MIL-G-2767C 27 April 1983 SUPERSEDING MIL-G-2767B 1 May 1970 (See 6.4)

### MILITARY SPECIFICATION

# GUARDS, RAT, SHIP

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

#### 1. SCOPE

- 1.1 Scope. This specification covers one type of rat guard to prevent rats from boarding ships.
- 1.2 Classification. Rat guards shall be of the following sizes, as specified (see 6.2):

3-inch

5-inch

8-inch

#### 2. APPLICABLE DOCUMENTS

# 2.1 Government documents.

2.1.1 Specifications and standards. Unless otherwise specified, the following specifications and standards of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this specification to the extent specified herein.

#### SPECIFICATIONS

#### FEDERAL

PPP-B-601 - Boxes, Wood, Cleated-Plywood.

PPP-B-621 - Boxes, Wood, Nailed and Lock-Corner.

PPP-T-97 - Tape, Packaging/Industrial, Filament Reinforced.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Sea Systems Command, SEA 55Z3, Department of the Navy, Washington, DC 20362 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

**MILITARY** 

MIL-C-52950 - Crates, Wood, Open and Covered.

**STANDARDS** 

MILITARY

MIL-STD-129 - Marking for Shipment and Storage.

(Copies of specifications and standards required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. The issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable.

NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC., AGENT National Motor Freight Classification

(Application for copies should be addressed to the National Motor Freight Traffic Association, Inc., ATA TRAFFIC Dept., 1616 "P" Street, NW, Washington, DC 20036.)

UNIFORM CLASSIFICATION COMMITTEE AGENT
Uniform Freight Classification Ratings, Rules and Regulations

(Application for copies should be addressed to the Uniform Classification Committee Agent, Tariff Publication Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

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 shall take precedence.

# 3. REQUIREMENTS

- 3.1 Materials. Rat guards shall be galvanized sheet steel (galvanize coating 1-1/4 ounce per square foot), or sheet aluminum alloy 6061-T6 or 5052-H32 as specified (see 6.2). Rat guards shall conform to figure 1 and shall consist of a disc and a tapered sleeve. Both halves shall be identical, except one half shall be provided with a "U" shaped guide.
- 3.1.1 Steel rat guards. When the guard is made of steel sheets, gal-vanized, the guide and sleeve shall be riveted and soldered to the disc with tinner's type rivets, number 3, 0.160 inch diameter.

- 3.1.2 Aluminum rat guards. When the guard is made of aluminum sheets, the sleeve and guide shall be spot welded and riveted to the disc. Spot welds not to exceed 2-inch spacing, and the minimum number of 4 spots on each half shall be required. The rivets shall be equivalent to number 3, 0.160 inch diameter. Five rivets shall be installed in each half of the guard, evenly spaced between spot welds.
- 3.1.3 Hinge bolt. Each guard shall be provided with a 1/4-20 UNC, hexagon head bolt, nut and washer. For steel guards, these parts shall be steel galvanized. For aluminum guards, these parts shall be corrosion-resistant steel.
- 3.1.4 Recovered materials. Unless otherwise specified herein, all equipment, material, and articles incorporated in the products covered by this specification shall be new and shall be fabricated using materials produced from recovered materials to the maximum extent practicable without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. None of the above shall be interpreted to mean that the use of used or rebuilt products is allowed under this specification unless otherwise specifically specified.
- 3.2 Dimensions. Rat guards shall conform to the dimensions as specified in table I and as specified on figure 1 (see 6.2).
- 3.3 Sleeve. The metal sleeve shall be slotted as specified in table I and as specified on figure 1, so that when the rat guard is in place, it may be drawn tightly against the hawser, with lashing. The formed sleeve shall be tapered to permit nesting of the complete rat guards, for compact shipping.

Dimensions Thickness of disc, sleeve, and guide (see figure 1) Number of Size prongs in Steel, galvanized Aluminum Α В complete inches inches sleeve sheet gage B and S gage 16 (0.0508 inch) 3 36 6 18 (0.0516 inch) 3 16 (0.0508 inch) 18 (0.0516 inch) 5 5 48 10 18 (0.0516 inch) 16 (0.0508 inch) 8 48 16 8

TABLE I. Dimensions.

- 3.4 Identification. Rat guards shall be marked for identification and identification marking shall include the following:
  - (a) Size.
  - (b) National stock number.
- 3.4.1 Method of identification. Identification marking shall be stenciled with black paint and letters shall be approximately 1-inch high.

3.5 Workmanship. Workmanship shall be of the highest quality throughout and in conformance with accepted commercial standard practice for this type of equipment.

# 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 purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, 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 supplies and services conform to prescribed requirements.

# 4.2 Sampling.

- 4.2.1 Lot. Rat guards of the same size shall be considered a lot.
- 4.2.2 Sampling for examination and trial assembly. A random sample of rat guards shall be selected in accordance with table II for the examination specified in 4.3 and the trial assembly specified in 4.4. If the number of defective rat guards in any sample exceeds the acceptance number specified in table II, it shall be cause for rejection of the lot. Table II shall be applied separately to major and minor defects for purpose of lot acceptance and rejection.

TABLE II.	Sampling for	examination	and	rriar	assembry.	

Number of rat guards in lot	Number of rat guards in sample	Acceptance number (defective)	Rejection number (defective)
25 and under	5	0	1
26 to 40	7	0	1
41 to 65	10	) 0	1
66 to 110	15	( 0	1
111 to 300	25	1	2
301 to 800	35	1	2

4.3 Examination. Rat guards selected in accordance with 4.2.2, shall be examined as specified in table III and measured to verify conformance to the requirements of this specification.

TABLE III. Classification of defects.

Categories	Defects	
Critical:	None defined	
Major:		
101	At trial assembly (see 4.4) guard does not fit properly over specified hawser size.	
102	Guard does not maintain a secure and correct posi- tion when lashed to the hawser (see figure 1).	
103	Thickness of material not as specified (see table I).	
104	Sleeves not tapered to allow for nesting closely for shipment (see 3.3).	
105	Sleeve, guide not properly assembled as specified in 3.1.1 and 3.1.2.	
106	Disc is warped.	
107	Galvanizing is less than 1.15 ounces per square foot.	
Minor:		
201	Dimensions do not conform to figure 1.	
202	Bolt, nut and washer not as specified in 3.1.3.	
203	Outside edges of disc sharp or inside of sleeve rough.	
204	Galvanizing not uniform.	

- 4.4 Trial assembly. Rat guards selected in accordance with 4.2.2 shall be assembled on the specified dimensional size to verify conformance with the functional requirements of this specification.
- 4.5 <u>Inspection of packaging</u>. Sample packages and packs, and the inspection of the preservation-packaging, packing and marking for shipment and storage shall be in accordance with the requirements of section 5 and the documents specified therein.

#### PACKAGING

(The preparation for delivery requirements specified herein apply only for direct Government acquisition. For the extent of applicability of the preparation for delivery requirements of reference documents listed in section 2, see 6.3).

5.1 Preservation. Preservation shall be level A or C, as specified (see 6.2).

## 5.1.1 Level A.

5.1.1.1 Preservative applications. Preservatives shall not be used.

- 5.1.1.2 Unit packs. Eight complete rat guards shall be nested together by disassembling each guard and securing the two halves together at the funnel with filament reinforced pressure sensitive tape conforming to PPP-T-97. The hinge bolt, nut and washer for each guard shall be secured to one half of the guard in a manner to prevent loss or damage.
- 5.1.2 Level C. Rat guards, assembled or disassembled at the contractors option, shall be unit packed in a manner to afford protection against damage during shipment from the supply source to the first using activity for immediate use. The contractors retail or wholesale preservation methods may be used when such meets the requirements of this level.
  - 5.2 Packing. Packing shall be level A, B or C as specified (see 6.2).
- 5.2.1 Level A. Eight disassembled rat guards unit packed as specified in 5.1 shall be packed in wood cleated plywood, nailed wood or open wood crates conforming to PPP-B-601 overseas type, PPP-B-621 class 2 or MIL-C-52950 boxes or crates respectively. Selection of the box or crate shall be at the option of the contractor. Protection to tapered funnels shall be provided by means of blocking, bracing or cushioning or other media to prevent damage during handling, shipment and storage. Shrouds are not required.
- 5.2.2 Level B. Eight disassembled rat guards unit packed as specified in 5.1 shall be packed as specified in 5.2.1, except that containers shall conform to the domestic class or grade of the type used.
- 5.2.3 Level C. Packing shall be accomplished in a manner which will insure acceptance by common carrier at the lowest rate and will afford protection against physical or mechanical damage during direct shipment from the supply source to the using activity for early installation. The shipping containers or method of packing shall conform to the Uniform Freight Classification Rules, National Motor Freight Classification, or other carrier regulations, as applicable to the mode of transportation.
- 5.3 Marking. In addition to any special marking required (see 6.2), unit packs and shipping containers shall be marked in accordance with MIL-STD-129. Unit packs in open crates may be marked with waterproof tags.

## 6. NOTES

- 6.1 <u>Intended use</u>. The type of rat guard covered in this specification is intended to prevent rats from boarding ships.
  - 6.2 Ordering data. Acquisition documents should specify the following:
    - (a) Title, number, and date of this specification.
    - (b) Size required (see 1.2).
    - (c) Material required (see 3.1).
    - (d) Dimensions (see 3.2).
    - (e) Level of preservation and packing (see 5.1 and 5.2).
    - (f) Special marking required (see 5.3).

- 6.3 Sub-contracted material and parts. The preparation for delivery requirements of referenced documents listed in section 2 do not apply when material and parts are acquired by the contractor for incorporation into the equipment and lose their separate identity when the equipment is shipped.
- 6.4 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.

Custodians:

Army - ME

Navy - SH

Preparing activity: Navy - SH (Project 2040-0149)

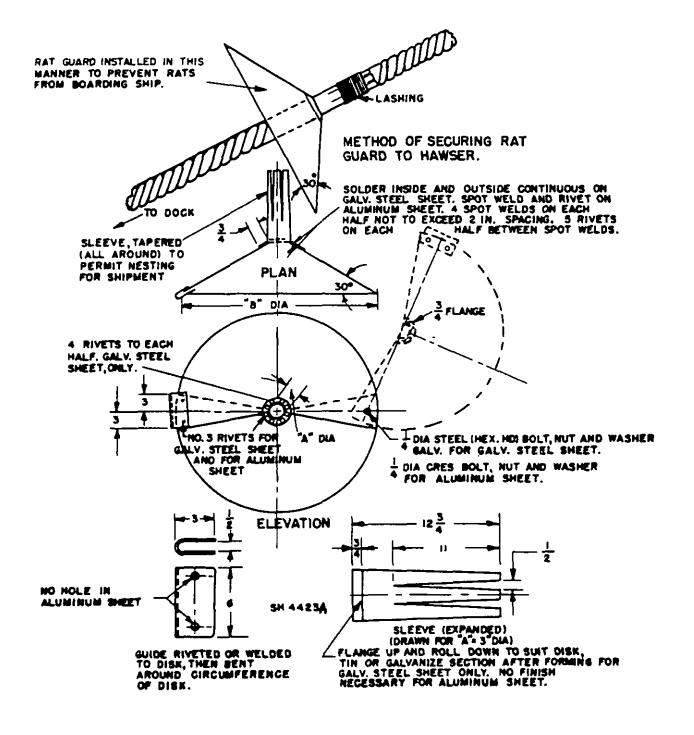


FIGURE 1. Assembly of rat guards.

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& ADDRESS-(Street, City, State, ZIP	Code)	MANUFACTURER		
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