

RESISTANCE TO SNAGGING - MACE TEST**Application**

This procedure is used to determine the resistance to snagging of interior trim fabrics. Snagging is the tendency of individual yarns, or fibers to be pulled from the surface of the fabric by sharp objects and results in deterioration to the fabrics appearance. This effect can be reproduced in the laboratory by rotating a sewn specimen of the material mounted on a cylinder in contact with the "mace" or spiked metal sphere under standard conditions.

Note: The maximum thickness of laminated trim fabrics for testing on this equipment shall be 5 mm, including a backing scrim if applicable.

Apparatus Required**Mace Snag Tester*****Viewing Cabinet*****Photographic Standards***

* Supplier: Shirley Developments Ltd.
P.O. Box 6
856 Wilmslow Road
Didsbury
Manchester M20 85A England

or

Carl von Gehlen
Postfach 119
4050 Monchengladbach 2
Bundersrepublik, Deutschland

Sewing Machine

Capable of producing a chain stitched seam as described under Procedure –Para 2.

Sewing Thread

Top and bottom threads according to either S-M15H4500-A, S-M15H4510-A, or Engineering Approved Equivalent.

Date	Action	Revisions
2001 08 11	Revised	Editorial – no technical change A. Cockman
1990 01 16		

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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. Measure and cut two specimens as quoted below with the shorter dimension parallel to the Warp/Wales or Weft/Courses direction:

Woven Fabrics:	340 x 205 mm
Knitted Fabrics:	330 x 205 mm

2. Fold each specimen face side to face side and sew a seam parallel to the shorter dimension. Tie the loose ends of the stitching threads at either end and turn the face side out before mounting on the Mace Test Cylinder.

Sewn Seam Construction

The stitch shall be a simple chain stitch with a stitch length of 4.0 +/-0.8 mm, and shall run approximately 15.0 mm from the cut edges of the test specimen.

3. Slide the stitched specimens onto the Mace Test Cylinder keeping the sewn seam flat. Secure one end with the rubber 'O' ring. Remove any creases or fullness and secure the opposite end with another 'O' ring.
4. Carefully place the mace on the fabric. The distance shall be 50 +/- 1 mm from the mace sphere to the under side of the mace support bar. Set the counter for 600 cycles or as specified in the Engineering Materials Specification.
5. Lift off each mace from the test specimen, clear of any loose fibers and place them in their respective holders. Remove the test specimens.
6. Mount each specimen on the viewing board with the sewn seam center back and place in the viewing cabinet.

Evaluation

Assess and report the density of snagging of the Warp/Wales and Weft/Courses test specimens by comparing with the Approved Master Sample established by the Materials Laboratory, Vehicle Engineering and/or as required by the Engineering Materials Specification.

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.