

Designation: D7055 – 19

Standard Practice for Preparation (by Abrasive Blast Cleaning) of Hot-Rolled Carbon Steel Panels for Testing of Coatings¹

This standard is issued under the fixed designation D7055; 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 practice covers the procedures to be followed in the preparation (by abrasive blast cleaning) of hot rolled steel panels for laboratory testing of coatings.

1.2 This standard practice does not include procedures for the application of coatings.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.5 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:²

A36/A36M Specification for Carbon Structural Steel

A572/A572M Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel

A1011/A1011M Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength D4285 Test Method for Indicating Oil or Water in Compressed Air

D4417 Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel

D4940 Test Method for Conductimetric Analysis of Water Soluble Ionic Contamination of Blast Cleaning Abrasives

D7393 Practice for Indicating Oil in Abrasives

2.2 ISO Standard:

ISO 8502-3, Part 3 Assessment of Dust on Steel Surfaces Prepared for Painting (pressure-sensitive tape method)³

- 2.3 SSPC/NACE Standards:⁴
- AB-1 Mineral and Slag Abrasives
- AB-2 Specification for Cleanliness of Recycled Ferrous Metallic Abrasives
- AB-3 Newly Manufactured or Re-Manufactured Steel Abrasives
- SP 1 Solvent Cleaning
- SP 5/NACE No. 1 White Metal Blast Cleaning
- SP 6/NACE No. 3 Commercial Blast Cleaning
- SP 10/NACE No. 2 Near-White Metal Blast Cleaning
- SSPC-VIS 1 Guide and Reference Photographs for Steel
- Surfaces Prepared by Dry Abrasive Blast Cleaning

3. Summary of Practice

3.1 This practice enables the user to specify the level of preparation of hot-rolled carbon steel test panels (prepared by dry abrasive blast cleaning) for testing of coatings, including the steel composition, the degree of surface cleanliness, and the type of abrasive.

4. Significance and Use

4.1 The procedures described in this practice are designed to provide hot-rolled, carbon steel panels with uniform and reproducible abrasive blast cleaned surfaces for testing of coatings.

5. Test Panels

5.1 Prepare the test panels from unpainted hot-rolled steel plate or bar stock.

¹ This practice is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.46 on Industrial Protective Coatings.

Current edition approved June 1, 2019. Published June 2019. Originally approved in 2004. Last previous edition approved in 2014 as D7055 – 14. DOI: 10.1520/D7055-19.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

⁴ Available from Society for Protective Coatings (SSPC), 800 Trumbull Drive, Pittsburgh, PA 15205, http://www.sspc.org.