

Australian/New Zealand Standard[®]

Textile floor coverings—Tests and measurements

Method 6: Determination of tuft length of pile

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TX/9 on Carpets. It is based on and is equivalent to the method of the same title in BS 4223:1989, *Methods for determination of constructional details of textile floor coverings with yarn pile*. In Australia, the Standard supersedes AS 2111.6—1978 *Methods of test for textile floor coverings, Method 6: Determination of tuft length of pile of textile floor coverings*.

METHOD

1 SCOPE This Standard describes the procedure for determining the average tuft length of the pile of a textile floor covering.

2 APPLICATION The method is applicable to all forms of textile floor coverings having a pile formed of U, J or W-shaped tufts.

3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

2001 Methods of test for textiles

2001.1 Method 1: Conditioning procedures

2119 Methods for sampling and cutting specimens of textile floor coverings for testing

2454 Textile floor coverings—Terminology

4 DEFINITIONS For the purpose of this Standard, the definitions given in AS 2454 apply.

5 PRINCIPLE Single tufts are straightened, in V-shaped grooves in a transparent rigid block, with the aid of a straight glass rod, and then measured.

6 APPARATUS The following apparatus is required:

- (a) **Tuft length block** This shall consist of a transparent, rigid block (see Figure 1) measuring approximately 100 mm × 75 mm × 10 mm, into the upper surface of which three straight V-shaped grooves have been cut lengthwise. The angle between the plane sides of the grooves is 60 degrees and the widths of the grooves at the surface are—

4 to 5 mm, suitable for coarse tufts;

3 to 3.5 mm, suitable for ordinary tufts; and

1.5 to 2.0 mm, suitable for fine tufts.

STANDARDS NEW ZEALAND

COPYRIGHT

STANDARDS AUSTRALIA
Document Sharing Hub

- (b) *Glass rod* Approximately 100 mm in length and 5.5 mm in diameter.
- (c) *Scale* A scale graduated in millimetres.
- (d) *Means of producing and maintaining the standard laboratory atmosphere* This shall be as specified in AS 2001.1.

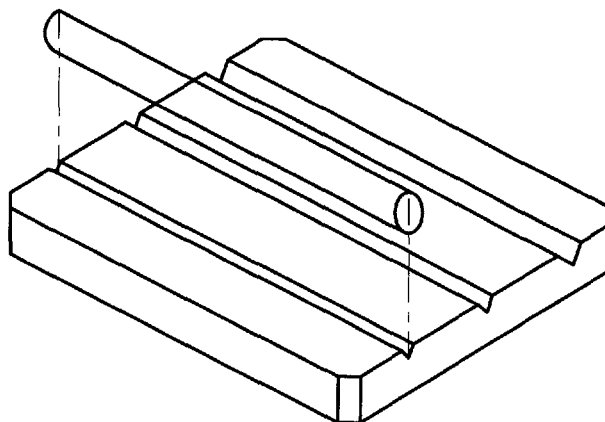


FIGURE 1 TUFT LENGTH BLOCK

7 SAMPLES AND TEST SPECIMENS

7.1 Sampling The sample and test specimens shall be selected in accordance with the requirements of AS 2119.

7.2 Preparation and number of test specimens Test specimens shall be prepared as follows:

- (a) The specimens shall be conditioned in the Standard atmosphere as specified in AS 2001.1 by laying them out flat and singly with the use surface uppermost. Condition them for a minimum of 24 h or until they reach moisture equilibrium. Preconditioning is not required.

For the purpose of this Standard, moisture equilibrium is considered to have been reached when successive weighings at 2 hourly intervals show no progressive change in mass greater than 0.25 percent.

The test shall be conducted in the Standard atmosphere as specified in AS 2001.1.

- (b) Remove not less than 20 tufts from different places down the length and across the width of the sample, bearing in mind the need of tufts for further tests.
- (c) If the textile floor covering has pile of two or more different heights, remove no fewer than 20 tufts from pile of each height.

NOTE: For back-coated tufted textile floor coverings, the tufts can be removed by inserting the point of a steel probe under the base of the tuft from the back of the substrate and withdrawing the tuft.

- (d) Reject any tufts that are damaged while being withdrawn from the floor covering.