

# **PART 1**

# **GENERAL REQUIREMENTS**



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## GENERAL REQUIREMENTS

### Section 1.1 – Standards

- 1.1.1 These Construction Standards, hereinafter called “**Seafish Standards**” or “**Standards**” (see 1.7.32), apply to the construction of any new commercial fishing vessel of less than 15m length overall (LOA), for which certification of compliance with Seafish Standards is required.
- 1.1.2 Tables found in Parts 4, 6 and 7 are for the construction of hulls of a displacement design. For fast planing and high speed hulls, details are to be submitted for consideration.
- 1.1.3 Where building yards have developed and produced standard designs of vessels, alternative scantlings, and/or working practices, these may be specially considered in relation to these Standards, upon submission of full details.
- 1.1.4 “**Seafish**” means Sea Fish Industry Authority
- 1.1.5 “**Surveyor**” refers to either a Surveyor employed by the Sea Fish Industry Authority (Seafish), or to any other Surveyor, appointed from time to time by Seafish to undertake specific work on its behalf.
- 1.1.6 Vessels are to conform to these Standards, and be completed in accordance with the specification and contract agreed between the Builder and Owner. Any variations to the arrangement, scantlings, materials, or equipment used in the construction of the vessel that may alter the content of the original undertaking, are to be notified to Seafish for consideration prior to the proposed variation being carried out.
- 1.1.7 It is the responsibility of the Builder, main Contractor or, (in case of Owner completion) the Owner for the quality of workmanship throughout the vessel, which should be in accordance with best practice and to good marine standards.
- 1.1.8 The Seafish appointed Surveyor is to confirm and approve compliance with these Standards. Quality control procedures are the responsibility of the Builder/Owner.
- 1.1.9 All vessels are to fully comply with any statutory requirements, current at the time of their construction and with MCA code of practice relevant to the size & class of vessel.
- 1.1.10 The Builder of any new vessel is to ensure that the completed structure, machinery, equipment, and outfit, will provide the strength and service for the safe operation of the vessel in all operating conditions likely to be met in the vessel’s area of operation.

- 1.1.11 Prior to commencement of construction, the Builder is to inform the Surveyor of the intended area of operation of the proposed vessel, and any other relevant details that may be required.
- 1.1.12 Fishing vessels of unusual form and dimensions or those that may be designed as high speed planing hulls require further details to be submitted for approval.
- 1.1.13 Compliance with these Standards does not relieve the Designer or Builder of a vessel of their responsibilities to the Owner for the specification requirements or performance of the completed vessel.
- 1.1.14 The Builder is to allow the Surveyor acting on behalf of Seafish full access and facilities during normal working hours to carry out their duties in surveying for compliance with these Standards.
- 1.1.15 These Construction Standards may be used for guidance during the repair of fishing vessels.
- 1.1.16 Seafish may refuse the inspection and survey of any vessel that is considered to be not suitably covered by the scope of these Standards.
- 1.1.17 Where an Owner undertakes the completion and fit out of a new vessel, the Owner will be considered as assuming full responsibility for this work. This responsibility also includes the work and design by any Subcontractors that may be appointed to assist in completing the vessel. In such cases it is the Owner's responsibility to ensure that all parties involved are familiar with the requirements of these Standards and any other mandatory requirements that are necessary to complete the vessel.

## Section 1.2 - Compliance procedures and certification

- 1.2.1 It is the responsibility of the Builder/Owner of a new vessel to be constructed to these Standards to inform the MCA or other designated Certifying Authority of the intention to build and register the vessel.
- 1.2.2 Where a vessel is to be constructed and certified to these Standards, the Builder/Owner is to inform Seafish of the intention to build a new vessel, and is to provide the following information after application for survey:-
- i) Dimensions and power;
  - ii) Intended use (method of fishing);
  - iii) Number of crew;
  - iv) Construction material;
  - v) Estimated design speed;
  - vi) Area of operation;
  - vii) Place of build (hull);
  - viii) Place of outfit (where differing from build location);
  - ix) Proposed date of commencement of construction;
  - x) Proposed date of completion of vessel.  
(See also Part 2, Paragraph 2.1.1)
- 1.2.3 Upon completion of a vessel built and surveyed in compliance with these Standards, Seafish will issue a certificate in accordance with 1.2.4.
- 1.2.4 Construction standard compliance certification will not be issued where the Surveyor has not inspected the vessel to their satisfaction during the construction period, or if fees are still outstanding.
- 1.2.5 **Categories of certification**

<b>Vessel length</b>	<b>Certification requirement</b>
0 to <7m LOA	Hull Construction Certification
7m LOA to <15m LOA	Hull & Outfit Compliance Certificate

## Section 1.3 - Registration

- 1.3.1 The Owner should take all steps necessary to effect registration of the vessel by contacting the Registry of Shipping and Seamen.

## Section 1.4 - Building premises

- 1.4.1 Building premises are to be suitable for the particular construction material proposed, and are to be in accordance with the requirements of these Standards, where applicable.
- 1.4.2 Separate locations may be approved for the construction of the hull and the fitting out of the vessel. When a hull is to be transported for fitting out and completion elsewhere, the construction is to be progressed to a

stage commensurate with the method of transport to be used. When a partially completed vessel is to be towed or propelled afloat, the Builders should ensure that the vessel's stability and weathertightness is adequate prior to removal from the Builders' yard. Advice is to sought by the builder/owner from the MCA when towing by sea.

- 1.4.3 For a hull of GRP construction, hull certification will only be issued where the Moulders of the hull also fit the internal framing and stiffeners to bare hull assemblies to ensure correct bonding and maintenance of adequate rigidity and shape for onward transportation. Certification of mono-hulls without decks fitted will only be considered on the basis as described above. Catamarans must be completed with the bridge deck structure completed by the Moulders.

### **Section 1.5 - Testing of structures**

- 1.5.1 Where applicable, weathertight and watertight structures including subdivisions are to be tested in accordance with these Standards and to any other statutory requirements.
- 1.5.2 Freshwater, ballast, oil fuel, and other tanks, void spaces and collision bulkheads should be either water or air pressure tested at the discretion of the Surveyor.
- 1.5.3 Where water tested, the head in integral tanks is to be not less than 2.4m above the tank top or to the overflow point whichever is the greater.
- 1.5.4 Where tested by air pressure, the test pressure is to be no greater than  $0.2\text{kg/cm}^2$  (2.85 psi) which should be maintained by water filled "U" tube of such length that it will overflow at a head of 2.12m thus preventing overpressure in the tank. On no account should the pressure be maintained solely by means of pressure gauges.
- 1.5.5 Fish stowage tanks and vivier tanks are to be tested by filling with water to overflow level.
- 1.5.6 Radiographic or ultrasonic examination may be required for welded structures or components. Where other means of non-destructive testing are being considered, details are to be submitted to the Surveyor for prior approval.
- 1.5.7 Weathertight / watertight hatches, doors and windows should be hose tested on completion.

### **Section 1.6 - Materials**

- 1.6.1 All materials used in the construction of a new vessel are to be in accordance with the approved building specification.

1.6.2 The specification of steel, aluminium alloy, wood and GRP materials is to be in accordance with the requirements of the appropriate sections of these Standards.

1.6.3 When selecting materials and equipment to be used in the vessel construction, Designers and Builders of new vessels will need to pay special regard to the working conditions to which the vessel will be subjected, and should take all measures to ensure that any material or appliance fitted in accordance with the requirements of these Standards is suitable for the purpose intended, having regard to its location in the vessel, the area of operation, and the weather conditions which may be encountered by the vessel.

1.6.4 The Commission of the European Union's general mutual recognition clause should be noted. The clause states:-

*Any requirement for goods or materials to comply with a specified standard shall be satisfied by compliance with:-*

- (i) a relevant standard or code of practice of a national standards body or equivalent body of a Member State of the European Community; or*
- (ii) any relevant international standard or code of practice of a national standards body or equivalent body of a Member State of the European Community; or*
- (iii) a relevant specification acknowledged for use as a standard by a public authority of any Member State of the European Community; or*
- (iv) traditional procedures of manufacture of a Member State of the European Community where these are the subject of a written technical description sufficiently detailed to permit the assessment of the goods or materials for the use specified; or*
- (v) a specification sufficiently detailed to permit assessment for goods or materials of an innovative nature (or subject to innovative processes of a manufacture such that they cannot comply with a recognised standard or specification) and which fulfil the purpose provided by the specified standard;*  
*provided that the proposed standard, code of practice, specification or technical description provides, in use, equivalent levels of safety, suitability and fitness for purpose.*

1.6.5 Where the phrase "or equivalent" is used in these Standards, details of the standard applied are to be advised to the Surveyor.

## Section 1.7 – Stability general

- 1.7.1 It is the responsibility of Owners and Skippers under safety legislation to use all reasonable means to ensure fishing vessels go to sea in a seaworthy state. Adequate stability and freeboard contribute greatly to a vessel's seaworthiness and survival capabilities in extreme conditions.
- 1.7.2 Information gathered from casualties to small fishing vessels shows that, in many cases, insufficient attention has been given to matters of stability and freeboard, and this can be avoided if care is taken to ensure that a vessel is suitable for its intended mode of fishing and the area in which it will operate.
- 1.7.3 For any new vessel, stability should be properly assessed by a person having appropriate professional experience. Alterations of more than a minor nature should not be made to fishing gear, structure or ballast without first checking to confirm that the vessel's stability characteristics and freeboard are not reduced below acceptable standards.
- 1.7.4 For certain vessels built under these Standards, there are statutory stability criteria and associated requirements that are to be complied with.

## Section 1.8 – Definitions

In these Standards the following expressions have the following meanings:-

1.8.1 “**Accommodation space**” means corridors and lobbies, stairways, lavatories, cabin offices, crew spaces, pantries not containing cooking appliances, and spaces similar to any of the foregoing and trunks to such spaces.

1.8.2 “**Amidships**” means the mid point of the length between perpendiculars (LBP).

1.8.3 “**‘B’ Class division**” means those divisions formed by bulkheads, decks, ceilings or linings which:-

- a) Are so constructed as to be capable of preventing the passage of flame to the end of the first thirty minutes of the standard fire test;
- b) Have an insulation value such that during the standard fire test the average temperature of the unexposed side will not rise more than 140°C above its initial temperature. Nor will its temperature at any one point, including any joint, rise more than 225°C above its initial temperature within the time listed below:-

B-30 Standard ..... 30 minutes

B-15 Standard .....	15 minutes
B- 0 Standard .....	0 minutes

- c) Are constructed of suitable non-combustible materials and their supporting members or structures are also constructed of non-combustible materials.
- 1.8.4 “**Breadth (B)**” is the principal breadth of the vessel, measured amidships to the moulded line of the frame in a vessel with a metal hull and to the outer surface of the hull or normal planking in a vessel with a hull of any other material.
- 1.8.5 “**Code**” means the Maritime and Coastguard Agency (MCA) Code of Practice for the applicable vessels size and category.
- 1.8.6 “**Control station**” means those spaces in which the vessel’s main navigating equipment is located.
- 1.8.7 “**Dead ship condition**” is the condition under which the main and auxiliary machinery are not in operation due to the absence of starting power.
- 1.8.8 “**Deckhouse**” or “**superstructure**” means a permanent enclosed structure on the freeboard or superstructure deck.
- 1.8.9 “**Decked vessel**” means a vessel with a continuous watertight weather deck that extends from stem to stern and has positive freeboard throughout, in any condition of loading the vessel.
- 1.8.10 “**Deep beams**” means those beams increased in scantlings and fitted in way of openings and those areas of deck on which masts, winch and superstructures are fitted.
- 1.8.11 “**Depth of vessel (D)**” means the scantling depth as defined for respective materials of construction.
- 1.8.12 “**Draught**” means the vertical distance from the moulded base line amidships to the operating waterline of a vessel.
- 1.8.13 “**Enclosed superstructure**” means a superstructure with:-
- Enclosing bulkheads of efficient construction.
  - Access openings, if any, in those bulkheads fitted with permanently attached weathertight doors of a strength equivalent to the unpierced structure that can be operated from either side.
  - Other openings in sides or ends of the superstructure fitted with efficient weathertight means of closing.
- 1.8.14 “**Fishing vessel**” has the same meaning as in Section 313 of the Merchant Shipping Act 1995.

- 1.8.15 **“Length Between Perpendiculars” (LBP)** is the ITC '69 definition which means 96% of the total length on a waterline of a vessel at 85% of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. In vessels designed with a rake of keel the waterline on which this is measured should be parallel to the designed waterline. The forward perpendicular and the after perpendicular are positioned at the forward and after ends of LBP respectively.
- 1.8.16 **“Length” (L)** unless otherwise specified shall refer to the scantling length “L” as defined for respective materials of construction.
- 1.8.17 **“Length overall” (LOA)** means the overall length measured from the foreside of foremost permanent fixed structure to the aft side of the aftermost permanent fixed structure of the vessel.
- 1.8.18 **“Length registered” (RL)** means the length as defined in SI 1988 No. 1909 The Merchant Shipping (Fishing Vessels - Tonnage) Regulations 1988, which is the length from the fore side of the foremost fixed permanent structure to the aftermost part of the rudder post, or, in a ship not having a rudder post to the fore side of the rudder stock at the point where the rudder stock passes out of the hull. In ships not having a rudder post or rudder stock, the measurement shall be taken to the aftermost part of the stern or transom.
- 1.8.19 **“MCA”** is an abbreviation for Maritime and Coastguard Agency, an Executive Agency of the Department of Transport.
- 1.8.20 **“Main deck”** means the lowest continuous weathertight deck.
- 1.8.21 **“Main frames”** are those frames extended from the top of floors or double bottom to the lowest continuous deck abaft of the collision bulkhead and forward of the after peak bulkhead.
- 1.8.22 **“Moulded depth”** means the vertical distance measured at the mid-point of LBP from the top of the keel to the freeboard deck beam at side. In wood and composite vessels the distance is measured from the lower edge of the keel rabbet. Where the form at the lower part of the amidship section is of a hollow character, or where thicker garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cut the side of the keel. In vessels:-
- a) Having rounded gunwales the moulded depth should be measured to the point of intersection of the moulded lines of the deck and the side shell plating, the lines extending as though the gunwale were of angular design; and
  - b) Where the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, the moulded depth should be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part.

- 1.8.23 “**Multi-hull vessel**” means any vessel which in any normally achievable operating trim or heel angle, has a rigid hull structure which penetrates the surface of the sea over more than one separate or discrete area.
- 1.8.24 “**Navigable speed**” means the minimum ahead speed at which the vessel can be effectively steered.
- 1.8.25 “**Non-combustible material**” means material that neither burns nor gives off flammable vapours in sufficient quantity for self-ignition when heated to a temperature of 750°C, this being determined in accordance with IMO Test Procedures.
- 1.8.26 “**Open type vessel**” means a vessel where water coming onto the vessel normally drains to the bilge.
- 1.8.27 “**Sea**” in the context of ‘at sea’ means all waters outside a safe haven, and “**safe haven**” means a harbour or shelter of any kind which affords entry, subject to prudence in the weather conditions prevailing, and protection from the forces of weather.
- 1.8.28 “**Seafish**” is an abbreviation for the Sea Fish Industry Authority.
- 1.8.29 “**Shelter deck**” means a superstructure deck above the level of the main weathertight deck and which is exposed to the weather.
- 1.8.30 “**Sole**” is the flooring in open vessels.
- 1.8.31 “**Spacing**” means the distance apart of members such as frames, stringers and stiffeners, as defined in the Tables.
- 1.8.32 “**Superstructure deck**” means the complete or partial deck or the top of a superstructure, deckhouse or other erection situated at a height of more than 1.8m above the freeboard deck.
- 1.8.33 “**Watertight**” in relation to structures and/or fittings means capable of preventing the passage of water through it in either direction, under a head of water for which the surrounding structure is designed.
- 1.8.34 “**Weather deck**” means deck that is exposed to the elements.
- 1.8.35 “**Weathertight**” in relation to structures and/or fittings means it is designed to prevent the passage of water into the vessel in any sea condition.
- 1.8.36 “**Working deck**” or “**Freeboard deck**” means the lowest complete deck above the deepest operating waterline from which fishing is undertaken. In vessels fitted with two or more complete decks, the lower deck may be accepted as the freeboard deck provided that the deck is situated above the deepest operating waterline.