

FLEX FOLD TEST**Application**

This procedure is used to determine the durability of sewn and dielectrically bonded seams of trim assemblies and also of individual trim materials.

Equipment Required**Ford Flex Fold Tester** Model CF15F or equivalent device

Must be provided with flat bar clamps which allow a 250 mm width of test specimens to be accommodated. In addition, for each clamp, a weight of 13.6 kg-force is required.

Source: Custom Scientific Instruments
Division of Atlas Electric Devices
13 Wing Drive
Cedar Knolls, New Jersey 07927
Telephone (201) 538-8500
Fax (201) 984-6793

or

Atlas/SFPS BV
PO Box 182
7240 A D Lochem, Netherlands
Telephone 31-5730-56465
Fax 31-5730-53368

Sewing Machine**Epoxy-type (two-pack) Adhesive**

Suitable for reinforcing the sewn seam ends.

Source: 3M Co. Ltd.
Wigmore Street
London, England

Date	Action	Revisions
2001 09 10	Revised	Editorial – no technical change A. Cockman
1995 08 23		

Printed copies are uncontrolled

Page 1 of 3

Copyright © 2001, Ford Global Technologies, Inc.

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

Method "A" for Sewn Trim Assemblies

1. Using the material to be tested, prepare the test assembly in line with the design released for production.
2. Cut out from the test assembly, two test specimens each 250 x 300 mm in size, one along the seam line and the other at right angles to it.
3. Seal sewing thread ends with the epoxy adhesive, in order to prevent loosening of thread.
4. After the cement is set (if necessary by application of a higher temperature) condition the test specimen for a minimum of 24 hours at a temperature of 23 +/- 2 °C and a relative humidity of 50 +/- 5 %.
5. Bring the flexing arm of the tester into a mid-point position, and clamp the test specimen assembly in with the narrower side parallel to the clamps.
6. Adjust the tester for a stroke length of 89 mm.
7. Apply the 13.6 kg-force weights to the 250 mm test specimen width.

Note: It is important to insure that the weights and the appropriate load bearing arms are completely free in their movement throughout the test.

8. Flex specimens for 10,000 cycles.

Evaluation

Examine specimens for needle hole enlargement, seam separation and any other deterioration.