

NOTE: This document was formerly known as A-A-52034, Container, Cargo, End and Side Opening, dated 6 May 1999. That document number was issued in error, and should no longer be used for procurement of this item.

INCH-POUND

A-A-59272

18 June 2003

## COMMERCIAL ITEM DESCRIPTION

### CONTAINER, CARGO END AND SIDE OPENING

The General Services Administration has authorized the use of this commercial item description, for all federal agencies.

1. **SCOPE.** This commercial item description (CID) covers 20 foot (ft) x 8 ft x 8 ft (6.1 meters (m)) x 2.44 m x 2.44 m), reusable, International Organization of Standardization (ISO) 668 1C, end and side opening, cargo containers for the transportation, distribution, and storage of military supplies.

2. **CLASSIFICATION.**

2.1 Container types.

- |          |   |
|----------|---|
| Type I   | - Opening door on one end of the container only.  |
| Type II  | - Opening doors on both ends of the container.  |
| Type III | - Opening doors on both ends and one set of 8 ft X 8 ft doors on one side of the container. |

3. **SALIENT CHARACTERISTICS.**

3.1 Materials. Material shall be as specified herein. Used, rebuilt or remanufactured components, pieces and parts shall not be incorporated into the container (see 5). Materials not specified shall be in accordance with Federal, Military or National Technical Society, Association or Institute specifications or standards.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent by letter to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/ESA, 6501 E. 11 Mile Road, Warren, MI 48397-5000.

AMSC N/A

FSC 8115

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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3.1.1 Materials deterioration, prevention and control. The container shall be fabricated from compatible materials, inherently corrosion resistant or treated to provide protection against the various forms of corrosion and deterioration that may be encountered in any of the applicable operating or storage environments to which the container may be exposed.

3.1.2 Steel requirement. The container shall be constructed of a high-strength low alloy (HSLA) structural steel conforming to ASTM A588 grade A, or equivalent, HSLA structural tubing conforming to ASTM A847, or equivalent, and sheet steel conforming to ASTM A606, type 4, or equivalent (see 7.2.1).

3.1.3 Dissimilar metals. Dissimilar metals shall not be used in intimate contact with each other unless protected against galvanic corrosion.

3.1.4 Identification of materials and finishes. The contractor shall identify the specific materials, material finishes or treatments for use with component or subcomponents, and shall make information available upon request to the contracting officer or designated representative.

3.2 Description. The container shall be new, unused and noncollapsible, of a permanent character and suitable for repeated use as defined in ISO 668. The container shall be a steel 20 ft X 8 ft X 8 ft dry cargo ISO 1C container with end and side opening doors as specified in 2.1. The container shall comply with the specification and testing requirements of ISO 1496/1 (see 7.2.4).

3.2.1 Standard product. Except as otherwise specified herein (see 7.1), the container shall be the standard product of the contractor. The container shall be new and unused. New and unused containers shall be sealed at the factory and shipped without cargo to the final destination.

3.2.2 Weight ratings and dimensions. The gross weight rating shall not be less than 52 910 pounds (lb). Dimensions, tolerances, and diagonal nominal length for containers shall be as specified in ISO 668. The tare weight of the container shall be the minimum practical, but shall not exceed the weights specified below:

- a. Type I      not to exceed 5150 lb
- b. Type II     not to exceed 5250 lb
- c. Type III    not to exceed 5510 lb

3.3 Construction. The container shall be constructed so as to be free of any recesses or voids in which contraband can be concealed or where moisture can accumulate. No part of the container (when empty) shall protrude beyond the outside surfaces of the corner fittings.

3.3.1 Doors. Doors shall conform with ISO 1496/1, provide a clear opening in accordance with the dimensions specified in ISO 668 and shall be hung as specified below:

- a. Type I containers Two doors shall be hung within the rear end frame.
- b. Type II containers Two doors shall be hung within the front and rear end frames.
- c. Type III containers Two doors shall be hung within the front and rear end frames, and one set of two doors shall be hung within the center of one side wall.

3.3.1.1 Hinges. Heavy duty pin hinges, recessed within the corner post shall be provided on each door allowing the door to fold back against the side of the body. Steel hinges shall have corrosion resistant steel pins.

3.3.1.2 Door handles. Each door shall be provided with not less than two heavy-duty, handle operated cam-locking devices with anti-rack provisions, which through lever type action, aid in releasing the door seal from the door frame. Each locking device handle must be capable of accepting a padlock and security seal.

3.3.1.3 Door latches. Means shall be provided to hold the doors in full open position and shall be of a material which will not scrape or chafe the container when the doors are closed.

3.3.1.4 Door seals. Each door shall have a mechanically attached (not adhesively attached) gasket (seal) made of synthetic rubber that is compatible with use in -40 degrees Fahrenheit (°F) to provide a weatherproof seal. The gasket shall not seriously impede door closing or opening.

3.3.1.5 Lubrication. All moving parts of the door locking mechanism and door hinges shall be permanently lubricated.

3.3.2 Metal fabrication. Metal used in the fabrication of equipment shall be free from kinks and sharp bends. The straightening of material shall be done by methods that will not cause injury to the metal. Shearing and clipping shall be done neatly and accurately. Corners shall be square and true. Flame cutting, using a tip suitable for the thickness of the metal, may be employed instead of shaving or sawing. Burned surfaces or flame-cut materials shall be free of slag. All bends of a major character shall be made with controlled means in order to insure uniformity of size and shape. Precautions shall be taken to avoid overheating, and heated metal shall be allowed to cool slowly.

3.3.2.1 Side and end walls. The steel side and end walls may be of the interior or exterior post type, with corrugated or smooth skin construction. The end and side walls shall withstand loading in accordance with ISO 1496/1, except each end wall shall withstand an internal loading equal to the full payload uniformly distributed over the surface of the end wall.

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3.3.2.2 Corner fittings. Corner fittings shall conform to the requirements of ISO 1161.

3.3.3 Floor. The floor shall be designed and installed to meet requirements and loading in accordance with ISO 1496/1.

3.3.3.1 Seal. The floor shall be watertight and be fabricated of hardwood or marine grade plywood. A maximum of six sheets of plywood shall be used.

3.3.3.2 Attaching hardware. The floor shall be attached to the cross members by countersunk fasteners, 1/4 inch (in.) (0.64 centimeters (cm)) minimum shank diameter, either of the self-tapping screw type, or machine screws with self-locking nuts and shall be installed so that each screw head is 0 to 1/16 in. (1.6 millimeters (mm)) below the board surface and at least 1 in. from the board edge. The floor boards shall be attached to each cross member by means of at least three fasteners per board, for boards equal to or over seven inches wide and two fasteners shall not exceed ten inches center to center distance. The floor shall be installed to permit lateral variations in floor board width due to swelling.

3.3.3.2.1 Bolted and riveted connections. Bolt and rivet holes shall be accurately punched or drilled and shall have the burrs removed. Washers, lockwashers, or lock nuts shall be provided where necessary and all bolts, nuts, and screws shall be tight. Rivet heads, when not countersunk or flattened, shall be uniform in size and shape for the same diameter or rivet concentric with the rivet holes, and in full contact with the surface of the member.

3.3.3.3 Chemical treatment. All wood components in the floor shall be chemically treated in accordance with the regulations as stated by the "Commonwealth of Australia Department of Health" (see 7.2.8). A data plate shall be affixed to the container indicating the immunization code used in the treating process.

3.3.3.4 Top treatment. The top surface of the floor shall be coated with Pacific Strong Water Bond Polyurethane or equivalent. A total of four coats of polyurethane shall be applied, providing an overall thickness of 0.125 in. (0.32 cm).

3.3.4 Load retainers. Two load retainers, one left and one right, shall be welded to the interior of the door end corner posts by a 1-1/4 in. by 1/4 in. thick structural steel angle. Each retainer shall be a minimum of 89 in. (226 cm) in length and shall extend from the top of the door sill to the base of the top corner fitting. The left load retainer shall be welded to the interior of the left door end corner post and the right load retainer shall be welded to the interior of the right door end corner post. The door opening width shall be a minimum of 89-1/2 in. (227.3 cm) after installation of the retainers. The reduced interior clearance shall not be cause for rejection of the container for noncompliance with ISO standards as long as the container met ISO standards prior to the retainer installation.

3.3.5 Bottom rail protection. An open recess shall be provided for protection against damage of the bottom side rails and bottom end rails in the vicinity of the bottom corner fittings. The open recesses shall be a minimum of 2 in. (5.08 cm) in height by 6 in. (15.2 cm) in length.

3.3.6 Forklift pockets. Forklift pockets shall be furnished and conform to the requirements of ISO 1496/1 Annex C. "EMPTY LIFT ONLY" shall be stenciled or letter decaled above the inside pockets (unloaded pockets) on each side wall of the container. Stenciled or decaled letters shall be a minimum of 3 in. (7.6 cm) high.

3.3.7 Roof. The roof shall be of a corrugated construction, self-draining and conform to ISO 1496/1. A reinforced zone shall be provided for protection of the roof against damage in the vicinity of the top corner fittings. The reinforced zone shall extend a minimum of 18 in. (45.7 cm) from the outside faces of each top corner fitting. The minimum metal thickness of the reinforced zone shall be 1/4 inch.

3.3.8 Vents. All containers shall have a passive ventilating system comparable to those used on commercial ISO containers. One vent shall be located on each side wall close to the top.

3.3.9 Anti-pilferage provisions. Hinge-pins and screws, bolts and other fasteners used for securing the hinges and closing devices to the container and for holding the essential parts of the sides, ends and roof, shall be welded or otherwise secured in such a manner as to prevent access to the interior of the container without leaving visible signs of tampering. Where such welding destroys protective coating on the items being welded or on other container parts, the weld and surrounding area shall be thoroughly cleaned, treated, and painted. All locking device handles shall be furnished with provisions for padlocking and customs sealing.

3.3.10 Surface preparation. All steel components both inside and out, shall be abrasively blasted to a near white, in accordance with Steel Structure Painting Council (SSPC) –10 (see 7.2.5). Equivalent chemical cleaning may be proposed. The cleaned surface shall be free from all grease, dirt, mill-scale, rust, corrosion products, oxides, paint or any other foreign matter. Very light shadows or very slight streaks caused by mill-scale, oxides or other slight discoloration on the finished surface, shall be acceptable. At least 95 percent (%) of each square inch of surface area shall be free of all visible residues and the remainder shall be limited to the slight discoloration mentioned above.

3.3.10.1 Primer coat. The primer coat shall be one that is commercially offered by the container manufacturer. The primer shall contain anticorrosive properties, which shall retard the corrosion of the steel. The primer coat shall be applied to the dry film thickness recommended by the primer manufacturer.

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3.3.10.2 Top coat. The top coat shall be compatible with the applied primer coat. The exterior finish color shall be painted in lusterless desert tan with an interior finish color of light gray. Painting shall be performed in accordance with commercial container standards. The final coating thickness shall be in accordance with the manufacturer's standard procedure.

3.3.10.3 Understructure coating. After painting of the metal surfaces, the entire underside of the container floor, including floor boards, cross members, corner fittings, side rails, and end frame members shall be coated with a bituminous undercoat applied to a minimum dry film thickness of 6 mils (150 microns).

3.3.11 Exterior markings. The container shall be marked in accordance with ISO 6346. All markings shall have a minimum 5 year life.

3.3.11.1 Sidewall marking. "PROPERTY OF U.S. ARMY" shall be stenciled or letter decaled on each side wall of the container. Stenciled or decaled letters shall be a minimum of 6 in. high.

3.3.11.2 Force provider emblem. The contractor shall place a "Force Provider" emblem on Type I and Type III containers for the quantity specified in the Synopsis/Solicitation. The emblems shall be centered 2/3 of the way up from the bottom of the container as follows:

- a. Type I containers      one emblem shall be placed on each side wall and one on the end wall with the door.
- b. Type III containers    one emblem shall be placed on the side wall without the door and one placed on the left side of each door on both the front and rear end walls.

3.3.11.2.1 Emblem design. The graphic design emblem shall be approximately 20 in. (50.8 cm) wide by 10 in. (25.4 cm) high. The sample graphic design shall be provided at the time of contract award.

3.3.12 Placard holder. Placard holders are not required.

3.3.13 Approval plates. An International Convention for Safe Containers (CSC) (see 7.2.6), Transport International des Routiers (TIR) (see 7.2.7), and Timber Component Treatment Requirements of the Australian Department of Health (TCT) plates or plaques shall be applied for and obtained from a designated approval authority, attached and displayed as required, by the convention in accordance with CFR 49, parts 450 and 451 (see 7.2.2). Any additional requirements of the approval authority shall be met. Each container shall be affixed with the seal of the approval authority.

3.3.14 Consolidated data plate. The consolidated data plate shall be in accordance with ISO 6359.

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3.3.15 Interior marking. The owner's code and serial number shall be stamped or bead welded in characters not less than 1/2 in. (1.3 cm) high on the interior surface of the door end top rail (header). The number shall be located on either the top left corner fitting or within an area of 18 in. (45.7 cm) from the left corner post where it will not be obscured.

3.4. Performance. The container shall conform to the requirements specified in ISO 1496/1 without damage or permanent deformation.

3.4.1 Workmanship. All parts, components, and assemblies of the container including castings, forgings, molded parts, stampings, seals and sealing agents, machined surfaces and welded parts, shall be clean and free from any defects that will reduce the capability of the container to meet the requirements specified herein. Any components and assemblies, which have been repaired or modified to overcome deficiencies, shall not be used without prior specific approval of the contracting officer. External surfaces shall be free from burrs, slag, sharp edges and corners, except where 90 degree edges and corners are required. The internal cargo space shall be free from sharp protrusions that could damage cargo or personnel.

3.4.2 Metric products. Products manufactured to metric dimensions will be considered equally with those manufactured using inch-pound units, provide that they fall within specified tolerances using conversion tables contained in FED-STD-376 (see 7.2.3), and that all other requirements of the CID are met.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR) (see 3.1 and 7.2.2).

5. PRODUCT CONFORMANCE. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance (see 7.1).

5.1 Responsibility for inspection. The contractor is responsible for the performance of all inspections (examinations and tests).

6. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order (see 7.1).

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## 7. NOTES.

7.1 Ordering data. The contract or order should specify the following:

- a. CID document number and revision.
- b. If standard container is as otherwise specified (see 3.2.1).
- c. Product conformance provisions (see 5).
- d. Preservation, packing and marking requirements (see 6).

7.2 Source of documents.

7.2.1 ASTM A588, “Standard Specifications for Steel, Structural, High Strength Low Alloy with 50 KSI (345 MPA) Minimum Yield Point to 4 in. (100 mm) Thick” (DoD adopted); ASTM A606, “Standard Specifications for Steel, Sheet or Strip, High Strength, Low Alloy, Hot Rolled and Cold Rolled, with Improved Atmospheric Corrosion Resistance” (DoD adopted); and ASTM A847, “Standard Specifications for Cold-Formed Welded and Seamless High Strength Low Alloy Structural Tubing with Improved Atmospheric Corrosion Resistance” are available from ASTM International, PO Box C700, 100 Barr Harbor Dr., West Conshohocken, PA 19428-2959 or website: [www.astm.org](http://www.astm.org)

7.2.2 Code of Federal Regulations 49, parts 450 and 451 and BOE 6000, part 172, appendix C Federal Acquisition Requirements (FAR) copies are available from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402 or website: [www.access.gpo.gov](http://www.access.gpo.gov)

7.2.3 FED-STD-376, “Preferred Metric Units for General Use by Federal Government” is available from the Document Automation and Production Service, 700 Robins Avenue, Building 4D, Philadelphia, PA 19111-5094 or website: <http://assist.daps.dla.mil>

7.2.4 ISO 668, “Series 1 Freight Containers - Classification, Dimensions and Ratings”; ISO 1161, “Series 1 Freight Containers - Corner Fittings Specification”; ISO 1496/1, “Containers, Series 1 Freight - Specification and Testing-Part 1: General Cargo Containers for General Purposes”; ISO 6346, “Freight Containers - Coding, Identification and Marking”, and ISO 6359, “Consolidated Data Plate” are available from the American National Standards Institute (ANSI), 11 West 42nd Street, New York, NY 10036 or website: [www.ansi.org](http://www.ansi.org)

7.2.5 SSPC Guide-10 is available from the Society for Protective Coatings, 40 24th Street, 6th Floor, Pittsburgh, PA 15222-4645 or website: [www.sspc.org](http://www.sspc.org)

7.2.6 International Convention for Safe Containers (CSC) is available from Maryland Nautical Sales, Inc., 1400 E. Clement Street, Baltimore MD 21230 or website: [www.mdnautical.com](http://www.mdnautical.com)



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7.2.7 Transport International des Routiers (TIR) is available from United Nations Economic Commission for Europe (UNECE) ,Transport Division, Dangerous Goods and Special Cargoes Section, Palais des Nations, 1211 Geneva 10, Switzerland or website: [www.unece.org](http://www.unece.org)

7.2.8 Commonwealth of Australian Department of Health is available from the Commonwealth of Australian Department of Health, Central Office, GPO Box 9848, Canberra ACT 2601, Australia, Telephone: 1800 020 103, Fax: 02 6281 6946 .

### 7.3 Key words.

Cargo  
Containerization  
Packaging  
Storage

#### MILITARY INTERESTS:

##### Custodians:

Army - AT  
Navy - AS  
Air Force - 99

##### Review Activities:

Army - MT, SM  
Navy - CG, SA  
Air Force - 03, 11  
Civ. - FCOE, FGI, 2FYE  
DLA – IS

#### CIVIL AGENCY COORDINATING ACTIVITY:

GSA-FSS

##### Preparing Activity:

Army - AT

(Project 8115-0616)