

Temperature °C	Class				
	A	**B**	**C**	**D**	**E**
55				≥4	≥3
70			≥4		
85		≥4			
100	≥4				

4.4 Classification of the resistance to cold liquids

Table 3 — Resistance to cold liquids

Liquid	Class									
	A		**B**		**C**		**D**		**E**	
	Time	Rating	Time	Rating	Time	Rating	Time	Rating	Time	Rating
Acetic acid	16 h	4	1 h	4	2 min	4	x	x	x	x
Acetone	10 min	4	10 s	4	x	x	x	x	x	x
Ammonia (10 %)	16 h	4	1 h	4	2 min	4	x	x	x	x
Citric acid (10 %)	16 h	4	1 h	4	2 min	4	x	x	x	x
Cleaning agent solution	16 h	4	6 h	4	1 h	4	10 min	4	2 min	4
Coffee	16 h	4	6 h	4	1 h	4	10 min	4	2 min	4
Ethanol 48%	6 h	4	1 h	4	10 min	4	10 min	4	x	x
Paraffin oil Dynamic viscosity 20 °C 25 mPas to 80 mPas	24 h	4	16 h	4	6 h	4	1 h	4	10 min	4
Water	24 h	4	16 h	4	6 h	4	1 h	4	1 h	4
Perspiration basic	1 h	4	1 h	4	1 h	4	1 h	4	1 h	4
NOTE x means no value										

The highest class achieved by all the liquids shall be the class that is assigned for that surface finish.

EXAMPLE   If the result is:

Acetic acid achieves class B.

Acetone achieves class A.

Ammonia (10 %) achieves class B.

Citric acid (10 %) achieves class C.

Cleaning agent solution achieves class A.

Coffee achieves class A.

Ethanol 48% achieves class A.

Paraffin oil achieves class A.

Water achieves class A.

Perspiration basic achieves class A.

Class C is the highest class achieved by all liquids therefore the surface shall be classified as class C.

4.5 Classification of the resistance to abrasion

Table 4 — Resistance to abrasion

IP	Class				
	A	**B**	**C**	**D**	**E**
Revolutions	≥300	]300-150]	]150-80]	]80-30]	<30

4.6 Classification of the resistance to scratching

Table 5 — Resistance to scratching

Method	Class				
	A	**B**	**C**	**D**	**E**
Linear Method A	≥16.0 N	]16.0-11.0] N	]11.0-5.0] N	]5.0-1] N	x
Circular Method B	≥ 2.5 N	]2.5-1.5] N	]1.5-1.0] N	]1.0-0.5] N	< 0.5 N

5   Expression of results

The classification is carried out for each property, separately.

For each property, the classification can be different.

The classification shall be expressed by coding the surface quality (named as a class) referred to the normative document that defines the test method to determine each property.

EXAMPLE

EN 12720: Class A

EN 12721: Class B

EN 12722: Class B

prEN 15185: Class A

prEN 15186: Class A