The American Boat & Yacht Council, Inc.



# Setting Standards for Safer Boating

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## H-28 INFLATABLE BOATS

### **Table of Contents**

28.1	PUR	POSE	1
28.2	SCO	PE	1
28.3	REFI	REFERENCED ORGANIZATIONS	
28.4	DEF	INITIONS	1
28.5	REQ	UIREMENTS - IN GENERAL	1
28.6	MAT	ERIALS	2
28.7	FUN	CTIONAL COMPONENTS	2
28.8	SEA	ТЅ	3
28.9	BOA	T LOAD CAPACITY	3
28.10	МАХ	MAXIMUM ENGINE POWER	
28.11	STA	STATIC STABILITY TEST	
28.12	COM	COMPARTMENTATION	
20.12		TICHTNESS TEST OF THE DUOY ANCY CHAMPEDS	, ,
28.15	AIK	AIR HOHINESS IEST OF THE BUOTANCT CHAMDERS	
28.14	SUD	SUDDEN TOTAL LOSS OF PRESSURE	
28.15	ROW	ROWING TEST	
28.16	OPE	RATING INSTRUCTIONS AND WARNINGS	9
28.17	STA	NDARD EQUIPMENT	9
А	P-1	TESTING OF BUOYANCY CHAMBER MATERIAL	9
А	P-1.1	TEST PIECES	9
А	P-1.2	RESISTANCE TO LIQUIDS TEST	9
А	P-1.3	RESISTANCE TO OZONE TEST	9
А	P-1.4	TEAR STRENGTH TEST (TYPES II ,III, AND IV INFLATABLE BOATS ONLY)	9
А	P-1.5	COATING ADHESION TEST - (TYPE II, III, AND IV INFLATABLE BOATS ONLY)	9
А	P-1.6	SEAM STRENGTH TEST OF BUOYANCY CHAMBERS – (TYPE III AND IV INFLATABLE	
		BOATS ONLY)	9
А	P-1.7	AIR TIGHTNESS TEST OF THE BUOYANCY CHAMBERS	9
А	P-1.8	ROWING TEST	9

### H-28 INFLATABLE BOATS

Based on ABYC's assessment of the existing technology, and the problems associated with achieving the goals of this standard, ABYC recommends compliance with this standard for all boats, associated equipment, and systems manufactured and/or installed after July 31, 2005.

28.1 **PURPOSE** 

This standard is a guide for the design, construction, material and testing of inflatable boats, including RIBS.

#### 28.2 SCOPE

This standard applies to all inflatable boats, including RIBS less than eight meters (26 feet) length overall capable of being mechanically powered.

#### **EXCEPTIONS:**

- 1. Liferafts
- 2. River excursion rafts
- 3. Inflatables powered exclusively by manual or sailing means.

#### 28.3 REFERENCED ORGANIZATIONS

ABYC - American Boat & Yacht Council, Inc., 3069 Solomons Island Road, Edgewater, MD 21037-1416. Phone: 410-956-1050. Fax: 410-956-2737. Website: www.abycinc.org

ASTM - American Society for Testing and Materials, ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Phone: 610-832-9585. Fax: 610-832-9555. Website: www.astm.org.

International Organization for Standardization (ISO), ISO Central Secretariat, 1 rue de Varembe, Case postale 56, CH-1211 Geneva 20, Switzerland. Website: www.iso.ch Also available from ABYC.

#### 28.4 **DEFINITIONS**

For the purposes of this standard, the following definitions apply.

Engine bracket – An engine or motor mounting device which is detachable or is not a structural part of the boat.

Inboard area – Internal surface area (length x width), measured in square meters (feet) (inboard length x inboard width) (feet), defined by a vertical plane tangent to the innermost side of the buoyancy tube, and perpendicular to the deck.

Inboard length – Measurement, including the area below any spray cover, measured along the boat centerline between the innermost points of the bow and stern as defined by a vertical plane tangent to the innermost side of the buoyancy tube and perpendicular to the cockpit floor. Inboard width – The measurement amidships between the innermost points of the buoyancy tubes.

Inflatable boat -A boat that achieves all or part of its intended structure, shape and buoyancy through the medium of inflation.

Inherent buoyancy (RIB only) – The force produced by all materials when submerged in fresh water.

Inflated buoyancy (RIB only) – Buoyancy of inflation collar when inflated.

Rigid inflatable boat – RIB, also known as rigid hull inflatable boat – (RHIB): An inflatable boat with a portion of the hull constructed as a rigid unit and another portion that achieves all or part of its intended structure, shape and buoyancy through the medium of inflation.

Reinforced material – Material which has a coated base fabric.

Single chambered boat - A boat whose entire buoyancy tube encompassing the passenger carrying area may deflate through any single opening.

Transom – A structural member of the boat and may be designed for mounting an outboard engine or electric motor.

Type I inflatable boat – An inflatable boat capable of taking a maximum outboard engine power of 4.5 kW (6 hp).

Type II inflatable boat – An inflatable boat with an engine power rating of greater than 4.5 kW (6 hp) to 15 kW (20 hp).

Type III inflatable boat – An inflatable boat with an engine power rating of greater than 15 kW (20 hp) to 75 kW (99.9 hp).

Type IV inflatable boat – An inflatable boat with an engine power rating of greater than 75 kW (99.9 hp).

Unreinforced material - Material which has no base fabric.

#### 28.5 REQUIREMENTS - IN GENERAL

28.5.1 The boat manufacturer shall specify a recommended seating arrangement, including helm position, in the owner's manual.