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AMENDMENT 1
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Textiles — Physiological effects — Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test)

AMENDMENT 1

Textiles — Effets physiologiques — Mesurage de la résistance thermique et de la résistance à la vapeur d'eau en régime stationnaire (essai de la plaque chaude gardée transpirante)

AMENDEMENT 1

Reference number
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Foreword

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Amendment 1 to ISO 11092:1993 was prepared by Technical Committee ISO/TC 38, *Textiles*.

Textiles — Physiological effects — Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test)

Amendment 1

Page 4, subclause 5.3

Replace the 6th paragraph with the following:

It is important that at this point the air flow shall have a certain degree of turbulence, expressed by the related variation in air speed s_v/v_a of between 0,03 and 0,07, measured at approximately 6 s intervals over a time period of at least 10 min with an instrument which has a time constant of less than 1 s.

Page 7, subclause 7.2.1

Add the following note to 7.2.1 at the end of the 3rd paragraph:

NOTE Guidance on the test specimen assembly for materials prone to swelling is given in Annex C.

New page 11: addition of an informative Annex C

Add the following informative Annex C:

Annex C
(informative)

Guidance on test specimen assembly for materials prone to swelling

C.1 General

Bubbles and wrinkles in the test specimen or air gaps between the specimen and the measuring unit shall be prevented providing they are not specific to the surface profile of the fabric.

Trapped air between the specimen and measuring unit can falsify the test result.

Certain membranes and materials or coatings swell during testing and extra procedures and care need to be taken to ensure that, as a consequence, wrinkles and bubbles do not occur at the test interface.

C.2 Additional guidance for a test specimen assembly for materials prone to swelling

The test specimens shall be placed on the measuring unit as described in 7.2.1. Additionally, to fix the test specimens on all 4 sides, outside of the porous metal plate of the measuring unit, strips of single- or double-sided adhesive tapes (not water-soluble) are placed on the measuring table.

Using tape as specified in 7.2.1, fix the specimen to the measuring unit on the edge facing the air stream and the two adjacent edges. Leave for a period of 10 min $\pm$ 30 s to condition it.

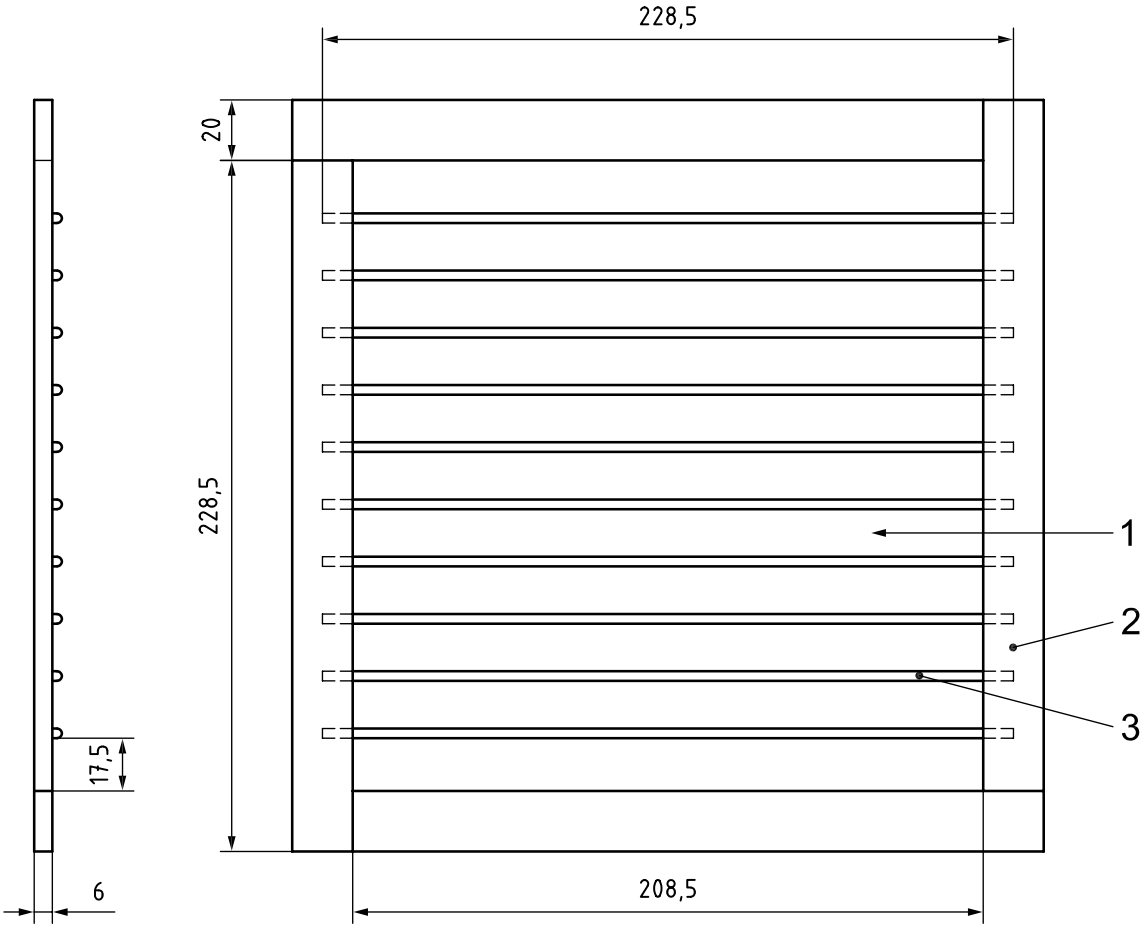
If, following this conditioning, bubbles or wrinkles have appeared, loosen one or more edges as required and smooth the specimen without stretching to remove the bubbles or wrinkles. Re-tape the three edges as required and repeat the conditioning period once more.

If no bubbles or wrinkles re-appear, then fix the fourth side down to the measuring unit. If bubbles or wrinkles appear, use the slat frame as shown in Figure C.1 to hold down the specimen.

The slat frame shall be placed on the specimen in such a way that the brass parts of the frame do not cover the measuring unit and the slats are parallel to the air flow.

If the frame is used, the fourth side of the specimen shall be left un-taped and the “bare plate” value R_{et0} shall be calculated with the frame in use.

Dimensions in millimetres



Key

1 direction of the air flow in the test enclosure

2 brass 20 mm × 6 mm

3 stainless steel slat (diameter 1,6 mm)

The slat frame shall be adapted to the specific dimensions of the measuring unit and the round bars shall cover not more than 8 % of the area of the measuring unit.

Figure C.1 — Example for a grid

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Price based on 3 pages