

[INCH-POUND]  
A-A-226A  
March 3, 1993  
TO SUPERSEDE  
A-A-226  
April 23, 1981

## COMMERCIAL ITEM DESCRIPTION

### HINGE, BUTT (TRANSOM)

The General Services Administration has authorized the use of this commercial item description.

#### 1. SCOPE

1.1 Scope. This commercial item description covers commercial and industrial quality, transom hinges with nonremovable pins.

1.2 Measurement system. The values stated in inch-pound units are to be regarded as the standard. The values stated in parentheses are for informational purposes only.

1.3 Classification. The hinges shall be furnished in sizes 2, 3-1/2, and 4 inches as specified (see 6.1).

#### 2. APPLICABLE DOCUMENTS

2.1 The documents referenced in this commercial item description shall be the issues in effect on the date of the invitation for bids or request for proposal unless otherwise specified. These documents form a part of this commercial item description to the extent specified. In the event of a conflict between this commercial item description and a document referenced herein, this commercial item description shall take precedence.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration, Engineering Group (7FXEE), 819 Taylor Street, Fort Worth, TX 76102.

A-A-226A

Federal Standard:

FED-STD-376 - Preferred Metric Units for General use by the Federal Government.

Copies of Federal specifications and standards are available from the General Services Administration Business Service Centers in Boston, MA; New York, NY; Philadelphia, PA; Washington, DC; Atlanta, GA; Chicago, IL; Kansas City, MO; Fort Worth, TX; Denver, CO; San Francisco, CA; Los Angeles, CA; and Seattle, WA.

Military Standard:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.

Copies of military standards may be obtained from the Standardization Documents Order Desk, Bldg. 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

ASTM Standard:

E29 - Standard Practice For Using Significant Digits In Test Data To Determine Conformance With Specifications.

Application for copies of ASTM standards should be addressed to ASTM, 1916 Race Street, Philadelphia, PA 19103.

ANSI/BHMA Standards:

A156.1 - American National Standard for Butts and Hinges.  
A156.18 - American National Standard for Materials and Finishes.

Application for copies of ANSI/BHMA standards should be addressed to the Building Hardware Manufacturers Association, Inc., 60 East 42nd Street, New York, NY 10065.

3. SALIENT CHARACTERISTICS

3.1 Construction. The construction of the hinges covered by this commercial item description shall be in accordance with ANSI/BHMA A156.1. The hinges shall be full mortise, plain bearing, grade 3, steel with nonrising removable pins. Standard hinges supplied in accordance with this commercial item description shall be in accordance with ANSI/BHMA A156.1 identifying number A8173 and as otherwise specified herein, in the sizes shown in Table I as specified. Table I lists those hinges most often procured by the Government; other materials, grades, sizes and finishes may be specified in the procurement document.

3.2 Size. Hinges shall be supplied in the size specified. Size shall be determined by the overall height (excluding pin) of the hinge.

TABLE I

SIZE 1/ (inches, nominal)	THICKNESS OF METAL 2/ (inches)	NUMBER OF SCREW HOLES
2 (50.800 mm)	0.083 (2.108 mm)	6
3-1/2 (88.900 mm)	0.123 (3.124 mm)	6
4 (101.600 mm)	0.130 (3.302 mm)	6

1/ The dimensional tolerance for size shall be  $\pm 1/8$  inch (3.175 mm).

2/ The dimensional tolerance for thickness shall be  $\pm 0.005$  inch (0.127 mm).

3.3 Performance. Test shall be performed in accordance with ANSI/BHMA A156.1 to assure quality conformance. Performance tests are not applicable to size 2 hinges.

3.4 Finish. Unless otherwise specified, significant surfaces of the hinge shall be finished in accordance with ANSI/BHMA A156.17 and A156.18, finish code as specified. Uncoated hinges need not be finished tested.

3.5 Pins. The pins shall be nonremovable, spun, or riveted. The pin shall be stainless steel or brass and lubricated with a nonfluid grease or coating.

3.6 Fasteners. All mounting hardware required for attachment shall be included with the hinges. Hardware furnished shall be of suitable size and shall be compatible with the material finish of the hinge.

3.7 Marking. The manufacturer's name or trademark shall be permanently displayed on the hinge.

3.8 Workmanship. The hinges furnished shall be free from imperfections which may impair durability or serviceability.

3.9 Regulatory requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

3.10 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within the tolerances specified using conversion tables contained in the latest revision of FED-STD-376, and all other requirements of this commercial item description are met.

A-A-226A

3.11 Commercial item. The use of the term "commercial item description" in this document does not imply that any item or items offered are not required to conform with all requirements specified herein.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the use of the contractor's own or any other facilities suitable for the performance of the inspection requirements specified herein shall be permitted, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 Sampling. The levels of inspection and acceptable quality levels (AQL's) shall be in accordance with MIL-STD-105.

4.3 Lot formation. All hinges of the same size, from the same manufacturer offered for delivery at one time shall be considered a lot for purposes of inspection.

4.4 Visual and dimensional inspection. A random sample of hinges shall be selected from each lot in accordance with inspection level S-2, AQL 2.5 expressed in terms of defects per hundred units. The sample hinges shall be visually and dimensionally examined to verify compliance with this description. All dimensions are absolute as defined in ASTM E29.

4.5 Sampling for performance and finish tests. Three hinges shall be randomly selected for performance testing. Samples for finish tests shall be selected in accordance with inspection level S-2, AQL 6.5 expressed in terms of percent defective.

4.6 Testing. Hinges shall be tested in accordance with the performance and finish test procedures of ANSI/BHMA A156.1 and A156.18.

4.7 Certification of performance test requirement. Unless otherwise specified in the contract or purchase order, a certificate of conformance may be furnished in lieu of actual testing on a lot by lot basis providing that:

- (1) The product was manufactured domestically (United States).
- (2) Objective evidence that the product offered has been tested to establish conformance with specified performance requirements.

- (3) Tests specified in the industry standards referenced herein have been performed by a test facility acceptable to the Government.
- (4) That the product being offered is the same type, material, and grade, and has been manufactured using the same manufacturing processes and techniques as the product tested.

In the event that conditions 2 thru 4 specified above are not met, testing shall be performed to establish conformance. If the contractor's source for product varies or if the product is of foreign manufacture, then testing must be performed on each inspection lot.

4.8 Examination for preparation for delivery. A random sample of shipping containers shall be selected from each lot for examination of the unit, intermediate and shipping containers (as applicable) for conformance with the preservation, packaging, packing, labeling, and marking required in the contract or order. Samples shall be selected in accordance with inspection S-2, AQL 6.5, expressed in terms of defects per hundred units. The sample unit shall be one shipping container.

## 5. PREPARATION FOR DELIVERY

5.1 Preservation, packaging, packing, and marking. The preservation, packaging, packing, and marking shall be as specified in the contract or order.

## 6. NOTES

6.1 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents (if applicable):

- a. Title, number and date of this commercial item description.
- b. Style and finish (see 1.2 and 3.4).
- c. Size (see 3.2).
- d. Material, if other than steel (see 3.1).
- e. If certification is not permitted (see 4.8).
- b. The preservation, packaging, packing, and marking desired.

6.2 National Stock Number: The following NSNs corresponds to the item described by this cid:

5340-00-050-3083  
5340-00-664-1420  
5340-00-664-6974

A-A-226A

MILITARY INTERESTS:

CIVIL AGENCY COORDINATING ACTIVITY:

LEAD STANDARDIZATION ACTIVITY:

VA - VOC  
NASA - JFK

DLA - IS

Preparing Activity:

GSA - FSS