

**DETERMINATION OF SURFACE FRICTION
OF COATINGS APPLIED TO WEATHERSTRIPS****Application**

This method is used to determine the surface friction of coatings applied to weatherstrips.

Apparatus Required**Tensile Machine**

With a load cell of 100 N and a test speed of 100 mm/minute.

Base Plate

With a pulley (see Sketch 1).

Weights**Aluminum Panels**

230 x 75 x 4 mm in size (see Sketch 2).

Test Panels

Painted as per BI 103-02; Method C production enamel straight color, 100 x 360 mm in size;
minimum aging: 48 hours at 23 +/- 2 °C or 16 hours at 45 +/- 2 °C.

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.

Date	Action	Revisions
2001 08 23	Revised	Editorial – no technical change A. Cockman
2000 02 29	Revised	Editorial – no technical change A. Cockman
1994 07 12		

Printed copies are uncontrolled

Page 1 of 3

Copyright © 2001, Ford Global Technologies, Inc.

Procedure

1. Cut 2 strips 75 x 10 mm in size from the weatherstrip and bond to an aluminum panel with coated side up (see Sketch 2).
2. Mount the base plate with the pulley at the rear on the lower traverse of the tensile machine.
3. Fix a panel painted according to BI 103-02 on the base plate, painted side up.
4. Place the aluminum plate with the adhered strips downward on the painted panel and add weights to a total weight of 5.00 kg +/- 0.01 kg. Only sound panels must be used and before testing, the painted surface of the panel must be cleaned with petroleum light naphtha and permitted to air dry.
5. Mount cord on the aluminum plate with the adhered strips. Guide it around the pulley and fix it in the upper jaw of the tensile machine.
6. Start the tensile machine and pull the panel with the adhered strips over a distance of approximately 150 mm with a speed of 100 mm/minute.
7. Report the initial value and the maximum force after break away.

Evaluation

Surface Friction = Maximum force in Newtons (N).

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.