

INCH-POUND

**MIL-DTL-44285A
9 March, 2000**

**SUPERSEDING
MIL-D-44285
24 June 1987**

DETAILED SPECIFICATION

DOORS, DOUBLE BUMP THROUGH

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers two classes of double bump through door assemblies to be used on Temper tents and tactical rigid walled shelters (see 6.1).

1.2 Classification. The double bump through doors shall be of the following classes, as specified (see 6.2).

Class A - No. 383 Green Finish
Class B - No. 33303 Sand Finish

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

Beneficial comments (recommendations, additions, deletions, clarifications) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center Philadelphia, Clothing and Textiles Directorate, Attn: DSCP-CNR, 700 Robbins Ave., Philadelphia, PA 19111-5096 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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*2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS**MILITARY**

MIL-C-5541	- Chemical Conversion Coatings On Aluminum Alloys
MIL-T-44243	- Tent Sections, Tent, Extendable Modular, Personnel
MIL-A-81236	- Adhesive, Epoxy Resin With Polyamide Curing Agent

STANDARDS**FEDERAL**

FED-STD-595	- Colors
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MILITARY

* MIL-STD-130	- Identification Marking of U.S. Military Property
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(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Document Automation and Production Service, Bldg. 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

*2.2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS**U.S. ARMY BIOLOGICAL CHEMICAL COMMAND**

5-4-3983	- Vestibule Door Cap
5-4-4081	- Doors, Double Bump through Assembly
5-4-4123	- Door, Panel Assembly

(Copies of drawings are available from the U. S. Army Biological Chemical Command, ATTN: AMSSB-REO-S(N), NATICK, MA 01760-5017.)

*2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this specification takes precedence. Nothing in this specification, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

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3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 4.2 and 6.2).

3.2 Materials and components. The materials and components shall be as specified herein and as shown on the applicable drawings. Materials and components not definitely specified shall be of the quality normally used by the manufacturer provided the completed item complies with all the provisions of this document.

*3.3 Color. The color of the Class A double bump through doors shall conform to Army Green Shade 383. The color of the Class B double bump through doors shall conform to Shade Sand 33303 of FED-STD-595 (see 1.2).

3.4 Alternate components. Components offered as equivalent to components specified in this document and on the reference drawings as a specific manufacturer's part number or equal shall be functionally equal to the manufacturer's part number identified and of equal or better quality. The incorporation and inclusion of such a component in the design of the specified end product shall not require modification or change to any other specified component, and shall not reduce ease of maintenance to it or any other components, unless such modification or change is specifically approved by the contracting officer. Prior to manufacture of the first article or if none is required, prior to commencing production, the contractor shall submit for the contracting officer's approval, a list identifying each proposed alternate component, together with proof that each listed component complies with requirements specified herein. At the option of the contracting officer, a physical sample of the proposed substitution may be required. Approval of the submitted listing, together with necessary supporting data authorizes the commencement of the first article or production manufacture, as applicable and does not relieve the contractor of the responsibility that these components perform in accordance with specified requirements when incorporated into the end product.

3.5 Design and construction. The design and construction of the bump through doors shall be as specified herein and as shown on the drawings referenced in 2.1.2.

3.5.1 Honeycomb door panels. The inner and outer skins on all joints of each door panel shall be sealed to provide a water barrier against the entrance of moisture to the core material. The water barrier shall be maintained intact at all panel cross-sectional openings. All joints, edges and mitered corners shall be assembled and sealed in a manner to prevent collection and retention of moisture. The door panels shall be fabricated in accordance with the following requirements:

- a. All aluminum surfaces shall be immersion coated in accordance with class 1A of MIL-C-5541. Areas of touchup may be sprayed.
- b. Apply adhesive specified in MIL-A-81236 in a quantity of 1 gallon per 200 square feet of surface area to be bonded.
- c. Cover epoxy surfaces with scrim cloth as specified on Drawing 5-4-4123.
- d. Insert reinforcing blocks as shown on drawing 5-4-4123.
- e. Position honeycomb core material between aluminum skins and apply a constant pressure of 10 to 12 psi over the entire surface area for a minimum of 24 hours at a minimum temperature of 70°F.
- f. Trim excess honeycomb and insert aluminum extrusions as shown on Drawings 5-4-4101 and 5-4-4102.

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3.5.1.1 Panel delamination. Door panels shall show no signs of delamination when tested as specified in 4.4.4.

3.6 Workmanship. The double bump through doors shall conform to the quality of product established by this document and the occurrence of defects shall not exceed the applicable acceptable quality levels. Cloth components shall be clean and free of holes, cuts, and tears. All hinges and latches shall be properly adjusted for smooth door operation before the door assembly is prepared for delivery to the government.

3.6.1 Riveting. Riveted joints shall be tight. The joined parts shall be undamaged and the rivet heads shall be properly seated and tight against the bearing surfaces. All exterior surface rivets shall be weather sealed.

3.6.2 Cleaning. After fabrication, parts shall be cleaned in accordance with the drawings.

3.6.3 Welding. Welded joints shall be such that grinding of the finished weld shall not be a requirement, except when specified on the drawing. Spot stitch and seam welds shall be as indicated on the drawings. All surfaces to be welded shall be cleaned in accordance with good commercial practice and shall be free from scale, paint, grease and other foreign materials. Welds shall have thorough penetration, good fusion and shall be free from scabs, blisters, abnormal pock marks, cracks, voids, slag inclusions and other harmful defects. Welded assemblies shall be cleaned to remove any scale, oxidation products and excess flux. Any acid used in cleaning shall be completely neutralized and removed.

3.6.4 Finish. Coatings shall level out to an adherent, continuous and uniform film without runs, wrinkles, steaks or areas of no film. Any coating damaged during assembly or examination shall be touched up. There shall be no areas of rust. Finish shall be free of blistering, peeling and chips.

*3.7 Marking.

*3.7.1 Identification. The inside face of one vertical door frame member (item 2 of drawing No. 5-4-4082) shall be permanently and distinctly stamped or marked for identification. The letters "U.S." shall be one-inch characters in height. The name of the manufacturer or brand name or mark of such known character as to make the source of manufacture determinable, and the number and year of contract shall be in characters a minimum of one half inch in height. Identification markings shall conform to MIL-STD-130.

*3.8 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

4. VERIFICATION

4.1 Responsibility for dimensional requirements. Unless otherwise specified in the contract or purchase order, the contractor is responsible for assuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point, or at all points in the manufacturing process necessary to assure compliance with all dimensional requirements.

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4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

- a. First article inspection (see 4.2).
- b. Conformance inspection (see 4.3).

4.3 First article inspection. When a first article is required (see 6.2) it shall be examined for the defects listed in 4.4.2 and tested as specified in 4.4.4. The presence of any defect or failure of any test shall be cause for rejection of the first article.

4.4 Conformance inspection. Sampling for inspection shall be as specified in the contract or purchase order.

4.4.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified or qualified in this specification or applicable purchase document.

4.4.2 End item visual examination. The end item shall be examined for the defects listed in Table I. The lot size shall be expressed in units of doors with frames. The sample unit shall be one door and frame assembly. The inspection level shall be II.

TABLE I. Defects

Examine	Defect	Classification	
		Major	Minor
Finish	Area of no coating	101	
	Color not as specified	102	
	Exposed surface due to scratch, buff, dig or abrasion		201
	Run, sag, blistering, cracking, flaking or peeling		202
	Dust, dirt, spot or stain that cannot be removed		203
	Painted or coated surface not uniform in appearance		204
	Powdery areas (anodizing)		205
	Excessive contact marks (anodizing)		206
	Contact marks not in areas of minimum exposure (anodizing when specified)		207
	Design, construction & workmanship applicable to all components & assemblies	Not type, class, style, etc. specified	103
Any component missing		104	
Any component that does not function, malfunctions or is misplaced to the degree that it does not serve its intended purpose, unless otherwise classified herein		105	
Not fabricated as specified by the specification or drawing		106	
Not clean (evidence of oil, grease or dirt)			208
Sharp edge or burr			209
Puncture, fracture or malformed		107	

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TABLE I. Defects (continued)

Examine	Defect	Classification		
		Major	Minor	
	Design detail deviating from specification or drawing requirements	108		
	Evidence of scale, rust, discoloration or deposit of any foreign matter		210	
	Finish omitted or not as specified:			
	a. On brass or aluminum components		211	
	b. On steel components	109		
	Area of partial or no finish		212	
Welding	Undercut		213	
	Underfill		214	
	Overlap		215	
	Incomplete fusion (where visible)		216	
	Slag, flux, splatter		217	
	Arc strike		218	
	Burn through		219	
	Insufficient penetration (where visible)		220	
	Surface cracking		221	
	Surface porosity		222	
		Unfilled craters		223
		Misalignment of welded parts		224
		Distortion of base metal		225
		Poorly formed beads		226
	Underwelded or overwelded		227	
Riveting	Melting surfaces of riveted components not drawn up tightly		228	
	Rivet head not in contact with its mating surface		229	
	Rivet loose – not properly set		230	
	Roll of a rivet contains more than one split		231	
	Portion of a rivet is set or rolled on itself in lieu of being set or rolled on the mating surface of component		232	
*Marking & labels	Omitted, incorrect, illegible, or misplaced		233	

4.4.3 End item dimensional examination. The end item shall be examined for conformance to dimensions specified with an asterisk on the drawing. Any dimensions not within the specified tolerance shall be classified as a defect. The lot shall be expressed in units or doors with frames. The sample unit shall be one door and frame assembly. The inspection level shall be I.

4.4.4 End item delamination testing. The doors with frames shall be tested as specified in 4.5.1. The lot shall be expressed in units or doors with frames. The sample unit shall be one door and frame assembly. The inspection level shall be S-2. Any test failure shall be cause for rejection of the lot.

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*4.4.5 Packaging examination. The fully packaged end items shall be examined for marking, materials, workmanship and content defects.

4.5 Methods of inspection.

4.5.1 Delamination test. The interior and exterior of the left and right door panel surfaces shall be tested by tapping them with the edge of a coin or material of like hardness. Each surface shall be tapped in at least ten (10) places (excluding windows, door and window extrusions, hinge covers and areas of the door within 1-inch of these exclusions). Any comparatively dull sound shall be indicative of an area of delamination and shall constitute failure of this test.

5. **PACKAGING**

*5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. **NOTES**

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The double bump through doors are intended to be used on Temper tents and tactical rigid wall shelters to provide a door that swings both ways and that can be locked open for free passage in and out of the shelters.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this specification.
- b. Class of item required (see 1.2).
- c. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
- d. When first article is required (see 3.1, 4.2 and 6.4).
- e. Levels of preservation and packing (see 5.1).

6.3 Sample. For access to standard sample, address the contracting activity issuing the invitation for bids.

6.4 First article. When a first article is required, it will be inspected and approved under the appropriate provisions of FAR 52.209. The first article should be a preproduction sample. The contracting officer should specify the appropriate type of first article and the number of units to be furnished. The contracting officer should include specific instructions in all acquisition instruments regarding arrangements for selection, inspection, and approval of the first article.

6.5 Vestibule door cap. When double dump through doors are intended to be used with

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Temper end section adapters, door section adapters or vestibules, a vestibule door cap conforming to Drawing 5-4-3983 of MIL-T-44243 must be obtained.

*6.6 Subject term (key word) listing.

Passageways
Shelters, tactical, rigid walled
Tents, Temper

*6.7 Changes from previous issue. The margins of this document have been marked with asterisks (or vertical lines) to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content, as written, irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - GL
Navy - NU
Air Force - 99

Preparing activity
DLA-CT

Review activities:

Army - MD
Navy - MC, MS
Air Force - 11.6

Project No: 8340-0581

MIL-DTL-44285A**STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL****INSTRUCTIONS**

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7 and send to preparing activity.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:		1. DOCUMENT NUMBER MIL-DTL-44285A	2. DOCUMENT DATE (YYYYMMDD) 2000/03/09
3. DOCUMENT TITLE DOORS, DOUBLE BUMP THROUGH			
4. NATURE OF CHANGE (<i>Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.</i>)			
5. REASON FOR RECOMMENDATION			
6. SUBMITTER			
a. NAME (<i>Last, First, Middle Initial</i>)		b. ORGANIZATION	
c. ADDRESS (<i>Include Zip Code</i>)		d. TELEPHONE (<i>Include Area Code</i>) (1) Commercial (2) DSN (<i>If applicable</i>)	7. DATE SUBMITTED (YYYYMMDD)
8. PREPARING ACTIVITY			
a. NAME DEFENSE SUPPLY CENTER PHILADELPHIA DSCP-CNRP		b. TELEPHONE (<i>Include Area Code</i>) (1) Commercial (2) DSN (215) 737-3209 444-3290	
c. ADDRESS (<i>Include Zip Code</i>) 700 Robbins Ave (Bldg 6, C&T) PHILADELPHIA, PA 19111-5092		IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman Road, Suite 2533 Fort Belvoir, Virginia 22060-6221 Telephone (703) 767-6888 DSN 427-6888	

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WHS/DIOR, Feb 99

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