



Designation: **A650/A650M—13** **A650/A650M – 18**

Standard Specification for Tin Mill Products, Black Plate, Double Reduced¹

This standard is issued under the fixed designation A650/A650M; 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 specification covers double-reduced black plate, produced from low-carbon cold-reduced steel, furnished in coils and cut sizes, for use predominantly in the manufacture of containers. The product may be specified “as rolled,” without the removal of the rolling solution, and with no additional surface or oiling treatment. It may also be specified “cleaned” with the rolling solution removed, with or without surface treatment and oiling. This product is normally supplied with trimmed edges.

1.2 This specification is applicable to orders in either inch-pound units (as A650) which is supplied in thicknesses 0.0050 in. to 0.0113 in. or SI units [as A650M] which is supplied in thicknesses from 0.127 to 0.287 mm.

1.3 The values stated in either inch-pound or SI units are to be regarded as standard. Within the text, the SI units are shown in brackets. The values stated in each system are not exact equivalents; therefore, each system must be used independently of the other. Combining values from the two systems may result in nonconformance with this specification.

1.4 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

[A623 Specification for Tin Mill Products, General Requirements](#)

[A623M Specification for Tin Mill Products, General Requirements \[Metric\]](#)

3. Ordering Information

3.1 Orders for material under this specification shall include the following information, as required and applicable, to adequately describe the desired materials.

3.1.1 Name of material (double-reduced black plate),

3.1.1.1 As rolled, with the rolling solution not removed,

3.1.1.2 Cleaned, with the rolling solution removed, not reoiled,

3.1.1.3 Cleaned and oiled, with the rolling solution removed and reoiled,

3.1.1.4 Cleaned, chemically treated and oiled, with the rolling solution removed, chemically treated and reoiled.

3.1.2 Thickness (see Specification [A623](#) [Specification [A623M](#)]),

3.1.3 Width,

3.1.4 Length, for cut sizes only,

3.1.5 Rolling direction must be specified by underlining the slit (rolling width) for cut sizes (see [4.1](#)),

3.1.6 Steel type (see Specification [A623](#) [Specification [A623M](#)]),

3.1.7 Mechanical designation requirements (see Specification [A623](#) [Specification [A623M](#)]),

3.1.8 Intended application,

3.1.9 Quantity, in base boxes [SITAs] (see [Note 5](#)),

3.1.10 On coils, specify minimum or range of acceptable inside diameters. The standard inside diameter is approximately 16 in. if ordered to Specification A650 [410 mm if ordered to Specification A650M]. Coils should be specified to a maximum coil weight if ordered to Specification A650 [mass if ordered to Specification A650M] or maximum outside diameter,

¹ This specification is under the jurisdiction of ASTM Committee [A01](#) on Steel, Stainless Steel and Related Alloys and is the direct responsibility of Subcommittee [A01.20](#) on Tin Mill Products.

Current edition approved Oct. 1, 2013; Nov. 1, 2018. Published October 2013; December 2018. Originally approved in 1971. Last previous edition approved in 2008; 2013 as [A650/A650M—03](#); [A650/A650M\(2008\)](#)—13. DOI: [10.1520/A0650_A0650M-13](#); [10.1520/A0650_A0650M-18](#).

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.

*A Summary of Changes section appears at the end of this standard