National Standards Authority of Ireland

IRISH STANDARD

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AEROSPACE SERIES - ELEMENTS OF ELECTRICAL AND OPTICAL CONNECTION - TEST METHODS - PART 317: FLAMMABILITY

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Aerospace series Elements of electrical and optical connection Test methods Part 317: Flammability

Série aérospatiale
Organes de connexion
électrique et optique
Méthodes d'essais
Partie 317: Ininflammabilité

Luft- und Raumfahrt
Elektrische und optische
Verbindungselemente
Prüfverfahren
Teil 317: Nichtenflammbarkeit

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: Rue de Stassart, 36, B - 1050 Bruxelles

Ref. No. EN 2591-317: 1998 E

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 AECMA, 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of an identical text or by endorsement, at the latest by December 1998, and conflicting national standards shall be withdrawn at the latest by December 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies a method of verifying the flammability of elements of connection.

It shall be used together with EN 2591.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 4046 - 1978	Paper, board, pulp and related terms - Vocabulary
EN 2591	Aerospace series - Elements of electrical and optical connection - Test methods - General
EN 2591-101	Aerospace series - Elements of electrical and optical connection - Test methods - Part 101: Visual examination
EN 2591-207	Aerospace series - Elements of electrical and optical connection - Test methods - Part 207: Voltage proof test
EN 2591-312	Aerospace series - Elements of electrical and optical connection - Test methods - Part 312: Air leakage [1)]
EN 2591-409	Aerospace series - Elements of electrical and optical connection - Test methods - Part 409: Contact retention in insert [1)]

3 Preparation of specimens

3.1 Specimens shall be prepared according to the technical specification.

Unwired cavities shall be fitted with filler plugs.

3.2 Unless specified in the technical specification, the following details shall be stated:

- specimens mated or unmated and fitted with protective covers;
- mounting method, type of cable (non propagating flames) and definition of specimen wiring;
- method A or B;
- final measurements and requirements (if applicable);
- force to be applied according to EN 2591-409;
- leakage rate according to EN 2591-312;
- method according to EN 2591-207 and voltage value.

1) Published as AECMA Prestandard at the date of publication of this standard

4 Apparatus

The dimensions of the chamber shall be approximately as follows: length 300 mm, width 300 mm, height 600 mm (see figure 1). It shall be open on the top and front faces. The air circulation shall be sufficient but there shall be no draught.

The specimens shall be held in position with a suitable device so that the thermal inertia is negligible.

The specimens shall be installed in the test chamber with their longitudinal axis positioned at an angle of (30 $\pm$ 5)° to the horizontal. For specimens with protective covers, cables shall be directed downwards.

A piece of easily flammable paper (tissue paper to ISO 4046) approximately 250 mm $\times$ 250 mm shall be stretched over a frame, about 300 mm to 350 mm below the specimens.

The burner with a nozzle diameter of approximately 10 mm shall be positioned under the specimen so that its axis is at an angle of 30° to the vertical. The flame shall be 50 mm to 70 mm high and its hottest point on the edge of the specimens shall have a temperature of (955 $\pm$ 30) °C.

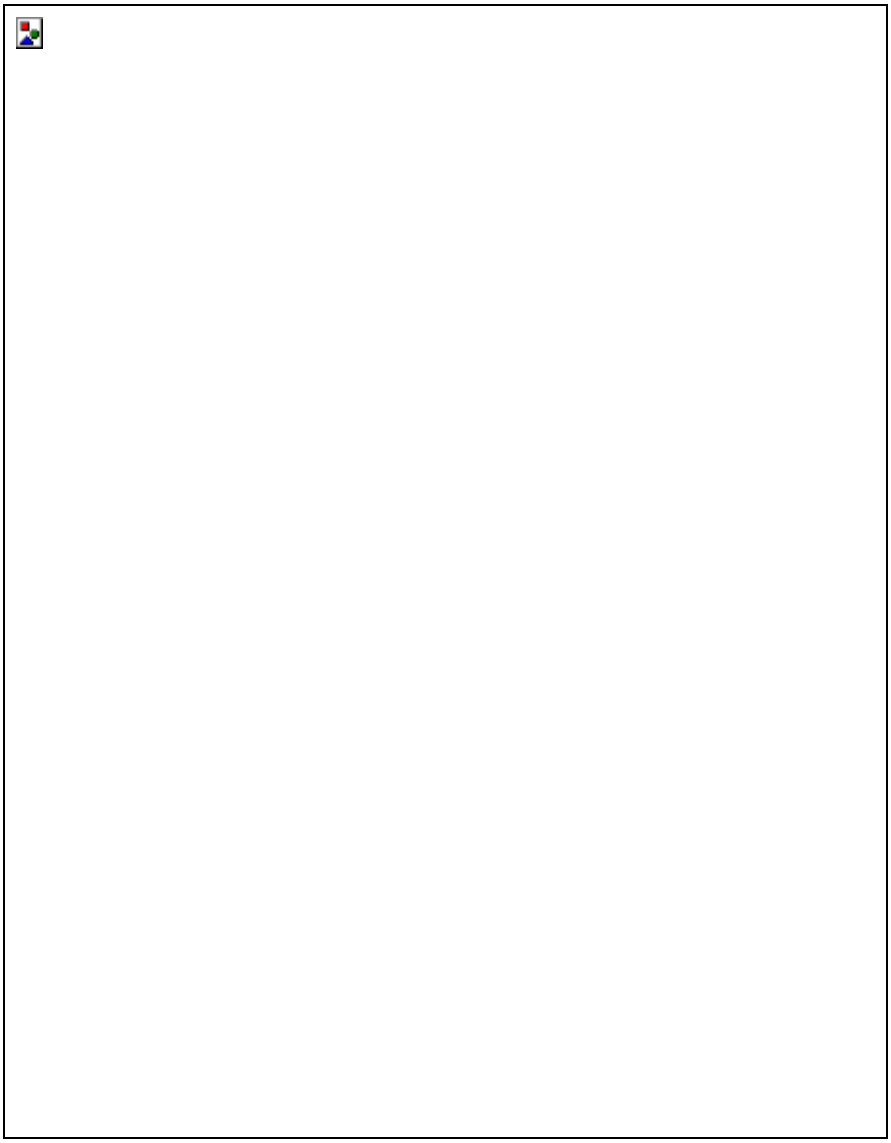

Figure 1