

[INCH-POUND]
A-A-50271
1 February 1996
SUPERSEDING
MIL-P-514D
15 September 1966

COMMERCIAL ITEM DESCRIPTION

PLATE, IDENTIFICATION

The General Services Administration has authorized the use of this Commercial Item Description as a replacement for MIL-P-514 which is canceled.

1. **SCOPE.** This commercial item description covers identification plates for attachment to equipment to provide identification, and other miscellaneous data.

2. **CLASSIFICATION.** The identification plates shall be of the following compositions and classes as specified (see 7.4).

Composition A - Non-ferrous — base alloy metal

Class 1 - Copper (Naval or Leaded Brass)

Class 2- Aluminum

Class 3 - Magnesium

Class 4 - Zinc

Composition C - Photosensitive metal

Composition D - Plastic, or other non metal material

3. **SALIENT CHARACTERISTICS.**

3.1 **Material.** Plates shall be in accordance with standard commercial manufacturing process.

Beneficial comments, recommendations, additions, deletions clarifications, etc. and any other data which may improve this document should be sent to: Commander, U. S. Army ARDEC, ATTN: AMSTA-AR-EDE-S, Picatinny Arsenal, NJ 07806-5000.

AMSC - N/A

FSC - 9905

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

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3.2 Format.

3.2.1 Plate size. Unless otherwise specified (see 7.4), plate size and thickness shall be the manufacturer's standard sizes as applicable for the unit.

3.2.2 Copy on plate. Copy matter inscribed on plates shall be as specified in the contract, or purchase order.

3.2.3 Type of copy. Letters shall be capitals and numbers shall be Arabic, of Alternate Gothic No. 2 or equivalent type face.

3.2.4 Application of copy. Individual characters shall be continuous. Border width shall be the same all around except in corners. The backside of all plates shall be smooth and solid. On all plates, except aluminum base alloy and photosensitive plates, all lines, letters, numerals, and other characters shall be depressed leaving all lines, letters, borders, numerals, and other characters in raised relief (raised or positive etched). Except for depressed backgrounds or depressed or raised copy the front of the plate shall be smooth. On aluminum-base alloy and photosensitive plates, all copy shall be applied as to produce either a smooth surface or with copy sunken, etched or in raised relief.

3.2.5 Color. The predominating color added to the metal plate shall conform to Table I, except that red shall not be used on red bronze, nor yellow on yellow brass. Under no circumstances shall red or yellow be used on other than danger and caution plates. Unless otherwise specified all sunken copy or depressed areas (excepting metal die stampings unique to each individual plate) shall be filled with an enamel compound conforming to TT-E-489. Filled lettering shall be white or black, whichever affords the greatest contrast with the background, except on radiation warning plates, which shall have magenta copy on a yellow background.

TABLE I. Colors of Plates

Plate	Predominating Color	FED-STD-595
Danger	Red*	11136 or 11105
Caution, warning, and radiation**	Yellow	13655 or 13538
Safety instructions	Green	14187
Direction Indicators (arrows)	Black	17038
Informational notices	Blue	15102
All others	Black	17038

* Use yellow where red or low level illumination is to be used.

** Radiation warning plates only shall show symbols and lettering in Magenta No. 17142

3.2.6 Finish. The smooth surfaces of plates shall have a satin or a matte finish to minimize reflection.

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3.3 Protective coating. Metal plates shall be given a protective coating.

3.4 Attachment of plates. Plates bolted to the item purchased shall be drilled or punched at all four corners with holes not less than 1/8 inch or more than 3/16 inch in diameter.

3.5 Performance. All plates except photosensitive plates shall be resistant to thermal shock, corrosion solvent and fading from solar radiation. Photosensitive plates shall conform to the permanency requirements of GG-P-455.

3.6 Resistance to thermal shock. The copy on the finished plate shall be legible and the plate material shall show no evidence of cracking, splitting, wrinkling, warping, or other injurious defects after being subjected to the test specified in 2.7.1.

3.6.1 Procedure. The plates shall be placed in a hot water bath, which shall be maintained at a temperature of 175 F. for a period of 3 hours. The sample shall then be immediately transferred to a cold chamber, and maintained at a temperature of -65 F. for a period of one hour. This procedure shall be immediately repeated and the plates examined for conformance.

3.7 Resistance to corrosion. Finished plates shall show no evidence of corrosion on either side after being subjected to a 150-hour salt-spray test in accordance with ASTM B117.

3.8 Resistance to solvent. The copy on the finished plates shall be legible after being subjected to the solvents specified in MIL-STD-202, method 215.

3.9 Resistance to weathering. After being subjected to weather tests (see 3.9.1), a plate shall show no appreciable change in color, clarity or legibility when compared with an original plate. The term, "appreciable change in color" shall mean a change that is immediately noticeable when the tested specimen is compared with the standard chip with the same color.

3.9.1 Weather test. The finished item mounted to a test surface shall be exposed to a flaming carbon arc at a distance of approximately 18 inches for a period of 50 hours. The carbon used shall operate on a current of 50 to 60 amperes. A spray shall be adjusted so that the plate is sprayed with water for approximately 20 minutes of each 2 hours exposure.

3.10 Workmanship. The quality of workmanship shall be in accordance with the requirements of this document. Particular attention shall be given to neatness and the legibility of all markings. Plates shall have smooth edges and shall be free from burrs and sharp edges or projections.

4. REGULATORY REQUIREMENTS.

4.1 Recovered materials. 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).

5. QUALITY ASSURANCE PROVISIONS.

5.1 Contractor certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this Commercial Item Description,

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and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

6. **PACKAGING.** Preservation, packaging, packing and marking for shipment shall be in accordance with American Society for Testing and Materials ASTM D3951 or as specified in the contract or purchase order.

7. **NOTES.**

7.1 **Source of documents.** ASTM Standards are available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

7.1.1 Federal specifications and Military standards are available from the DODSSP, Standardization Documents Order Desk, Bldg 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

7.2 **Material.** When copper base alloy is poorly compatible electrochemically with equipment to which it is attached, a base material more compatible electrochemically and less subject to bimetallic corrosion shall be selected from the composition listed in 2. First preference shall be given to base material most similar to the surface metal to which the plate will be attached (e.g., an aluminum plate for an aluminum unit).

7.3 **Fasteners.** When fasteners used for attaching the plate to the equipment are electrochemically incompatible with the base equipment and the plate, consideration should be given to the protection of the fasteners.

7.4 **Ordering Data**

- a. Title, number and date of this description.
- b. Type of material composition required (see 3).
- c. Plate size if other than manufacturers standard (see 3.2.1).

Custodian:
Army - AR

Preparing Activity:
Army - AR

Reviewer:
Navy - YD1, MC
Army - ME, MI, AT

(Project 9905-0330)