



Standard Specification for Multi-Story Building External Evacuation Controlled Descent Devices¹

This standard is issued under the fixed designation E2484; 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 the requirements, performance, design, marking instructions, test methods and ancillary components of Multi-Story Building External Evacuation Controlled Descent Device (CDD) systems for emergency escape of persons who cannot use the standard exit facilities in multi-story buildings, defines requirements for their installation, periodic maintenance when installed and instructions for their use.

1.2 This specification does not apply to personal escape parachutes, rope, chain ladders or rappelling devices.

1.3 This specification does not apply to ancillary components used with and included in CDD systems, harnesses, connecting hardware, signage, special evacuation openings, personal protection equipment or devices and other components used on CDD systems which may be installed, purchased or used in accordance with the requirements specified herein.

1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

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:²

B117 Practice for Operating Salt Spray (Fog) Apparatus
E488/E488M Test Methods for Strength of Anchors in Concrete Elements

¹ This specification is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.77 on High Rise Building External Evacuation Devices.

Current edition approved May 1, 2015. Published June 2015. Originally approved in 2006. Last previous edition approved in 2008 as E2484 - 08. DOI: 10.1520/E2484-08R15.

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.

E631 Terminology of Building Constructions

E894 Test Method for Anchorage of Permanent Metal Railing Systems and Rails for Buildings

E1512 Test Methods for Testing Bond Performance of Bonded Anchors

E2265 Terminology for Anchors and Fasteners in Concrete and Masonry

2.2 ANSI Standards:³

ANSI Z359.1 Fall Arrest System Components

ANSI/AWS D, 14.4 Specification for Welded Joints in machinery and Equipment

2.3 ASCE Standard:⁴

ASCE 1-05 Minimum Design Loads for Buildings and Other Structures

2.4 ASME Standard:⁵

ASME A120 Safety Requirements for Powered Platforms for Building Maintenance

2.5 International Standards:

CSA-Z259.10 Full Body Harness, M90⁶

CSA-Z259.2.3-99 Descent Control Devices⁶

EN 292-1:1991 Basic Design Concepts and general Principles of Design for Safety Machinery⁷

EN 362 Connectors and Attachment Hardware⁷

EN 1497 Rescue Equipment-Rescue Harness⁷

EN 1498 Rescue Equipment Class B-Rescue Harness⁷

EN 1891 Personal Protective Equipment⁷

PrEN 341:2002 Personal Protective Equipment for Protection Against Falls from Height⁷

2.6 ISO Standards:⁸

ISO 9002 Quality Management and Manufacturing Quality Assurance

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 American Society of Civil Engineers (ASCE), 1801 Alexander Bell Dr., Reston, VA 20191, <http://www.asce.org>.

⁵ Available from American Society of Mechanical Engineers (ASME), ASME International Headquarters, Two Park Ave., New York, NY 10016-5990, <http://www.asme.org>.

⁶ Available from Canadian Standards Association (CSA), 5060 Spectrum Way, Mississauga, ON L4W 5N6, Canada, <http://www.csa.ca>.

⁷ Available from European Committee for Standardization (CEN), Avenue Marnix 17, B-1000, Brussels, Belgium, <http://www.cen.eu>.

⁸ Available from International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland, <http://www.iso.org>.