



The Safety of Small Commercial Sailing Vessels

MCA Blue Book Code requirement Summary

<15 persons, <15metres

Category 0 - unlimited

Category 1 - up to 150 miles from safe haven

Category 2 - up to 60 miles from safe haven

Category 3 - up to 20 miles from safe haven

Category 4 - up to 20 miles from safe haven in favourable weather & daylight

No. of Persons – n (max. no. of persons – determined from stability tests/results, including a max. of 12 passengers)

PART1 – Construction / stability

- Vessel has a watertight weather deck
- Vessel/hull is either:
 - Surveyed & Certificated by a MCA recognised Class Society
 - Hull structure to Classification Society scantlings
 - A vessel which has not been built under the survey of an UK Load Line Assigning Authority will be considered to be of adequate strength after a satisfactory examination by an authorised person and if it has been built:- in accordance with the hull certification standards for small vessels, recognised by one of the Authorities; or
 - Has individual plan approval
 - Surveyed & Certificated by MECAL previously
 - Has EC Certification for appropriate Design Class (independently verified)
 - Independent verification mandatory for category A (Ocean) vessels over 12m [39.4 feet]
 - Vessel has 5 year history of safe operation in comparable sea conditions/area
 - Hull structure acceptance to be based on at least 5 years safe history of design (declared by owner, builder)
- Stability information booklet required for multihulls – to be approved by MCA
- Damage survival capability is required for >14 persons
- Stability assessment according to hull form and top weight
- For vessels required to have a stability information booklet freeboard marks to be applied port & starboard midships (data from stability booklet)
- Out of water, structural survey

Note: Range category allowed dependant on stability outcome.

PART2 – Fixed equipment/systems

- Deck hatch coaming height 300mm minimum above deck edge. Flush w/t hatches accepted where emergency access not required. Any escape hatches require being openable from both sides.
- Vents to have means to prevent down flooding
- All below waterline hull penetrations to have closure valves
- Above waterline hull penetrations to have valve closures or non-return valves or swan necked with attached plugs (if substantially above waterline)
- Anti siphon measures for toilet discharges
- Windows/ports toughened glass or refer to RCD (ISO) requirements for other materials
- Forward deck hatches to have portable blanks if hinged aft.
- Rail height 600mm minimum, spacing 2200mm minimum
- Fuel system to ISO 10088 – “Small Craft - Permanently installed fuel systems & fixed fuel tanks”
- Remote fuel cut-off valve
- Engine compartment fire retardant surfaces & insulation
- Ventilation shut-off to engine compartment (fire protection)
- Engine space fire extinguisher-additional
- Bow thruster/diesel heater space fire extinguisher-additional
- Fixed gas installation (isolation, securing, drainage, ventilation, materials) – requires Gas Safe Register [ex-CORGI] certification
- Flame failure cooker/hob
- Gas detection & alarm (certified system)
- Electrical protection, wiring & terminations - marine standard
- Battery security & ventilation
- Engine space flooding alarm
- Plastic or rubber pipes connected to seacock below water line in engine space to have:
 - Seacock capable of remote closure from outside the engine space or
 - All plastic raw water pipes below water level should be lagged with fire resistant lagging or
 - Pipes should be replaced with either ISO Standard 7840 or exhaust quality rubber hosing or metallic pipe without soldered joints.
- Recent evidence of fuel tank cleaning required
- Two sources of power for engine starting (can be via two separate battery/banks with change over and paralleling switching); note: engine start battery/bank to be dedicated with no domestic loads to inadvertently discharge.
- Engine space bilge (Oil pollution) must not have automatic bilge pump.
- Bilge pumping from each compartment (operated from outside compartment) – drain valves from extremities
- Minimum 1 hand bilge pump (with strum box) - in each hull for multihull
- Minimum 1 power bilge pump (with strum box) - in each hull for multihull
- Larger vessels (over 10m) and those with bow thrusters may require additional pumps
- Engine space seacocks to have remote shut-off or fire rated sea hoses or fire lagged pipes.
- Emergency steering facility
- Emergency forestay, halyard & efficient storm jib

Registered office: 121 Church Road, Wembury, Devon, PL9 0LB

Registered in England No 5888621

Authorised to undertake MCA small commercial vessel safety inspections on behalf of MECAL Ltd

- Recent aloft rig inspection certificate provided
- Navigation lights & shapes and sound signals as per Collision Regulations
- For vessels over 12m Not under command lights [2 red all round spaced 1.5m and 4m above deck] & shapes [two round ball spaced 2m apart and 4m above deck].
- Recess (Cockpit) total volume (V_c) does not exceed the value obtained from the following formula: $V_c \leq 0.1 \times \text{length of vessel} \times \text{breadth of vessel} \times \text{freeboard abreast the recess}$.
- Recess (Cockpit) drainage capable of efficient operation when the vessel is heeled to 30° . Such drainage to have an effective area, excluding grills and baffles, of at least 10cm^2 for a vessel operating in Area Category 2, 3 or 4 and of at least 20cm^2 for a vessel operating in Area Category 0 or 1.
 - Alternative 3 minutes to drain from full swamping may be accepted.
- **For >24 hour sailing :**
- Adequate ventilation below decks
- No. of bunks = no. of persons
- 50% secure bunks (e.g lee cloths)
- 1 Heads & washbasin per 12 persons

Note: In addition all vessels over 45 feet (13.7m) are categorised as Class XII passenger vessels whether in commercial operation or privately used for pleasure only. Specific carriage requirements are needed-see www.mcga.org web site for details.

PART 3 – Safety equipment inventory

Item	Cat 0	Cat 1	Cat 2	Cat 3	Cat 4
Liferaft – DpT SOLAS A (cat.0), B (cat 1,2,3,4) or ISAF or ISO9650 or ORC plus grab bag (cat 2,3,4)	+ 1	+1	yes	yes	yes
Hydrostatic release for liferafts (not mandatory if stowed for quick release Cat.2/3/4)	yes	yes	yes	yes	yes
Lifebuoys (horseshoe or round)	2	2	2	2	2
Dan buoy plus drogue (drogue required for horseshoe type buoys)	1	1	1	1	1
Lifebuoy lights – fitted to buoy with with dan buoy	1	1	1	1	1
Lifebuoy buoyant lines (18M) – fitted to remaining lifebuoy	2	2	2	2	2
Lifejackets (DTp or BSEN399-275N or BSEN396-150N) 2 extra if gas infl. Type. Lights needed (+L)	N +L	N+L	N+L	N+L	N
Safety harnesses	n	n	n	n	n
Jackstays plus cockpit attachment points for harnesses	yes	yes	yes	yes	yes
Wash board(s) attachment lanyard	yes	yes	yes	yes	yes
Red para flares	12	6	4	4	0
Red hand flares	6	6	6	6	2
Red smoke- buoyant or hand (cat 2,3,4)	2	2	2	2	2
TPA (thermal protective aids) – 2 required if immersion suits provided for all on board	n	n	n	n	n
Portable vhf (not Cat.4 if fixed vhf provided)	1	1	1	1	-
Emergency instruction card for VHF operation	1	1	1	1	1
Emergency aerial – if main aerial is mtd on mast	1	1	1	1	1
SSB radio or INMARSAT ship earth station	1	1	-	-	-
406 EPIRB	1	1	-	-	-
121.5 SART (not required if EPIRB has 406/121.5 dual frequency)	1	1	-	-	-
SOLAS 1 or 2 SOLAS 2 rescue information charts - displayed	1	1	1	1	1
Training manual	1	1	1	1	1
Instr for on-board maintenance of life saving appliances	1	1	1	1	1
Fire extinguishers 1-(13 A 113B), 2 – (5 A 34B), 2- fire buckets, fie blanket	yes	yes	yes	yes	yes
Fire pump (fixed or portable)	yes	yes	yes	yes	yes
Nautical publications (as per MS Rules 1975 SI 1975 700)	yes	yes	yes	yes	yes
Light & Sound Signals (as per Collision Regulations M.1642/ COLREG1 1996)	yes	yes	yes	yes	yes
DpT approved radar reflector	1	1	1	1	1
Compass deviation correction table	yes	yes	yes	yes	yes
Hand bearing compass or Pelorus	1	1	1	1	1
Searchlight	1	1	1	1	-
Emergency torch	1	1	1	1	1
Sound signal (can be canister type with spare canister)	1	1	1	1	1
Barometer	1	1	1	-	-
Storm sails	yes	yes	yes	yes	-
Rigging cutters	yes	yes	yes	yes	yes
Main & kedge anchors plus chain/warp (as per Section 20 & Annex 5 of Blue Code)	yes	yes	yes	yes	yes
Emergency water supply n x 2 Litres (for >24hrs)	yes	yes	yes	yes	yes
Tender (marked with no. of persons capacity)	yes	yes	yes	yes	yes
Man overboard recovery device	yes	yes	yes	yes	yes
Med. kit & First Aid Man. (Merchant Shipping Notice MSN1768 scale A,B,C)	A	B	C	C	C

Blue Peninsula Marine Ltd

Yacht & Commercial Coding Surveyors

or equiv.					
-----------	--	--	--	--	--