



Designation: E 1977 – 01<sup>€1</sup>

## Standard Specification for Shelter, Tactical, Expandable, One-Side<sup>1</sup>

This standard is issued under the fixed designation E 1977; 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 (€) indicates an editorial change since the last revision or reapproval.

€<sup>1</sup> NOTE—Editorial corrections were made in August 2001.

### 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 the standard. The SI units given in parentheses are for information only.

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:

- E 864 Practice for Surface Preparation of Aluminum Alloys to Be Adhesively Bonded in Honeycomb Shelter Panels<sup>2</sup>
- E 865 Specification for Structural Film Adhesives for Honeycomb Sandwich Panels<sup>2</sup>
- E 866 Specification for Corrosion-Inhibiting Adhesive Primer for Aluminum Alloys to Be Adhesively Bonded in Honeycomb Shelter Panels<sup>2</sup>
- E 874 Practice for Adhesive Bonding of Aluminum Facings to Nonmetallic Honeycomb Core for Shelter Panels<sup>2</sup>
- E 990 Specification for Core-Splice Adhesive for Honeycomb Sandwich Shelter Panels<sup>2</sup>
- E 1091 Specification for Nonmetallic Honeycomb Core for Use in Shelter Panels<sup>2</sup>

E 1749 Terminology Relating to Rigid Wall Relocatable Shelters<sup>2</sup>

E 1773 Practice for Sealing Rigid Wall Tactical Shelters with Polysulfide Based Sealants<sup>2</sup>

E 1826 Specification for Low Volatile Organic (VOC) Corrosion-Inhibiting Adhesive Primer for Aluminum Alloys to Be Adhesively Bonded<sup>2</sup>

E 1925 Specification for Engineering and Design Criteria for Rigid Wall Relocatable Structures<sup>2</sup>

#### 2.2 ISO Standards:<sup>3</sup>

ISO 1161-1980 Series 1-Freight Containers-Corner Fittings, Specification<sup>4</sup>

ISO 1496/I Series 1-Freight Containers-Specification and Testing Part I-General Cargo Containers<sup>4</sup>

#### 2.3 Military Standards:<sup>5</sup>

MIL-Q-9858 Quality Program Requirements<sup>3</sup>

MIL-STD-129 Marking for Shipping and Storage<sup>3</sup>

MIL-STD-810 Environmental Engineering Considerations and Laboratory Tests<sup>3</sup>

MIL-STD-1595 Qualification of Aircraft, Missile and Aerospace Fusion Welders<sup>3</sup>

MIL-STD-2219 Fusion Welding for Aerospace Appliances<sup>3</sup>

#### 2.4 ANSI/ASQC Standard:

ANSI/ASQC 21.4-1993 Sampling Procedures and Tables for Inspection by Attributes<sup>5</sup>

5-4-3200 Shelter, Assembly, One-Side Expandable-100 amp<sup>6</sup>

#### 2.5 Drawings:

5-4-2828 Shelter, Assembly, One-Side Expandable-60 amp<sup>6</sup>

### 3. General Requirements

3.1 *Alternate Components*—When this specification or the referenced drawings specify use of a specific component “or

<sup>1</sup> 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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<sup>2</sup> Annual Book of ASTM Standards, Vol 04.11.

<sup>3</sup> Available from Standardization Documents Order Desk, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

<sup>4</sup> Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

<sup>5</sup> Available from American Society for Quality Control, 611 East Wisconsin Avenue, Milwaukee, WI 53201.

<sup>6</sup> Copies of drawings are available from the U.S. Army Natick Research, Development, and Engineering Center, Attn: SSCNC-WST, Natick, MA 07160-5018.