

Australian/New Zealand Standard®

Textile floor coverings—Tests and measurements

Method 21: Non-destructive measurement of pile thickness above the backing—WRONZ gauge method

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 10834:1992(E), *Textile floor coverings—Non-destructive measurement of pile thickness above the backing—WRONZ gauge method*.

As the 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.
- (d) References to international Standards should be replaced by equivalent Australian or Joint Australian/New Zealand Standards, as follows:

Reference to International Standard		Australian or Joint Australian/New Zealand Standard	
ISO		AS	
139	Textiles—Standard atmospheres for conditioning and testing	2001	Methods of test for textiles
		2001.1	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
2424	Textile floor coverings—Vocabulary	2424	Textile floor coverings—Terminology
		AS/NZS	
1766	Textile floor coverings—Determination of thickness of pile above the substrate	2111	Textile floor coverings—Tests and measurements
		2111.5	Determination of thickness of pile above the substrate

Appendix ZZ lists the Australian/New Zealand variations to ISO 10834:1992. The changes are indicated with a marginal bar against the relative 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.



Textile floor coverings — Non-destructive measurement of pile thickness above the backing — WRONZ gauge method

1 Scope

This International Standard specifies a method for the measurement of the thickness of pile above the backing of a textile floor covering and is applicable to all textile floor coverings having a pile of cut or looped yarn. Where areas of different construction or thickness exist, these should be tested separately if possible. This method is non-destructive of the floor covering specimen and is useful particularly for production control in manufacture and for measurements on installed carpets.

Due to different loading factors, this method and that of ISO 1766, in which the pile fibres are cut from the substrate, may not give identical results. In case of dispute or where maximum accuracy is required, the pile thickness shall be determined by the method of ISO 1766.

Because of this, care shall be exercised in comparing textile floor coverings with different substrates when using this gauge.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 139:1973, *Textiles — Standard atmospheres for conditioning and testing*.

ISO 1766:1986, *Textile floor coverings — Determination of thickness of pile above the substrate*.

ISO 1957:1986, *Machine-made textile floor coverings — Sampling and cutting specimens for physical tests*.

ISO 2424:1992, *Textile floor coverings — Vocabulary*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 pile thickness: The distance between the planes of the upper surface of the pile and the upper surface of the backing when the surfaces are located respectively under conditions of standard pressure and standard loading.

NOTE 1 This definition, being related to the instrument described in this International Standard, differs from the definition "effective pile thickness" in ISO 2424.

3.2 standard loading: A nominal force of 735 mN acting on each needle of a probe.

4 Principle

The pile thickness is determined by measuring the distance between the planes of the pile surface located under a standard pressure and the plane of the backing surface located under a standard loading.

5 Apparatus

5.1 Measuring instrument, as illustrated in figure 1, consisting of the following elements:

5.1.1 Plane circular presser foot, of area between 300 mm² and 1 000 mm², for locating the upper surface of the pile under a nominal standard pressure of 2,0 kPa.

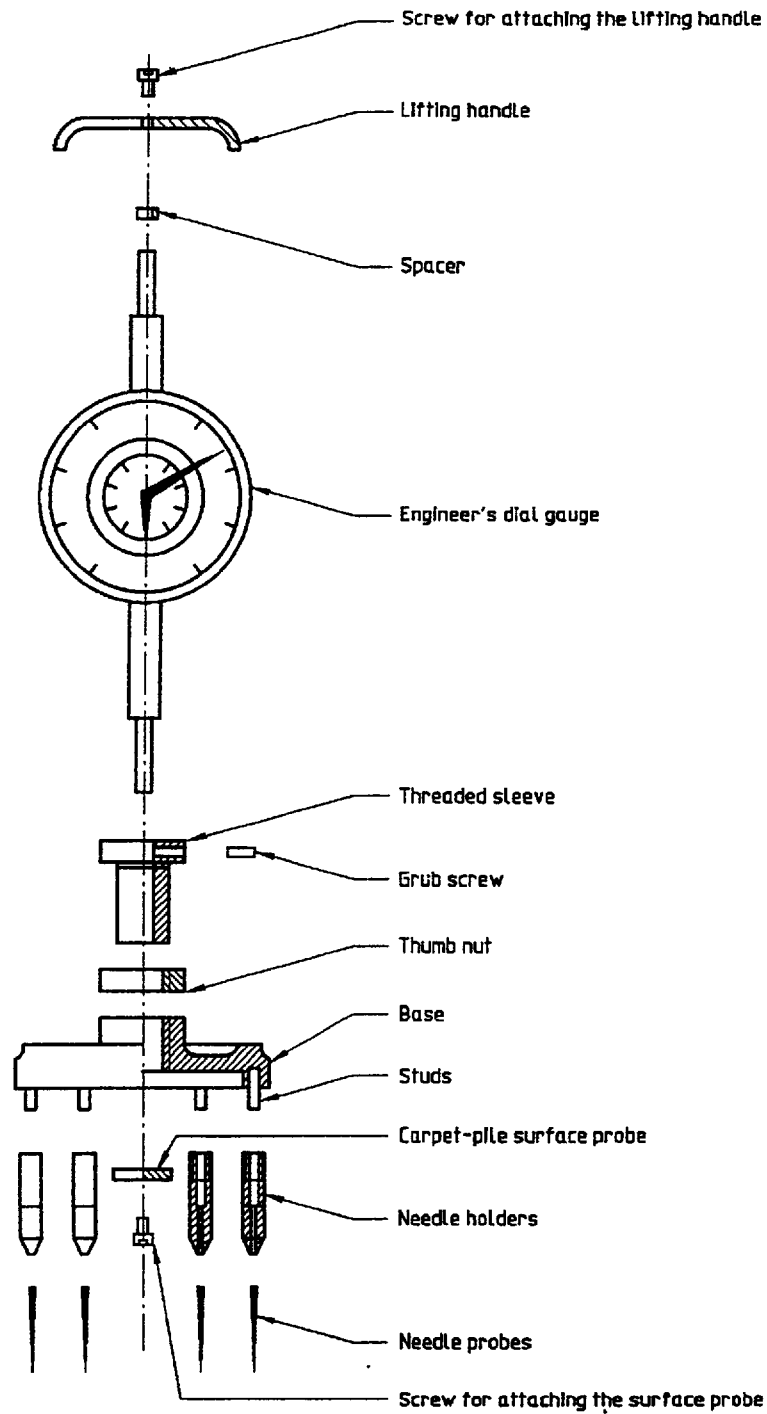


Figure 1 — Exploded diagram of the WRONZ pile-thickness gauge