

INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENT OF SHIPS, 1969

(ITC69)

Novel Type of Craft under Regulation 1(3)

Red Ensign Group<sup>1</sup>

Tonnage Guidelines for Yachts

<sup>1</sup>The United Kingdom and its Crown Dependencies (Isle of Man, Guernsey and Jersey) and UK Overseas Territories (Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, St Helena and the Turks & Caicos Islands)

Revision History

Rev.1	Final draft for Recognized Organisation review.
Rev.1.1	First issue for publication on 1 <sup>st</sup> August 2024. Applicable to vessels with contracts signed on or after 1 Jan 2025 and projects with contracts signed before 1 Jan 2025 keel to be laid no later than 1 Jan 2026
Rev.1.2	Amended section on gratings to cover diagonally orientated gratings and added new figure 10. Amended section on End Openings, Side Openings and Recesses to provide further clarification.
Rev.1.3	Amended section on gratings to clarify that for diagonally orientated gratings they may be not more than 45 degrees from the horizontal

## Appendix 1 – Typical Yacht Features

## Appendix 2 - Explanatory Figures

## PREAMBLE

1. In accordance with ITC69 Regulation 1(3) *‘The gross tonnage and the net tonnage of novel types of craft whose constructional features are such as to render the application of the provisions of these Regulations unreasonable or impracticable shall be as determined by the Administration.’*
2. As per IMO TM.5/Circ.6, *‘in applying these novel craft provisions, the resulting gross and net tonnages should be reflective of the ship's overall size and useful capacity, respectively. A novel type of craft should be understood as one which is novel in its design and should not include existing traditional types of ships of usual shape or those types already covered by the unified interpretations.’*
3. Yachts can be regarded as purpose-built ships which have some unique constructional features in exterior areas for aesthetical reasons or for guest recreation that do not affect the overall size or useful capacity for which it would be unreasonable to include in the vessel’s tonnage. By way of example, it is well established industry practice to exclude spaces such as inaccessible voids and bulwarks, and areas above false ceilings which are closed solely for aesthetical reasons (i.e. not providing any functional purpose), but this has not previously been formalized by Administrations.
4. The objective of this document is to provide Recognized Organizations (ROs) acting on behalf of this Administration additional guidance on how to apply ITC69 and TM.5/Circ.6 for typical yacht arrangements.
5. Unique constructional features which negatively impact on the safety of the vessel (i.e., seaworthiness, operation, or maintenance), or the safety of the crew and passengers, or which provide enhanced protection of excluded spaces from the sea or weather, will not be considered.

Important Note

**Since the guide is this Administration’s national interpretation of the application of ITC69 for yachts, the tonnage calculations based on this guide might not be accepted by another Flag State or Port State.**

## Summary Table of Typical Excluded Spaces

Constructional Feature	Impact		Incl. in GT
	Overall Size	Useful Capacity	
Bulwarks: inaccessible* and $<1\text{m}^2$ CSA <sup>1</sup>	No	No	No
Isolated Fairing Structures: inaccessible* and $<1\text{m}^3$	No	No	No
Mast Structures: inaccessible*	No	No	No
Radar/Satellite covers (i.e. protection/safety domes)	No	No	No
Exterior False ceilings: without storage or equipment	No	No	No
Isolated Exterior Furniture: $\leq 1\text{m}^3$ without storage	No	No	No
Isolated Exterior Detachable Furniture: with storage $\leq 1\text{m}^3$	No	No	No
Swim Platform: inaccessible and $\leq 1\text{m}^3$ or $<1\text{m}^2$ CSA	No	No	No
Gangway storage box: above upper deck	No	No	No

<sup>1</sup> Cross Sectional Area (CSA)

\* Bolted plates or fixed panels to excluded inaccessible spaces are permitted where essential for the inspection and maintenance of the concealed structure (i.e., in way of bulwarks, fairing structures, mast structures and swim platforms).

## Summary Table of Typical Included Spaces

Constructional Feature	Impact		Incl. in GT
	Overall Size	Useful Capacity	
Bulwarks: $\geq 1\text{m}^2$ CSA	Yes		Yes
Bulwarks: accessible**		Yes	Yes
Isolated Fairing Structures: $\geq 1\text{m}^3$	Yes		Yes
Fairing Structures: accessible**		Yes	Yes
Mast Structures: accessible		Yes	Yes
Exterior False Ceilings: with storage		Yes	Yes
Exterior False Ceilings: with equipment		Yes	Yes
Exterior Permanently Fixed Furniture: with storage		Yes	Yes
Swim Platform: $\geq 1\text{m}^2$ CSA	Yes		Yes
Indoor/Outdoor spaces (i.e. portable glass partitions)		Yes	Yes
Permanent Deck Modules (see page 6)	Yes	Yes	Yes

\*\*Separate storage areas within these spaces and entirely dedicated for 'float-free' liferafts may be excluded from the total volume (V).

**Regulation 2(1) Upper deck**

As per TM.5/Circ.6 R.2(1)-1 to 3, for the discontinuity (or step) in the upper deck to be recognised as the moulded depth it must extend over the full breadth of the ship, be in excess of 1m, and importantly, be within the load line length. (Figure 1 in Appendix 2)

**Regulation 2(4) Enclosed spaces**Awnings

Awnings, often referred to as 'biminis' on yachts, should be interpreted as a fabric covering of a readily removeable tarpaulin (i.e., sheet of strong, flexible, water-resistant, or waterproof material, often cloth such as canvas or polyester coated with polyurethane or made of plastics such as polyethylene) stretched over a frame. (Figure 1 in Appendix 1)

'Readily removable' means secured with poppers, zips or tape; bolted or screwed fastenings are not permitted.

Temporary or portable partitions (i.e., glass retractable panels or deck to deck glass windbreaks) are not awnings.

**Regulation 2(5) Excluded spaces**Bulwark Structures

Bulwarks on yachts are enclosed for aesthetical reasons. In line with TM.5/Circ.6 R.2(4)-6, provided they are completely inaccessible and have not been considered in vessel's global strength or stability calculations they should not be included in the total volume of all enclosed spaces (V) if their CSA is not exceeding 1m<sup>2</sup> in the vertical plane. (Figure 1 in Appendix 1)

Where 'float-free' liferafts are incorporated in bulwark structures the dedicated separate storage area may be excluded from the total volume (V).

Stanchions (pillars) in way of Passageways

In applying regulation 2(5)(b) and (c) and TM.5/Circ.6 R.2(5)-5, isolated stanchions (pillars) necessary to support an overhead deck which exceed 600mm in the forward - aft direction would normally be considered as closing or reducing the size of the side opening. (Figure 3 in Appendix 1)

Isolated Fairing Structures

Superstructures on yachts often incorporate complex shapes for aesthetical reasons. In line with TM.5/Circ.6 R.2(4)-6, provided they are completely inaccessible and have not been considered in vessel's strength or stability calculations they should not be included in the total volume of all enclosed spaces(V) if their enclose volume is <1m<sup>3</sup>. (Figure 1 in Appendix 1)

'Isolated' means well separated from any other fairing structures.

Where 'float-free' liferafts are incorporated in fairing structures the dedicated separate storage area they should not be included in the total volume of all enclosed spaces(V).

Mast Structures

Masts on yachts often incorporate complex shapes for aesthetical reasons. In line with TM.5/Circ.6 R.2(4)-6 provided they are completely inaccessible they should not be included in the total volume of all enclosed spaces(V). (Figure 2 in Appendix 1)

Exterior False Ceilings

Exterior deckheads on yachts are normally covered by aesthetical removeable linings/ceilings. Provided stores, equipment or machinery are not located in the concealed the air space the volume should not be included in the total volume of all enclosed spaces(V). Cables, air ducts and pipe runs are permitted to pass through these areas. Lighting and speakers may be fitted in the ceiling. (Figure 6 in Appendix 1)

Deck Modules

Deck modules (such as containerised modules) installed to permanently improve the utility of the vessel (i.e., additional accommodation, vehicle storage, workshop, or laboratory) are to be included in the total volume of all enclosed spaces (V) Temporary installations (i.e., for a voyage or time limited period) should be agreed with the Administration.

Regulations 2(5)(a), (b), (c) and (e) End Openings, Side Openings and Recesses

Exterior furniture  $\leq 1\text{m}$  in height is not considered to protect/enclose an opening (Figure 5 in Appendix 2). Exterior solid furniture (permanently fixed or detachable)  $\geq 1\text{m}$  in height is to be considered as a deck erection when in way of an end opening, side opening or recess.

Regulation 2(5)(d) Space immediately below an uncovered opening

As per TM.5/Circ.6 R.2(5)(d)-1 the volume of any recess below the line of the upper deck (i.e., pool, jacuzzi, open tender recess, open cockpit recess) are included spaces.

Gratings (as referred to in TM.5/Circ.6 R.2(4)-8)

Aesthetical gratings or louvres covering side openings should be of a design and orientation that does not afford any advantage in terms of protection of the excluded space from the sea or weather (Figure 9 in Appendix 2). As per TM.5/Circ.6, it is only stanchions supporting an overhead deck and safety railings above the height of a bulwark or handrail that are not considered to close or reduce the size of a side opening. As such the total of the air gaps perpendicular to the plane should meet the qualifying criteria for a side opening. Alternatively for diagonally orientated gratings, which may be of not more than 45 degrees from the horizontal, the lateral opening should be 30% of the required area and perpendicular distance between the blades should be greater than their separation perpendicular to the plane of the opening (Figure 10 in Appendix 2).

Gratings covering deck recess should be at least 30% open in projection (i.e., perpendicular to the plane containing the grid) (Figure 11 in Appendix 2).

Gangways

TM.5/Circ.6 R.2(4)-9 has provision for machinery and other similar items to not be included in the total volume of all enclosed spaces (V). On this basis dedicated protective enclosures for gangways above the upper deck should not be included in the total volume of all enclosed spaces.

#### Heat Exchangers (coolers) in hull recesses

Heat exchangers (coolers) fitted in hull recesses shall be treated as machinery under TM.5/Circ.6 Interpretation R.2(4)-9 and not as appendages. This is as per IACS UI TM2.

#### Rudders, stabilizers, retractable keels

TM.5/Circ.6 R.2(4)-9 has provision for machinery and other similar items to not be included in the total volume of all enclosed spaces (V). On this basis rudders, stabilisers and retractable keels should not be included.

#### Furniture on exterior decks

Isolated furniture (permanently fixed or detachable) of  $\leq 1\text{m}^3$  enclosed volume should not be included in the total volume of all enclosed spaces(V), under the provisions of TM.5/Circ.6 R.6-1 (Figure 5 in Appendix 1).

Permanently fixed furniture of  $>1\text{m}^3$  enclosed volume should be included in the total volume of all enclosed spaces(V).

Isolated detachable furniture of  $>1\text{m}^3$  enclosed volume but with storage volume of  $\leq 1\text{m}^3$  should not be included in the total volume of all enclosed spaces(V).

‘Isolated’ means well separated from any other furniture.

‘Detachable’ means bolted or an equivalent readily removeable means of securing.

Where ‘float-free’ liferafts are incorporated in furniture the dedicated storage area should not be included in the total volume of all enclosed spaces(V).

#### Exterior Furniture under a deck canopy

Exterior furniture for guest services below a deck canopy does not preclude that space from being excluded. However, the exterior furniture itself should be included if not fulfilling the above criteria for exclusion. (Figure 5 in Appendix 1).

### **Regulation 6 Calculation of volumes**

#### Regulation 6(1) Termination of measurements

All volumes included in the calculation of gross and net tonnages shall be measured, irrespective of the fitting of insulation or the like, to the inner side of the shell *of the hull* (or *to the inner side of the structural boundary plating for deck structures*) in ships constructed of metal, and to the outer surface of the shell *of the hull* (or *to the inner side of the structural boundary surfaces for deck structures*) in ships constructed of any other material. *If the deck structure has framing, dimensions are taken to the inner surface of the skin.*

#### Regulation 6(2) Appendages

Swim platforms  $\leq 1\text{m}^3$  should not be included in the total volume of all enclosed spaces, as per the provisions in TM.5/Circ.6 R.6-1 and R.6(2)-1 (Figure 1 in Appendix 1).

Small swim platforms on yachts may be enclosed for aesthetical reasons. In line with TM.5/Circ.6 R.2(4)-6 provided they are completely inaccessible they should not be included in the total volume of all enclosed spaces(V) provided their CSA is not exceeding 1m<sup>2</sup> in the forward – aft direction.

Regulation 6(3) Spaces open to the sea

Spaces open to the sea may be excluded from the total volume (V) under the provisions of Reg.6(3).

Moonpools for launching/recovery of submersibles or ROVs, and recesses for retractable keels on sailing yachts may be excluded from the total volume (V) provide the space has no means of closure.

**Regulation 7 Measurement and Calculation**

Generally accepted methods include 3D models and numerical integration methods such as Trapezoidal Rule and Simpson's Rule.

**ITC Annex II - Certificate**

Excluded spaces as per Reg.2(5).

For the avoidance of doubt, the following 'enclosed but excluded spaces' should be included on the certificate.

- Passageways
- Boundary recesses (side and end openings)
- Deck recesses

An asterisk (\*) is to be added to those spaces which comprise both enclosed and excluded spaces.



## Appendix 1 – Typical Yacht Features

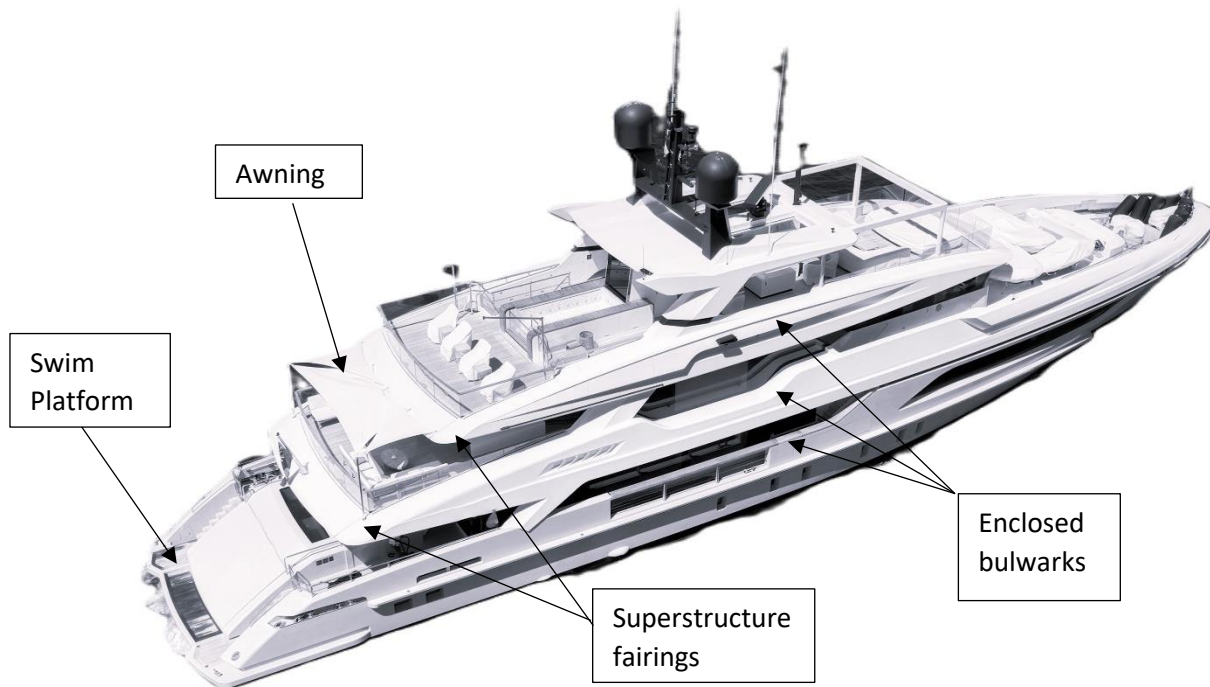


Figure 1

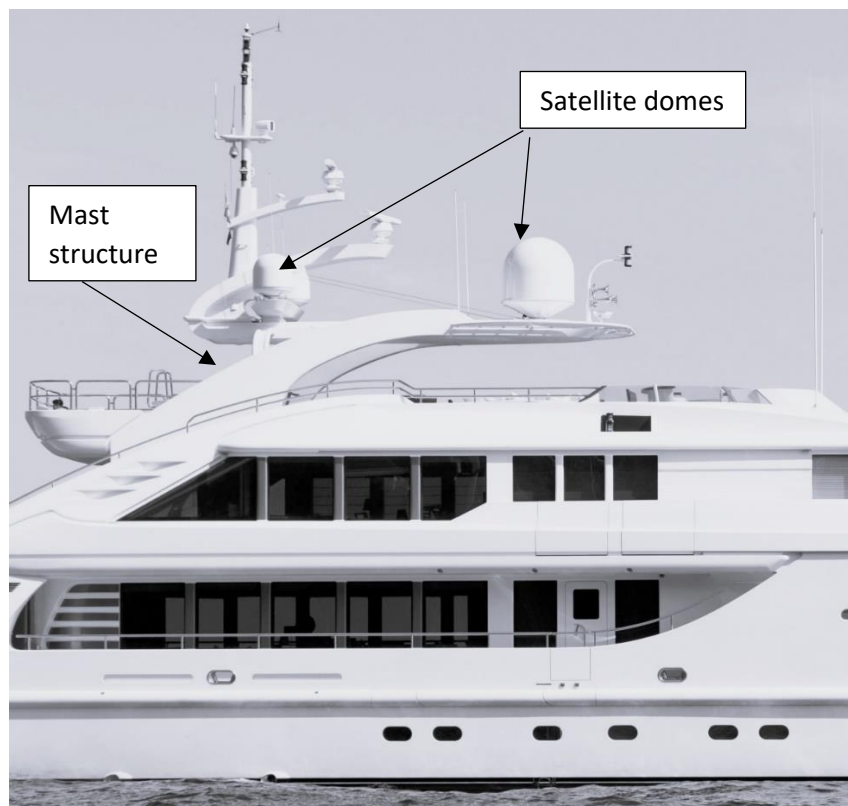


Figure 2

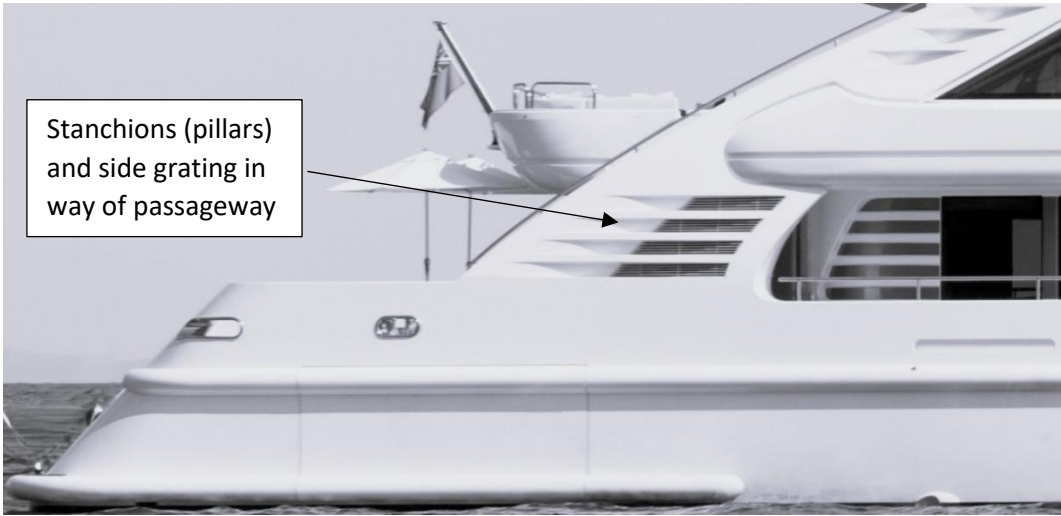


Figure 3

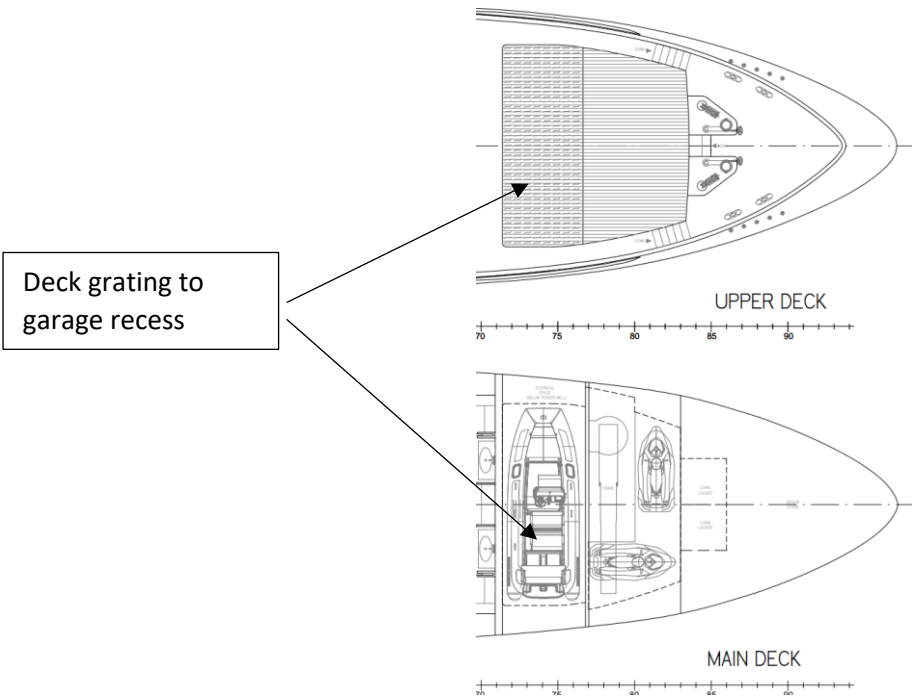


Figure 4

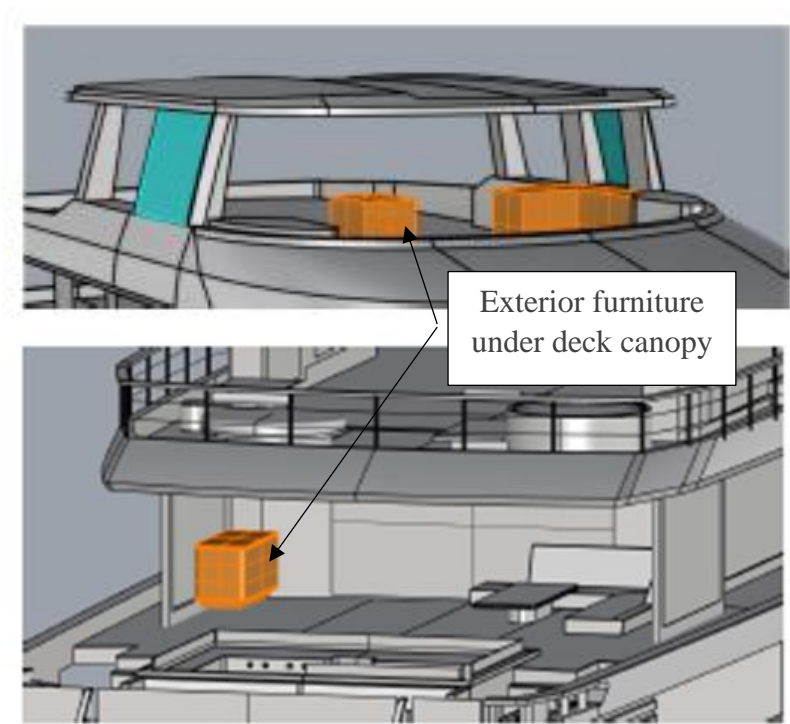


Figure 5



Figure 6

Appendix 2 - Explanatory Figures

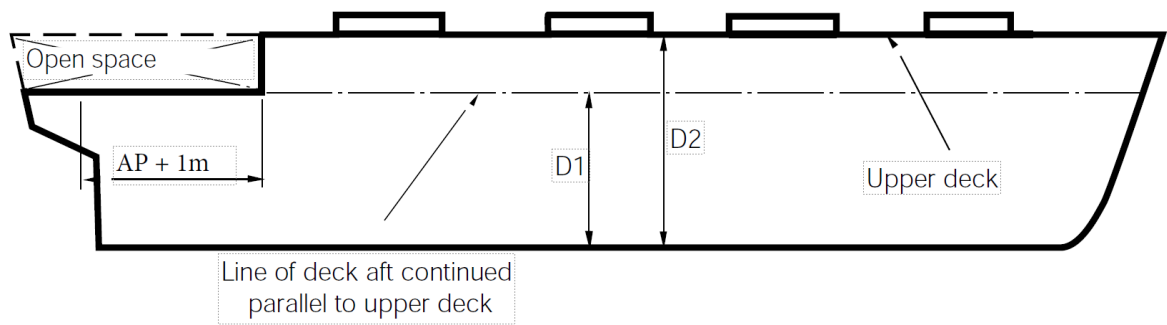


Figure 1

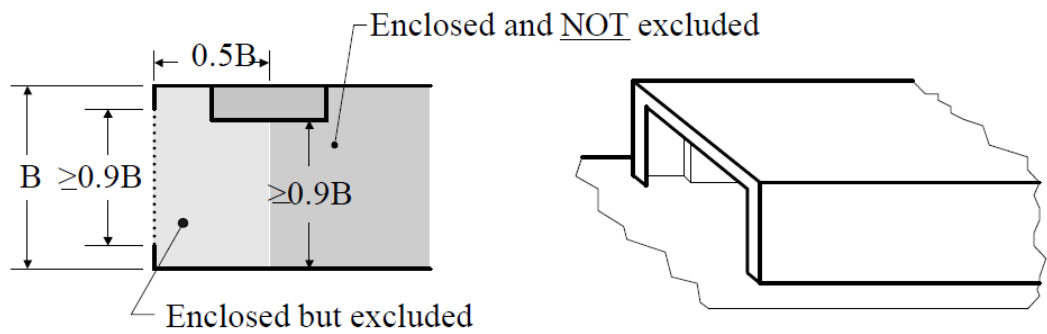


Figure 2

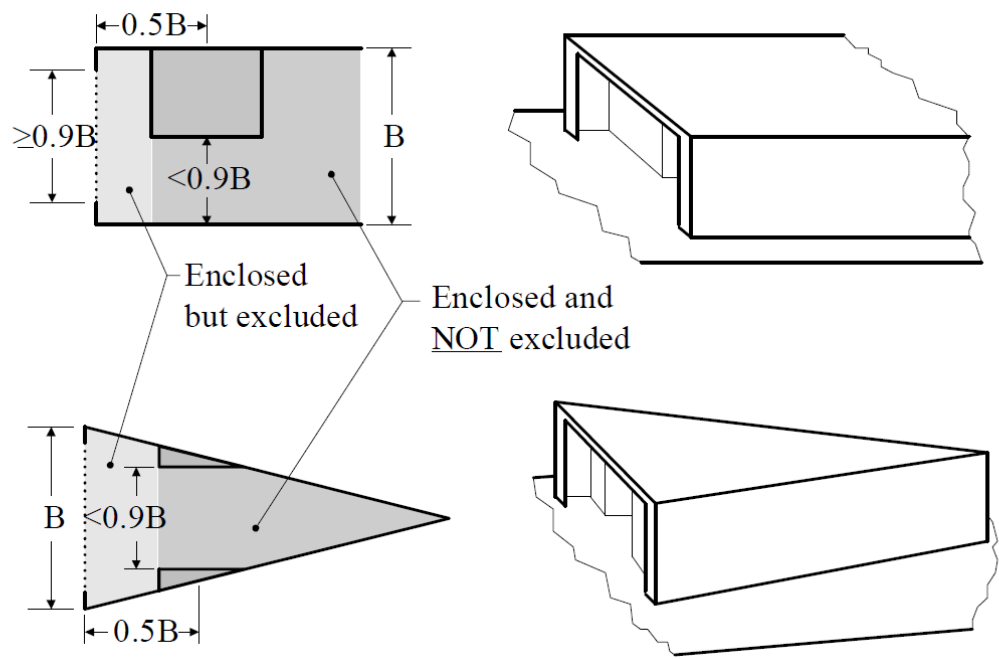


Figure 3

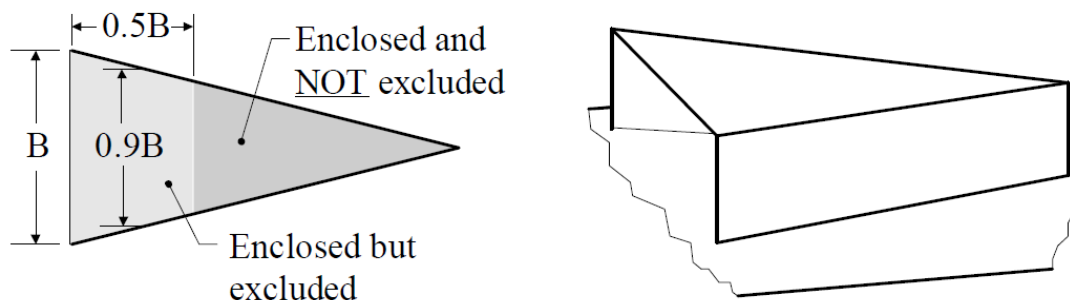


Figure 4

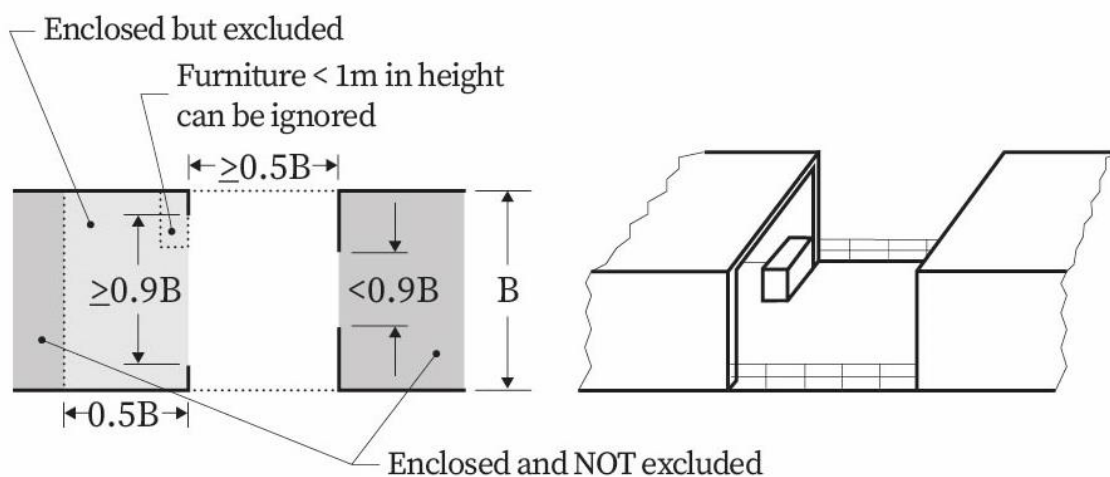


Figure 5

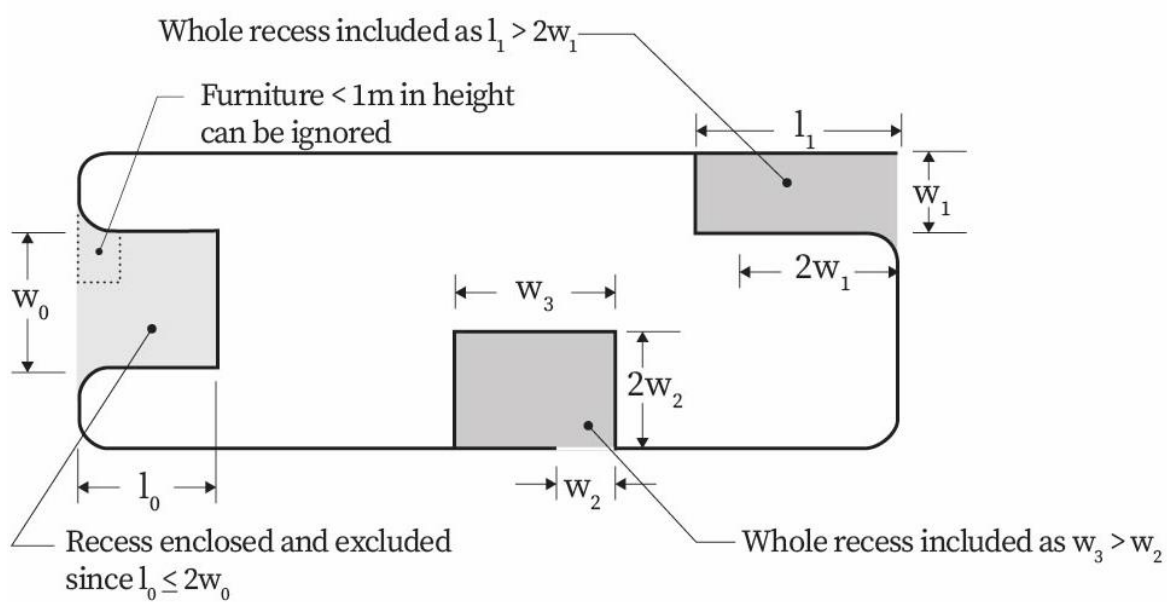


Figure 6

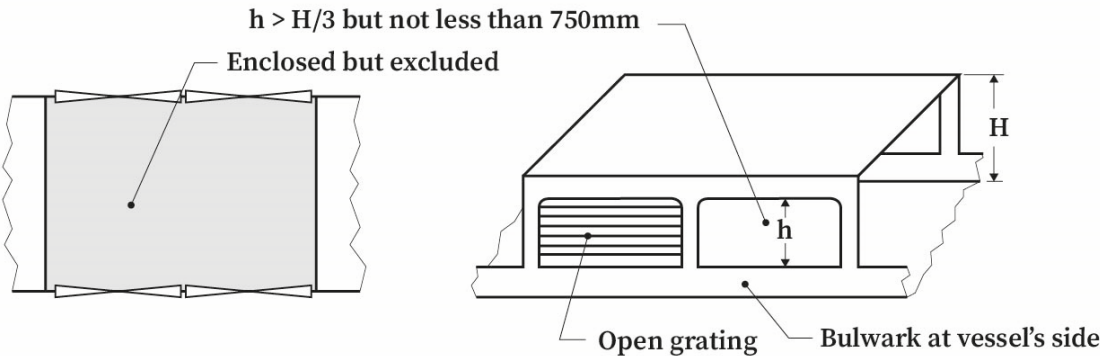


Figure 7

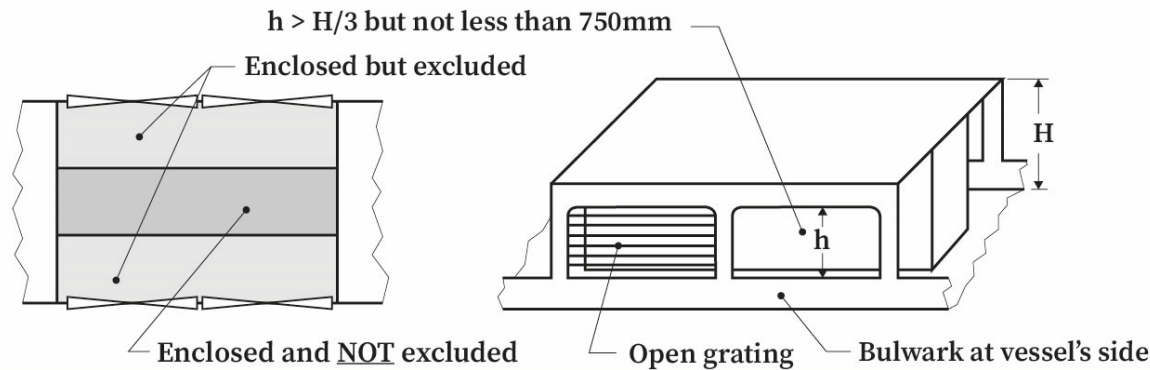


Figure 8

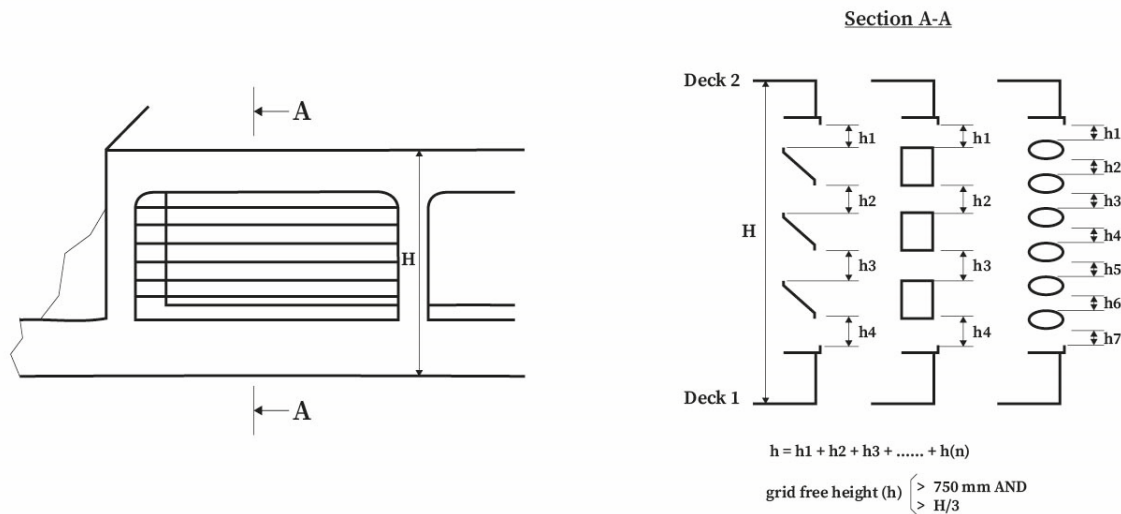
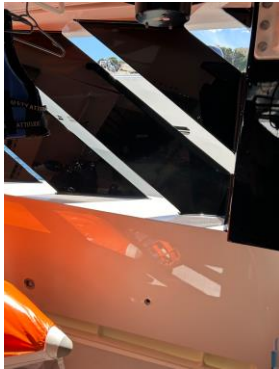
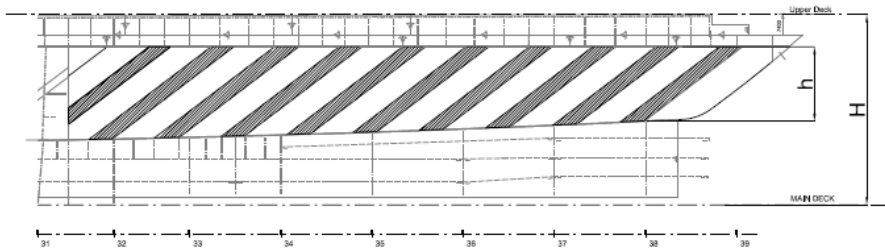


Figure 9

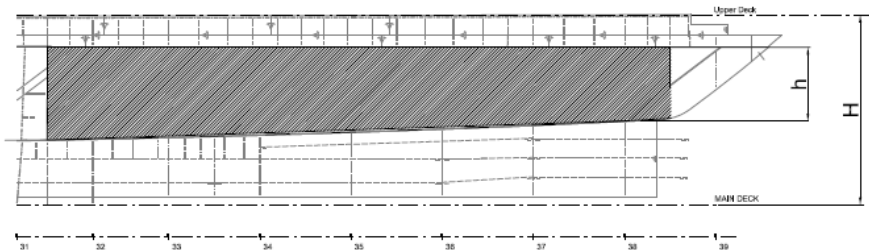




Shell view - With lateral grid      Lateral openings = 30%A



Shell view - Without lateral grid      Lateral opening = A



Section plan

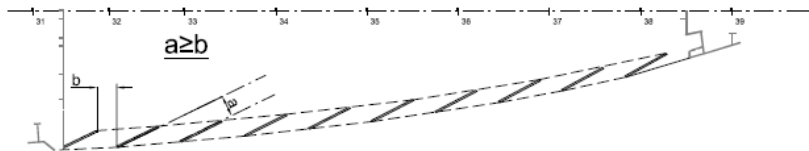


Figure 10

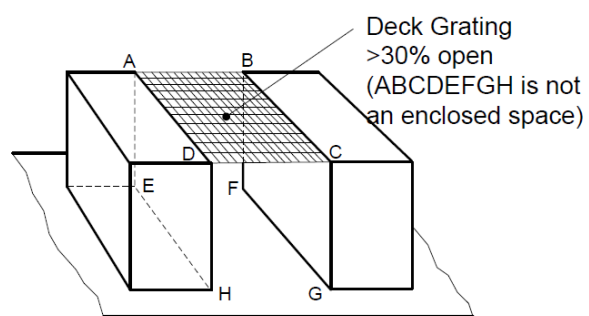


Figure 11