

Australian/New Zealand Standard®

Textile floor coverings—Tests and measurements

Method 1: Machine-made textile floor coverings—Determination of total thickness

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TX/9 on Carpets. It is equivalent to, and has been reproduced from ISO 1765:1986, *Machine-made textile floor coverings—Determination of thickness*. In Australia, the Standard supersedes AS 2111.1—1978, *Methods of test for textile floor coverings—Method 1: Determination of thickness of textile floor coverings*.

As this Standard is reproduced from an international Standard, the following applies:

- (a) Its number appears on the cover and title page while the international Standard number appears only on the cover.
- (b) In the source text, ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to international Standards should be replaced by equivalent Australian Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
139	Textiles—Standard atmospheres for conditioning and testing	2001 2001.1	Methods of test for textiles Conditioning procedures
1957	Machine-made textile floor coverings—Sampling and cutting specimens for physical tests	2119	Method for sampling and cutting specimens of textile floor coverings for testing

Appendix ZZ lists the Australian/New Zealand variations to ISO 1765:1986. The changes are indicated with a marginal bar against the relevant clause.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

Machine-made textile floor coverings — Determination of thickness

1 Scope and field of application

This International Standard specifies a basic method for the determination of the thickness of machine-made textile floor coverings. Where areas of different thickness or construction exist, these should be tested separately if possible.

This method forms an integral part of other methods of test for textile floor coverings and the result of this test by itself cannot be used as an indication of the quality of the product.

The method is applicable to all machine-made textile floor coverings.

2 References

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

ISO 1957, *Machine-made textile floor coverings — Sampling and cutting specimens for physical tests*.

3 Definition

For the purposes of this International Standard, the following definition applies :

thickness (of machine-made textile floor coverings) : The distance between a reference plate on which the specimen rests and a parallel presser foot applying a given pressure to the specimen. Ordinarily the thickness of a machine-made textile floor covering without compression is measured at the standard pressure of 2,0 kPa* applied to a circle of area between 300 and 1 000 mm² within a larger area.

4 Principle

The thickness of a specimen of machine-made textile floor covering is measured as the distance between the reference plate on which the specimen rests and a parallel circular presser foot exerting a specified pressure on an area of defined size within a larger area of the machine-made textile floor covering. Textile floor coverings without yarn or flocked pile are tested using a guard ring.

5 Apparatus

5.1 Instrument for measuring the thickness, having a circular plane presser foot of area between 300 and 1 000 mm². It shall be capable of exerting a pressure normal to the plane of the specimen of $2,0 \pm 0,2$ kPa and shall have a means of measuring thickness with an accuracy of 0,1 mm over a range of 25 mm. The movement of the presser foot shall be normal to the plane of the textile floor covering. The reference plate on which the specimen rests shall be plane, at least 125 mm × 125 mm in size, and parallel to the presser foot to within 1 part in 500.

5.2 Circular guard ring, mass 1 000 g, external diameter not greater than 125 mm and internal diameter of $d + 40$ mm, d being the diameter of the circular presser foot, such that a pressure of at least 1 kPa is exerted. A throat of 40 mm width may be cut from the guard ring.

5.3 Straightedge, for example a ruler, for brushing the surface of the specimen.

6 Atmosphere for conditioning and testing

The specimens shall be conditioned and the test conducted in one of the standard atmospheres for conditioning and testing of textiles specified in ISO 139.

7 Test specimens

7.1 Sampling

Select the specimens according to the directions in ISO 1957.

7.2 Number of specimens, dimensions and location of test

7.2.1 Textile floor coverings with yarn pile or flocked pile

Prepare sufficient specimens to allow at least five tests to be made. Test specimens shall be at least 75 mm × 75 mm, but they may be of any larger dimensions as required by other

* 1 kPa = 10^3 N/m²