

# **European Aviation Safety Agency**

## **European Technical Standard Order**

**Subject:** Cargo Restraint Strap Assemblies

### **1 - Applicability**

This ETSO gives the requirements which Cargo Restraint Strap Assemblies that are manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

### **2 - Procedures**

#### 2.1 - General

Applicable procedures are detailed in CS-ETSO Subpart A.

#### 2.2 - Specific

None.

### **3 - Technical Conditions**

#### 3.1 - Basic

##### 3.1.1 - Minimum Performance Standard

Standards set forth in the SAE AS 5385C, Cargo Restraint Straps - Design Criteria and Testing Methods, dated January 2007, as amended by Appendix 1 of this ETSO.

##### 3.1.2 - Environmental Standard

See Section 4 of SAE AS 5385C.

##### 3.1.3 - Computer Software

None.

##### 3.1.4 - Electronic Hardware Qualification

None.

#### 3.2 - Specific

##### 3.2.1 Failure Condition Classification

N/A

### **4 - Marking**

#### 4.1 - General

Marking as detailed in CS-ETSO Subpart A paragraph 1.2. In addition, each Cargo Restraint Strap Assemblies shall be legibly and permanently marked in accordance

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with SAE AS 5385C, section 7.3 with the following:

- (i) dates of manufacture and expiration per SAE AS 5385C, section 4.5.2. Format the dates per SAE AS 5385C, section 7.2.
- (ii) the rated ultimate load in daN and lbf.
- (iii) a unique identifier if required by SAE AS 5385C, section 4.5.2(b).

Also mark permanently and legibly, with at least the manufacturer's name, subassembly part number, and the ETSO number:

- (1) each component that is easily removable (without hand tool), and
- (2) each subassembly of the article that may be interchangeable.

**NOTE 1:** any extra information listed in SAE AS 5385C, section 7, not specifically required in this paragraph, may be marked.

**NOTE 2:** Compliance with this ETSO does not necessarily indicate compliance with SAE AS 5385C. To make the cargo strap assembly as complying with SAE AS 5385C, the cargo strap assembly must be shown to meet the requirements of SAE AS 5385C in conformance with SAE AS 5385C, Para 7.1 and Note 8.

4.2 - Specific

None.

## **5 - Availability of Referenced Document**

See CS-ETSO Subpart A paragraph 3.

## **APPENDIX 1. MINIMUM PERFORMANCE STANDARD FOR CARGO RESTRAINT STRAP ASSEMBLIES**

This Appendix prescribes the MPS for cargo restraint strap assemblies. The applicable standard is SAE AS 5385C *"Cargo Restraint Straps – Design Criteria and Testing Methods"*, dated January 2007 modified as follows:

<b>AS5385C Section</b>	<b>Action</b>
1	Disregard
2	Modify Paragraph 2. "REFERENCES" by disregarding the last sentence.
3	Disregard 3.14
4	Disregard 4.5.4 and 4.9.1  Modify 4.5.1 by adding the following note:  "NOTE: Environmental degradation data other than that documented in AIR490B may be used if substantiated by the Applicant and approved by the Agency."
5	Disregard 5.9, 5.10 and 5.11  Modify 5.1 by adding the following note:  "NOTE: Equivalent alternate methods must be approved by the Agency".
6	Disregard
7	Apply per Paragraph 4 of this ETSO
8	Disregard
9	Disregard
10	Disregard