

RESISTANCE TO ABRASION - TABER ABRASER

Application

This procedure is used to test the abrasion resistance of textile fabrics, coated fabrics, genuine leather, cardboard, rubber floor mats, carpets, other floor covering materials, plastics and painted substrates.

Apparatus Required

Abraser*

Model 140, or equivalent, which meets the requirements of ASTM D 1175. The abraser shall be equipped with a vacuum attachment.

Specimen Holder*

Catalog No. E-100-125 108 mm O.D.

Hold Down Ring*

Catalog No. E-100-101 108 mm I.D.

Rubber Pad*

Catalog No. S-19.

Clamp Plate*

54 mm O.D. for textile fabrics, genuine leather, and coated fabrics.

Clamp Plate*

32 mm DO.D. for carpets and other floor covering materials.

Wheel Refacer*

Model 133, or equivalent.

Abrasive Discs*

Catalog No. S-11.

Date	Action	Revisions
2001 09 11	Revised	Editorial – no technical change A. Cockman
1996 04 26		

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Wheels*

Type - Calibrate H-10 or H-18 for carpets (flocked carpets, use H-10 only), Calibrate CS-10 for all other materials unless otherwise designated by the Engineering Material Specification.

Date: Use prior to expiration date stamped on wheels.

Hardness: None on H-10 or H-18 wheels. The hardness on CS-10 wheels shall be 76-84 when measured with a Shore Type Durometer (ASTM D 2240). Take the average of five (5) readings at equally-spaced locations around the abrading surface of the wheel, midway between edges. Readings shall be taken 6 - 10 sec after firm contact between the presser foot and wheel.

*** Sources:**

Taber Instrument Corp.
North Tonawanda, N.Y.
U.S.A.

Erichsen GmbH & Co.
Hemer-Sundwig, Westfalen
Germany

H. E. Mesmer, Ltd.
144 C Oxford Rd.
London N1

Conditioning and Test Conditions

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5 % relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

Procedure

A. Textiles, Coated Fabrics, Genuine Leathers

1. Cut three (3) specimens 130 mm in diameter with a central hole 6 mm diameter from the material under test.
2. Place a specimen on the rubber pad of the specimen holder.
3. Place a 54 mm O.D. clamp plate over the material and tighten down securely with the clamping nut.
4. Press the hold down ring over the test specimen so that the material is drawn taut over the specimen holder with no wrinkles or bulges.