



Standard Specification for Shelter, Tactical, Expandable, One-Side¹

This standard is issued under the fixed designation E1977; 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 a rigid wall, one-side expandable shelter constructed of aluminum-faced, nonmetallic honeycomb sandwich panels, and meeting the International Organization for Standardization (ISO) Cargo Container specification in the transport mode. Nominal dimensions when closed (container mode) are: height 8 ft, width 8 ft, and length 20 ft (2.4 by 2.4 by 6.1 m). Approximate dimensions, when expanded (shelter mode) are: height 8 ft, width 15 ft, and length 20 ft (2.4 by 4.6 by 6.1 m).

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 precautionary statement pertains to the test method portion only. Section 7, of this specification; *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 determines the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

- E864 Practice for Surface Preparation of Aluminum Alloys to Be Adhesively Bonded in Honeycomb Shelter Panels
- E865 Specification for Structural Film Adhesives for Honeycomb Sandwich Panels
- E866 Specification for Corrosion-Inhibiting Adhesive Primer for Aluminum Alloys to Be Adhesively Bonded in Honeycomb Shelter Panels
- E874 Practice for Adhesive Bonding of Aluminum Facings

- to Nonmetallic Honeycomb Core for Shelter Panels
- E990 Specification for Core-Splice Adhesive for Honeycomb Sandwich Structural Panels
- E1091 Specification for Nonmetallic Honeycomb Core for Use in Shelter Panels
- E1749 Terminology Relating to Rigid Wall Relocatable Shelters
- E1773 Practice for Sealing Rigid Wall Tactical Shelters with Polysulfide Based Sealants
- E1826 Specification for Low Volatile Organic Compound (VOC) Corrosion-Inhibiting Adhesive Primer for Aluminum Alloys to Be Adhesively Bonded
- E1925 Specification for Engineering and Design Criteria for Rigid Wall Relocatable Structures

2.2 ISO Standards:³

- ISO 1161-1980 Series 1-Freight Containers-Corner Fittings, Specification
- ISO 1496/I Series 1-Freight Containers-Specification and Testing Part I-General Cargo Containers
- ISO 9001 Quality Systems—Model for Quality Assurance in Design, Development, Production, Installation, and Servicing

2.3 Military Standards:⁴

- MIL-STD-129 Marking for Shipping and Storage
- MIL-STD-810 Environmental Engineering Considerations and Laboratory Tests

2.4 ANSI/ASQC Standards:⁵

- ANSI/ASQC 21.4-1993 Sampling Procedures and Tables for Inspection by Attributes

2.5 Drawings:⁶

- 5-4-2828 Shelter, Assembly, One-Side Expandable-60 amp
- 5-4-3200 Shelter, Assembly, One-Side Expandable-100 amp⁶

¹ This specification is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is 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.

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 American Society for Quality (ASQ), 600 N. Plankinton Ave., Milwaukee, WI 53203, <http://www.asq.org>.

⁶ Copies of drawings are available from U.S. Army Natick Soldier Center, ATTN: AMSRD-NSC-CP-CS, Kansas Street, Natick, MA 01760-5018, <http://www.natick.army.mil>.