

Leneta Leveling Test Blade and Standards

Used in ASTM D 4062, Test for Leveling of Paints

Leneta Leveling Test Blade

Item No. LTB-2



Fig. 1 The Leneta Leveling Test Blade

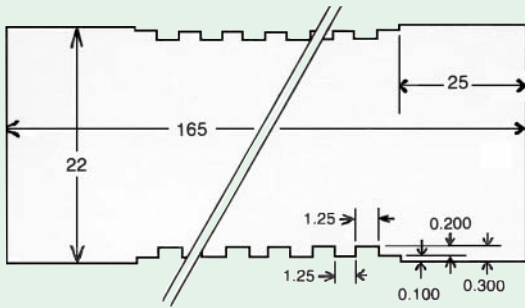


Fig. 2 Details from the engineering drawing. Dimensions are in millimeters. Plastic arms are illustrated in Fig. 1 above.

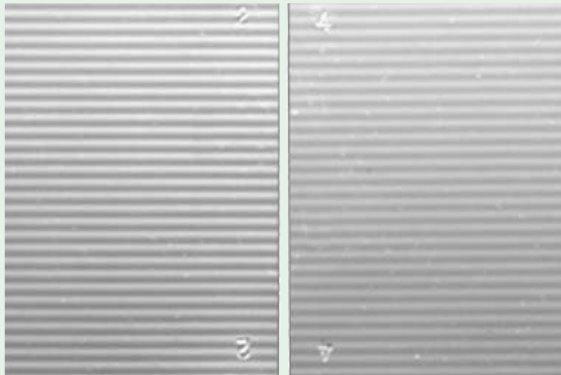


Fig. 3 Drawdown Levelness Standards under oblique light, as described in ASTM D 4062.

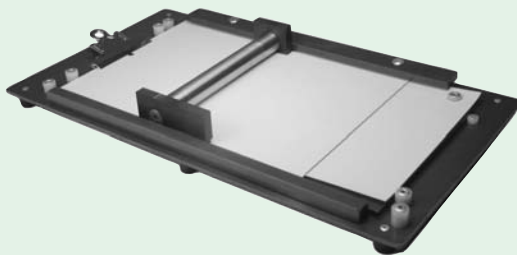


Fig. 4 Application with the Leneta Leveling Test Blade. Illustrates use of Drawdown Plate and Catch-Papers.

This is a threaded stainless steel rod that functions as a grooved doctor blade at any part of its circumference. It produces a film with parallel ridges and valleys in simulation of brush marks. Critical dimensions are indicated in the diagram. Plastic arms in conjunction with straight-edge guides assure rectilinear drawdown movement (see DP-2 Leveling Test Drawdown Plate below). Advantages over brushout application tests are speed, reproducibility, and a regular surface pattern that facilitates evaluation. The leveling of films applied in this manner correlates well with brushout leveling.

The diagram shows alternating clearances of 300 and 100 μm (12 and 4 mils), to apply alternate stripes of 150 and 50 μm (6 and 2 mils) thickness. Thus the mean wet film thickness of the test drawdown will be about 100 μm (4 mils), corresponding to a spreading rate of 10 m^2/L (400 ft^2/gal).

The detailed method is described in the Appendix, Page 35.

Leneta Drawdown Levelness Standards

Item No. LS-2

These are 3-dimensional true scale replicas of drawdowns made with the Leneta Leveling Test Blade, using a series of nine paints ranging from extremely poor to good leveling. The primary standards are durable metal plates from which replicas are pressed in the form of 3 x 5 in (75 x 125 mm) white vinyl panels. They are numbered 1 through 9 from poorest to best leveling. Perfect leveling is 10 and poorer than 1 is zero. Evaluation of drawdowns prepared with the Leneta Leveling Test Blade is readily accomplished by visual comparison in oblique light. The number of the matching standard is the Leveling Value of the paint. Further information with regard to the significance of these values is provided in the Appendix, Page 35.

Leveling Test Drawdown Plate

Item No. DP-2

This drawdown plate was designed for use with the Leneta Leveling Test Blade in ASTM Method D 4062. Its construction features include edge guides, to assure that straight parallel stripes are obtained from the rapid blade movement called for in the test method. It also includes peg stops that automatically terminate the blade movement in the correct location at completion of the drawdown.

“Catch-Papers”

Form CP-2

These are thin lacquered sheets, size 3 x 7-1/4 in, for catching surplus paint at the end of the drawdown. This form was designed specifically for use with the Leveling Test Drawdown Plate, being cut to size and hole punched accurately for that purpose.

Packaging: 1000 sheets/box