

# **Touch and close fasteners — Determination of the overall and effective widths of tapes and the effective width of a closure**

The European Standard EN 12240 : 1997 has the status of a  
British Standard

ICS 61.040

## National foreword

This British Standard is the English language version of EN 12240 : 1997.

The UK participation in its preparation was entrusted to Technical Committee TCI/66, Apparel, which has the responsibility to:

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- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 4, an inside back cover and a back cover.

### Amendments issued since publication

Amd. No.	Date	Text affected

This British Standard, having been prepared under the direction of the Sector Board for Materials and Chemicals, was published under the authority of the Standards Board and comes into effect on 15 November 1997

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ISBN 0 580 28608 8

ICS 61.040

Descriptors: Haberdashery, touch and close fasteners, tapes, measurements, width

English version

## Touch and close fasteners — Determination of the overall and effective widths of tapes and the effective width of a closure

Fermetures auto-agrippantes — Détermination de la largeur totale et de la largeur utile des rubans et de la largeur utile d'une fermeture

Haftverschlüsse — Bestimmung der gesamten und der effektiven Breite der Bänder eines Haftverschlusses und der effektiven Breite eines geschlossenen Haftverschlusses

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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 Brussels**

## **Foreword**

This European Standard 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of an identical text or by endorsement, at the latest by December 1997, and conflicting national standards shall be withdrawn at the latest by December 1997.

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 European Standard specifies a method for determining the overall widths and effective widths of tapes which comprise a touch and close fastener, and the effective width of the resulting closure.

## 2 Normative reference

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.

EN 20139                      *Textiles — Standard atmospheres for conditioning and testing*  
(ISO 139 : 1973)

## 3 Definitions

For the purposes of this European Standard the following definitions apply.

### 3.1 selvedge of a tape

That part of the tape adjacent to the edge which does not contain any closure elements.

### 3.2 overall width of a tape

The distance between the edges of the tape as measured by the method in 8.1.

### 3.3 effective width of a tape

The distance between the edges of the pile surface of the tape as measured by the method in 8.2.

### 3.4 effective width of a closure

The effective width of the male or female tape, whichever is the lower.

## 4 Principle

Determination, by using three steel scales, of the overall and effective widths for the tapes which comprise a touch and close fastener and the effective width of the closure when the male and female tapes are closed together.

## 5 Apparatus

Three steel rules capable of measuring to within 0,5 mm.

## 6 Test specimens

Take one test specimen of length  $(100 \pm 2)$  mm of both the male and female tapes.

## 7 Conditioning

Condition the test specimen for at least 24 h in accordance with the standard atmosphere for testing as specified in EN 20139. Measure the tapes under these conditions.

## 8 Methods of measurement of width

### 8.1 Measurement of overall width of a tape

For each of the test specimens, place the test specimen on a flat surface so that the pile surface is downwards and making sure that the tape is free from creases; place a steel scale on the back of the tape and perpendicular to the edges of the tape. Measure the overall width of the tape, including any selvedges, to an accuracy of 0,5 mm for tapes up to 100 mm width and 0,5 % for tapes of width greater than 100 mm.

Repeat this procedure to give a total of three measurements for each test specimen.

### 8.2 Measurement of the effective width of a tape

For each of the test specimens place the test specimen on a flat surface so that the pile surface is upwards, and, making sure that the tape is free from creases, place a steel scale flush against the base of the pile of the tape, one on either side. Place the third steel scale on top of the first two steel scales and perpendicular to their edges (see figure 1). Measure the distance between the edges of the first two steel scales which are against the pile of the tape to an accuracy of 0,5 mm for distances up to 100 mm, and 0,5 % for distances greater than 100 mm.

Repeat this procedure at three places for each test specimen.

## 9 Calculation and expression of results

### 9.1 Calculation of the overall width of a tape

For each of the male and female tapes, calculate the arithmetic mean of the three measurements, according to 8.1, and express this to an accuracy of 0,5 mm for tapes up to 100 mm width and 0,5 % for tapes of width greater than 100 mm. Record this value as the overall width of the tape.

### 9.2 Calculation of the effective width of a tape

For each of the male and female tapes, calculate the arithmetic mean of the three measurements, according to 8.2, and express this to an accuracy of 0,5 mm for tapes up to 100 mm width and 0,5 % for tapes of width greater than 100 mm. Record this value as the effective width of the tape.

### 9.3 Calculation of the effective width of a closure

The effective width of a closure is equal to the effective width of either of the male or female tapes, whichever is the lesser.

## 10 Test report

The test report shall include the following information:

- the number and date of this European Standard;
- date of the test;
- a complete identification of the components, including where possible the type, source and manufacturer's reference numbers;
- the overall width and effective width for each tape and the effective width of the closure;
- any deviation from this standard or any incident likely to have affected the results.

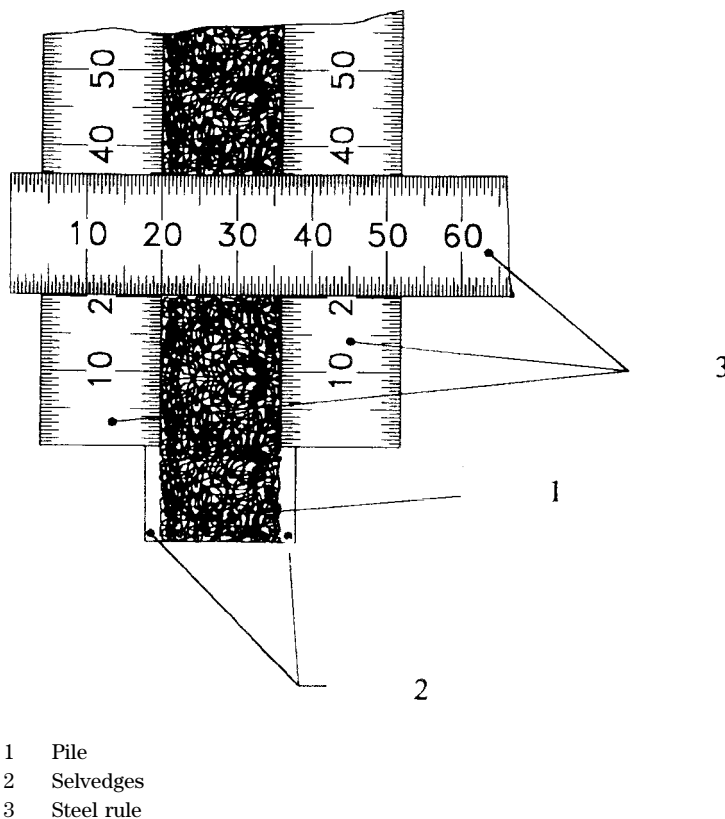


Figure 1. Measurement of effective width



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