



BSI Standards Publication

Aerospace series — Requirements and tests on user-applied markings on aircraft electrical cables

National foreword

This British Standard is the UK implementation of EN 3838:2022. It supersedes BS EN 3838:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Aerospace series - Requirements and tests on user-applied markings on aircraft electrical cables

Série aérospatiale - Exigences et essais sur les marquages utilisateurs de câbles électriques aéronautiques

Luft- und Raumfahrt - Anforderungen und Prüfungen der Anwenderkennzeichnung auf elektrischen Luftfahrzeugleitungen

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European foreword

This document (EN 3838:2022) 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 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 document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2022, and conflicting national standards shall be withdrawn at the latest by November 2022.

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Introduction

Durability of function-related marking of aircraft electrical cables is of great importance throughout the life of an aircraft, during initial assembly, operation and maintenance operations in service.

Markings should, therefore, be made to a sufficiently high standard to satisfy requirements initially and for the remainder of the expected life marked cable or equipment containing it.

Markings are applied by the user to the cable insulation, jacket or sheath and should not degrade the performance of the cable. They should be applied in accordance with design requirements using a process approved by the Design Authority.

1 Scope

This document specifies tests that are to be performed on markings applied by the user to ensure that their durability is satisfactory and that, after application of markings directly to the cable insulation, jacket or sheath, the cable will meet the performance requirements laid down.

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 3475-201, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 201: Visual examination*

EN 3475-302:2006, *Aerospace series — Cable, electrical, aircraft use — Test methods — Part 302: Voltage proof test*

EN 3475-401:2002, *Aerospace series — Cables, electrical, aircraft use — Test Methods — Part 401: Accelerated ageing*

EN 3475-405:2002, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 405: Bending at ambient temperature*

EN 3475-411, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 411: Resistance to fluids*

EN 3475-703:2002, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 703: Permanence of manufacturer's marking*

EN 3475-705, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 705: Contrast measurement*

EN ISO 4892-3, *Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps (ISO 4892-3)*