Recreational Craft Directive (RCD)

1	Boat Design Category A, B, C or D	Requirements	Standard
2	General Requirements		
2.1	Hull Identification Number (HIN) must be ISO format	Each craft shall be marked with a hull identification number including the following information: – manufacturer's code, – country of manufacture, – unique serial number, – year of production, – model year, – the relevant harmonised standard gives details of these requirements.	EN ISO 10087:1996/A1:2000
2.2	Builder's Plate (CE Marking)	2.2 Builder's plate Each craft shall carry a permanently affixed plate mounted separately from the boat hull identification number, containing the following information: – manufacturer's name, – CE marking (see Annex IV), – boat design category according to section 1, – manufacturer's maximum recommended load according to section 3.6, – number of persons recommended by the manufacturer for which the boat was designed to carry when under way.	
2.3	Protection from falling overboard	Depending on the design category, craft shall be designed to minimise the risks of falling overboard and to facilitate reboarding.	EN ISO 15085:2003:
2.4	Visibility from main steering position	For motor boats, the main steering position shall give the operator, under normal conditions of use (speed and load), good all-round visibility.	EN ISO 11591:2000:
2.5	Owners manual	Each craft shall be provided with an owner's manual in the official Community language or languages, which may be determined by the Member State in which it is marketed in accordance with the Treaty. This manual should draw particular attention to risks of fire and flooding and shall contain the information listed in sections 2.2, 3.6 and 4 as well as the unladen weight of the craft in kilograms.	EN ISO 10240:1996:
3	Integrity and Structural Requirements		
3.1	Structure	The choice and combination of materials and its construction shall ensure that the craft is strong enough in all respects. Special attention shall be paid to the design category according to section 1, and the manufacturer's maximum recommended load in accordance with section 3.6.	EN ISO 12215-1:2000: EN ISO 12215-2:2002: EN ISO 12215-3:2002: EN ISO 12215-4:2002: *EN ISO 6185-1:2001:* *EN ISO 6185-2:2001:*

			EN ISO 6185-3:2001:
3.2	Stability and Freeboard	The craft shall have sufficient stability and freeboard considering its design category according to section 1 and the manufacturer's maximum recommended load according to section 3.6.	*EN ISO 12217-1:2002:* *EN ISO 12217-2:2002:* EN ISO 12217-3:2002*:*
3.3	Buoyancy and flotation	The craft shall be constructed to ensure that it has buoyancy characteristics appropriate to its design category according to section 1.1, and the manufacturer's maximum recommended load according to section 3.6. All habitable multihull craft shall be so designed as to have sufficient buoyancy to remain afloat in the inverted position. Boats of less than six metres in length that are susceptible to swamping when used in their design category shall be provided with appropriate means of flotation in the swamped condition.	*EN ISO 12217-1:2002:* *EN ISO 12217-2:2002:* EN ISO 12217-3:2002:
3.4	Openings in hull deck and superstructure	Openings in hull, deck (s) and superstructure shall not impair the structural integrity of the craft or its weathertight integrity when closed. Windows, portlights, doors and hatchcovers shall withstand the water pressure likely to be encountered in their specific position, as well as pointloads applied by the weight of persons moving on deck. Through hull fittings designed to allow water passage into the hull or out of the hull, below the waterline corresponding to the manufacturer's maximum recommended load according to section 3.6, shall be fitted with shutoff means which shall be readily accessible.	EN ISO 9093-1:1997 EN ISO 9093-2:2002 EN ISO 12216:2002
3.5	Flooding	All craft shall be designed so as to minimise the risk of sinking. Particular attention should be paid where appropriate to: – cockpits and wells, which should be self-draining or have other means of keeping water out of the boat interior, – ventilation fittings, – removal of water by pumps or other means.	EN ISO 11812: 2001 EN ISO 15083:2003 EN 28849:1993/A1:2000
3.6	Manufacturers maximum recommended load	The manufacturer's maximum recommended load (fuel, water, provisions, miscellaneous equipment and people (in kilograms)) for which the boat was designed, as marked on the builder's plate, shall be determined according to the design category (section 1), stability and freeboard (section 3.2) and buoyancy and flotation (section 3.3).	EN ISO 14946:2001:
3.7	Liferaft stowage	All craft of categories A and B, and craft of categories C and D longer than six metres shall be provided with one or more stowage points for a liferaft (liferafts) large enough to hold the number of persons the boat was designed to carry as recommended by the manufacturer. This (these) stowage point(s) shall be readily accessible at all times.	

3.8	Escape	All habitable multihull craft over 12 metres long shall be provided with viable means of escape in the event of inversion. All habitable craft shall be provided with viable means of escape in the event of fire.	EN ISO 9094-1:2003: EN ISO 9094-2:2002: EN ISO 12216:2002:
3.9	Anchoring, mooring and towing	All craft, taking into account their design category and their characteristics shall be fitted with one or more strong points or other means capable of safely accepting anchoring, mooring and towing loads.	EN ISO 15084:2003:
4	**Handling Characteristics**	The manufacturer shall ensure that the handling characteristics of the craft are satisfactory with the most powerful engine for which the boat is designed and constructed. For all recreational marine engines, the maximum rated engine power shall be declared in the owner's manual in accordance with the harmonised standard.	EN ISO 8665:1995/A1:2000 EN ISO 11592:
5	**Installation Requirements**		
5.1.1	Inboard engine	5.1.1 Inboard engine All inboard mounted engines shall be placed within an enclosure separated from living quarters and installed so as to minimise the risk of fires or spread of fires as well as hazards from toxic fumes, heat, noise or vibrations in the living quarters. Engine parts and accessories that require frequent inspection and/or servicing shall be readily accessible. The insulating materials inside engine spaces shall be non-combustible.	EN 28846:1993/A1:2000: EN ISO 9094-1:2003: *EN ISO 9094-2:2002*: EN ISO 7840:1995/A1: 2000: EN ISO 10088: 2001: EN ISO 10133:2000: EN ISO 11105:1997: EN ISO 15584:2001: *EN ISO 16147:2002:*
5.1.2	Ventilation	The engine compartment shall be ventilated. The dangerous ingress of water into the engine compartment through all inlets must be prevented.	EN ISO 11105:1997: *EN ISO 12217-1:2002:* *EN ISO 12217-2:2002*: EN ISO 12217-3:2002:
5.1.3	Exposed parts	Unless the engine is protected by a cover or its own enclosure, exposed moving or hot parts of the engine that could cause personal injury shall be effectively shielded.	
5.1.4	Outboard Engine starting	All boats with outboard engines shall have a device to prevent starting the engine in gear, except: (a) when the engine produces less than 500 newtons (N) of static thrust; (b) when the engine has a throttle limiting device to limit thrust to 500 N at the time of starting the engine.	EN ISO 11547:1995/A1:2000:
5.2.1	**Fuel System General**	The filling, storage, venting and fuel-supply arrangements and installations shall be designed and installed so as to minimise the risk of fire and explosion.	EN ISO 7840:1995/A1:2000: EN ISO 8469:1995/A1:2000: EN ISO 9094-1:2003 *EN ISO 9094-2:2002* EN ISO 10088: EN ISO 11105:1997:

			EN ISO 14895:2003: EN ISO 15584:2001: *EN ISO 16147:2002:*
5.2.2	Fuel Tanks	Fuel tanks, lines and hoses shall be secured and separated or protected from any source of significant heat. The material the tanks are made of and their method of construction shall be according to their capacity and the type of fuel. All tank spaces shall be ventilated. Liquid fuel with a flash point below 55°C shall be kept in tanks which do not form part of the hull and are: (a) insulated from the engine compartment and from all other source of ignition; (b) separated from living quarters. Liquid fuel with a flash point equal to or above 55°C may be kept in tanks that are integral with the hull.	
5.3	**Electrical Systems**	Electrical systems shall be designed and installed so as to ensure proper operation of the craft under normal conditions of use and shall be such as to minimise risk of fire and electric shock. Attention shall be paid to the provision of overload and short-circuit protection of all circuits, except engine starting circuits, supplied from batteries. Ventilation shall be provided to prevent the accumulation of gases, which might be emitted from batteries. Batteries shall be firmly secured and protected from ingress of water.	EN ISO 10133:2000: EN ISO 13297:2000: EN ISO 28846:1993/A1:2000: EN ISO 15584:2001: *EN ISO 16147:2002:* *EN 60092-507:2000:*
5.4.1	Steering System General	Steering systems shall be designed, constructed and installed in order to allow the transmission of steering loads under foreseeable operating conditions.	EN 28847:1989: EN 28848:1993/A1:2000: *EN ISO 10592:1995/A1:2000:* *EN 29775:1993/A1:2000:* *EN ISO 13929:2001*:
5.4.2	Emergency arrangements	Sailboat and single-engined inboard powered motor boats with remote-controlled rudder steering systems shall be provided with emergency means of steering the craft at reduced speed.	
5.5	**Gas System**	Gas systems for domestic use shall be of the vapour-withdrawal type and shall bedesigned and installed so as to avoid leaks and the risk of explosion and be capable of being tested for leaks. Materials and components shall be suitable for the specific gas used to withstand the stresses and exposures found in the marine environment. Each appliance shall be equipped with a flame failure device effective on all burners. Each gas- consuming appliance must be supplied by a separate branch of the distribution system, and each appliance must be controlled by a separate closing device. Adequate ventilation must be provided to prevent hazards from leaks and products of combustion. All craft with a permanently installed gas system shall be fitted with an enclosure to contain all gas cylinders.	*EN ISO 10239:2000:*

		The enclosure shall be separated from the living quarters, accessible only from the outside and ventilated to the outside so that any escaping gas drains overboard. Any permanent gas system shall be tested after installation.	
5.6.1	General Fire Protection	The type of equipment installed and the layout of the craft shall take account of the risk and spread of fire. Special attention shall be paid to the surroundings of open flame devices, hot areas or engines and auxiliary machines, oil and fuel overflows, uncovered oil and fuel pipes and avoiding electrical wiring above hot areas of machines.	EN ISO 9094-1:2003: *EN ISO 9094-2:2002*
5.6.2	Fire-fighting Equipment	Craft shall be supplied with fire-fighting equipment appropriate to the fire hazard. Petrol engine enclosures shall be protected by a fire extinguishing system that avoids the need to open the enclosure in the event of fire. Where fitted, portable fire extinguishers shall be readily accessible and one shall be so positioned that it can easily be reached from the main steering position of the craft.	EN ISO 9094-1:2003: *EN ISO 9094-2:2002*
5.7	**Navigation Lights**	Where navigation lights are fitted, they shall comply with the 1972 COLREG or CEVNI regulations, as appropriate.	
5.8	**Discharge Prevention**	Craft shall be constructed so as to prevent the accidental discharge of pollutants (oil, fuel, etc.) overboard. Craft fitted with toilets shall have either: – holding tanks; or – provision to fit holding tanks on a temporary basis in areas of use where the dischargeof human waste is restricted. In addition, any through-the-hull pipes for human waste shall be fitted with valves, which are capable of being sealed shut.	EN ISO 8099:2000: