



Specification for Engineering and Design Criteria for Rigid Wall Relocatable Structures¹

This standard is issued under the fixed designation E1925; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers engineering and design criteria required for the development of rigid wall relocatable structures (RWRs) and shall be applied to the design of expandable and nonexpandable RWRs. This specification applies to present engineering and design requirements for effective RWRs that are operable in a variety of environments without degradation and are capable of all specified transport modes. This specification shall be applied to the design of expandable and nonexpandable RWRs. This specification is a conversion of a military standard that was approved by all departments and agencies of the Department of Defense.

1.2 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.

1.3 The following safety hazards caveat pertains only to the test required portion, Section 10, of this specification. *This specification 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 specification 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

E1851 Test Method for Electromagnetic Shielding Effectiveness of Durable Rigid Wall Relocatable Structures
G21 Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi

¹ This specification is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is under the direct responsibility of Subcommittee E06.53 on Materials and Processes for Durable Rigidwall Relocatable Structures.

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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.

2.2 ISO Standards:³

ISO 668-1995 Series 1 Freight Containers - Classification, Dimensions and Ratings, 5th Edition

ISO 1161-1990 Series 1 Freight Containers - Corner Fittings

ISO 1496-1 Series 1 Freight Containers Specification and Testing Document - Part 1, 1993

ISO 1496-2 Series 1 Freight Containers Specification and Testing Document - Part 2, 1993

2.3 Military Standards:⁴

MIL-STD-1472D Notice 3, Human Engineering Design Criteria for Military Systems, Equipment and Facilities

MIL-F-14072D Finishes for Ground Electronic Equipment

MIL-C-22992E Amend 5, Connector, Plugs and Receptacles, Electrical, Waterproof, Quick Disconnect, Heavy Duty Type General Specification for

MIL-STD-810 Environmental Engineering Considerations and Laboratory Test

MIL-STD-1791 Notice 1, Designing for Internal Aerial Delivery in Fixed Wing Aircraft

2.4 SAE Standards:⁵

SAE-AS8090 Mobility, Towed Aerospace Ground Equipment, General Requirements for

3. Terminology

3.1 Definitions:

3.1.1 *degradation*—damage by the weakening or loss of some property, quality, or capability.

3.1.2 *delamination*—separation into constituent layers.

3.1.3 *galvanic corrosion*—the corrosion of metallic objects in the presence of moisture, caused by electrolytic action.

3.1.4 *special tools*—tools other than common hand tools or those designed specifically for use with a delivered product.

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 Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, <http://dodssp.daps.dla.mil>.

⁵ Available from SAE International (SAE), 400 Commonwealth Dr., Warrendale, PA 15096-0001, <http://www.sae.org>.