Standard Test Method for Accelerated Aging of Wood Sash Face Glazing Compound¹

This standard is issued under the fixed designation C 741; 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. Scope

1.1 This test method covers the testing of wood sash face glazing compounds for accelerated aging.

Note 1—Test Method D 2249 describes a similar procedure for a different type of glazing compound.

- 1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.
- 1.3 This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of whoever uses this standard to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

- 2.1 ASTM Standards:
- C 717 Terminology of Building Seals and Sealants²
- D 822 Practice for Conducting Tests on Paint and Related Coatings and Materials Using Filtered Open-Flame Carbon-Arc Exposure Apparatus³
- D 2249 Test Method for Predicting the Effect of Weathering on Face Glazing and Bedding Compounds on Metal Sash²
- 2.2 Federal Specifications:
- TT-P-96A Paint, Latex-base, For Exterior Wood and Metal Surfaces (White and Tints)⁴
- 2.3 NWMA Industry Standards:
- NWMA I.S. 4-81 Water Repellant Preservative Treatment for Millwork⁵
- NWMA M-2-81 Swellometer Test⁵

3. Terminology

3.1 *Definitions*—Refer to Terminology C 717 for definitions of the following terms: adhesive failure (loss of adhesion), bead, compound, face glazing, glazing, muntin, rabbet, and sight line.

4. Summary of Test Method

4.1 A section of wood muntin bar and glass, simulating a typical wood sash, is glazed with the compound and exposed in the accelerated weathering unit for 200 h, then visually inspected for degradation or failure.

5. Significance and Use

5.1 The effect of accelerated weathering will assist in judging the quality and predicting the performance of glazing compounds. Accelerated weathering devices should not, however, be used to predict the exact number of years of service life or the exact type of failure that will occur under all the varied conditions encountered in actual use.

6. Apparatus

- 6.1 Accelerated Weathering Unit, described in Practice D 822.
- 6.2 Wood Muntin Bar, three, 9-in. (225-mm) sections, Standard Wood Sash Muntin Bar.
- 6.3 *Glass*, three pieces, double-strength Grade B, 9 by 1 in. (225 by 25 mm).
 - 6.4 Rubber Base Bedding Compound.
- 6.5 *Wood Preservative*, one gallon, commercial type (water repellant), conforming to NWMA I.S. 4-81.
- 6.6 *Paint*, 2 fl oz (59 cm³), white latex exterior, conforming to Federal Specification TT-P-96A.
 - 6.7 Glazier's Points.
 - 6.8 Putty Knife.
 - 6.9 Rule, calibrated to ½32 in. (or 1 mm).

7. Sampling

7.1 Take the compound to be tested directly from a container as commercially supplied by the manufacturer. If there are any signs of separation, mix the compound thoroughly prior to testing.

8. Procedure

- 8.1 Immerse the wood muntin bars in the wood preservative for 30 s when using a solvent-borne preservative and 3 min for water-borne preservative in accordance with NWMA M-2-81. Weight them if necessary to ensure complete submersion. Then remove them from the preservative and dry for 24 h at 73.4 \pm 3.6°F (23 \pm 2°C) and 50 \pm 5 % relative humidity.
- 8.2 Paint the bars on all surfaces with one coat of white latex exterior paint, and allow to dry for 24 h at 73.4 ± 3.6 °F

¹ This test method is under the jurisdiction of ASTM Committee C-24 on Building Seals and Sealants and is the direct responsibility of Subcommittee C24.12 on Oil and Resin Base Glazing and Caulking Compounds.

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² Annual Book of ASTM Standards, Vol 04.07.

³ Annual Book of ASTM Standards, Vol 06.01.

⁴ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

⁵ Available from National Woodwork Manufacturer's Association, 205 West Touhy Avenue, Park Ridge, IL 60068.