



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 14704-3:2006**

ICS 59.080.30

National Standards  
Authority of Ireland  
Glasnevin, Dublin 9  
Ireland

Tel: +353 1 807 3800  
Fax: +353 1 807 3838  
<http://www.nsai.ie>

**DETERMINATION OF THE ELASTICITY OF  
FABRICS - PART 3: NARROW FABRICS**

**Sales**  
<http://www.standards.ie>

*This Irish Standard was  
published under the  
authority of the National  
Standards Authority of  
Ireland and comes into  
effect on:*

*7 February 2007*

**NO COPYING WITHOUT NSAI  
PERMISSION EXCEPT AS  
PERMITTED BY COPYRIGHT  
LAW**

© NSAI 2006

**Price Code G**

Údarás um Chaighdeán Náisiúnta na hÉireann



EUROPEAN STANDARD

**EN 14704-3**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2006

---

ICS 59.080.30

English Version

## Determination of the elasticity of fabrics - Part 3: Narrow fabrics

Détermination de l'élasticité des étoffes - Partie 3 : Etoffes étroites

Bestimmung der Elastizität von Flächengebilden - Teil 3: Schmaltextilien

This European Standard was approved by CEN on 28 October 2006.

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.

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 Central Secretariat has the same status as the official versions.

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



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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

---

## Contents

Page

Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions .....	4
4 Principle.....	6
4.1 Method A.....	6
4.2 Method B.....	6
5 Sampling.....	6
6 Apparatus .....	6
6.1 CRE testing machine.....	6
6.2 Line clamps .....	7
6.3 Equipment, for cutting test specimens to the required dimensions.....	7
6.4 Calibrated metal rule, graduated in mm. ....	7
7 Atmosphere for conditioning and testing .....	7
8 Preparation of test specimens .....	7
8.1 General.....	7
8.2 Test specimen preparation .....	7
9 Procedure .....	7
9.1 Method A.....	7
9.2 Method B.....	10
10 Test report .....	14
Annex A (informative) Example of a typical cycling graph for method A.....	15
Annex B (informative) Procedure for sampling.....	16
Annex C (informative) Clamping and holding devices .....	17

## **Foreword**

This document (EN 14704-3:2006) 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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

The reasons behind developing this standard are due to technical advancement in yarn and fabric structures and properties, which increases product range and developments.

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

## EN 14704-3:2006 (E)

### 1 Scope

This standard describes the test methods which can be used to measure the elasticity and related properties of narrow fabrics. Two methods are itemised: one for the purpose of product quality assurance (method A), and the other for product performance when in use (method B).

### 2 Normative references

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

EN ISO 139, *Textiles – Standard atmospheres for conditioning and testing (ISO 139:2005)*

EN ISO 7500-1, *Metallic materials – Verification of static uniaxial testing machines – Part 1: Tension/compression testing machines – Verification and calibration of the force-measuring system (ISO 7500-1:2004)*

EN ISO 10012, *Measurement management systems - Requirements for measurement processes and measuring equipment (ISO 10012:2003)*

### 3 Terms and definitions

For the purposes of this European standard the following terms and definitions apply.

#### 3.1

##### **narrow fabric**

woven or knitted construction intended for use as a trim, binding, edging, strapping or harness, and designed to be used in its full width

#### 3.2

##### **elasticity**

property of a material by virtue of which it tends to recover its original size and shape immediately after removing the force causing deformation

#### 3.3

##### **constant-rate-of-extension (CRE) testing machine**

tensile testing machine provided with one clamp which is stationary and another clamp, which moves with a constant speed throughout the test, the entire testing system being virtually free from deflection

#### 3.4

##### **strip test specimen**

test specimen in which the full width is gripped in the jaws of the testing machine

#### 3.5

##### **gauge length**

distance between the two effective clamping points of a testing device, for this method where line clamps are employed, it is the distance between the two contact points

#### 3.6

##### **slack mounting**

insertion of a strip test specimen in the line clamps of the upper jaw, allowing it to hang freely under its own weight, guided by the hand to ensure perpendicular alignment to the line of pulling force, without any force being applied

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-