

Advisory Circular

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Maritime Rules Part 91: Navigation Safety Rules

General

Purpose of advisory circulars

Maritime New Zealand (MNZ) advisory circulars provide MNZ's views and interpretation of the standards and requirements set out in the maritime rules. However, the advisory circulars are not a substitute for the rules themselves, which are the law.

This advisory circular is about recognition and certification of personal flotation devices (PFDs) for use on board recreational craft. It details the national and international standards that the Director of MNZ (the Director) has recognised as substantially complying with the types of device described in New Zealand standards series NZS 5823, which is referred to in the definition of PFD in Maritime Rules Part 91 (Part 91). It also provides advice on the authorities that the Director considers competent to certify a PFD's compliance with a standard.

This circular supersedes the section on PFD standards on page 3 of Advisory Circular: Maritime Rules Part 91: Navigation Safety (2004).

Background

Part 91 requires carriage of PFDs (buoyancy aids designed to be worn on the body) on board recreational craft. This includes pleasure craft and manually powered craft used in commercial operations, for example, sea kayak rentals.

Certain recreational craft do not have to carry PFDs (for example a windsurfer where the sailor wears a wetsuit, or people training or participating in a sporting event where there is a support vessel handy).

The rules incorporate standards for PFDs and provides the Director with the discretion to determine which devices (certified by a recognised authority to a national and international standard) substantially comply with the New Zealand standard for buoyancy aids. This discretion is set out in paragraph (b) of the definition of "personal flotation device" in rule 91.2, as set out below:

"...any serviceable buoyancy aid that is designed to be worn on the body and that is certified by a recognised authority as meeting:

(a) type 401, 402, 403, 404, 405, or 408 in NZ Standard 5823:1989 or NZ Standard 5823:2001 or type 401, 402, 403, 404, 405 or 406 in NZ Standard 5823:2005; or

(b) a national or international standard that the Director is satisfied substantially complies with types 401, 402, 403, 404, 405, or 408 of the NZ Standard 5823:1989 or NZ Standard 5823:2001 or type 401, 402, 403, 404, 405 or 406 in NZ Standard 5823:2005.

National and international standards substantially complying with NZ Standard 5823:1989, NZ Standard 5823:2001, and NZ Standard 5823:2005

The standards and the devices that substantially comply are listed in tables 1 and 2.

Column 1 in each table lists the national and international standards.

Table 1 lists the national and international standards that substantially comply for types 401, 402, 403 and 405 of NZ Standard 5823 and table 2 list the standards for types 406 and 408 of NZ Standard 5823.

Table 1:

PFD types 401– 405: National and international standards that substantially comply with NZ Standard 5823:1989, NZ Standard 5823:2001 and NZ Standard 5823:2005				
National/ international standard	Type 401: open waters lifejackets	Type 402: inshore waters PFDs	Type 403: buoyancy vests	Type 405: buoyancy garments
American Standard (ANSI) ANSI/UL 1123–2008 and ANSI/UL 1177–2007 ANSI/UL 1180–2000	Type I PFD: offshore life jacket Type I PFD: recreational inflatable***	Type II PFD: near shore buoyant vest Type II PFD: recreational inflatable***	Type III PFD	Type III PFD
Australian Standard (AS) AS 4758–2008 Parts 1–3	level 150	level 100	level 50	level 50
AS 1499–1996	-	-	PFD type 2	PFD type 2
AS 1512–1996	-	PFD type I	-	-
AS 2260–1996	-	-	PFD type 3	PFD type 3
International Organization for Standardization (ISO) 12402–2006* Parts 3–6 **	12402–3	12402–4	12402–5	12402–5
European Standard (EN) 393–399	396	395	393	393

ANSI – American National Standards Institute

AS – Australian Standard

EN – European standard

ISO – International Organization for Standardization

NZS – New Zealand Standard

UL – Underwriters Laboratories

* The ISO 12402 standard is directly equivalent to the European Standard EN ISO 12402.

**Parts 3–6 of the ISO standards refer to the parts that set the performance levels. These standards work with Parts 7–9 of the standards, which set out requirements covering materials, components and test methods.

*** Adult size only with user weight more than 36 kgs.

Table 2:

PFD types 406–408: National and international standards substantially complying with NZ Standard 5823:1989, NZ Standard 5823:2001 and NZ Standard 5823:2005					
National/ international standard	Type 406:* specialist PFD kayaking activities	Type 406:* specialist PFD white-water rafting	Type 406:* specialist PFD jet and power boat racing	Type 408:** specialist PFD white-water rafting	Type 408:** specialist PFD jet and power boat racing
American Standard (ANSI)/UL 1123–2008 and ANSI/UL 1177–2007 ANSI/UL 1180–2000	Type V PFD: special use device/ canoe/ kayak vest	Type V PFD: special use device/ commercial white water vest	Type II PFD: near shore buoyant vest or type V: special use device Type II PFD: recreational inflatable****	Type V PFD: special use device/ commercial white water vests	Type II PFD: near shore buoyant vest or type V: special use device
Australian Standard (AS) 4758–2008 Parts 1–3	level 50 Special purpose PFD	level 100 Special purpose PFD	level 100 Special purpose PFD	level 100 Special purpose PFD	level 100 Special purpose PFD
AS 1499–1996	PFD type 2	-	-	-	-
AS 1512–1996	-	PFD type 1	PFD type 1	PFD type 1	PFD type 1
AS 2260–1996	PFD type 3	-	-	-	-
International Organization for Standardization (ISO) 12402–2006 Parts 3–6***	12402–6 (special purpose)	12402–6 (special purpose) level 100	12402–4 12402–6 (special purpose)	12402–6 (special purpose) level 100	12402–4 12402–6 (special purpose)
European Standard (EN) 393–399	393	-	395	-	395

ANSI – American National Standards Institute

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ISO – International Organization for Standardization

NZS – New Zealand Standard

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* NZS 5823:2005 only.

** NZS 5823:1989 and NZS 5823:2001 only.

*** Parts 3–6 of the ISO and EN standards refer to the parts that set the performance levels. These standards work with Parts 7–9 of the standards, which set out requirements covering materials, components and test methods.

**** Adult size only with user weight more than 36 kgs.

In consequence of the arrangements between members of the European Committee for Standardization (CEN), the European Standards in the tables above are reflected in member States' national standards. Accordingly, the Director's determination of standards that substantially comply extends to these national standards. The member States of CEN comprise the 27 European Union States, together with Croatia, Turkey, Norway and Switzerland.

Marks of conformity and approval numbers

Labels on devices, including United State Coast Guard (USCG)-approved devices, will bear a certification mark from the organisation undertaking the conformity assessment.

Devices certified to European (EN) / International Standards Organization (ISO) standards will be identifiable by their CE marking (Conformité Européene). The form of the mark is shown below:



The standard and part, eg EN ISO 12402–4, the performance level, and the intended application (for example level 50, sheltered waters, light clothing) will also appear on the device, although the performance level may be replaced by a pictogram (see figure 1 below).

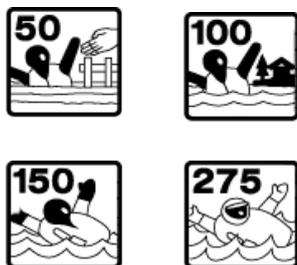
Devices conforming to the American National Standards Institute (ANSI) standards have the type of PFD, the intended use, and a USCG approval number or numbers marked on the device (for example, in the case of a buoyancy vest, Type III PFD, 160.### / #### / #). They also have a third party (Underwriters Laboratories - UL) certification mark.

The status of USCG device approvals can be verified at the USCG Maritime Information Exchange.

Devices conforming to the Australian Standard (AS) will have AS 4758.1 and the classification of the PFD performance level (for example 100). This performance level may be replaced with a pictogram (see figure 1). In the case of special purpose PFDs, the letter "s" will be used after the performance level, for example AS 4758.1 50s.

Devices conforming to the New Zealand Standard (NZS) 5823 will be marked with the number and the year of the standard in addition to the type. For a buoyancy aid, the marking would be NZS 5823:2005 type 403/buoyancy vest.

Figure 1:
Performance level



Recognised authorities for certification of PFDs

The Director has determined that conformity assessment bodies holding product certification accreditation from the following bodies are competent to certify PFDs to the standards that the Director considers substantially comply with the NZS 5823 series:

- Joint Accreditation System of Australia and New Zealand (JAS-ANZ) and the European co-operation for Accreditation in respect of Australian, ISO and EN standards
- USCG for devices made to American national standards.