

Rubber or plastic coated fabrics - Safety of temporary structures (tents) - Specification for coated fabrics intended for tents and related structures

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15619:2014 sisaldab Euroopa standardi EN 15619:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 15619:2014 consists of the English text of the European standard EN 15619:2014.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.03.2014.	Date of Availability of the European standard is 26.03.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 59.080.40, 97.200.30

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

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

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

The right to reproduce and distribute 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 a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

English Version

**Rubber or plastic coated fabrics - Safety of temporary structures
(tents) - Specification for coated fabrics intended for tents and
related structures**

Supports textiles revêtus de caoutchouc ou de plastique -
Sécurité des structures temporaires (tentes) - Spécification
des supports textiles revêtus destinés aux tentes et
structures similaires

Mit Kautschuk oder Kunststoff beschichtete Textilien -
Sicherheit Fliegender Bauten (Zelte) - Spezifikation für
beschichtete Textilien für Zelte und zugehörige Bauten

This European Standard was approved by CEN on 20 December 2013.

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 CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 General description of coated fabrics intended for tents	7
5 Characteristics relating to coated fabrics	8
6 Requirements	10
7 Information provided by the coated fabric producer	13
Annex A (normative) Artificial ageing by long term exposure to the combination of UV irradiation, elevated temperature and water	14
A.1 General	14
A.2 Exposition programme	14
A.3 UV cycle	14
A.4 Moisture cycle	14
A.5 Preparation of specimens	14
A.6 Procedure	15
A.7 Measurements after ageing	15
A.8 Test report	15
Annex B (normative) Coating adhesion	16
B.1 General	16
B.2 Preparation of the test specimens	16
B.3 Welding	16
B.4 Testing	16
B.5 Test report	17
Annex C (informative) Weld resistance recommendation	18
C.1 General	18
C.2 Weld resistance	18
C.3 Preparation of test specimens and test procedure	18
C.4 Test report	19
Annex D (informative) Assessment of conformity	20
D.1 General	20
D.2 Type tests	20
D.3 Factory production control	20

D.4	Testing of the finished products.....	21
D.5	Inspection and testing	22
D.6	Traceability.....	22
D.7	Marking	22
	Bibliography.....	23

This document is a preview generated by EVS

Foreword

This document (EN 15619:2014) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, the secretariat of which is held by BSI.

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 September 2014 and conflicting national standards shall be withdrawn at the latest by September 2014.

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.

This document supersedes EN 15619:2008+A1:2010.

The main changes in comparison with the previous edition include:

- the normative references have been updated;
- use of the expression “coated fabric producer” instead of “manufacturer” throughout the document;
- subclause 5.9 “Reaction to fire” updated to include an alternative test method related to fire behaviour, used to determine the “Euroclasses”;
- Clause 6 “Requirements” has been updated to include:
 - explanation to determine the product profile;
 - separate tables introduced tables (one table per performance) to avoid confusion when determining the product profile;
 - a specific codification letter is used for each performance;
 - a fourth performance level has been added to Tables 4 and 8 (elongation), Tables 5 and 9 (residual deformation);
- creation of a new Clause 7, Information provided by the coated fabric producer;
- addition of subclause A.8 “Test report”;
- Annex C has been deleted and references to this annex replaced by reference to EN 15977.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The purpose of this European Standard is to specify the characteristics, the requirements and the test methods for coated fabrics intended for temporary structure and tents.

Particular care has been taken not to come in conflict with the items that have already been treated in EN 13782. This European Standard has been drawn up according to past experience and risk analysis. The content of this European Standard collects the different existing national regulations and refers to the different European test standards available for coated fabrics.

This European Standard also introduces a system of levels. It is not possible to divide coated fabric for tents into just a few performance levels, because of the enormous variety of conditions of use. This European Standard proposes different level of performance (level F₁, F₂, F₃, for examples) for each characteristic – or T1, T2, T3, T4 for the fire behaviour. This allows choice of the appropriate level for each characteristic and thus enables the composition of a “product profile”, adapted to each specific type of use. This means, for example, that for small tents exposed to low wind and snow loads but high exposition to sun light, a mechanical resistance level F₃ may be required combined with a colour fastness level C₁.

This European Standard specifies requirements which are useful for design, calculation, manufacture, installation, maintenance, operation, examination and testing of coated fabric. The informative Annex D gives recommendations regarding the assessment of conformity of the production. The informative Annex C gives recommendations regarding the weld resistance.

1 Scope

This European Standard specifies the characteristics, requirements and test methods for coated fabric intended for mobile, temporary installed tents (see 3.3) and related structures.

Plastic film and material other than coated fabrics are not covered by this European Standard.

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 1875-3, *Rubber- or plastics- coated fabrics - Determination of tear strength - Part 3: Trapezoidal method*

EN 14115, *Textiles - Burning behaviour of materials for marquees, large tents and related products - Ease of ignition*

EN 15977:2011, *Rubber or plastic coated fabrics - Mechanical properties - Determination of the elongation under load and the residual deformation*

EN 20105-A02, *Textiles - Tests for colour fastness - Part A02: Grey scale for assessing change in colour (ISO 105-A02)*

EN ISO 846, *Plastics - Evaluation of the action of microorganisms (ISO 846)*

EN ISO 1421, *Rubber- or plastics-coated fabrics - Determination of tensile strength and elongation at break (ISO 1421)*

EN ISO 2286-2, *Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 2: Methods for determination of total mass per unit area, mass per unit area of coating and mass per unit area of substrate (ISO 2286-2)*

EN ISO 2411, *Rubber- or plastics-coated fabrics - Determination of coating adhesion (ISO 2411)*

EN ISO 4892-3, *Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps (ISO 4892-3)*

EN ISO 11925-2, *Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test (ISO 11925-2)*

ISO 1420, *Rubber- or plastics-coated fabrics - Determination of resistance to penetration by water*

3 Terms and definitions

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

3.1

initial approval

design and calculation review, verification, examinations and tests executed before granting a permit for tent operation