

1.0 Scope

The purpose of this test method is to document the performance characteristics of a finishing technology when exposed to abrasive elements.

2.0 Applicable Documents

2.1 ANSI/AWI 0400 Factory Finishing (latest edition)

2.2 ASTM D4060 (latest edition)

3.0 Significance and Use

Test data will provide useful information for architects, design professionals, and manufacturers in making judgments on the ability of a finishing technology to maintain serviceability under actual operating conditions.

This test method will not determine the useful life of finished architectural woodwork components resulting from the test data obtained. It will, however, indicate finishing technology topcoat performance outcomes from test stress levels.

4.0 Test Fixture

4.1 Main Testing Machine

Rotary Abraser capable of meeting requirements set in ASTM D4060.

5.0 Test Specimen

Two test specimens, conforming to ASTM D4060 shall be supplied for each individual finishing technology.

5.1 Test Specimen

5.1.1 Specimen Materials

The test specimen shall be steel with a single finishing technology applied in accordance with the manufacturer/supplier's documented instructions.

Any additives (e.g. primers or bonding agents) applied to the test specimen in addition to the individual finishing technology being tested shall be disclosed prior to testing.

5.1.2 Specimen Compliance Confirmation

Test specimens shall be accompanied by a signed affidavit identifying the finishing technology, the finishing technology manufacturer/supplier, and the steps included in preparing the test specimen.

6.0 Conditioning

6.1 Pre-Test Acclimation

Test specimens shall be acclimated in the test facility environment for no less than 72 hours after date of arrival and under conditions in compliance with requirements as established in AWI 200 - Care & Storage (latest edition).

6.2 Test Environment

The test facility shall maintain continuous monitoring and an archival record of the facility's indoor environmental conditions at a minimum of fifteen (15) minute intervals, including:

- Temperature
- Relative humidity

6.2.1 Environmental Condition Log

The official date and time of the Environmental Condition Log (ECL) begins upon receipt of the test specimen and is continuous throughout the acclimation and testing procedures. At the conclusion of the final test procedures, the test specimen's ECL shall cease and be closed with a final environmental close-out log entry.

7.0 Testing Procedure

7.1 Preparing Test Specimen

The test specimen shall be coated with a finishing technology in accordance with the manufacturer/supplier's documented instructions. All test specimens shall be fully cured in accordance with manufacturer/supplier's recommendations.

7.2 Testing Process

7.2.1 Test Steps and Test Process Step 1

Abrasion Wear Cycles Per Mil test shall be conducted in accordance with ASTM D4060. Tests shall be conducted on each individual finishing technology.

8.0 Record of Test Result

8.1 Determining Results

Upon examination, material's abrasion resistance performance shall be determined according to the number of cycles completed before substrate material is exposed in any test specimen quadrant.

8.2 Nonconformities

All nonconformities shall be identified and deviations recorded.

Deviation measurements greater than the tolerances allowed in the referenced standard shall be deemed as a failure to meet the performance requirements of this test.

9.0 Test Report

The AWI Performance Quality Test Report is the official test report for standard compliance. The results of these findings will be valid for one (1) calendar year from date of report. Conformance to tested methodology is subject to verification to ensure integrity of the product is maintained. Noncompliant verification may result in a suspension of the Test Report. The following information must be submitted to complete the Performance Quality Test Report:

9.1 Test Applicant

- Legal Business Name, Street Address, City, State, ZIP Code and Phone Number

9.2 Independent Testing Laboratory (ITL)

- Legal Business Name, Street Address, City, State, ZIP Code
- Authorizing Signee's Name, Title, Phone, Email
- Testing Laboratory Service Order #, Testing Laboratory Customer ID, Testing Laboratory Battery #, Specimen #
- Date of Specimen Receipt
- Date of Test Performed

9.3 Test Documentation

- All information required for this test methodology

9.4 Material

- Documentation of manufacturer product identification, trade name, chemical name, chemical family, and physical form

9.5 Specimen Dimensions

9.6 Notes, Observations, and Photographs of Specimen

- Before, during, and after test

9.7 Equipment Used to Execute Test

- Calibration documentation (when required)

9.8 Signed Statement of Specimen Affirmation

9.9 Signed Statement of Test Process Verification

9.10 Technical Datasheet of Finish Technology

9.11 MDS of Finish Technology

9.12 Test Specimen's Application Instructions

9.13 Test Specimen's Moisture Humidity Log Record

- Acclimation
- Pre-Test
- Post-Test

9.14 Declaration of Test Methodology Used for This Test

9.15 Signed Statement of Results

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