

Interpretations of the HSC Code

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HSC1 Cupboard as part of the space

(1996)

Reg. 7.3.1

Cupboards of less than 2 m² may be accepted as part of the space they serve provided they have open ventilation to this space and do not contain any materials or equipment of fire risk.



HSC2 Classification of stairways

(1996)

Reg. 7.3.1.3

Stairways may be categorised as areas of minor fire hazard.



HSC3 Public spaces extending over 2 decks

(1996)

Reg. 7.4.4.1

Public spaces extending over 2 decks may be considered as one space, provided that

- the mean length and width of the opening area between lower and upper part is at least 25% of the mean length and width of the upper part of the whole space or at least of a corresponding area,
- sufficient means of escape is provided from both levels of the space directly leading to an adjacent safe area or compartment,
- the whole space is served by one section of sprinkler system with one relieve valve.



HSC4 Ventilation Grille in Toilet Entrance Door (1997)

Table 7.4-1

Ventilation openings may be accepted in entrance doors to public toilets if positioned in the lower portion of such doors and fitted with closable grilles operable from the public space side and made of non-combustible or fire-restricting material.



HSC5 Aluminium Lube Oil Sump or Tank

(1997)

Reg. 7.5.2

The use of Aluminium in lubricating oil sump tanks for engines or in lubricating oil filter housings fitted integral with the engines, is accepted.



HSC6 Protection of Propeller Shafts

(1997)

Reg. 9.8

On monohulls, propeller shaft and bearings of at least one main engine, when passing through the aft machinery space, are to be protected as follows:

- steel shaft bearings by water spray,
- shafts made of composite material (FRP), either by
 - passive fire protection for 60 minutes duration, or
 - a water spray system and able to transmit the full torque of the propulsion engine after a standard fire test of 7 minutes.



HSC7 Machinery Installations – Dead Craft Condition

(Dec 2003)
(Rev.1 Nov
2005)

Chapter 9 - Machinery Part A - General Paragraph 9.1.5

Means shall be provided to ensure that machinery can be brought into operation from the dead craft condition without external aid.

Interpretation

Dead craft condition for the purpose of Regulation 9.1.5 is to be understood to mean a condition under which the main propulsion plant and auxiliaries are not in operation and, in restoring the propulsion, no stored energy is assumed to be available for starting and operating the propulsion plant, the main source of electrical power and other essential auxiliaries. It is assumed that means are available at all times to start the emergency generator or one of the main generators when the main source is arranged according to paragraph 12.7.2.

Where the emergency source of power is an emergency generator which complies with section 12.4, or a main generator meeting the requirements of paragraph 12.7.2, it is assumed that means are available to start this generator and consequently this generator may be used for restoring operation of the main propulsion plant and auxiliaries where any power supplies necessary for engine operation are also protected to a similar level as the starting arrangements.

Where there is no emergency generator installed or an emergency generator does not comply with section 12.4, the arrangements for bringing main and auxiliary machinery into operation are to be such that initial charge of starting air or initial electrical power and any power supplies for engine operation can be developed on board the craft without external aid. If for this purpose an emergency air compressor or electric generator is required, these units are to be powered by a hand-starting oil engine or a hand-operated compressor. The arrangements for bringing main and auxiliary machinery into operation are to have a capacity such that the starting energy and any power supplies for engine operation are available within 30 minutes of a dead craft condition.

Note:

1. This UI is to be uniformly implemented by IACS Members and Associates from 1 March 2004.
2. Refer to IMO MSC/Circ. 1177.
(Rev.1 is to introduce a reference to IMO MSC/Circ. 1177 with no change of technical substance).



Protection of load bearing structures

HSC Code Ch.7.4.2.3 reads:

“Main load-carrying structures within areas of major fire hazard and areas of moderate fire hazard and structures supporting control stations shall be arranged to distribute load such that there will be no collapse of the construction of the hull and superstructure when it is exposed to fire for the appropriate fire protection time. The load-carrying structure shall also comply with the requirements of 7.4.2.4 and 7.4.2.5.”

Interpretation

Protection time

The structural fire protection time of main load bearing structures located within areas of major fire hazard (classified as A) and areas of moderate fire hazard (classified as B), and load bearing structures supporting control stations shall, as a minimum, be the same as that required by tables 7.4-1 and 7.4-2 (as applicable), for the divisions enclosing the space where these supports are located. In accordance with para. 7.4.1.1 in no case shall the structural fire protection time be less than 30 min.

Load bearing structures made of steel, other than those constituting the divisions dealt with in tables 7.4-1 and 7.4-2 (as applicable), need not be insulated.

Extent of structural fire protection

The structures considered shall be all load-carrying structures within areas of major and moderate fire hazard (classified as A or B) as well as all structures (irrespective of where they are located) which are necessary to support control stations.

The vertical extent of structure supporting control stations shall be considered all the way down to and including spaces within the hull(s). However, all structures within voids in the hull can be exempted from this consideration based on HSC Code 7.4.2.1 (first part).

Fire testing

Approvals from the standard fire test *according to the IMO FTP Code, Annex 1, Part 11* for a bulkhead or deck of a given material can be applied for protection of pillars of the same material. The structural fire protection time shall be considered to be the same as that achieved in the fire test.

Load case

When load carrying capability calculations are performed for an assumed fire within a space, all insulated or un-insulated steel structures, including pillars, as well as fire insulated aluminium and FRP structures in the space may be included; un-insulated aluminium and FRP structures shall not be included. A single fire concept can be applied where a fire is only presumed to originate in one enclosed space and not propagate to another enclosed space.

Note:

1. This UI is to be uniformly implemented by IACS Societies on high speed craft the keels of which are laid on/after 1 January 2014.

HSC8
(cont)

Example: Structures within a public space support a wheelhouse and a separate enclosed public space on the wheelhouse deck. Two load calculations shall then be made:

- i) One presuming a fire below the wheelhouse; utilizing, in the load calculations un-insulated steel and insulated aluminium and FRP structures within the public space on the wheelhouse deck;*
- ii) Another presuming fire within the public spaces on the wheelhouse deck; utilizing, in the load calculations, un-insulated steel and insulated aluminium and FRP structures within the public space below the wheelhouse.*

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MPC 104 Keel Laying Date for Fibre-Reinforced Plastic (FRP) Craft

(Mar 2013)
(Corr.1 Jan 2014)

LL 78

(Mar 2013)
(Corr.1 Jan 2014)

HSC 9

(Mar 2013)
(Corr.1 Jan 2014)

Interpretation

For the purposes of the application of the IMO Conventions and Codes (Performance Standards, Technical Standards, Resolutions and Circulars) for Fibre-Reinforced Plastic (FRP) Craft, the term *“the keels of which are laid or which are at a similar stage of construction”* should be interpreted as the date that the first structural reinforcement of the complete thickness of the approved hull laminate schedule is laid either in or on the mould.

NOTE

1. This UI is to be uniformly implemented by IACS Societies from 1 January 2014.

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**HSC
10**
(May
2016)

Inclusion of mediums of the fire-fighting systems in lightweight (2000 HSC Code Chapter 1, Regulation 1.4.34)

Regulation

2000 HSC Code Chapter 1, Regulation 1.4.34

“Lightweight is the displacement of the craft in tonnes without cargo, fuel, lubricating oil, ballast water, fresh water and feedwater in tanks, consumable stores, passengers and crew and their effects.”

Interpretation

The weight of mediums on board for the fixed fire-fighting systems (e.g. freshwater, CO₂, dry chemical powder, foam concentrate, etc.) shall be included in the lightweight and lightship condition.

Note:

1. This Unified Interpretation is to be uniformly implemented by IACS Societies on ships contracted for construction on or after 1 January 2017.
2. The “contracted for construction” date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of “contract for construction”, refer to IACS Procedural Requirement (PR) No. 29.

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