



Standard Single- and Multi-Panel Forms for Recording Results of Exposure Tests of Paints¹

This standard is issued under the fixed designation D 1150; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

^{†1} NOTE—Editorial changes were made throughout in May 1987.

1. Single-Panel Paint Record Form

1.1 The single-panel form² provides on one sheet the complete exposure record of a paint test panel. It provides a record for a period of 60 months for 15 or more different types of failure. On the front side there are eight graphs upon which the record for practically every type of failure may be plotted. The type of failure is specified on six of the graphs as indicated and there are two additional graphs for special types of failure that may be required. In order to record three types of failure on a single graph the symbols X, O, and (dot) are used. The numerical system of grading is used. Ten indicates perfection or absence of failure while zero represents complete failure. Ratings are plotted along the vertical axis in steps of 2. Intermediate ratings in steps of 1 may be plotted between the lines. Time is plotted along the horizontal axis. To illustrate the use of the single-panel record form, Fig. 1 shows a section of one graph with gloss, chalking, and erosion ratings recorded.

1.2 On the reverse side of the single-panel form are columns for recording the composition, the reduction procedure, and miscellaneous information for a paint system for as many as four coats. Ample space is provided for additional remarks.

2. Referenced Documents

2.1 ASTM Standards:

D 610 Test Method for Evaluating Degree of Rusting on Painted Steel Surfaces³

¹ This standard is under the jurisdiction of ASTM Committee D-1 on Paint and Related Coatings and Materials and is the direct responsibility of Subcommittee D01.27 on Accelerated Testing.

Current edition approved Sept. 12, 1955. Published November 1955. Originally published as D 1150 – 51 T. Last previous edition D 1150 – 55 (1982)^{†1}.

² Copies of the single-panel form and the multi-panel inspection sheet are available from the Federation of Societies for Coatings Technology, 1315 Walnut St., Suite 830, Philadelphia, PA 19107, and from ASTM, 1916 Race St., Philadelphia, PA 19103. Request Adjunct No. 12-411500-11 (single-panel) or 12-411500-21 (multi-panel).

³ Annual Book of ASTM Standards, Vol 06.01.

D 659 Test Method for Evaluating Degree of Chalking of Exterior Paints³

D 660 Test Method for Evaluating Degree of Checking of Exterior Paints³

D 661 Test Method for Evaluating Degree of Cracking of Exterior Paints³

D 662 Test Method for Evaluating Degree of Erosion of Exterior Paints³

D 714 Test Method for Evaluating Degree of Blistering of Paints³

D 772 Test Method for Evaluating Degree of Flaking (Scaling) of Exterior Paints³

2.2 Other Documents:

*Exposure Standards Manual*⁴

3. Multi-Panel Paint Inspection Sheet

3.1 Although the single-panel form may be used in the field to record results directly, it is recommended that observation in the field be recorded on the multi-panel paint inspection sheet² and later be transcribed to the single form. Provision is made on the multi-panel form for recording twenty different observations of twenty different panels. The type of failure is to be written in the spaces under the heading "Properties." The back of the sheet may be used for remarks or any additional data that need be recorded.

4. Photographic Reference Standards

4.1 The following ASTM test methods refer to photographic reference standards for use in evaluating exposure tests of paints:

4.2 *Chalking*—Test Method D 659.

4.3 *Checking*—Test Method D 660.

4.4 *Cracking*—Test Method D 661.

4.5 *Erosion*—Test Method D 662.

4.6 *Flaking*—Test Method D 772.

4.7 *Rusting*—Test Method D 610.

4.8 *Blistering*—Test Method D 714.

4.9 The *Exposure Standards Manual* also contains pictorial standards for evaluating paint failures.

⁴ Available from the Federation of Societies for Coatings Technology, 1315 Walnut St., Suite 830, Philadelphia, PA 19107.