



Standard Test Methods for Physical Assault on Vertical Fixed Barriers for Detention and Correctional Facilities¹

This standard is issued under the fixed designation F 2322; 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 These test methods cover requirements for simulated service tests and testing equipment for determining the performance characteristics of walls designed to incarcerate inmates in detention and correctional institutions. The testing equipment provides for the setup and testing of two sample fixed barriers side-by-side, one with no openings and one equipped with a representative penetration in accordance with the American Correctional Association (ACA) standard for clear view area of 3 ft² (0.279 m²), 12 in. (305 mm) wide by 36 in. (914 mm) high.

1.2 It is the intent of these test methods to help ensure that detention security walls perform at or above minimum acceptable levels to control passage of unauthorized or secure areas, to confine inmates, to delay and frustrate escape attempts, and to resist vandalism. It is recognized that in order to meet the intent of these test methods, opening assemblies within these walls must be compatible with the level of performance required by: Test Methods F 1450, F 1592, and F 1643.

1.3 These test methods apply to walls enclosing or separating secure areas of detention/correctional facilities.

1.4 The values stated in inch-pound units are to be regarded as the standard. The SI values given in parentheses are approximate and for information only.

1.5 *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:

F 1450 Test Methods for Hollow Metal Swinging Door Assemblies for Detention Facilities²

F 1592 Test Methods for Detention Hollow Metal Vision Systems²

F 1643 Test Methods for Detention Sliding Door Locking Device Assembly²

F 1915 Test Methods for Glazing for Detention Facilities²

2.2 UL Standard:

UL-752 Bullet Resisting Equipment³

2.3 ANSI Standard:

ANSI/HMMA 863 Guide Specifications for Detention Security Hollow Metal Doors and Frames⁴

3. Terminology

3.1 Definitions:

3.1.1 *detention security*—assurance of the restriction of mobility of inmates to designated areas within a correctional or detention facility.

3.1.2 *forcible egress*—an opening created in the test wall which allows a 5 in. (127 mm) by 8 in. (203 mm) by 8 in. (203 mm) rigid rectangular box to be passed through it with no more than 10 lbf (44.5 N) of force.

3.1.3 *manufacturer*—the party responsible for the construction, fabrication, or supply of the test samples or components used to construct the test samples.

3.1.4 *performance characteristic*—the response of the wall in any one of the tests described herein.

3.1.5 *test completion*—conduct one test sequence for each wall.

3.1.6 *testing laboratory*—an independent third party materials testing laboratory.

4. Significance and Use

4.1 A major concern for administrative officials is the security of barriers used in detention/correctional facilities. These test methods are designed to aid in identifying levels of physical security for walls which enclose or separate secure areas. This does not apply to the passage of contraband.

4.2 These test methods are not intended to provide a measure of resistance for a wall subjected to attack by corrosive agents, by high-powered rifles, explosives, sawing,

¹ These test methods are under the jurisdiction of ASTM Committee F33 on Detention and Correctional Facilities and are the direct responsibility of Subcommittee F33.02 on Physical Barriers.

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² *Annual Book of ASTM Standards*, Vol 15.08.

³ Available from Underwriters Laboratories (UL), Corporate Progress, 333 Pfingsten Rd., Northbrook, IL 60062.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.