INTERNATIONAL STANDARD

**ISO 5025**

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# Reinforcement products — Woven fabrics — Determination of width and length

*Produits de renfort — Tissus — Détermination de la largeur (laize) et de la longueur*



Reference number
ISO 5025:1997(E)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 5025 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

This second edition cancels and replaces the first edition (ISO 5025:1978), which has been technically revised.





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# Reinforcement products — Woven fabrics — Determination of width and length



## 1 Scope

This International Standard specifies a method for determining the width and length of a woven-fabric reinforcement in the form of a roll.[1)]

## 2 Principle

The width, in centimetres, and the length, in metres, are determined using a calibrated ruler or other suitable measuring device.

## 3 Definition

For the purposes of this International Standard, the following definition applies:

**3.1 width:** The distance, measured perpendicular to the warp yarns, between the outside edges of the outermost warp yarns.

## 4 Apparatus

**4.1 measuring device** (for example a ruler), with a length greater than the width of the fabric, graduated in millimetres.

The permissible limit of error for the device shall not exceed 0,1 cm for measurements less than or equal to 150 cm and 0,15 % for measurements greater than 150 cm.

**4.2 Measurement equipment,** capable of measuring the fabric length with a maximum permissible error not exceeding 1 % of the full length measured. For in-line use, measurement shall be made on flat running fabric without slippage.

A ruler or a drum linked to a counting device may be acceptable systems, depending on the roll length.

1) Attention is drawn to the following related International Standards on textiles: ISO 3932:1976, *Textiles — Woven fabrics — Measurement of width of pieces,* and ISO 3933:1976, *Textiles — Woven fabrics — Measurement of length of pieces.*

The determination of the length of a roll of fabric may be influenced by the tension to which the fabric is subjected during measurement. The measuring device shall be calibrated taking this tension into account and the fabric specification shall be written accordingly.

## 5 Sampling, type of test specimen and number of test specimens

For lot acceptance, the number of elementary units[2)] to be examined, and possibly the number of determinations to be performed within each elementary unit, shall be as defined either in the product specification or by the person ordering the test.

For the determination itself, the test specimen is, in this case, one roll of fabric.

## 6 Procedure

Conditioning of the fabric is not necessary.

### 6.1 Width

Using the measuring device (4.1), determine to the nearest 0,1 cm the width as the average of two measurements separated from each other by at least 100 cm.

Carry out these measurements at the outer end of the roll unless there is evidence of damage or distortion of the fabric, in which case unroll sufficient fabric to ensure representative measurements.

The fabric specification or the person ordering the test may require additional determinations at other places within the roll.

The overall width, i.e. including the fringes, may also be determined by agreement between the interested parties.

### 6.2 Length

Using the measurement equipment (4.2), measure the length, to the nearest 1 m or, if required, to a fraction of a metre in order to achieve 1 % accuracy for the length measured.

This may be also done by reading the dial of a drum counter.

## 7 Expression of results

### 7.1 Width

Calculate the width of the fabric as the mean of the two measurements, expressed in centimetres to the nearest 0,1 cm.

If more than one determination is made within the roll, the specification or the person ordering the test shall indicate how the results of the different determinations shall be dealt with.

### 7.2 Length

Take as the length of the fabric the measurement obtained for the roll length, expressed to the nearest metre or fraction of a metre (see 6.2).

2) As defined in ISO 1886, the elementary unit is the smallest normally commercially available entity of a given product.