



**SLOVENSKI STANDARD**  
**SIST EN 4726:2015**

**01-november-2015**

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**Aeronavtika - Odobranje kozmetičnih odstopanj videza sestavnih delov letalske kabine**

Aerospace series - Acceptance of the cosmetic variations in appearance of aircraft cabin parts

Luft- und Raumfahrt - Akzeptanz von kosmetischen Qualitätsabweichungen bei Flugzeug-Kabinenbauteilen

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Série aérospatiale - Acceptation des variations esthétiques de l'aspect des éléments de cabine d'avion

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**Ta slovenski standard je istoveten z: EN 4726:2015**

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**ICS:**

49.095

Oprema za potnike in  
oprema kabin

Passenger and cabin  
equipment

**SIST EN 4726:2015**

**en,fr,de**

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EUROPEAN STANDARD

EN 4726

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September 2015

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English Version

## Aerospace series - Acceptance of the cosmetic variations in appearance of aircraft cabin parts

Série aérospatiale - Acceptation des variations esthétiques de l'aspect des éléments de cabine d'avion

Luft- und Raumfahrt - Akzeptanz von kosmetischen Qualitätsabweichungen bei Flugzeug-Kabinenbauteilen

This European Standard was approved by CEN on 10 January 2015.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 4726:2015) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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of an identical text or by endorsement, at the latest by March 2016, and conflicting national standards shall be withdrawn at the latest by March 2016.

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 organizations 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.

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**EN 4726:2015 (E)****1 Scope**

This standard defines surfaces on visible components in the aircraft cabin. Surfaces will be considered under the aspects of technical feasibility of the industrial design.

This standard is a guideline between airlines, supplier and OEMs with regard to cosmetic issues.

This document aims to:

- a) Provide the supplier with quality criteria, which need to be met during the production, testing- and quality-inspection-process,
- b) Guide airline-, OEM- and supplier-quality assurance with a description of cosmetic standards for following inspections:
  - Supplier internal QA inspection;
  - First article inspection;
  - Source inspection;
  - Incoming inspection;
  - Final assembly line cabin inspection.

**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 12464-1, *Light and lighting — Lighting of work places — Part 1: Indoor work places*

EN ISO 2813, *Paints and varnishes — Determination of specular gloss of non-metallic paint films at 20°, 60° and 85°*

EN ISO 11664-1, *Colorimetry — Part 1: CIE standard colorimetric observers*

EN ISO 11664-2, *Colorimetry — Part 2: CIE standard observers*

EN ISO 11664-4, *Colorimetry — Part 4: CIE 1976 L\*a\*b\* Colour space*

EN ISO 11664-5, *Colorimetry — Part 5: CIE 1976 L\*u\*v\* Colour space and u', v' uniform chromaticity scale diagram*

**3 Abbreviations**

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

A/C	aircraft
CDR	critical design review
3D	three dimensional



CAS	cabin attendant seat
e.g.	for example
FAI	first article inspection
FAL	final assembly line
HTPT	hydro transfer printing technology
ICS	Industrial design colour specification
NTF	non-textile floor
OEM	original equipment manufacturer
Pax	passenger
PTS	purchaser technical specification
PVF	polyvinyl fluoride
QA	quality assurance
QC	quality control
TTL	taxi, take-off and landing
SU	Service unit

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## 4 Definitions of cosmetic defects, inspection zones and criteria

### 4.1 Simplified definition of a cosmetic defect

Cosmetic defects are deviations from the standard or customized specifications/definitions if they are distinct without additional illumination and/or mirror and according to the defined criteria's within this standard. The defects listed encompass any process relevant material.

Pick-ups raised by OEM which are disputed between both parties (OEM and supplier) are subject to be finally decided by the customer. Any decision has to be documented and to be attached to each individual unit.

Samples have to be supplied by the supplier and/or the customer to the OEM in order to validate the inspection.

### 4.2 Zonal type definition for installed parts

#### 4.2.1 Zone A

All surfaces (and edges) directly visible after installation in TTL position from a standing or seating position; specially critically parts regarded by the customer e.g. table top / backs and video arms and as well as areas around logos.

**EN 4726:2015 (E)****4.2.2 Zone B**

All surfaces (and edges) not directly visible after installation in TTL position from a standing or seating position, which will only be visible after modification of the module, e.g. stowage and stowage doors inside.

**4.2.3 Zone C**

All surfaces (and edges) not visible after installation from a standing or seating position and which are entirely covered. To view these areas parts needs to be removed, or inspection equipment (e.g. mirror) is needed. Surfaces and edges are only visible while maintenance.

**4.3 Classification of surfaces to be inspected**

The surfaces to be inspected are classified into three zones (A, B, C).

Customers and suppliers shall document latest at CDR (critical design review) areas that are not visible after installation in the cabin of the aircraft and all other surfaces according to the below zones prerequisites unless otherwise agreed.

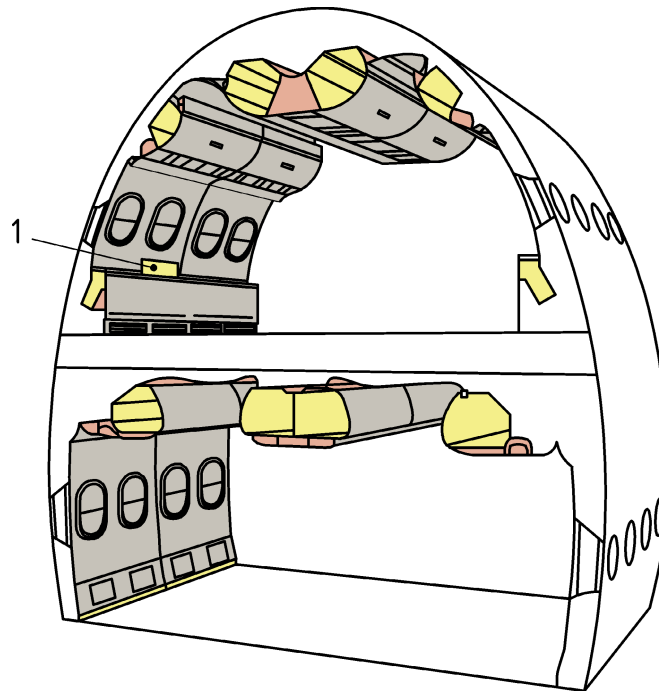
Figure 1 to Figure 6 show typical areas for the zone classification.

Areas/parts allowing functional manual or driven movement, thereby becoming fully visible to the passenger or cabin crew, are classified as "A" zones. In some cases the installation position is paramount facets covered up of wall flush items will have an upgraded classification if free standing.

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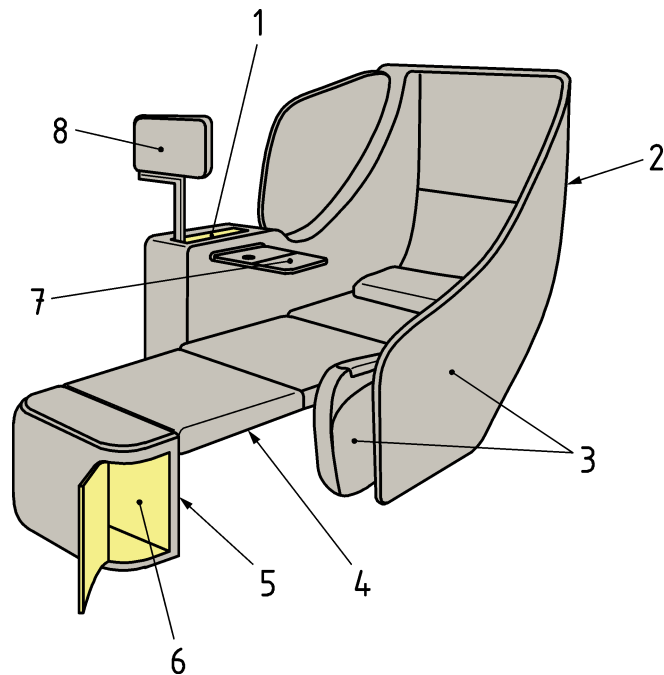
### Key

1 Side wall stowage lid shown open to view lid inside



	A zone
	B zone
	C zone

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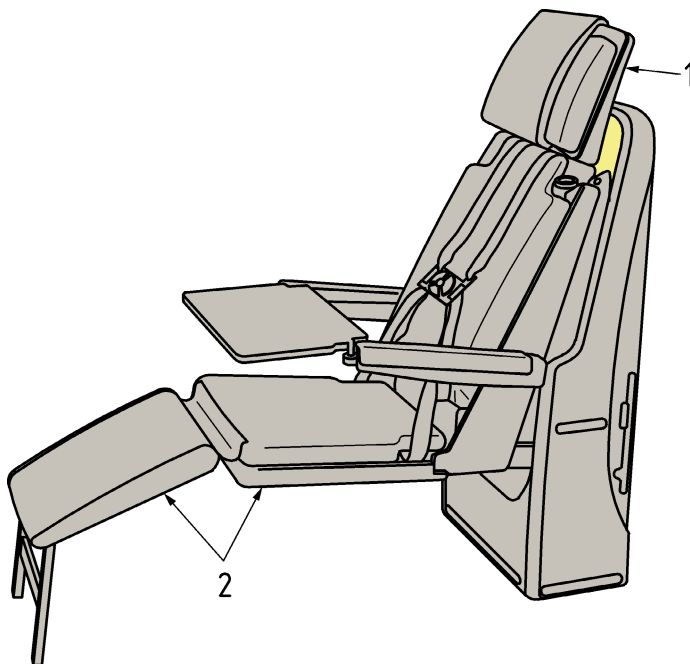
**Figure 1 — Cabin lining**

**Key**

- 1 Stowages insides: B zone
- 2 Rear walls, if free standing: A zone; if rear side very close to a wall (i.e. masked by wall): B zone
- 3 Aisle walls, if aisle side: A zone; if window side: B zone
- 4 Underneath, if "footrest" returns down and backwards: B zone; if "footrest" returns up and backwards: A zone; if "footrest" cannot be viewed incl. during operational movement: C zone
- 5 Reade side: A zone
- 6 Stowage insides: B zone
- 7 Tables top and bottom: A zone
- 8 LCD monitor: A zone

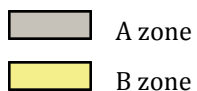
-  A zone
-  B zone

**Figure 2 — Pax seat**



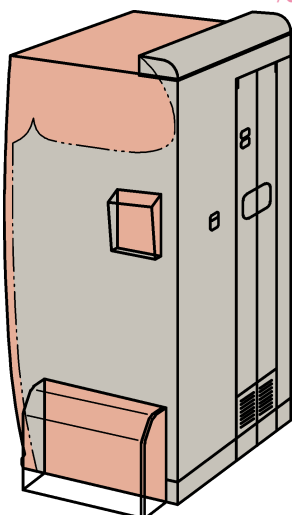
**Key**

- 1 Only if flush to a wall: B zone behind headrest, back of seat
- 2 A zone, under seat pan shroud, underneath of footrest

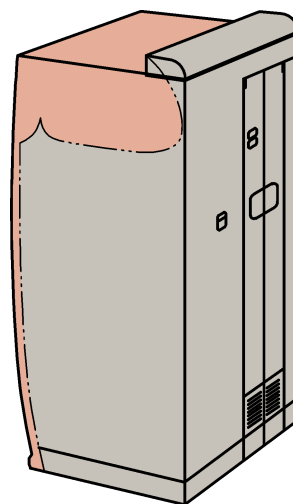


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**Figure 3 — CAS seat**  
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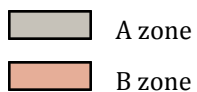


Typical monument with magazine rack and doghouse



Typical monument without additional furnishings

**Key**



**Figure 4 — Cabin monument**