

OCEAN ENGINEERING DIVISION  
UNITED STATES COAST GUARD  
WASHINGTON, D.C.

OCTOBER 2012

SPECIFICATION FOR FABRICATION  
OF  
ICE BUOY  
GASKET KIT

SPECIFICATION NO. 363  
REVISION B

## 1. SCOPE

1.1 Scope. This specification defines the requirements for a gasket kit (one adapter plate gasket & one battery pocket gasket) for use on 6x16 and 7x20 lighted ice buoys. These buoys are used as aids-to-navigation in navigable waters of the United States.

## 2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are referenced in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification which are recommended for additional information or used 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 cited in sections 3 and 4 of this specification, whether or not the referenced documents are listed here.

2.2 Issues of Documents. The following documents, of the issue in effect on the date of solicitation, form a part of this specification to the extent specified herein. Suffixes denoting the specific issue of each document will be omitted from future references to the document in this specification:

2.3 Government Documents. The following documents form a part of this specification to the extent referenced herein. Suffixes denoting the specific issue of each document are omitted from future references to the documents in this specification.

MIL-STD-129P (4) (2007)      Standard Practice for Military Marking

2.4 Industry Publications. The following documents of the issues specified form a part of this specification to the extent referenced herein. Suffixes denoting the specific issue of each document will be omitted from future references to the document in this specification.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D3951 (2010)                  Standard Practice for Commercial Packaging

AMERICAN SOCIETY FOR QUALITY (ASQ)

ASQ C1 (1996)                  Specification of General Requirements for a Quality Program T60E

ASQ Q9001 (2008)          Quality Management Systems – Requirements T 860

ASQ Z1.4 (2008)              Sampling Procedures and Tables for Inspection by Attributes – T004E

ASSOCIATION FOR AUTOMATED IDENTIFICATION AND MOBILITY (AIM)

AIM BC 1-95                  Uniform Symbology Specifications (Code 3, 9)

2.5 Drawings. The latest revision of the following United States Coast Guard Ocean Engineering drawing forms a part of this specification to the extent referenced herein, and shall be referred to as "the drawings" throughout this specification:

<u>Drawing Number</u>	<u>Title</u>
121200	Ice Buoy Gaskets

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

### 3. REQUIREMENTS

3.1 General. The gaskets shall be made in accordance with the drawing and shall meet the requirements of this specification.

3.2 Materials. The gasket material shall be chloroprene (neoprene) rubber sheet, color black, of durometer hardness 50 +/- 5.

3.3 Dimensions and Dimensional Tolerances. The gaskets shall conform in design and dimension to the drawing. The dimension tolerances shall be as given on the drawing.

3.4 Documentation.

3.4.1 Quality Assurance Inspection Form. The Contractor shall develop and provide a Quality Assurance Inspection Form (QAIF). The QAIF shall be used to document the inspections and tests performed on every item throughout its fabrication process. The form shall be typewritten on standard (i.e., 8½x11 inch) white paper. Inspection results may be handwritten on the form. The form shall be prepared in the Contractor's format and shall be legible, in English, and suitable for reproduction. The form shall be made available to the Contracting Officer's Representative (COR) for review.

3.4.1.1 QAIF Content. At a minimum the QAIF shall include:

- a) Item serial number.
- b) Date of test or inspection.
- c) Test or inspection to be performed (list every test and inspection required by section 4.6 & 4.7).
- d) Result of test or inspection.
- e) Accept/Reject criteria for each test or inspection.
- f) Corrective action taken (if any).
- g) Notes.
- h) Initials or signatures of Contractor's test personnel.

3.4.2 Material Certifications. The contractor shall furnish material certifications from the material manufacturer or from a reputable engineering laboratory, to the effect that all materials described above have been tested and found to be in accordance with the requirements of paragraph 3.2.

3.4.3 Material Inspection and Receiving Report (DD Form 250). A form DD-250 shall be used as a certification of product quality assurance, as a packing list, and as a certification of acceptance. The Contractor shall prepare a separate DD-250 for each shipping lot. Prior to shipment, the DD-250 must be signed by the Contracting Officer's Representative (COR).

#### 4.0 QUALITY ASSURANCE PROVISIONS

4.1 General. The contractor shall maintain an inspection system which ensures that each item offered to the Coast Guard for acceptance conforms to all contract requirements. The contractor's quality assurance program shall meet the requirements of ASQ Q9001. However, the Contractor does not have to be Q9001 certified. The inspection system shall be documented and available for review by the COR.

4.2 Contractor's Calibration System. The contractor shall maintain a calibration and maintenance system to control the accuracy of measurement and test equipment used in the fulfillment of this specification. The system shall include, as a minimum, prescribed calibration intervals and the source of calibration. A monitoring system to this requirement shall be readily available to the Coast Guard Inspector. Calibration shall be traceable to the National Institute of Standards and Technology.

4.3 Responsibility for Inspection. The contractor shall be responsible for the performance of all inspection requirements as specified herein. The contractor shall provide space, personnel and test equipment for the conduct of all inspection requirements. The inspection shall be performed at the contractor's plant, or at other facilities acceptable to the Coast Guard. The Coast Guard reserves the right to verify or perform any of the inspections set forth in this specification, where such inspections are deemed necessary to assure that supplies and services conform to the prescribed requirements. The contractor shall notify the Contracting Officer fourteen (14) calendar days prior to the scheduled commencement of any test required by this specification.

4.4 Failure Responsibility. If a gasket fails to pass any inspection required by this specification, the contractor shall take corrective action on the materials or process, or both as warranted, on all items or portions thereof which were similarly manufactured, and which are subject to the same cause for failure. Depending on the type or number of failures, the inspection may be discontinued, at the option of the Coast Guard, until all corrective action has been taken. After all corrective action has been taken; the inspection shall be continued or repeated, depending on the reason for which the inspection was interrupted, at the option of the Coast Guard. Acceptance shall be withheld until reinspection has shown that the corrective action was successful and the gasket satisfactorily passes all inspections.

4.5 Classification of Inspections. The inspection requirements specified herein are classified as follows:

- a. First Article Test Inspection - Paragraph 4.6.
- b. Production Inspection - Paragraph 4.7.

4.6 First Article Test. Two gasket kit samples shall be provided for first article testing. The gaskets in each gasket kit offered for acceptance will be inspected for conformance to this specification. The inspection will include the measurement of all dimensions, as specified in paragraph 3.3, to ensure that they are within the specified tolerances. The material certification(s) required by paragraph 3.4 shall be presented at the time of this inspection. Packaging and labeling and marking shall be inspected for compliance with Paragraph 5.1 and 5.2 of this specification.

4.7 Production Inspection. The gaskets in each gasket kit sample offered for acceptance will be inspected for conformance to this specification. The inspection will include the measurement of all dimensions, as specified in paragraph 3.3, to ensure that they are within the specified tolerances. The material certification(s) required by paragraph 3.4 shall be presented at the time of this inspection. Packaging and labeling and marking shall be inspected for compliance with Paragraph 5.1 and 5.2 of this specification.

4.7.1 Sampling Plan. A random sampling of gasket kits (the number and type is to be specified by ASQ Z1.4, Table II A, based on General Inspection Level II from Table I) shall be selected from each production lot. A production lot shall be all of the gasket kits in an identifiable production period from one manufacturer and one plant and submitted for acceptance at one time. Lots shall be rejected when the percent of nonconformance is in excess of ASQ Z1.4. (Minimum sample size shall be Level II, normal, AQL = 1.0.)

## **5.0 PREPARATION FOR DELIVERY.**

5.1 Packaging & Packing. Each gasket kit consists of one battery pocket gasket and one adapter plate gasket packaged in individually sealed cardboard boxes. The individual gasket kits shall be packed in a larger shipping container. The preservation and packaging shall conform to ASTM D 3951.

5.2 Marking. Interior and exterior container marking shall be in accordance with MIL-STD-129p. Barcoding of the item National Stock Number (NSN), in accordance with AIM BC 1, is required. The NSN is **2050-01-132-2310**.

**SPECIFICATION NO. 363 - FABRICATION OF ICE BUOY GASKET KIT**

**OCTOBER 2012**

Prepared by

Reviewed by:

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***10/18/2012***

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