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Aerospace series - Rotorcraft life raft - Requirements, testing and marking

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/24

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 4886

July 2024

ICS 13.200; 49.020

English Version

**Aerospace series - Rotorcraft life raft - Requirements,
testing and marking**

Série aérospatiale - Radeaux de sauvetage de giravion -
Exigences, essais et marquage

Luft- und Raumfahrt - Drehflügler-Rettungsinsel -
Anforderungen, Prüfung und Kennzeichnung

This European Standard was approved by CEN on 26 May 2024.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 4886:2024) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, 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of an identical text or by endorsement, at the latest by January 2025, and conflicting national standards shall be withdrawn at the latest by January 2025.

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

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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EN 4886:2024 (E)**Introduction**

This document prescribes the minimum standards of design and performance for rotorcraft life rafts, carried on rotorcraft operating in a hostile sea area or over very rough sea conditions. Life rafts are designed to provide protection following ditching or water impact, after escape from the rotorcraft and while awaiting rescue.

The document aims to ensure that the equipment user is able to carry out the necessary emergency procedures whilst being provided with an appropriate level of protection under foreseeable conditions of use. It aims to ensure that the equipment has no detrimental effect on the health and safety of the user or on the performance of other equipment.

This document is applicable to all rotorcraft. Rotorcraft include helicopters, tilt rotor/wing and gyroplanes. For the purpose of this document the term helicopter is used generically hereinafter.

1 Scope

This document specifies minimum requirements for life rafts carried on helicopters operating in a hostile sea area or over very rough sea conditions. Life rafts covered by this document are for use by helicopter crew members and passengers in the event of a ditching or water impact.

They are intended either for integration into the helicopter, or stowed in the cabin before being manhandled out of the helicopter. This document does not cover air-drop life rafts.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1875-3, *Rubber- or plastics-coated fabrics — Determination of tear strength — Part 3: Trapezoidal method (five-highest-peak calculation)*

EN 4856, *Aerospace series — Rotorcraft Emergency Breathing Systems (EBS) — Requirements, testing and marking*

EN 4862, *Aerospace series — Rotorcraft constant wear lifejackets — Requirements, testing and marking*

EN 4863, *Aerospace series — Rotorcraft immersion suits — Requirements, testing and marking*

EN ISO 105-E02, *Textiles — Tests for colour fastness — Part E02: Colour fastness to sea water (ISO 105-E02)*

EN ISO 105-X12, *Textiles — Tests for colour fastness — Part X12: Colour fastness to rubbing (ISO 105-X12)*

EN ISO 811, *Textiles — Determination of resistance to water penetration — Hydrostatic pressure test (ISO 811)*

EN ISO 1421, *Rubber- or plastics-coated fabrics — Determination of tensile strength and elongation at break (ISO 1421)*

EN ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227)*

EN ISO 12947-2, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 2: Determination of specimen breakdown (ISO 12947-2)*

ISO 105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

AATCC Test Method 183, *Test Method for Transmittance or Blocking of Erythemally Weighted Ultraviolet Radiation through Fabrics*

ASTM D1434-82, *Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting*

ASTM D1655, *Standard Specification for Aviation Turbine Fuels*

ASTM D3389-21, *Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform Abrader)*

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ASTM D4060, *Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser*

CIE publication No. 15, Colorimetry

DEF STAN 91-091, Turbine Fuel, Kerosene Type, JET A-1; NATO Code: F-35; JSD: AVTUR

EASA, Certification Specifications for Large Aeroplanes, CS-25, Book 1 — Appendix F

EUROCAE, ED-14G, Environmental conditions and test procedures for airborne equipment; Section 11, Fluids susceptibility

EUROCAE, ED-14G, Environmental conditions and test procedures for airborne equipment; Section 13, Fungus resistance

FTMS (Federal Standard) 191A, Textile test methods

IATA Guidance material (Kerosene Type), NATO Code F-35

IMO, Resolution MSC.481(102), Revised recommendation on the use and fitting of retro-reflective materials on life-saving appliances

MIL-STD-3009, *Lighting, aircraft, night vision imaging system (NVIS) compatible*

SAE ARP5825, *Design Requirements and Test Procedures for Dual Mode Exterior Lights*

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