

# INTERNATIONAL STANDARD

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4603**

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**AMENDMENT 1**  
2010-12-15

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## Textile glass — Woven fabrics — Determination of thickness

### AMENDMENT 1

*Verre textile — Tissus — Détermination de l'épaisseur*

AMENDEMENT 1

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ISO 4603:1993/Amd 1:2010

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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.

Amendment 1 to ISO 4603:1993 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

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# Textile glass — Woven fabrics — Determination of thickness

## AMENDMENT 1

### Page 1, Clause 1

In line 3 of the first paragraph, replace “a thickness of 0,1 mm or more” by “a thickness of 0,01 mm or more”.

In the associated footnote, delete the year of publication of ISO 5084 and replace the title by: *Textiles — Determination of thickness of textiles and textile products*.

### Page 1, Clause 2

Replace the clause by the following text:

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

ISO 291, *Plastics — Standard atmospheres for conditioning and testing*

ISO 2602, *Statistical interpretation of test results — Estimation of the mean — Confidence interval*

### Page 2

Replace Table 1 by the following table (in which the centre column has been modified to give two alternative sets of conditions):

Conditions of measurement	Woven fabrics of continuous single yarns and/or folded (plied) yarns and/or rovings		Woven fabrics of staple-fibre or textured yarns (including woven fabrics with one of these products in the weft or warp only)
	Set of conditions 1 <sup>a</sup>	Set of conditions 2 <sup>a</sup>	
Measuring-foot diameter (area)	6,35 mm (0,32 cm <sup>2</sup> )	56,43 mm (25 cm <sup>2</sup> )	56,43 mm (25 cm <sup>2</sup> )
Standard pressure	176 kPa (17,6 N/cm <sup>2</sup> )	2,0 kPa (0,2 N/cm <sup>2</sup> )	—
Low pressure	—		0,5 kPa (5 cN/cm <sup>2</sup> )
High pressure	— <sup>b</sup>		2,0 kPa (20 cN/cm <sup>2</sup> )

<sup>a</sup> The set of conditions used shall be selected by agreement between the interested parties.

<sup>b</sup> For some textile-glass fabrics (for example, those with high yarn density or for electrical and electronic uses), thickness measurements may be carried out at a pressure substantially higher than the standard pressure and with a measuring foot of smaller diameter. Such measurements are made to estimate the variation in the ply thickness of laminates (cured under high pressure) produced from the fabric under test. Such pressures shall be used only by agreement between the interested parties.

Page 2, 7.2

Add the following words at the beginning of the subclause:

In the case of woven fabrics of staple-fibre or textured yarns,

Page 3, Clause 9

Replace item e) by the following text:

e) the measurement pressure used [for woven fabrics of continuous single yarns and/or folded (plied) yarns and/or rovings, state which of the two possible pressures specified in Table 1 was used and, for all fabrics, give the actual pressure used if different from the values specified in Table 1];

Replace item f) by the following text:

f) the diameter of the measuring foot used [for woven fabrics of continuous single yarns and/or folded (plied) yarns and/or rovings, state which of the two possible diameters specified in Table 1 was used and, for all fabrics, give the actual diameter used if different from the values specified in Table 1];

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