
**Clothing — Digital fittings —
Vocabulary and terminology used for
the virtual garment**

*Habillement — Essayage virtuel — Vocabulaire et terminologie
utilisés pour les vêtements virtuels*

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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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 133, *Clothing sizing systems — Size designation, size measurement methods and digital fittings*.

Introduction

This International Standard deals with virtual garments for digital fitting.

Various types of virtual garment-based IT/fashion convergence technology are being attempted today, in response to the rapid development of the vast online fashion market, including the internet, smart phones, smart TVs, and virtual fittings at bricks-and-mortar stores. Meanwhile, the increased demand for ubiquitous fashion business services is encouraging efforts to innovate with regard to the traditional processes of planning, production and sales. The use of digital technology in the modern international apparel industry is leading to the use of three-dimensional information for fashion products. These products reflect appearance, design and texture characteristics of garments. It is envisaged that consumers will be able to go online anytime, anywhere, to try on clothes, evaluate the style and fit and place orders. Despite such advances, there is no International Standard related to virtual garments.

The purpose of this International Standard is to specify the data attributes and formats required for the creation of virtual garments, facilitating clear and synchronized communication of terminology.

This International Standard provides a platform that unifies specified vocabulary and terminology for the development of virtual garment systems. In addition, online consumers, fashion designers, manufacturers and retailers will be able to become familiar with and make use of this vocabulary.

NOTE Measurements of the body and garments are in millimetres (mm). Upward direction corresponds to the +y-axis (height), a leftward direction to the +x-axis (width), and a forward direction to the +z-axis (depth). The origin of body and garment is $X = 0$, $Y = 0$, $Z = 0$ in local coordinates; the common import/export formats for body and garment is dxf format.

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1 Scope

This International Standard defines the terms that are commonly used for the digital fitting system. The digital fitting system includes virtual fabric, virtual fabric properties, virtual garment pattern, virtual garment pattern properties, virtual sewing line, virtual garment, and virtual garment simulation of a virtual garment on a virtual human body model for fit assessment.

2 Terms and definitions

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

2.1 General terms

2.1.1 Virtual fabric

2.1.1.1

virtual fabric attribute

virtual fabric attribute characteristic of virtual fabric

EXAMPLE Tensile modulus, bending rigidity, shear resistance, thickness, weight.

Note 1 to entry: Refer to ISO 5084, ISO 13934-2, ISO 14087, and ISO 14273.

Note 2 to entry: It can be retrieved from library or imported.

2.1.2

virtual garment pattern

shapes consisting of closed curves that mark the area of a digitized pattern to be used on the *virtual garment* (2.1.3)

Note 1 to entry: The example of a virtual garment pattern is shown in [Figure 1](#).

2.1.2.1

virtual garment pattern properties

pattern consisting of contours and multiple *internal lines* (2.2.1.3), which are used to express seams, internal openings, fold lines and other garment characteristics