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**Textiles — Methods for analysis of  
woven fabrics construction —**

Part 6:  
**Determination of the mass of warp  
and weft per unit area of fabric**

*Textiles — Méthodes d'analyse de la construction des tissus —*

*Partie 6: Détermination de la masse des fils de chaîne et de trame par  
unité de surface d'un tissu*



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## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 24, *Conditioning atmospheres and physical tests for textile fabrics*.

This second edition cancels and replaces the first edition (ISO 7211-6:1984), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

- the normative reference to ISO/TR 5090 (withdrawn) has been replaced by ISO 1833-1;
- a [Clause 3](#), Terms and definitions has been added.

A list of all parts in the ISO 7211 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

It is common practice to describe fabrics by the mass per unit area (see ISO 3801) and the ends and picks per centimetre, but this leaves the proportions of warp and weft in the fabric uncertain. Any desired balance of cover between warp and weft can be stated without specifying the yarn linear densities by giving separate values for the masses of warp and weft per unit area of the fabric.



# Textiles — Methods for analysis of woven fabrics construction —

Part 6:

## Determination of the mass of warp and weft per unit area of fabric

### 1 Scope

This document specifies methods for determining the mass of the warp and weft threads per unit area of fabric after the removal of any non-fibrous matter.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*

ISO 1833-1, *Textiles — Quantitative chemical analysis — Part 1: General principles of testing*

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 4 Principle

**Method A:** The outline of the fabric specimen to be dissected is marked in the form of a square or rectangle, and the nonfibrous matter is removed while the marked area still forms part of a larger sample and the threads cannot, therefore, be lost from it. If the amount of non-fibrous matter is to be determined, it is stipulated that the larger sample shall be a square cut with its diagonals parallel to the directions of the threads in the fabric. If the amount of non-fibrous matter has not to be determined, the larger sample may be of any shape or size.

**Method B:** A specimen of known area is dissected and the non-fibrous matter is removed from the warp and weft threads.

### 5 Apparatus

#### 5.1 Indelible marking ink.

#### 5.2 Scissors.