

Code of practice for

Design of canoes and kayaks

ICS 47.080

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee GME/33, Small Craft, upon which the following bodies were represented:

- Association of Canoe Trades
- British Marine Industries Federation
- British Nautical Instrument Trade Association
- British Waterways Board
- Consumer Policy Committee of BSI
- Department of Trade and Industry
- Department of Trade and Industry (Standards Policy Unit)
- Environment Agency
- Federation of Wire Rope Manufacturers of Great Britain
- Fire Extinguishing Trades Association
- Home Office
- Lloyd's register of shipping
- Marine Safety Agency
- National Rivers Authority
- Royal Ocean Racing Club
- Royal Society for the Prevention of Accidents
- Royal Yachting Association
- Coopted members

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Canoe Union
- Canoe Association of Northern Ireland
- Open Canoe Association
- Scottish Canoe Association

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Foreword

This British Standard has been prepared by Technical Committee GME/33. It recommends good practice for the design of canoes and kayaks. It supersedes BS MA 91 : Part 1 : 1981 and Part 2 : 1981, which are withdrawn.

All canoeing and kayaking should be considered a risk sport, the risk inversely proportional to the paddler's skill and experience. Practice in the use of equipment and rescue methods, an understanding of the elements, as well as the development of paddling skills are all needed, together with a well-designed craft to keep this risk to a minimum.

It is emphasized that, while a well-designed, constructed and maintained craft will help to reduce accidents, there is no such thing as a totally 'safe canoe or kayak'. Only the interaction between an experienced and safety-conscious paddler and such a craft can result in safe canoeing or kayaking.

Further guidance on canoeing and kayaking can be sought through clubs, courses and the British Canoe Union Coaching Scheme. Useful information about canoeing and kayaking can also be found in the official Canoeing Handbook [1].

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

1 Scope

This code of practice gives recommendations for the design of certain canoes and kayaks.

This standard covers all types of canoes and kayaks except surf/wave skis, sit on top kayaks, inflatable canoes, inflatable kayaks, canoes or kayaks designed specially for competition. It does not cover spraydecks or devices to increase the stability of craft or to assist paddlers to re-enter their boats.

The recommendations for white water boats can also be applied to kayaks used for surfing.

2 Informative references

This British Standard refers to another publication that provides information and guidance. The edition of this publication current at the time of issue of this standard is given on the inside back cover, but reference should be made to the latest edition.

3 Definitions

For the purposes of this British Standard, the following definitions apply:

3.1 canoe

A craft, usually without decking or with vestigial decks and normally propelled with a single-bladed paddle.

NOTE. Canoes are derived from the type of craft used by the North American Indian and are often termed open canoes, or Canadian canoes.

3.2 kayak

A craft that is always decked and normally propelled with a double-bladed paddle.

NOTE. Kayaks are derived from the type of craft used by the Inuit. They are often termed Eskimo kayaks.

3.3 closed cockpit kayak

A kayak in which the deck covers the knees of the occupant(s) in the normal paddling position.

NOTE. Closed cockpit kayaks are used in white water recreation, slalom, down-river racing, rodeo and squirt competition and also for sea kayaking.

3.4 open cockpit kayak

A kayak in which the deck does not cover the knees in the normal paddling position.

NOTE. Open cockpit kayaks are used for some flat-water recreation and for sprint and marathon racing.

3.5 white water play boat

A short white water kayak or canoe used to give gymnastic performances on and above the water surface.

3.6 squirt boat

A small, white water kayak or canoe whose displacement is very little more than the paddler. It is used to give gymnastic performances on or below the water surface.

3.7 buoyancy

Buoyant material, normally close-cell foam, watertight air-bags or compartments, used singly or in combination and incorporated within a canoe or kayak to exclude water from regions of the craft in the event of swamping or flooding.

3.8 total buoyancy

The filling of the whole of the interior of the craft with buoyant material that excludes as much water as possible from the interior of a swamped craft, with the exception of the cockpit volume in kayaks and the volume immediately surrounding the paddler in an open craft which is required to paddle efficiently.

3.9 swamping

The filling with water of any part of an undamaged craft, including the cockpit in a kayak without a spraydeck fitted.

3.10 flooding

The filling with water of any part of a craft owing to damage or failure.

3.11 platform footrest

A platform of suitable material positioned to support the soles of the paddler's feet.

3.12 bar footrest

A bar of suitable material positioned to support the ball of the foot only.

NOTE. In kayaks they are fastened transversely across the craft, between or close to the gunwales. In a canoe they are normally close to the hull (floor) of the craft.

3.13 stud footrest

Small pads cantilevered out from the gunwale or other part of the hull that support the ball of each foot individually.

NOTE. They can be adjustable, or they can consist of a series of separate pads, the one most compatible with the paddler's leg length being selected to support the foot. This latter type is sometimes known as a notched or ladder footrest.

3.14 end grabs

Handles, close to the ends of the craft, consisting of either rigid material, rope or toggles.

3.15 streamers

Short lengths of webbing fastened to the ends of white water craft which act as extensions to end grabs.

3.16 broach loop

A strong loop or ring positioned within reach of the paddler while seated in the cockpit which allows the attachment of karabiners or hooks to pull the craft free of obstructions.

NOTE. They are often fitted to the foredeck so that it can be lifted to release a trapped paddler.