



Standard Specification for Tool-Resisting Steel Flat Bars and Shapes for Security Applications¹

This standard is issued under the fixed designation A 629; 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.

^{ε1} NOTE—Section 10 was added editorially in June 1994.

1. Scope

1.1 This specification covers the requirements for performance characteristics including simulated service tests and testing equipment for determining the characteristics of homogeneous steel flat bars and shapes except those covered by Specification A 627, and Specification A 628. This does not preclude the possibility of severing or penetrating this material by cutting means other than that described herein. This material can be severed with tungsten/carbide coated or tipped saws.

2. Referenced Documents

2.1 ASTM Standards:

A 627 Specification for Homogeneous Tool-Resisting Steel Bars for Security Applications²

A 628 Specification for Tool-Resisting Composite Steel Plates for Security Applications³

E 329 Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction⁴

2.2 Other Documents:

U. S. Federal Specification GG-B-451d, dated April 11, 1960, and Amendments 1, 2, and 3: Blade, Hand Hacksaw and Blade, Power Hacksaw.⁵

3. Terminology Definitions

3.1 *equipment manufacturer*—a manufacturer who fabricates and assembles security products, including tool-resisting steel enclosures, for installation in areas requiring security against ingress and egress. This manufacturer processes semi-

finished materials to produce a finished product fabricated into components and is responsible for all heat-treating and other fabricating processes to obtain the performance characteristics specified herein. The manufacturer is also responsible for fabricating and assembling ancillary items so as not to impair the performance characteristics of the product.

3.2 *homogeneous steel*—one which is nominally of uniform chemistry throughout.

3.3 *lot*—all flat bars and shapes of the same nominal dimensions from the same mill heat.

3.4 *testing laboratory*—a recognized testing laboratory capable of complying with Recommended Practice E 329, selected by the equipment manufacturer.

4. Ordering Information

4.1 Orders for products under this specification shall include the following information:

4.1.1 Name of material,

4.1.2 Dimensions (thickness, width, web thickness, and other descriptions of special shapes),

4.1.3 ASTM designation (A 629) and date of issue,

4.1.4 Test reports (if required),

4.1.5 Certifications (if required), and

4.1.6 Special requirements, if any.

5. Chemical Requirements

5.1 The selection of chemical composition shall be at the discretion of the equipment manufacturer.

6. Mechanical Requirements

6.1 Cutting Test:

6.1.1 *Requirements*—The flat bar or shape shall not be completely severed during the test.

6.1.2 Number of Specimens:

6.1.2.1 The equipment manufacturer shall take three heat-treated specimens no less than 7 in. (178 mm) in length from the lot for which the test is conducted.

6.1.2.2 The testing laboratory shall select one specimen for conduct of the cutting test.

¹ This specification is under the jurisdiction of ASTM Committee F-33 on Detention and Correctional Facilities and is the direct responsibility of Subcommittee F33.02 on Physical Barriers.

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

³ Discontinued; see 1982 *Annual Book of ASTM Standards*, Vol 01.03.

⁴ *Annual Book of ASTM Standards*, Vol 14.02.

⁵ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.