



Standard Test Method for Degree of Set for Glazing Compounds on Metal Sash¹

This standard is issued under the fixed designation D 2451; 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 describes a laboratory method for determining the degree of set of face glazing or bedding compounds, or both, when used on a metal sash.

1.2 The values stated in SI 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 concerns, if any, associated with its use. It is the responsibility of the user of this standard to 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 217 Test Methods for Cone Penetration of Lubricating Grease³

3. Terminology

3.1 *Definitions*—Definitions of the following terms are found in Terminology C 717: bedding, compound, face glazing, glazing.

4. Significance and Use

4.1 This test method provides an accelerated means for predicting the effect of time and weathering on the setting of glazing compounds.

5. Apparatus

5.1 *Brass Ring*, 63.5 mm (2½ in.) in diameter by 12.7 mm (½ in.) deep and approximately 1.6 mm (1/16 in.) in wall thickness (Fig. 1).

5.2 *Glass Plate*, double strength, approximately 102 by 102 mm (4 by 4 in.) (Fig. 1).

5.3 *Aluminum Foil*, household, approximately 102 by 102 mm (4 by 4 in.) (Fig. 1).

5.4 *Putty Knife*.

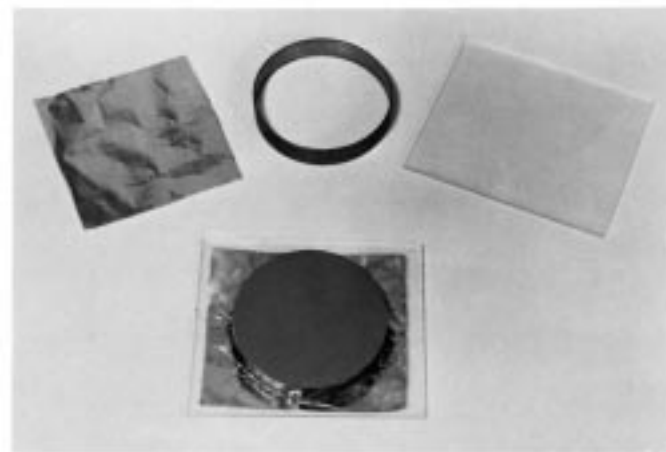


FIG. 1 Apparatus Required for Set Test

5.5 *Gravity-Convection Oven*, controlled at $65 \pm 2^\circ\text{C}$ ($149 \pm 3.6^\circ\text{F}$).

5.6 *Penetrometer*, fitted with the tip and shaft of a grease penetration cone as described in Fig. 4 of Test Methods D 217, with a total moving load of 54.5 ± 0.1 g.

5.7 *Photo Spot Light*, or equivalent.

6. Reagent

6.1 *Solvent*, such as methyl ethyl ketone or acetone.

7. Sampling

7.1 The compound to be tested shall be taken from a previously unopened container. Remove the compound from the container and work with a putty knife to a homogenous consistency on a nonporous surface.

8. Procedure

8.1 Cover the glass plate with the sheet of foil; then center the brass ring on the covered plate and pack the mixed compound flush with the top of the ring (Fig. 1).

8.2 Place the specimen (glass plate, ring compound) in the oven controlled at $65 \pm 2^\circ\text{C}$ ($149 \pm 3.6^\circ\text{F}$). The specimen shall be at the same level in the oven as the temperature-measuring device. Allow the specimen to remain in the oven for 336 h (2 weeks).

8.3 Remove the test specimen and allow it to stand at room temperature for 1 h. Then condition for another hour at $25 \pm 1/2^\circ\text{C}$ ($77 \pm 1^\circ\text{F}$). If necessary, the specimen may be placed in

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² *Annual Book of ASTM Standards*, Vol 04.07.

³ *Annual Book of ASTM Standards*, Vol 05.01.