

**RESISTANCE TO TOPCOAT 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  
P.O. Box 484  
Bethlehem, PA 18018-5208 U.S.A.  
Phone: (610) 838-7500  
Fax: (610) 838-6214

**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.  
PO Box 3026  
415 Delaware Ave  
West Pittston, PA 18643 USA  
Phone: (570) 603 0432  
Fax: (570) 603 0433  
Email: [info@testfabrics.com](mailto:info@testfabrics.com)  
[www.testfabrics.com](http://www.testfabrics.com)

**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 2

Source: M.J. Foley Company  
52026 Sierra Drive  
New Baltimore, Michigan 48047  
Phone (586) 948-6070  
Fax (586) 948-6081

| Date       | Action    | Revisions                                                                      | Rev 3                              |
|------------|-----------|--------------------------------------------------------------------------------|------------------------------------|
| 2015 01 30 | Editorial | See Summary of Revisions                                                       | D. Murtonen, NA                    |
| 2011 01 12 | Revised   | Updated sources (addresses and ph nrs); update evaluation;<br>updated figure 1 | M. Dumitrescu, NA; J. Williams, EU |
| 1998 10 14 |           |                                                                                |                                    |



### Sewing Thread

Top and bottom threads shall conform to WSS-M8P25-A/N90, 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 WSS-M8P25-A/N90, 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).
- if the top coat exhibited wear through to the russet, when it is examined with a 6 x magnified glass.

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.