

**Aerospace series - Non-metallic materials - Glass
transparencies - Test methods - Determination of
modulus of rupture**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 3864:2013 sisaldab Euroopa standardi EN 3864:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 3864:2013 consists of the English text of the European standard EN 3864:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

**Aerospace series - Non-metallic materials - Glass
transparencies - Test methods - Determination of modulus of
rupture**

Série aérospatiale - Matériaux non-métalliques -
Transparents en verre - Méthodes d'essais - Détermination
du module de rupture

Luft- und Raumfahrt - Nichtmetallische Werkstoffe -
Transparente Glaswerkstoffe - Prüfverfahren - Bestimmung
des Bruchmoduls

This European Standard was approved by CEN on 19 January 2013.

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Foreword

This document (EN 3864:2013) 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 Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, 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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Introduction

This standard is part of the series of EN non-metallic material standards for aerospace applications. The general organisation of this series is described in EN 4385. This standard is a level 3 document as defined in EN 4385. It has been prepared in accordance with TR 4386.

1 Scope

This European Standard defines the requirements for the determination of the modulus of rupture of glass transparencies for aircraft applications, whether in the annealed or chemically or thermally tempered condition.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3001, *Aerospace series — Tempered float glass plies for aircraft applications — Technical specification* ¹⁾

EN 4385, *Aerospace series — Non-metallic materials — General organisation of standardisation — Links between types of standards* ¹⁾

TR 4386, *Aerospace series — Non-metallic materials — Rules for the drafting and presentation of test method standards* ²⁾

3 Terms, definitions and abbreviations

For the purposes of this document, the following terms, definitions and abbreviations apply.

3.1

modulus of rupture

MOR

the surface fibre stress applied to a glass in bending, at the point at which rupture takes place

4 Health, safety and environment

This standard does not necessarily include all health, safety and environment requirements, associated with its use.

Persons using this standard shall be familiar with normal laboratory / test house practices.

It is the responsibility of the user to establish satisfactory health, safety and environment practices and to ensure conformity with any European, National or local laws / regulations.

5 Principle/technique

A specimen of glass representing the transparency is subjected to four points bending to failure, and the MOR is then calculated from the breaking load and specimen dimensions.

1) Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

2) Published as ASD-STAN Technical Report at the date of publication of this standard (www.asd-stan.org).