

RESISTANCE TO PILLING WEAR OF LEATHER**Application**

This test method determines the abrasion resistance of high wear leather and genuine leather.

Required Test Equipment

Pilling Tester* - Model no. CS-53

Specimen Holder and Weight*

As specified by the relevant engineering document

*Source: Standard Scientific Supply Company
601 W. Market Street
Bethlehem, PA 18018-5208 U.S.A.
Phone: (610) 868-2500
Fax: (610) 868-4925

Abradant

The abradant shall be no. 8 cotton duck cloth, style 474 and shall be rigidly mounted on the pilling board.

Source: Test Fabrics, Inc.
P.O. Box 26
415 Delaware Ave.
West Pittston, PA 18643, USA
Phone: (717) 603-0432
Fax: (717) 603-0433

Sewing Machine

Capable of producing a lock stitched deck seam and French seam as described in Step 2 of the Procedure.

Sewing Needle

Type 135 x 17, size 23

Source: M. J. Foley Co.
16580 Eastland
Roseville, MI U.S.A. 48066
Phone: (810) 779-5050

Date	Action	Revisions
2001 09 24	Revised	Editorial – no technical change A. Cockman
1998 10 14		

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Sewing Thread

Top and bottom threads shall conform to WSD-M15H51-D and WSD-M15H51-E, or engineering approved equivalent, unless otherwise specified by the responsible Materials Engineering Activity.

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

1. Cut two leather test specimens each 90 x 130 mm in size.
2. Sew the test specimens with a french seam parallel to the 90 mm side (see Figure 1).

Sew the specimens with a lock stitch, employing 5 - 6 stitches per 25 mm. The top and bottom sewing threads shall meet the requirements of WSD-M15H51-D/E, or engineering approved equivalent unless otherwise specified by the responsible Materials Engineering Activity.
3. Wrap the pilling board with no. 8 cotton duck cloth. The abradant shall be rigidly mounted on the pilling board with staples on the side. A new piece of cotton duck cloth should be used on every sample.
4. Wrap the test specimen around the specimen holder with the deck seam parallel to the center of the holder.

To avoid formation of folds or wrinkles and/or slipping of the specimen during the test, the specimen shall be held in the specimen holder with double-sided adhesive tape.
5. Place the weight in position. Use the test weight and time as specified in the relevant engineering document. The pilling weight shall be balanced so that the specimen holder with the test specimen can rock back and forth during the test.

Evaluation

Assess the results by comparing with the currently approved master sample. The material shall be judged a failure if the test exhibited loss of adhesion, such as lifting or delamination of the top coat from the russet (top skin).

Chemicals, materials, parts, and equipment referenced in this document must be used and handled properly. Each party is responsible for determining proper use and handling in its facilities.