# INTERNATIONAL STANDARD



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# Textiles — Method for assessing appearance of apparel and other textile end products after domestic washing and drying

Textiles — Méthode d'évaluation de l'aspect des vêtements et autres produits finis textiles après lavage et séchage domestiques **iTeh STANDARD PREVIEW** 

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Reference number ISO 15487:2009(E)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 15487 was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 2, *Cleansing*, *finishing and water resistance tests*.

This second edition cancels and replaces the first edition (ISO 15487:1999), of which it constitutes a minor revision. An informative annex has been added and ards.iteh.ai)

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# Textiles — Method for assessing appearance of apparel and other textile end products after domestic washing and drying

# 1 Scope

This International Standard specifies a method of test for evaluating the smoothness appearance of flat fabric and seams, and the retention of pressed-in creases in garments and other textile products after one or several domestic washing and drying treatments. This International Standard is applicable to any washable textile end product of any fabric construction. Techniques for seaming and creasing are not included since the purpose is to evaluate textile end products as they are supplied from the manufacturer or as ready-to-use. Techniques for seaming and creasing are controlled by fabric properties.

This method has been developed for use primarily with domestic washing machines of Type B as defined in ISO 6330, but it may be possible to use it with machines of Type A defined in the same International Standard.

It is recognized that prints and patterns may mask the wrinkled appearance present in textile end products. The rating process is, however, based on the visual appearance of specimens/including such effects.

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# 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.

ISO 105-A03, Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining

ISO 139, Textiles — Standard atmospheres for conditioning and testing

ISO 6330, Textiles — Domestic washing and drying procedures for textile testing

# 3 Terms and definition

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

#### 3.1

#### appearance

overall visual impression of apparel and other textile end product, quantified by comparison of individual components with appropriate reference standards

#### 3.2

#### crease retention

(in fabrics) visual impression of an inserted crease, quantified by comparison with a set of reference standards

#### 3.3

#### dryer creases

(in fabrics) sharp folds or lines running in any direction in a laundered or dried specimen

NOTE Dryer creases are an unintended result of restricted movement of specimens in the washer or the dryer.

### 3.4

#### durable press

substantial retention of the initial shape, flat seams, pressed-in creases and unwrinkled appearance during use and after laundering

#### 3.5

#### laundering

(of fabric, apparel and textile end products) process intended to remove soils and/or stains by treatment (washing) with an aqueous detergent solution and normally including rinsing, extracting and drying

#### 3.6

#### seam smoothness

 $\langle \text{in fabrics} \rangle$  visual impression of flatness of a seamed specimen, quantified by comparison with a set of reference standards

#### 3.7

#### smoothness appearance

 $\langle \text{in fabrics} \rangle$  visual impression of flatness of a specimen, quantified by comparison with a set of reference standards

# 4 Principle

**4.1** Garments or other textile end products are subjected to procedures simulating domestic laundering practices. One of the washing and drying procedures specified in ISO 6330 is used, as agreed between the interested parties.

**4.2** Garments or other textile end products are compared visually with plastic smoothness appearance replicas, plastic crease replicas and/or photographic seam standards under specified illumination. A supplemental spot light suitably placed to highlight the creased area of the textile is used in crease evaluation. https://standards.iteh.ai/catalog/standards/sist/c6d99496-f54b-4f0c-993e-

fcbf5d151cc2/iso-15487-2009

# **5** Apparatus

**5.1** Washing and drying apparatus, as specified in ISO 6330.

**5.2** Lighting and evaluation area, in a darkened room using lighting arrangement shown in Figure 1 and Figure 2 and comprising the following items. Lamp dimensions should be chosen to extend beyond the overall surface of a test specimen and replicas, when used for the assessment.

**5.2.1** Two CW (cool white) fluorescent lamps, without baffle or glass, a minimum of 2 m in length each, placed side by side.

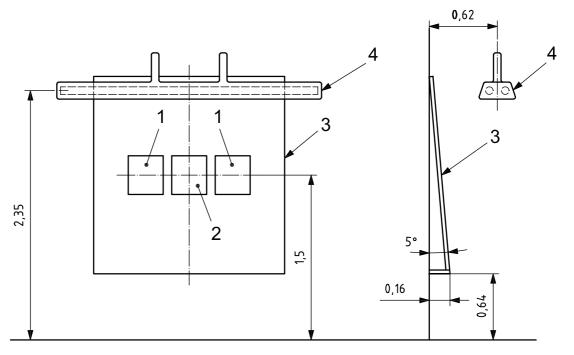
5.2.2 One white enamel reflector, without baffle or glass.

**5.2.3** One thick plywood viewing board, painted grey to match the No. 2 rating on the grey scale for assessing staining specified in ISO 105-A03.

**5.2.4** One 500 W reflector floodlight and lightshield (for the purpose of protecting the viewer's eyes from direct light for grading creases, as illustrated in Figure 2).

# ISO 15487:2009(E)

Dimensions in metres





- 1 replica
- 2 test specimen
- 3 board for viewing
- 4 example of fluorescent lamp placement ISO 15487:2009

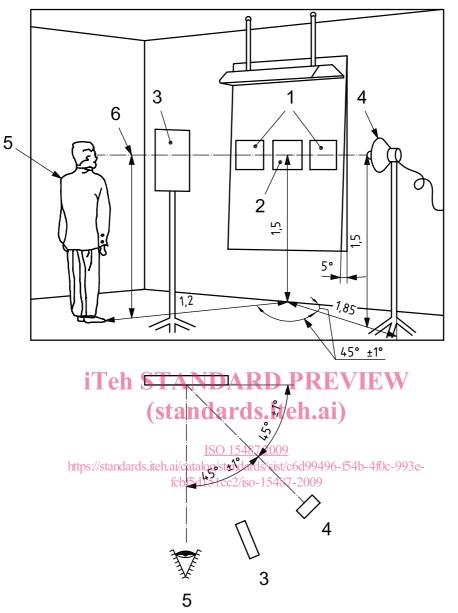
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fcbf5d151cc2/iso-15487-2009 Figure 1 — Lighting and viewing arrangement for test specimens for smoothness and seam appearance

Dimensions in metres



#### Key

- 1 replica
- 2 test specimen
- 3 light shield
- 4 500 W reflector floodlight
- 5 observer
- 6 arbitrary eye level

# Figure 2 — Lighting and viewing arrangement for creases only

**5.3** American Association of Textile Chemists and Colorists (AATCC) standard plastic crease replicas, prepared for evaluating creases, as shown in Figure 3.



(standards.iteh.ai) Figure 3 — AATCC standard plastic crease replicas ISO 15487:2009

**5.4 AATCC photographic standards prepared for evaluating seam appearance** (single- and double-needle stitching), as shown in Figures 4 and 5.

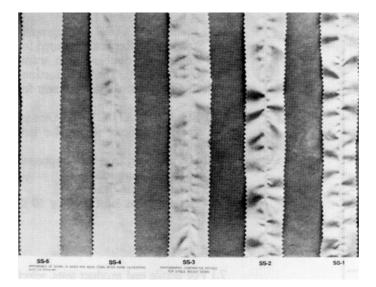


Figure 4 — AATCC standard single-needle seam smoothness photograph