

Secondary Legislation

DCE - MTI 3I - 1/1

**Maritime Transport (Accommodation, Access,
Escape, and Personal Safety) Instrument [year]**

DRAFT FOR CONSULTATION

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Section 1 Preliminary provisions

1.1 Title

This MTI is the Maritime Transport (Accommodation, Access, Escape, and Personal Safety) Instrument [year].

1.2 Commencement

This MTI comes into force on [same date as Part 3I].

1.3 What this MTI does

This MTI specifies standards and requirements for the design and construction of New Zealand ships that are commercial ships for the purposes of Part 3I.

1.4 Application

This MTI specifies—

- (a) requirements with which a ship and its structure, systems, and equipment described in rule 3I: A1.3(1) must comply; and
- (b) standards that are, for the purposes of rule 3I: C1.1(5), the design, construction, and installation standards and technical requirements.

1.5 Interpretation

- (1) If there is a conflict between this MTI and material incorporated by reference in this MTI, the MTI applies.
- (2) A term that is used in this MTI and defined in Part 3I has the same meaning as in that Part.
- (3) In this MTI, codes and official standards (such as *NZS* and *ISO* standards), and guidelines are referred to as standards and by the abbreviations listed in Appendix 2.
- (4) In this MTI, unless the context otherwise requires,—

AIS MOB means Automatic Identification System Man Overboard

ferry means any ship that carries passengers on a regular or irregular service between any 2 or more places of embarkation or disembarkation

fishing ship means a vessel that is registered under the Fisheries Act 1996 other than an eel fishing boat

non-passenger ship means a ship that is not a passenger ship, a fishing ship, or a sailing ship

Part 3I means Part 3I: Maritime (Design, Construction, and Equipment – Accommodation, Access, Escape, and Personal Safety) Rules

rigid inflatable boat means an open boat or decked boat that—

- (a) has a rigid bottom structure; and
- (b) has inflatable sides that chiefly ensure the intact buoyancy of the boat; and
- (c) is propelled by an engine.

1.6 Transitional application

- (1) This MTI applies subject to any transitional, savings, and related provisions specified in Part 3I.
- (2) Where a transitional provision in Part 3I permits compliance with an earlier standard or requirement, that provision prevails over the requirements of this MTI.

Section 2 Accommodation

2.1 Application of requirements for accommodation

- (1) This Section specifies requirements for the type and design of crew and passenger accommodation on a ship for the purposes of Part 3I: Subpart C, Section 2.

Note: Crew accommodation includes, for the purposes of Section 2 of Subpart C, the master's accommodation.

- (2) The maximum number of passengers that a ship may accommodate must be determined by a surveyor in accordance with Appendix 1.

2.2 Requirements applying to both crew and passenger accommodation

Headroom and ventilation

- (1) The clear headroom in areas of free movement throughout crew and passenger accommodation areas must be at least 1,900 millimetres.
- (2) A surveyor may allow reduced headroom—
- (a) along the sides of a compartment to accommodate camber, ducting, or piping; and
 - (b) in areas of fixed seating, provided the surveyor is satisfied that crew and passengers can comfortably access adjacent passageways; and
 - (c) in any ship carrying 12 persons or fewer, and only in sleeping cabins that contain berths, if the surveyor determines that the proposed headroom allows adequate access to each berth.
- (3) A surveyor must be satisfied that the crew and passenger accommodation spaces are provided with adequate ventilation to ensure sufficient air changes for a comfortable living environment.

Soil and waste pipes

- (4) Soil and waste pipes—
- (a) must be adequately sized and constructed to minimise the risk of blockage and to allow for effective cleaning; and
 - (b) must not pass through freshwater or drinking water tanks.
- (5) An empty void space must be maintained between holding tanks and freshwater tanks to avoid cross-contamination.

2.3 Type, design, and arrangement of crew accommodation

Sleeping accommodation

- (1) A ship that is required under Part 3I to provide sleeping accommodation for crew must comply with the following requirements:
- (a) each crew member must be provided with an individual bunk with internal dimensions of at least 1,900 millimetres in length and 680 millimetres in width, and a surveyor may determine that the foot of the bunk can be tapered if space is limited;
 - (b) the clearance above each bunk must be not less than 600 millimetres, and the lowest bunk must be positioned at least 300 millimetres above the floor;
 - (c) if bunks are stacked, the upper bunk must have a dustproof base made of wood or other suitable material:

- (d) each bunk must be fitted with a mattress of a type that will not attract or harbour pests or insects:
- (e) the bedding components, including mattresses and covers, must be resistant to ignition and propagation of flame, as specified in Part 9 of the *FTP Code*:
- (f) bunks must not be arranged in a way that requires a crew member to climb over another bunk to access their own:
- (g) the clear deck space between bunks must be at least 600 millimetres:
- (h) each crew member must be provided with storage space in the form of a secure locker for clothing and personal items:
- (i) crew sleeping arrangements must be located to minimise the effects of motion and acceleration.

Sailing ships

- (2) Each berth or bunk on a sailing ship must be fitted with a lee cloth, lee board, or other suitable restraint to prevent the occupant from falling out.

Toilets and wash facilities

- (3) A ship must have the following toilet and wash facilities:
 - (a) if the ship normally undertakes voyages of 4 hours' duration or more, it must have at least—
 - (i) 1 plumbed flush toilet and 1 washbasin for every 8 crew members or part of that number, subject to paragraph (b); and
 - (ii) on a sailing ship, 1 plumbed flush toilet and 1 washbasin for every 12 crew or part of that number:
 - (b) if the ship is not a sailing ship and either normally undertakes voyages of 24 hours' duration or more, or requires the crew to sleep on board, the ship must be fitted with a minimum of 1 shower or bath for every 8 crew or part of that number:
 - (c) each toilet, shower, or bath must be designed to provide privacy for the users.
- (4) A plumbed flush toilet on a ship must have an ample flush of water that—
 - (a) is independently controlled; and
 - (b) is available for use at all times when the ship is in service.
- (5) A ship may be fitted with a chemical or other self-contained toilet instead of a plumbed flush toilet if a surveyor determines that the installation is hygienic, having regard to the following factors:
 - (a) the number of crew:
 - (b) the duration of the voyages the ship normally undertakes:
 - (c) the design and ventilation of the space in which the toilet is located:
 - (d) the arrangements for the storage, handling, and disposal of waste.

2.4 Type, design, and arrangement of passenger accommodation

Seating

- (1) A ship that normally undertakes voyages of 30 minutes' duration or more must be provided with passenger seating for every passenger that the ship is certified to carry.

- (2) If a ship has passenger seating, the seating must comply with the following requirements:
- (a) if continuous fixed seating is installed, at least 450 millimetres in seating width must be provided for each passenger;
 - (b) fixed seating must allow for ready escape, with passageways between fixed seating at least—
 - (i) 600 millimetres in width, if the passageway is 4,500 millimetres or less in length; and
 - (ii) 750 millimetres in width, if the passageway is more than 4,500 millimetres in length;
 - (c) on a vehicular ferry carrying private motor vehicles on an open deck within enclosed waters, the number of seats in the vehicles may be counted towards the required passenger seating instead of the seating under paragraph (1), provided that—
 - (i) adequate space is maintained between vehicles to allow passengers to move freely and to enter and exit the vehicles; and
 - (ii) the normal duration of the voyage does not exceed 1 hour;
 - (d) where seats are arranged in rows and face the same direction, the distance between the front edges of the seats in successive rows must be at least 750 millimetres;
 - (e) portable or temporary seating must be arranged in the same manner and comply with the same requirements as fixed seating and must be secured to prevent movement due to the ship's motion;
 - (f) seats must not be installed in—
 - (i) working areas of a deck; or
 - (ii) areas between a deckhouse or superstructures and a safety barrier, including a bulwark, course of guard rails, or a course of taut wire; or
 - (iii) internal closed passageways where the width of the space is less than 1,000 millimetres.
- (3) For a sailing ship,—
- (a) seating must be provided for every passenger; and
 - (b) a minimum of 450 millimetres in width of seating must be allowed for every passenger; and
 - (c) a bed, bunk, or cot may count as 1 seat only.

Toilet and wash facilities on sailing ships

- (4) A sailing ship that carries passengers must have toilet and wash facilities in accordance with the following requirements:
- (a) if the ship normally undertakes a voyage of less than 24 hours' duration, it must have at least the following:
 - (i) 1 toilet and 1 washbasin for 1 to 50 passengers;
 - (ii) 2 toilets and 2 washbasins for 51 to 100 passengers;
 - (iii) 1 additional toilet and 1 additional washbasin for each additional 100 passengers or part of that number;
 - (b) if the ship normally undertakes voyages of 24 hours' duration or more, it must have at least 1 toilet and 1 washbasin for every 12 passengers or part of that number.

Toilet and wash facilities on ships other than sailing ships

- (5) A ship, other than a sailing ship, that carries unberthed passengers must have toilet and wash facilities in accordance with the following requirements:
- (a) if the ship normally undertakes voyages that do not proceed beyond coastal limits, it must have at least the following:
 - (i) 1 toilet and 1 washbasin for 1 to 50 passengers:
 - (ii) 2 toilets and 2 washbasins for 51 to 100 passengers:
 - (iii) 1 additional toilet and 1 additional washbasin for each additional 100 passengers or part of that number:
 - (b) if the ship normally undertakes voyages proceeding beyond coastal limits, it must have at least the following:
 - (i) 1 toilet and 1 washbasin for 1 to 12 passengers:
 - (ii) 2 toilets and 2 washbasins (or 1 washbasin if both toilets are cubicles in 1 main compartment) for 13 to 50 passengers:
 - (iii) 3 toilets and 3 washbasins (or 2 washbasins if 2 or more toilets are cubicles in 1 main compartment) for 51 to 100 passengers:
 - (iv) 1 additional toilet and 1 additional washbasin for each additional 100 passengers or part of that number.
- (6) A ship, other than a sailing ship, that carries berthed passengers, must have toilet and wash facilities that comply with the following requirements:
- (a) if the ship carries 1 to 4 berthed passengers, it must have at least 1 toilet, 1 washbasin, and 1 shower for 1 to 4 passengers:
 - (b) if the ship carries 5 or more passengers, the number of each facility (toilets, washbasins, and showers) must be determined as follows:
 - (i) 1 facility for every complete group of 5 passengers:
 - (ii) 1 additional facility if the number of remaining passengers after those groups is 3 or more.
- Example 1:** The ship has 13 passengers.

 1. Dividing 13 by 5 gives 2 with a remainder of 3.
 2. Start with 2 of each facility.
 3. Since the remainder (3) is 3 or more increase each facility by 1.

Result: 3 toilets, washbasins, and showers

Example 2: The ship has 6 passengers.

 1. Dividing 6 by 5 gives 1 with a remainder of 1.
 2. Start with 1 of each facility
 3. Since the remainder (1) is less than 3, there is no increase in facilities.

Result: 1 toilet, washbasin, and shower.
- (7) For the purposes of this Section, each accessible toilet that complies with clause 5.9 is to be treated as the equivalent of 2 toilets.
- (8) A plumbed flush toilet must have an ample flush of water that—
- (a) is independently controlled by the user; and
 - (b) is available for use at all times when the ship is in service.

- (9) A ship may have a chemical or other self-contained toilet fitted, instead of a plumbed flush toilet, if—
 - (a) the ship carries no more than 12 passengers; and
 - (b) the ship operates only within restricted limits.
- (10) All wash facilities must—
 - (a) provide cold fresh water; and
 - (b) if the ship carries berthed passengers, provide hot fresh water, or a means of heating water.

Section 3 Means of access, escape, and evacuation

3.1 Application of requirements for means of access, escape, and evacuation

This Section specifies requirements for the type and design of means of access, escape, and evacuation for the purposes of Part 3I: Subpart C, Section 3.

Note: Crew accommodation includes, for the purposes of Section 3 of Subpart C, the master's accommodation.

3.2 Type, design, and arrangement of the primary means of access to a space

Primary means of access to accommodation spaces

- (1) The primary means of access to an accommodation space must consist of 1 or more of the following:
 - (a) a doorway:
 - (b) a passageway:
 - (c) a corridor:
 - (d) a stairway:
 - (e) a walkway.
- (2) A walkway, stairway, or ladder must be provided between 2 levels of accommodation or decks if—
 - (a) the vertical difference between those levels is more than 400 millimetres; and
 - (b) persons on board are likely to need to move between those levels.

Primary means of access to operational workspaces

- (3) The primary means of access to an operational workspace with a maximum capacity of 12 persons or fewer, as determined under clause 3.4, must consist of 1 or more of the following:
 - (a) a fixed step ladder:
 - (b) a fixed rung ladder:
 - (c) any means described in subclause (1).
- (4) The primary means of access to an operational workspace with a capacity of more than 12 crew, as determined under clause 3.4, must consist of 1 or more of the means of access described in subclause (1).

3.3 Type, design, and arrangement of alternative means of escape from a space

Alternative means of escape from accommodation spaces

- (1) The alternative means of escape from an accommodation space with a capacity of more than 12 persons, as determined under clause 3.4, must consist of 1 or more of the following:
 - (a) a doorway:
 - (b) a passageway:
 - (c) a corridor:
 - (d) a stairway:
 - (e) a walkway:
 - (f) a fixed step ladder, if the space is not permitted to accommodate passengers under Appendix 1:
 - (g) a fixed rung ladder, if the space is not permitted to accommodate passengers under Appendix 1.
- (2) If a ladder is used as an alternative means of escape under subclause (1), at least 1 ladder must be provided for every 18 persons in the space.
- (3) The alternative means of escape from an accommodation space with a maximum capacity of 12 persons or fewer, as determined under clause 3.4, must consist of 1 or more of the following:
 - (a) any means of escape described in subclause (1):
 - (b) an escape hatch or skylight:
 - (c) a sliding window:
 - (d) a popout window:
 - (e) a window of a breakable type:

Alternative means of escape from operational workspaces

- (4) The alternative means of escape from an operational workspace with a capacity of more than 12 persons, as determined under clause 3.4, must consist of 1 or more of the means of escape described in subclause (1).
- (5) If a ladder is used as an alternative means of escape under subclause (4), there must be at least 1 ladder for every 18 persons in the space.
- (6) The alternative means of escape from operational workspaces with maximum capacity of 12 persons or fewer, as determined under clause 3.4, must consist of 1 or more of the means of escape described in subclause (3).

3.4 Requirements for doorways, corridors, walkways, passageways, and stairways

- (1) The number of passengers assumed to be in a space is the maximum number of passengers permitted in that space, as determined in accordance with Appendix 1.
- (2) The number of crew assumed to be in a space is the maximum number of crew who may reasonably be expected to be present in that space at any one time.

Minimum widths for doorways, corridors, walkways, passageways, and stairways

- (3) A doorway, corridor, walkway, passageway, or stairway that forms a primary means of access or an alternative means of escape must, subject to subclauses (4) and (5), be of at least the minimum width specified in Table 1 for the number of persons assumed to be in the space.

Table 1 Minimum width according to number of persons

Number of persons assumed to be in the space		Minimum width of means of access and escape
Exceeding	Not exceeding	millimetres
	12	600
12	30	750
30	45	900
45	60	1,050
60	75	1,200
75	90	1,350
90	100	1,450

(4) A single primary means of access or alternative means of escape described in subclause (3) may be formed by 2 or more separate means of access or escape of lesser widths than those specified in Table 1, provided the following conditions are met by the substitutes in respect of the 2 or more separate means of access or escape:

- there are 2 or more separate doorways, corridors, walkways, passageways, or stairways, or a combination of these that together form either a single primary means of access or an alternative means of escape:
- each of the separate means of access and escape described in paragraph (a) is at least 600 millimetres wide:
- the aggregate capacity (in terms of persons) of the 2 or more separate means of access or escape is equal to or greater than the number of persons that the space is assumed to accommodate, determined by reference to the combined width of those means using the following formula:

$$N = \frac{W-450}{10}$$

Where:

W is the minimum aggregate width, in millimetres, of the doorways, passageways, corridors, or stairways that together form a single primary means of access or alternative means of escape, given the number of persons in the space; and

N is the number of persons assumed to be in the space, calculated in accordance with clause 3.4(1) and (2) and Appendix 1.

A simple alternative to using the formula (but that gives the same result) is:

- Take the appropriate width from table 1
- Add 450 mm for each additional means of escape
- The joint widths must equal this amount, provided none are less than 600 mm.

For example:

If the space has 60 people and there are to be two means of escape instead of 1:

- Take 1,050 mm from the table
- Add 450 mm for the extra means of escape
- 1,500 is the joint width, so options include:
 - 1 x 900 mm and 1 x 600 mm
 - 2 x 750 mm each.

If there are 60 people and three means of escape instead of 1:

- Take 1,050 mm from the table
- Add 2 x 450 mm for the two additional means of escape
- The joint widths are 1,950 mm, so options include
 - 2 x 600 mm and 1 x 750 mm
 - 3 x 650 mm.

- (5) If, under subclause (4), 2 or more separate doorways, corridors, passageways, walkways, or stairways together form a single primary means of access or alternative means of escape, they together are taken to form 1 means of access or escape for the purposes of rules 3l: C3.3 and C3.4.
- (6) A passenger compartment that is permitted to accommodate more than 100 persons, in accordance with Appendix 1, must include at least 2 primary means of access.
- (7) The 2 primary means of access required by subclause (6) must comply with the following requirements:
 - (a) the combined clear width of the 2 primary means of access required by subclause (6) must be at least—
 - (i) 1,500 millimetres; and
 - (ii) an additional 25 millimetres for every 10 passengers or part of that number over 100;
 - (b) each separate primary means of access must have a clear width of opening of at least 750 millimetres.

Walkways, passageways, and corridors

- (8) A walkway, passageway, or corridor that serves as, or forms part of, a primary means of access or an alternative means of escape must—
 - (a) have a minimum clear width, measured between the inner edges of the handrails or, if any obstruction protrudes within the handrail zone, between the obstruction and the opposite handrail or boundary, in accordance with Table 1; and
 - (b) be fitted with—
 - (i) handrails on both sides, if the walkway, passageway, or corridor is more than 1,800 millimetres wide in the longitudinal direction or more than 1,000 millimetres wide in the transverse direction; or
 - (ii) a single handrail in any other case; and
 - (c) have handrails fitted at a vertical height of at least 850 millimetres above the floor, with no obstruction on or above the handrails that could impede a person from obtaining a secure grip; and
 - (d) in the case of a walkway, have a slope of not more than 20 degrees from the horizontal.

Stairways

- (9) A stairway that serves as, or forms part of, a primary means of access or an alternative means of escape must—
 - (a) be fitted with handrails on both sides, positioned at a vertical height of not less than 850 millimetres and not more than 1,000 millimetres above the nosing of the treads; and
 - (b) have the handrails fitted so that no obstruction on or above the handrails impedes a person from obtaining a secure grip;
 - (c) if a handrail transitions from a stair to a landing, have a handrail height of no more than 1,100 millimetres over a transition zone of not more than 300 millimetres, having regard to the slope of the stairway;
 - (d) have a minimum clear width, measured between the inner edges of handrails, or between a handrail and an obstruction and the opposite handrail or boundary, in accordance with Table 1:

- (e) if the stairway is 1,500 millimetres or more in clear width, be fitted with a centreline dividing rail;
 - (f) maintain a clear vertical headroom of at least 1,900 millimetres above the treads;
 - (g) have an angle of inclination of not more than—
 - (i) 45 degrees from the horizontal when accommodating more than 200 passengers; and
 - (ii) 53 degrees from the horizontal when accommodating 200 or fewer passengers;
 - (h) on a ship proceeding beyond enclosed waters, be aligned fore and aft rather than athwartships, where practicable;
 - (i) have slip-resistant treads that are at least 150 millimetres deep and have a riser height of at least 200 millimetres and not more than 225 millimetres; and
 - (j) be adequately illuminated under both daylight and nighttime conditions.
- (10) Despite subclause (9)(a), a stairway is not required to be fitted with handrails if—
- (a) the stairway serves a single step or a vertical change of not more than 1,000 millimetres in height; and
 - (b) suitable handholds are provided.

3.5 Requirements for low-capacity means of escape

- (1) This clause applies to low-capacity means of escape that may be used as a means of access or escape under clauses 3.2 and 3.3.
- (2) The low-capacity means of escape are the following:
 - (a) a fixed step ladder;
 - (b) a fixed rung ladder;
 - (c) a horizontal escape hatch or skylight;
 - (d) a vertical escape hatch;
 - (e) a sliding window;
 - (f) a popout window;
 - (g) a window of a breakable type.

Note: For spaces with a capacity of 12 persons or fewer, this clause works together with clauses 3.2 to 3.4 to identify low-capacity means of escape that may be used as an alternative means of escape.

Ladders

- (3) A ladder that forms part of a primary means of access or an alternative means of escape must—
 - (a) be fitted with handrails on both sides; and
 - (b) have a clear unobstructed width of at least 600 millimetres, measured—
 - (i) between the insides of the handrails; and
 - (ii) if an obstruction protrudes within the handrail space, between the obstruction and the inner edge of the opposite handrail, as applicable; and
 - (c) have treads or rungs that—
 - (i) are at least 100 millimetres deep; and

- (ii) have a slip-resistant surface; and
 - (d) be installed—
 - (i) at an angle of at least 70 degrees to the horizontal, if a fixed rung ladder; or
 - (ii) at an angle of between 60 and 75 degrees to the horizontal, if a fixed stepladder; and
 - (e) not exceed a vertical rise without a landing of—
 - (i) 3 metres; or
 - (ii) 6 metres, if the space is not permitted to accommodate passengers; and
 - (f) be adequately illuminated under both daylight and nighttime conditions.
- (4) A surveyor must be satisfied that any ladder (trunked or otherwise) on a ship of 24 metres or more in LLL—
- (a) provides adequate protection from heat or smoke in emergency situations, taking into account the nature and location of the space and the number of persons who may be present; and
 - (b) is clearly marked.

Note: Guidance published for implementation of rules will contain the following best practice: Trunked ladders should be considered if the smoke or heat may affect escape in the space when evacuating from an engine space.

- (5) If a ladder used as a primary means of access or alternative means of escape leads to a hatch or skylight, the hatch or skylight must comply with the requirements of this Section.

Escape hatches and skylights

- (6) An escape hatch or skylight that forms an alternative means of escape must—
- (a) be operable from both sides; and
 - (b) be capable of being readily opened from the inside without the use of keys, tools, or special knowledge.
- (7) A horizontal escape hatch or skylight must—
- (a) have a minimum clear opening of 600 millimetres by 580 millimetres; and
 - (b) be clearly marked as an escape route and kept clear at all times; and
 - (c) include handholds or other aids, if necessary, to enable effective use; and
 - (d) be protected against accidental closing, if fitted with a hinged cover; and
 - (e) be positioned not more than 1,200 millimetres vertically from the top of a ladder or other structure used to reach the hatch or skylight; and
 - (f) be fitted with appropriate counterweights if the cover is sufficiently heavy to hinder rapid opening and escape.
- (8) A vertical escape hatch must—
- (a) have a minimum clear opening of 600 millimetres by 580 millimetres; and
 - (b) be clearly marked as an escape route and kept clear at all times; and
 - (c) include handholds or other aids, if necessary, to enable effective use; and
 - (d) be protected against accidental closing, if fitted with a hinged cover; and
 - (e) be positioned not more than 750 millimetres vertically from the top of a ladder or other structure used to reach the hatch.

Windows

- (9) An alternative means of escape comprising a window must be capable of being opened from both sides.
- (10) A window serving as an alternative means of escape must—
 - (a) have a minimum clear opening of at least 600 millimetres by 580 millimetres, when fully opened, including a sliding window; and
 - (b) if horizontal in orientation, be positioned not more than 1,200 millimetres vertically from the top of a ladder or other structure used to reach the window; and
 - (c) if vertical in orientation, be positioned not more than 750 millimetres vertically from the top of a ladder or other structure used to reach the window; and
 - (d) if it is a pop-out window installed in a weathertight envelope, be weathertight; and
 - (e) if of a breakable type,—
 - (i) be breakable from both sides; and
 - (ii) have a glass-breaking hammer installed on the interior within 1,000 millimetres of the window, clearly marked and affixed adjacent to it; and
 - (f) be clearly marked as an escape route; and
 - (g) include handholds or other aids if necessary to enable effective use of the window as a means of escape.

Use of furniture or other objects

- (11) Furniture or other objects may be used to achieve the vertical distances in subclauses (7)(e), (8)(e), (10)(b), and (10)(c), provided that the route to the hatch, window, or skylight over such furniture or objects remains unobstructed and readily accessible at all times.
- (12) The furniture or other objects described in subclause (11) must be constructed of robust materials and be structurally capable of supporting the weight of people using it in an emergency.

3.6 Information and signage regarding means of escape

- (1) A passenger ship of 24 metres or more in LLL must comply with subclauses (2) to (6).
- (2) A ship must have at least 1 sign clearly indicating each exit and emergency exit from a space, and the sign must—
 - (a) be located immediately adjacent to the door, window, or other means of access or escape, where possible; and
 - (b) only be located on a door, hatch, or other opening if that opening is not normally left in the open position when the ship is in service.
- (3) If an exit or emergency exit sign is not readily visible from within the space it serves, there must be a prominent sign indicating the direction in which the exit lies.
- (4) The signage required in subclause (2) must comply with 1 or both of the following:
 - (a) *IMO Resolution A.116(30)*;
 - (b) *ISO 24409 -1*.
- (5) A ship must have prominently displayed, on the inside of every cabin door of berthed accommodation and in public spaces, a simple evacuation diagram that—
 - (a) is properly oriented in relation to its position on the ship; and
 - (b) clearly identifies the location of primary means of access and any alternative means of escape; and

- (c) displays the 'you are here' position and escape routes marked by arrows; and
 - (d) indicates the location of relevant evacuation stations.
- (6) A sign required under this clause must be composed of white or light-coloured letters on a green background.

Section 4 Personal safety

4.1 Application of requirements for protecting personal safety

This Section specifies requirements for the type and design of bulwarks, courses of guard rails, courses of taut wire, and other safety measures on a ship for the purposes of Part 3I: Subpart C, Section 4.

4.2 Type and design of safety measures to protect persons from falling overboard depending on type of ship

Surfaces of areas to which passengers and crew normally have access

- (1) The surface of a deck and other external walkways to which passengers and crew normally have access must have a slip-resistant finish.
- (2) Every hatch cover installed on a deck described in subclause (1) must have a slip-resistant walkable surface.

Type of safety barriers

- (3) The safety barriers required under rule 3I: C4.2 and rule 3I: C4.3 must be of 1 or more of the following types:
 - (a) bulwarks:
 - (b) courses of evenly spaced guard rails:
 - (c) courses of evenly spaced taut wire.
- (4) The barriers described in subclause (3)(b) and (c) must be supported at intervals not exceeding 2,200 millimetres.

Storm rails and hand grabs

- (5) Storm rails or hand grabs must be installed where considered necessary by a surveyor for safe movement in passageways, at deckhouse sides, and in areas around ladders and hatches where passengers and crew have normal or emergency access.

Ships with vehicle decks

- (6) A ship carrying vehicles must have barriers, chains, or cables installed that prevent the unintentional movement of vehicles beyond the open ends of the deck.

Inflatable boats and rigid inflatable boats

- (7) If a surveyor considers that it is unnecessary or impracticable to install bulwarks, guard rails, or courses of taut wire on an inflatable boat or a rigid inflatable boat, the boat must have suitable handgrips, toeholds, handrails, or other safety features to ensure the safety of all persons on board.
- (8) The design and placement of the safety features specified in subclause (7) must provide adequate security for persons on board during transit and in all sea state and weather expected to be encountered in the intended area of operation.
- (9) Inflatable boats and rigid inflatable boats must have a slip-resistant finish on the upper surface of their inflated buoyancy tubes.

Stern trawlers

- (10) A stern trawler must be provided with suitable protection such as doors, gates, or nets at the top of the stern ramp at the same height as the adjacent bulwark, courses of guard rails, or courses of taut wire.

Tender boats

- (11) A tender boat that is treated as equipment must have adequate measures to prevent persons from falling overboard, unless a surveyor is satisfied that such measures are not justified, having regard to—
- (a) the design and configuration of the ship and the tender boat; and
 - (b) the operational environment in which the tender boat is intended to be used; and
 - (c) the nature and level of safety risks associated with its use.

Sailing ships - safety harnesses and safety lines

- (12) A sailing ship must have a safety harness and a safety line for each person on board if the ship—
- (a) is less than 24 metres in LLL and proceeds beyond restricted limits; or
 - (b) proceeds beyond coastal limits.
- (13) A sailing ship to which subclause (12) does not apply must have a safety harness and safety line—
- (a) for each person permitted access to an exposed deck; and
 - (b) for every person required to work or handle sails from above or on the deck.
- (14) A safety harness and safety line must comply with *NZS 5823*.

Sailing ships - working aloft

- (15) If access to the rig is operationally necessary, a sailing ship must have protections, satisfactory to a surveyor, to protect a person working at height from the risk of falling.
- (16) The protections may include 1 or more of the following:
- (a) safety nets below the bowsprit:
 - (b) wooden safety grabrails or metal jackstays fixed along the bowsprit to provide handholds and attachment points for safety harnesses:
 - (c) footropes and horses of wire or rope, permanently rigged to enable persons to stand while working on the yards or bowsprit:
 - (d) metal jackstays fixed along the top of the yards to provide handholds and attachment points for safety harnesses:
 - (e) means of climbing aloft safely, including—
 - (i) fixed metal steps or ladders attached to the mast; or
 - (ii) traditional ratlines of rope, or rattling bars of wood or steel, fixed across the shrouds to form a permanent ladder:
 - (f) a bosun's chair.
- (17) Any protections considered necessary by a surveyor under subclause (15) must be recorded on the Certificate of Survey.

4.3 Size of openings in safety barriers and other safety measures depending on type of ship and passengers

- (1) The openings between horizontal courses of guard rails or courses of taut wire on a deck must comply with the following requirements:
 - (a) on a deck that is normally accessible to passengers, no vertical opening between any adjacent courses, or between the deck and the lowest course may be more than 230 millimetres;
 - (b) on a deck that is not normally accessible to passengers—
 - (i) the vertical opening between the deck and lowest course must not be more than 230 millimetres; and
 - (ii) the vertical opening between any higher adjacent courses must not be more than 380 millimetres.
- (2) For the purposes of the measurements in subclause (1), if a toe-rail is fitted, the toe-rail may be treated as a course of a guard rail.
- (3) Compliance with subclause (1) may be achieved by fitting all or any part of the space below the upper course of guard rails or taut wire with strong wire mesh or other material of sufficient strength and dimensions to ensure that the applicable maximum vertical opening limits are not exceeded.
- (4) An opening in a bulwark, including a freeing port, must be protected by rails, bars, or other protective barriers to ensure that the maximum dimension of any clear opening does not exceed the limit applicable under subclause (1).
- (5) A sailing ship is not required to comply with subclause (1) or (4) if a surveyor determines that the safety measures in place provide adequate protection against the risk of persons slipping and falling through openings.

Children under 12 years of age

- (6) If children under 12 years of age are permitted access to an exposed deck on a passenger ship, all openings in bulwarks, courses of guard rails, or courses of taut wire must—
 - (a) ensure that no single clear opening below the top of the guard rail allows the passage of a sphere with a diameter greater than 125 millimetres; and
 - (b) have measures to ensure that safety barriers on that deck must not contain openings that could serve as toe holds at heights between 150 millimetres and 760 millimetres (inclusive).
- (7) If the safety arrangements required in subclause (6) are not provided, children under 12 years of age must be prohibited from accessing the deck, and clear and conspicuous signage indicating that access is prohibited for children under 12 years of age must be installed and maintained.

Cockpits that open aft to sea

- (8) If a ship has a cockpit that opens aft to the sea, additional guard rails must be installed so that no vertical opening is more than 380 millimetres.

4.4 Requirements for height of safety barriers and other safety measures depending on type of ship

Non-passenger ships

- (1) Subject to subclauses (3) to (6), the height of bulwarks, courses of guard rails, and courses of taut wire on a non-passenger ship must comply with the following requirements:

- (a) on a ship of less than 10 metres in LOA, a height determined by a surveyor, having regard to the safety of persons on board taking into account the ship, operating area, and the nature of the activity;
- (b) on a ship of 10 metres or more but less than 16 metres in LOA, at least 750 millimetres;
- (c) on a ship of 16 metres or more but less than 20 metres in LOA, at least 850 millimetres;
- (d) on a ship of 20 metres or more in LOA, at least 1,000 millimetres.

Passenger ships

- (2) The height of a bulwark, guard rail, or course of taut wire on a passenger ship must be at least 1,000 millimetres.
- (3) For a passenger ship that is less than 12 metres in LOA and operating in enclosed waters, a surveyor may approve a lower safety barrier height if the surveyor considers the height specified in subclause (2) to be unnecessary or impracticable.
- (4) In determining whether to approve a lower safety barrier height under subclause (3), a surveyor must take into account—
 - (a) the ship's design, operational environment, and safety risks; and
 - (b) whether any additional safety measures would—
 - (i) prevent persons slipping or falling overboard; and
 - (ii) provide a level of safety equivalent to the safety barriers required by subclause (2).
- (5) Additional safety measures referred to in subclause (4) may include—
 - (a) the installation of a handrail on the side of a deckhouse for a ship with narrow side decks adjacent to the deckhouse; and
 - (b) the provision of a centreline handrail on the foredeck where such an arrangement offers improved practicality and safety; and
 - (c) the provision of AIS MOB; and
 - (d) measures to limit, control, or prevent passengers accessing exposed decks.

Fishing ships

- (6) The height of bulwarks, courses of guard rails, and courses of taut wire on fishing ships must be at least 750 millimetres.

Sailing ships

- (7) The height of bulwarks, courses of guard rails, and courses of taut wire on a sailing ship must be at least 1,000 millimetres.
- (8) A sailing ship fitted with courses of guard rails or courses of taut wire under clause 4.2(3)(b) or (c) must have installed around the deck to which passengers and crew normally have access, forward of the mast, except in the way of fittings,—
 - (a) a toe rail of at least 25 millimetres in height; or
 - (b) a continuous wire 25 millimetres above the deck.

4.5 Lower safety barriers where normal operations are impeded

- (1) This clause applies if a surveyor is satisfied that compliance with clause 4.4 would impede the normal operations of the ship.

- (2) Subject to subclause (3), a ship must have safety barriers near the edge of every exposed deck normally accessible to persons on board, consisting of—
 - (a) bulwarks at a height of at least 600 millimetres; or
 - (b) 2 courses of guard rails or courses of taut wire, at a height of at least 600 millimetres above the deck, with the bottom rail or wire not more than 300 millimetres above the deck.
- (3) If subclause (1) applies, the following requirements must be met:
 - (a) the deck must have a slip-resistant surface:
 - (b) a readily available means of reboarding the ship must be provided:
 - (c) if the ship carries passengers and proceeds beyond restricted limits, fixed seating must be provided for all passengers:
 - (d) any additional measures required by the surveyor to prevent persons falling overboard or to reduce the impact of falls must be implemented:
 - (e) the measures required under paragraph (d) must be recorded on the Certificate of Survey.

4.6 Alternative safety measures where reduced safety barriers would impede normal operations

- (1) This clause applies if a surveyor is satisfied that even a reduced safety barrier under clause 4.5 would impede the normal operations of the ship.
- (2) If subclause (1) applies, the ship must—
 - (a) comply with all the requirements in clause 4.5(3); and
 - (b) implement 1 or more additional measures determined by a surveyor to prevent persons falling overboard or to reduce the impact of falls; and
 - (c) have those measures recorded on the Certificate of Survey.
- (3) Safety measures that may be required under subclause (2) include the following:
 - (a) toe rails at least 25 millimetres high or a continuous wire 25 millimetres above the deck:
 - (b) safety harnesses and safety lines for every person permitted access to the exposed deck, in addition to any necessary jackstays, safety rail, clipping points or attachment systems:
 - (c) the wearing of lifejackets while on deck:
 - (d) the wearing of AIS MOB alert beacons when operating beyond restricted limits:
 - (e) any other measures considered necessary by the surveyor.
- (4) The jackstays, safety rails, and clipping points specified as part of the safety measures under subclause (3) must—
 - (a) enable a person to attach a safety line via the safety harness before entering an exposed deck, and unclip the safety line after leaving an exposed deck; and
 - (b) be arranged in a manner that allows access to all necessary areas of the deck.

Note: Clauses 4.5 and 4.6 provide alternative safety requirements where full compliance with clause 4.4 would impede normal operations. Clause 4.5 applies where safety barriers are reduced and there are additional safety measures. Clause 4.6 applies where barriers are lower or not present because even the reduced height in 4.5 impedes normal operations and additional surveyor-determined measures are required.

Section 5 Access for disabled passengers and passengers requiring special assistance

Note: Some provisions in this Section restate requirements in earlier Sections for ease of reference and do not limit or affect those earlier provisions.

5.1 Application

This Section specifies requirements for the type and design of facilities for disabled passengers and passengers requiring special assistance for the purposes of Part 3I: Subpart C, Section 5.

5.2 Type and design of signage, visual aids, and other aids

Signage

- (1) Signage on a ship must include:
 - (a) large print:
 - (b) high-contrast tactile print:
 - (c) Braille and other tactile markers.
- (2) The markers described in subclause (1)(c) must be installed in accordance with the *Accessible Signage Guidelines: Braille, Tactile and Clear Print, Fifth Edition*.

Note: Following the Blind Low Vision NZ document *Accessible Signage Guidelines: Braille, Tactile and Clear Print, Fifth Edition* is an effective way to ensure that signage (including large print signage, high contrast tactile print, and Braille and other tactile markers) is accessible for all users.

Visual aids and other aids

- (3) All artificially lit areas on a ship must be adequately illuminated in accordance with NZS 4121.
- (4) The following elements on a ship must be marked or finished in colours that provide clear contrast against their background to enhance visibility:
 - (a) handrails:
 - (b) steps and stairways (ensuring contrast between treads and risers):
 - (c) ramps and coamings:
 - (d) handholds in priority seating areas and wheelchair-accessible spaces:
 - (e) door handles:
 - (f) fixtures and fittings within accessible toilets.
- (5) For the purposes of rule 3I: C5.2(6), the following technology must be installed:
 - (a) an operational hearing aid loop system to facilitate onboard announcements, designed to operate in passenger areas where announcements are made:
 - (b) electronic displays capable of presenting pre-loaded safety information, which must be communicated visually (including text) and in sign language, accompanied by synchronised subtitles and audio descriptions.

Note: Subclause (5) only applies to ships with more than 100 passengers.

5.3 Embarking and disembarking

- (1) A ship must have at least 1 access point for embarking and disembarking that is suitable for use by disabled passengers, including users of wheelchairs and other mobility devices.
- (2) The access point must include a gangway ramp, which may be portable, and the ramp must—
 - (a) have a slip-resistant surface; and
 - (b) include an upstand or kerb of at least 75 millimetres on both sides to prevent wheels from running off; and
 - (c) be fitted with handrails on both sides, positioned at a height of not less than 840 millimetres and not more than 900 millimetres; and
 - (d) maintain an even gradient for all sloped gangway ramps or ramp sections.
- (3) If a gangway ramp poses a risk of passengers striking their heads while embarking, appropriate warning signage, in accordance with rule 3I: C5.2, must be provided.
- (4) Where tides and land-based infrastructure permit, a gangway must not exceed a gradient of 1:12.

Note: Guidance published for implementation of rules will contain the following best practice: If the gradient exceeds 1:12, crew should only provide assistance where it is safe for both the assisting crew member and the person being assisted. Door sills at the entrance to a ship must not be more than 20 millimetres in height.

5.4 Priority vehicle parking spaces for holders of mobility parking permits

Note: The number of priority parking spaces in the draft Rule is—

- (a) at least 2 priority parking spaces for the first 37 parking spaces; and
- (b) at least 1 additional priority parking space for every 50 parking spaces thereafter.

- (1) Each priority vehicle parking space for holders of mobility parking permits on a roll-on and roll-off ferry must—
 - (a) be at least 3,200 millimetres wide and 7,800 millimetres long; and
 - (b) have at least 2,500 millimetres headroom clearance, measured from the level of the allocated space; and
 - (c) be clearly marked in yellow text or symbols and display the wheelchair symbol (the International Symbol of Access); and
 - (d) have a slip-resistant surface and markings.
- (2) There must be an unobstructed access aisle to the side of the priority vehicle parking space that—
 - (a) is at least 1,600 millimetres wide by 7,800 millimetres long; and
 - (b) is marked with yellow signage, in accordance with rule 3I: C5.2, discouraging parking over the aisle; and
 - (c) may be shared between 2 priority vehicle parking spaces.

5.5 Accessible routes

- (1) An accessible route must—
 - (a) ensure a smooth transition between changes in level, and a change in level must not exceed 20 millimetres unless a ramp with a gradient of not more than 1:12 is provided; and
 - (b) maintain a clear width of at least 850 millimetres, including through doorways; and
 - (c) remain free from obstacles or protrusions that reduce the required clear width; and
 - (d) be well illuminated at all times, in both daytime and nighttime conditions.
- (2) If compliance with subclause (1)(a) is impracticable, an alternative solution such as a drop-in sill or roll-over sill may be used to provide a smooth transition between sills of different heights.
- (3) Any turning point along an accessible route must provide enough space, free of fixed obstructions, to allow a wheelchair or other mobility device to manoeuvre without assistance.

Lifts

- (4) A lift for the use of passengers that forms part of an accessible route must comply with the following requirements:
 - (a) the internal dimensions of the lift car must be not less than 1,400 millimetres by 1,400 millimetres;
 - (b) the stationary position of the lift car at a landing must be within 20 millimetres above or below the level of the landing.
- (5) Lift doors must—
 - (a) have a clear opening of not less than 900 millimetres; and
 - (b) open sideways; and
 - (c) be automatically operated.
- (6) Lift controls, both at the landing and inside the lift car, must—
 - (a) be located between 900 millimetres and 1,350 millimetres above the floor; and
 - (b) have call buttons that—
 - (i) are tactilely distinguishable from the faceplate; and
 - (ii) provide a clear physical response when pressed; and
 - (iii) have a width or diameter of not less than 20 millimetres; and
 - (c) have raised or indented labels for control buttons that are—
 - (i) located immediately to the left of the relevant button; and
 - (ii) not less than 15 millimetres in height; and
 - (d) have Braille labels located immediately to the left of the standard label.
- (7) A lift car must have handrails on each wall other than a wall containing a door, and each handrail must be—
 - (a) positioned between 950 millimetres and 1,050 millimetres above the floor; and
 - (b) located at least 30 millimetres from the wall.
- (8) A lift must have both visible and audible indicators of lift position that enable users to identify the level of the lift.

Doors and door handles

- (9) A door forming part of an accessible route, that is not normally left open while the ship is underway must require no more than 22 newtons of force at the handle for operation.
- (10) Door handles on doors forming part of an accessible route must be—
 - (a) positioned between 900 millimetres and 1,200 millimetres from the finished floor level; and
 - (b) designed for use by persons with limited dexterity; and
 - (c) operable with 1 hand, to allow a user of a wheelchair or other mobility device to propel their chair while opening the door; and
 - (d) equipped with a lever-action mechanism for handles, locks, and latches, if present.

5.6 Priority seats for disabled passengers and passengers requiring special assistance

Note: The number of priority seats in the draft Rule must be—

- (a) at least 4 priority seats for the first 50 passengers; and
- (b) at least 2 additional seats for every 50 passengers or part of that number, beyond the initial 50 passengers.

General seats

- (1) All seats, including priority seats, must have—
 - (a) seat width of at least 450 millimetres per passenger; and
 - (b) seat height of at least 450 millimetres; and
 - (c) row spacing of at least 750 millimetres, measured from seat front to seat front, for forward-facing seats; and
 - (d) colour-contrasting, integrated handrails on the top of backrests if the seat is on either side of an aisle of seats.
- (2) Priority seats must be—
 - (a) positioned as close as reasonably practicable to entry and exit doorways forming part of accessible routes; and
 - (b) located and arranged to ensure that—
 - (i) an occupant can view at least 1 available onboard safety information screen from their seated location, if screens are provided on the ship; and
 - (ii) an occupant can access any available auditory supports and other necessary aids; and
 - (iii) their position does not place the occupants at a material disadvantage compared with general passengers in terms of comfort and amenities.
 - (c) accompanied by clear signage, in accordance with rule 3I: C5.2, stating that such seats must be vacated for—
 - (i) a disabled passenger; and
 - (ii) a passenger requiring special assistance, including a parent or caregiver with children.

5.7 Allocated spaces for users of wheelchairs and other mobility devices

Note: The number of allocated spaces in the draft Rule must be—

- (a) at least 2 spaces for the first 37 passengers; and
- (b) at least 1 additional space for every 50 passengers or part of that number, beyond the initial 37 passengers.

Allocation of spaces for users of wheelchairs and other mobility devices

- (1) Allocated spaces must be—
 - (a) situated on the same level as the embarkation and disembarkation areas; and
 - (b) positioned as close as practicable to entry and exit doorways forming accessible routes; and
 - (c) arranged to ensure that—
 - (i) an occupant can view at least 1 available onboard safety information screen from their seated location, if such screens are provided; and
 - (ii) an occupant can access any available auditory and other assistive features; and
 - (iii) their position does not place the occupants at a material disadvantage compared with general passengers in terms of comfort and amenities.
 - (d) accompanied by clear signage, in accordance with rule 31: C5.2, stating that such spaces must be vacated for users of wheelchairs and other mobility devices.
- (2) Each allocated space must comply with the following dimensions:
 - (a) length of at least 1,300 millimetres;
 - (b) width of at least 800 millimetres.
- (3) A clear turning circle with a diameter of 1,925 millimetres must be provided in passenger accommodation areas at or adjacent to allocated spaces, for users of wheelchairs and other mobility devices to turn unassisted, and the spaces must be free of fixed obstructions, to allow manoeuvring without assistance.
- (4) If a flip-up seat is fitted in an allocated space or within or adjacent to a turning circle, the seat—
 - (a) must be capable of being easily raised and remaining securely in an upright position when the allocated space or turning circle is required by a user of a wheelchair or other mobility device; and
 - (b) must not, when raised, prevent the allocated space or turning circle from complying with subclauses (2) and (3); and
 - (c) must be available for use by another passenger only when the allocated space or turning circle is not required by a user of a wheelchair or other mobility device.
- (5) Each allocated space must be equipped with a securement system that—
 - (a) enables a user of a wheelchair or mobility device to operate the securement system unaided; and
 - (b) prevents unintentional movement of occupied wheelchairs or mobility devices in all sea states expected to be encountered; and
 - (c) is simple and intuitive to engage and disengage by the user or the crew; and
 - (d) does not protrude into the wheelchair or mobility device space when the system is not in use, or pose a hazard to passengers; and

- (e) does not cause discomfort, restrict access to emergency exits, or interfere with evacuation procedures.

Note: Guidance published for implementation of rules will contain the following best practice: A securement system is available for users of wheelchairs or other mobility devices to use to prevent unintended movement caused by the ship's motion. The system is intended to enhance passenger safety and comfort and may be used at the passenger's discretion.

5.8 Stairway safety and accessibility

- (1) A door must not—
 - (a) open directly across the top of a stairway; or
 - (b) swing in a manner that obstructs the top or bottom step of a stairway unless there is a clear opening of at least 400 millimetres between the fully open door and the nearest step.
- (2) Step risers within a stairway must—
 - (a) be of uniform height; and
 - (b) have a vertical height of not more than 225 millimetres.
- (3) Handrails must be—
 - (a) installed on both sides of steps or a stairway; and
 - (b) continuous and unobstructed along the full length of a stairway; and
 - (c) positioned at a height between 900 millimetres and 1,000 millimetres above the nosing of the treads; and
 - (d) extended at least 300 millimetres beyond both the top and bottom steps to enhance accessibility and stability.
- (4) Tactile ground surface indicators must be installed at the top and bottom of every flight of stairs to provide warning and guidance for passengers who are blind or have low vision.

5.9 Type and design of accessible toilet facilities

- (1) This clause applies to toilet facilities that are required by rule 31: C5.9 to be accessible toilet facilities, and to any other toilet facilities that are provided as accessible toilet facilities.

Accessible toilet compartments and dimensions

- (2) Each toilet compartment must have the following internal dimensions:
 - (a) length of at least 1,950 millimetres:
 - (b) width of at least 1,600 millimetres:
 - (c) height of at least 2,000 millimetres.
- (3) A toilet within a compartment must comply with the following specifications:
 - (a) the front edge of the toilet seat must be positioned 800 millimetres from the rear wall of the compartment:
 - (b) the centre line of the toilet seat must be located 450 millimetres from the adjacent side wall:
 - (c) a clear space of at least 1,150 millimetres must be provided from the centre line of the toilet pan to the opposite (far-side) wall, to ensure sufficient space for persons transferring from wheelchairs or other mobility devices:

- (d) there must be no obstructions adjacent to the side of the toilet pan that would reduce the clearance distances in paragraphs (b) and (c) or otherwise impede access or use.
- (4) The top surface of the toilet pan must be installed at a height of not less than 460 millimetres and not more than 480 millimetres above the finished floor level.
- (5) When in the open position, the toilet lid must rest at an angle of 10 to 15 degrees beyond vertical, in order to provide an effective backrest for the user.
- (6) If 2 or more accessible toilets are provided on a ship—
 - (a) an approximately equal number must be configured to allow for wheelchair and mobility device transfer from the left-hand and from the right-hand side of the toilet respectively; and
 - (b) each accessible toilet must display signage, in accordance with rule 3I: C5.2, indicating the direction of wheelchair transfer, marked clearly with the letter “L” for left-side transfer or “R” for right-side transfer, as applicable.

Grab rails adjacent to accessible toilets

- (7) An L-shaped grab rail must be installed on the wall adjacent to the toilet seat, in accordance with the following requirements:
 - (a) the horizontal component of the rail must—
 - (i) be positioned at a height of 700 millimetres above the finished floor level; and
 - (ii) extend horizontally for not less than 750 millimetres;
 - (b) the vertical component of the rail must—
 - (i) extend vertically upward from the horizontal component for not less than 750 millimetres; and
 - (ii) commence at a point located 230 millimetres forward of the front edge of the toilet pan;
 - (c) the grab rail must—
 - (i) project from the wall at a distance of not less than 50 millimetres and not more than 60 millimetres; and
 - (ii) have an external diameter of not less than 30 millimetres and not more than 40 millimetres.

Washbasins in accessible toilet compartments

- (8) A washbasin must be installed within each toilet compartment and—
 - (a) must be installed on the wall adjacent to the toilet pan, with the nearest part of the washbasin positioned at least 230 millimetres forward of the front edge of the toilet pan; and
 - (b) must not exceed 400 millimetres in depth, measured from the finished wall surface to the furthest projection of the basin; and
 - (c) must comply with AS/NZS 1172.4; and
 - (d) must be positioned so that—
 - (i) the top rim of the basin is no higher than 850 millimetres above the finished floor level; and
 - (ii) a clear space of at least 675 millimetres in height is maintained directly beneath the basin to allow for unimpeded wheelchair access.

Additional fixtures and fittings

- (9) Any separate soap dispensers, towel dispensers, or similar facilities installed in accessible toilet compartments—
- (a) must be installed on the side wall adjacent to the toilet pan, with the nearest part of the fixture positioned at least 230 millimetres forward of the front edge of the pan; and
 - (b) must not project more than 400 millimetres from the adjacent side wall; and
 - (c) must have their bottom edge positioned at a height between 1,000 millimetres and 1,200 millimetres above the finished floor level; and
 - (d) may be installed above a washbasin provided they are not located directly above the taps.

Entry to accessible toilet facilities

- (10) Entry to a toilet must be through—
- (a) a door-free entrance; or
 - (b) a door of 1 of the following types:
 - (i) an automatic door with push-button operation:
 - (ii) a sliding door:
 - (iii) a hinged door that swings outward, in order to preserve clear manoeuvring space within the toilet compartment.

Note: Guidance published for implementation of rules will contain the following best practice: Many disabled people prefer door-free entrances to toilets because they are easier to manoeuvre through, particularly for people with mobility devices. Privacy for door-free toilets can be maintained through use of angled entryways, privacy screens, or partitioned layout. However, avoid sharp 90 degree turns in their design, as this is difficult for users with mobility equipment.

- (11) A toilet door must be fitted with a lock that—
- (a) is operable with the palm of the hand or a closed fist; and
 - (b) can be released from the outside in an emergency using a key, irrespective of an “occupied” indicator.
- (12) A toilet door must provide a clear opening width of not less than 850 millimetres.
- (13) The handle of a toilet door must be positioned at a height of not less than 900 millimetres and not more than 1,000 millimetres above the finished floor level.
- (14) A toilet door must have—
- (a) a horizontal pull rail installed on the cubicle side at a height of 900 millimetres above the finished floor, where a hinged door is provided; and
 - (b) a vertical handle installed on the cubicle side at a height of 1 metre above the finished floor, where a sliding door is provided.

Note: Guidance published for implementation of rules will contain the following best practice: The required widths for toilet doors are minimums. Wider doors, where possible, provide for greater accessibility and comfort.

Appendix 1 Determining number of passengers in accommodation spaces

1. The maximum number of passengers permitted on a ship must be determined by calculating the aggregate number of persons allowed—
 - (a) in all enclosed spaces; and
 - (b) on ships other than sailing ships, on all decks; and
 - (c) for sailing ships, in any cockpit.

Note: Calculations under this Appendix are used to determine maximum passenger numbers for certificate of survey.

Enclosed spaces

2. The maximum number of passengers permitted in enclosed spaces must be determined as follows:
 - (a) in cabins and other compartments fitted with fixed berths, or settees convertible to sleeping berths, by the number of berths, if there is at least 2 cubic metres of space for each passenger in the cabin or other compartment, and the berths are arranged in no more than 2 tiers:
 - (b) in spaces used exclusively for dining—
 - (i) by the number of seating positions provided; and
 - (ii) only if the space is accessible to passengers on board at all times:
 - (c) in public spaces on a ship operating within the coastal limits or offshore limits, and in public spaces below the main deck of a ship operating within inshore limits, by dividing the clear deck area in square metres by 0.836:
 - (d) in public spaces situated on or above the main deck of a ship operating within the coastal limits or inshore limits, by dividing the clear deck area in square metres by 0.56:
 - (e) in public spaces situated on or above the main deck of a ship operating in the enclosed water limits, by dividing the clear deck area in square metres by 0.28:
 - (f) in sheltered spaces complying with the requirements of rule 31: C2.4(2) on a ship operating within the inshore limits, by dividing the clear deck area in square metres by 0.28.

Open deck spaces

3. The maximum number of passengers permitted on open deck spaces must be determined as follows:
 - (a) for a ship operating within the coastal limits and offshore limits, by dividing the clear deck area of all open deck spaces, in square metres, by 0.836:
 - (b) for a ship operating within the coastal limits and inshore limits, by dividing the clear area of the open main deck in square metres by 0.56, and for decks above the main deck, and for deckhouse tops, by dividing the clear area in square metres by 0.836:
 - (c) for a ship operating within the enclosed water limits, by dividing the clear deck area of the open main deck in square metres, by 0.28, and for a deck above the main deck and deckhouse tops, by dividing the clear area in square metres by 0.836.

Open boats and cockpits

4. The maximum number of passengers permitted on an open boat or in an open cockpit must be determined as follows:
 - (a) for operations within the enclosed water limits, by dividing the clear area in square metres of the open boat or cockpit by 0.28;
 - (b) for operations within the inshore limits, by dividing the clear area in square metres of the open boat or cockpit by 0.56.
5. For an open boat, the clear area under paragraph 4 must be measured—
 - (a) inside the back of any side benches, gunwale, or side deck, whichever gives the smallest area; and
 - (b) excluding any space alongside an engine casing that is less than 915 millimetres wide; and
 - (c) excluding any area required for the handling and stowage of anchors.
6. For a sailing ship, the clear area of a cockpit under paragraph 4 must be measured inside the back of any side benches, gunwale, or side deck, whichever gives the smallest area.
7. The number of crew on the ship must be deducted from the passenger number determined under paragraph 4 for an open boat or open cockpit.

Excluded spaces

8. The following spaces must not be measured for the purposes of paragraphs 2 and 3:
 - (a) a forecastle deck;
 - (b) for a flush deck ship not operating beyond enclosed waters, the deck area required for anchor handling and stowage;
 - (c) for a flush deck ship operating beyond enclosed waters, the open deck space within one eighth of the ship's length aft of the foreside of the stem;
 - (d) any space between deckhouse sides and a bulwark or rail if that is less than 750 millimetres wide;
 - (e) interior passageways of less than 750 millimetres in width and open deck passageways of less than 450 millimetres in width;
 - (f) spaces occupied by tables and permanent fittings in public spaces;
 - (g) toilets and washrooms;
 - (h) spaces where passenger presence would interfere with navigation or ship operations; and
 - (i) public spaces with clear headroom of less than 1,900 millimetres; and
 - (j) spaces used for cargo stowage.

Compliance with other requirements

9. If the number of passengers determined under this MTI is greater than the number of passengers permitted under any of the following Parts, the ship must be certified to carry the lesser number that results from applying all relevant requirements under the following:
 - (a) the stability requirements of Part 3B: Maritime (Design, Construction, and Equipment – Stability, Drainage, Freeboard, and Subdivision) Rule¹; or

¹ Draft Rule Part consulted on in 2025.

- (b) the freeboard requirements of Part 3B: Maritime (Design, Construction, and Equipment – Stability, Drainage, Freeboard, and Subdivision) Rule, as the case may be; or
- (c) the seating requirements in clause 2.4; or
- (d) the access, escape, and evacuation requirements in Section 3.

Appendix 2: Codes of practice and official standards

FTP Code means the *International Code for Application of Fire Test Procedures, 2010*, adopted by IMO Resolution MSC.307(88).

NZS means *New Zealand Standard*, in the following:

NZS 4121: 2001 – *Design for Access and Mobility – Buildings and associated facilities*

NZS 5823: 1989 and 2005 – *Specifications for buoyancy aids and marine safety harnesses and lines*

ISO means the *International Organization for Standardization* in the following:

ISO 24409-1:2020: *Ships and marine technology – Design, location and use of shipboard safety signs, fire control plan signs, safety notices and safety markings*

AS/NZS means joint *Australian and New Zealand Standard*, in the following:

AS/NZS 1172.4:2019 - *Sanitary plumbing products, Part 4: Washbasins*

Accessible Signage Guidelines means *Blind Low Vision NZ, Accessible Signage Guidelines: Braille, Tactile and Clear Print, Fifth Edition (2018)*

