

BS ISO 14186:2013



BSI Standards Publication

Air cargo — Fire containment covers — Design, performance and testing requirements

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National foreword

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

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**Air cargo — Fire containment covers
— Design, performance and testing
requirements**

*Fret aérien — Couvertures anti-feu — Exigences de conception,
performances et essais*



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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The committee responsible for this document is ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 9, *Air cargo and ground equipment*.

Introduction

This International Standard specifies the design and performance criteria and testing methods applicable to fire containment covers intended to be used in conjunction with air cargo unit load devices in order to meet through oxygen depletion the fire containment regulations in certain civil transport aircraft cargo compartments.

Throughout this International Standard, the minimum essential criteria are identified by use of the key word “shall”. Recommended criteria are identified by use of the key word “should” and, while not mandatory, are considered to be of primary importance in providing fire containment covers meeting the applicable regulatory requirements and ensuring effective protection against fires. Deviation from recommended criteria should only occur after careful consideration, extensive testing, and thorough service evaluation have shown alternate methods to be satisfactory.

The requirements of this International Standard are expressed in the applicable SI units, with approximate inch-pound units conversion between brackets for convenience in those countries using that system. Where it is deemed necessary to use exact values, the SI unit ones are to be used.

Air cargo — Fire containment covers — Design, performance and testing requirements

1 Scope

1.1 This International Standard specifies the minimum design and performance criteria and testing methods of fire containment covers (FCCs) used:

- a) either in those cargo compartments of civil transport aircraft where they constitute one means of complying with applicable airworthiness regulations,
- b) or on a voluntary basis, when deemed appropriate by operators to improve fire protection in aircraft cargo compartments where airworthiness regulations do not mandate their use.

1.2 The FCCs specified by this International Standard are intended to be used to cover unitized cargo contained/restrained in an air cargo pallet and net assembly, for loading into aircraft main deck cargo compartments:

- a) either class F aircraft cargo compartments according to CS-25 § 25.857(f) and AMC to CS-25.855 and 25.857, in accordance with 1.1 a) above,
- b) or class B aircraft cargo compartments according to CS-25, CCAR-25, JAS Part 3 or 14 CFR Part 25 § 25.857 (b), in accordance with 1.1 a) or 1.1 b) above,
- c) or class E aircraft cargo compartments according to CS-25, CCAR-25, JAS Part 3 or 14 CFR Part 25 § 25.857 (e), in accordance with 1.1 b) above.

NOTE Though nothing prevents an FCC from being carried in a lower deck class C aircraft cargo compartment, it is not intended for this use since its fire containment capability would be redundant with that of the aircraft's fire detection and suppression system, which it could hamper.

1.3 The FCCs specified by this International Standard may be of two types:

- a) type I: separate devices to be installed over a pallet's load below a net approved for this purpose; or
- b) type II: devices permanently attached to a pallet net approved for this purpose.

1.4 The unit load devices (pallet and net) used in conjunction with the fire containment cover are specified in this International Standard only insofar as their flammability requirements are concerned. They are not otherwise specified in this International Standard.

NOTE See Bibliography for applicable ULD airworthiness approval and general design standards.

1.5 This International Standard is not intended to cover fire containment of loose baggage or loose cargo loaded in bulk cargo compartments.

1.6 This International Standard does not cover requirements for fire detection or suppression devices. The specified FCCs are passive devices.

1.7 The use of fire containment covers meeting the requirements of this International Standard is not sufficient alone to ensure flight safety: this International Standard is based on the assumption that the approved fire containment covers will be installed and checked prior to aircraft loading in accordance with appropriate operating instructions, by competent, suitably trained personnel as defined, for example, in ISO 9001:2008^[9], 6.2.2 (see [9.3](#) hereafter).