EESTI STANDARD

EVS-EN 2155-13:2000

Lennunduse ja kosmonautika seeria. Läbipaistvate lennukiklaasimismaterjalide katsemeetodid. Osa 13: Koormuse all läbipaindumise temperatuuri määramine

Aerospace series - Test methods for transparent materials for aircraft glazing - Part 13: Determination of temperature at deflection under load

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA	NATIONAL FOREWORD
Käesolev Eesti standard EVS-EN 2155-13:2000 sisaldab Euroopa standardi EN 2155-13:1993 ingliskeelset teksti.	This Estonian standard EVS-EN 2155-13:2000 consists of the English text of the European standard EN 2155-13:1993.
Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 11.01.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

This document is a preview generated by EVS

ICS 49.045

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:
Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 2155-13:1993

EVS

February 1993

UDC 629.73.023.26:620.1:536.4

Descriptors: Aircraft industry, glazing, glass, transparent plastics, bend tests, flexing, determination, temperature

English version

Aerospace series - Test methods for transparent materials for aircraft glazing - Part 13: Determination of temperature at deflection under load

Série aérospatiale - Méthode d'essais pour matériaux transparents pour vitrages aéronautiques - Partie 13: Détermination de la température de fléchissement sous charge

Luft- und Raumfahrt - Prüfverfahren für transparente Werkstoffe zur Verglasung von Luftfahrzeugen - Teil 13: Bestimmung der Temperatur bei Durchbiegung unter Belastung

This document is a preview generated by EVS

This European Standard was approved by CEN on 1993-02-19. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

Central Secretariat: rue de Stassart,36 B-1050 Brussels

© 1993 Copyright reserved to CEN members

Contents list

		Page
1	Scope	3
2	Definitions	3
3	Apparatus	3
4	Specimens	5
5	Conditioning	5
6	Procedure	5
7	Test report	6

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 successively 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 August 1993, and conflicting national standards shall be withdrawn at the latest by August 1993.

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

This document is a preview generated by EVS

1 Scope

1.1 This standard specifies a procedure for determining the temperature at which an arbitrary deformation occurs when the specimens are subjected to arbitrary bending loads, under conditions of continually rising temperatures.

1.2 The procedure applies to materials in sheet form in thicknesses ⩾ 3 mm.

It does not apply to stretched/pressed (homogenous) acrylic materials.

This document is a preview generated by EVS

2 Definitions

For the purpose of this test the temperature of deflection under load is that temperature (attained during conditions of steady increase of temperature) at which a specimen of the material exhibits a specified deflection.

3 Apparatus

3.1 The apparatus used is constructed essentially as shown in figure 1 and shall conform to the description given below.

3.2 Specimen supports

The specimen rests horizontally on metal supports (see figure 1); the load is applied vertically on the upper face of the specimen at midway between supports by means of a rod.

The vertical members, which attach the specimen supports to the upper plate are made of material having the same coefficient of linear expansion as is used for the rod (see note).

> NOTE : Unless these parts have the same coefficient of linear expansion, the differential change in length of these parts introduces an error in the reading of the apparent deformation of the specimen. A blank test is made on each apparatus using a test bar made of rigid material having a low coefficient of expansion [1]. All temperature ranges to be used shall be covered and a correction factor is determined for each temperature. If the correction factor is 0,010 mm or greater, its algebraic sign is noted and the factor is applied to each test by adding it algebraically to the reading of apparent deflection of the tested specimens.

1) Invar or borosilicate glass has been found suitable for this purpose.