**1974/171**

# THE SHIPPING (PILOT LADDERS) RULES 1974

DENIS BLUNDELL, Governor-General

ORDER IN COUNCIL

At the Government House at Wellington this 1st day of July 1974

Present:

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL

PURSUANT to the Shipping and Seamen Act 1952, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following rules.

## RULES

**1. Title and commencement**—(1) These rules may be cited as the Shipping (Pilot Ladders) Rules 1974.

(2) These rules shall come into force on the 1st day of August 1974.

**2. Application of rules**—These rules apply to—

(a) New Zealand ships:

(b) Other ships while they are within, approaching, or leaving any port in New Zealand.

**3. Provision of pilot ladders**—(1) Every ship which requires or may require the services of a pilot during the course of its voyages shall be provided with a pilot ladder, which is capable of reaching sea level under all normal conditions of draught and trim and is constructed in accordance with the provisions of the First Schedule to these rules.

(2) The pilot ladder shall be maintained in good order, shall be kept clean, and shall be used only for the embarkation and disembarkation of pilots and officials having business aboard the ship while the ship is arriving at or leaving a port.

(3) If the pilot ladder is being used, it shall be under the direct supervision of a responsible officer of the ship, who shall ensure that all the provisions of these rules are complied with and shall indicate to the pilot or official intending to use the pilot ladder when it is safe for him to do so.

(4) The pilot ladder shall be in one continuous length and shall contain no joins of any sort. Repairs shall not exceed those specified in the First Schedule to these rules.

(5) The length of any pilot ladder shall not exceed 9 metres. In any ship where the distance between the waterline and the point of access to the ship exceeds 9 metres, access to the ship shall be by a power-operated pilot hoist which is approved by a Surveyor and complies with the Second Schedule to these rules or by some other equally safe and convenient means approved by a Surveyor:

Provided that whenever a pilot hoist is being used there shall be available adjacent to the hoist a pilot ladder which for this purpose must be of sufficient length to reach the water line.

(6) Provision shall be made to enable the pilot ladder to be rigged on each side of the ship in such a position that—

(a) It is well clear of any possible discharges and as far as possible amidships; and

(b) Each step rests firmly against the ship's side.

(7) The pilot ladder shall be properly secured to eyes which are welded to the deck.

(8) Access to the deck from the head of the pilot ladder shall be provided on each side of the ship, and shall be by one of the following methods:

(a) A bulwark door or entry port in the ship's side fitted with handholds rigidly attached on each side of the opening. If the width of the opening exceeds 800 mm, stanchions complying with subclause (9) of this rule shall be fitted instead of the handholds; or

(b) A removable section of ship's side rail or gate. If the width of the opening exceeds 800 mm, stanchions complying with subclause (9) of this rule shall be fitted; or

(c) A bulwark ladder securely fastened to the ship and stanchions complying with subclause (9) of this rule.

(9) The stanchions required by subclause (8) of this rule shall have a minimum diameter of 40 mm. They shall be placed one on each side of the pilot ladder so that the distance between them is not less than 700 mm and not greater than 800 mm. They shall be rigidly attached to the ship and shall have a minimum height of 1.2 metres above the head of the pilot ladder. The top of each stanchion shall be fitted with an eye of sufficient diameter to enable the manrope to be passed through it.

(10) Whenever normal access between the pilot ladder and the navigating bridge is obstructed by deck cargo, alternative access shall be provided by means of properly constructed and fenced gangways and ladders. A clear deck space at least 1.2 metres square shall always be maintained in way of the pilot ladder. Where the provision of a clear deck space is not consistent with the principles of good stowage, alternative arrangements to those prescribed in subclauses (7) and (8) of this rule shall be allowed, subject to the following provisions:

(a) The pilot ladder shall be firmly attached to the ship; and

(b) The pilot ladder shall hang as nearly as possible vertically throughout its length; and

(c) All other provisions of these rules shall be complied with.

(11) A manrope of not less than 20 mm diameter shall be provided on each side of the ladder, and shall be firmly secured to the ship.

(12) During the hours of darkness the pilot ladder and the access to the deck shall be effectively illuminated.

(13) The following shall be provided adjacent to the pilot ladder whenever it is in use:

(a) A lifebuoy, which during the hours of darkness shall be fitted with a self-igniting light; and

(b) A light line of sufficient length to reach the water.

**4. Unsafe pilot ladder**—Whenever a pilot or other person is required to board or leave a ship by means of a pilot ladder which does not comply with the provisions of these rules, he shall inform the master and the Harbourmaster, and shall not attempt to use the pilot ladder until the deficiencies have been made good. A report of each such case shall be forwarded by the Harbourmaster to the Director, Marine Division of the Ministry of Transport.

**5. Revocation**—The Shipping (Pilot Ladders) Rules 1968* are hereby revoked.

*S.R. 1968/74

## SCHEDULES

### FIRST SCHEDULE

CONSTRUCTION OF PILOT LADDERS

1. Every pilot ladder shall comply with the following requirements:

(a) It shall have the form and dimensions indicated in the following figure 1:

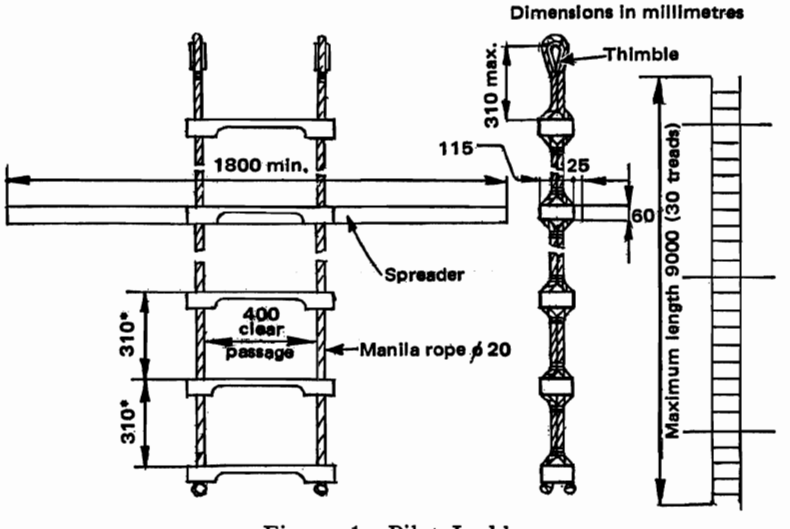


Figure 1—Pilot Ladder

FIRST SCHEDULE—*continued*

(b) Spreaders shall be made in one piece, and shall be securely attached to the back of the tread. A spreader shall be fitted to the fifth tread from the bottom and to every ninth tread measured upwards from the fifth tread.

(c) Treads, spreaders, and repair treads shall be constructed in one piece from hardwood or other material having equivalent properties, and shall be free from knots. The upper surface of each tread shall be suitably treated to give an effective non-slip surface. This may be by means of a number of crossed grooves having a maximum depth of 5 mm, but in this case the ladder shall not be painted. Treads and repair treads shall have the form and dimensions indicated in figures 2 and 3, respectively. The 4 lowest treads of the pilot ladder may be made of rubber of sufficient strength and stiffness, and shall be of the same shape and dimensions as the wooden treads.

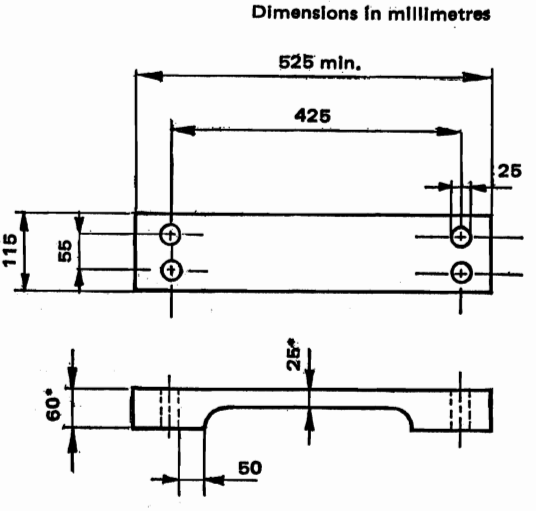


Figure 2—Tread

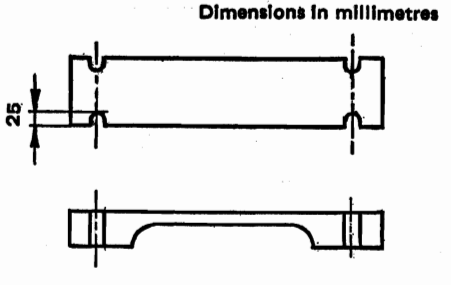


Figure 3—Repair Tread
(For other dimensions, see Figure 2)

FIRST SCHEDULE—*continued*

(d) Ropes shall be of manila and shall not be covered. The side ropes shall have a diameter of 20 mm. Every side rope shall be one continuous length, and shall be knotted at each end below the lowest tread. A galvanised thimble shall be seized into the top of the loop (see figure 1). The side ropes shall be seized together as closely as possible above and below each tread.

(e) The pilot ladder shall be secured to the metal eyes provided for the purpose on the ship's deck by means of manila ropes of 26 mm diameter of adequate length. These ropes shall be spliced into the thimbles of the pilot ladder.

(f) Repairs to pilot ladders shall be made to the treads only. The repair treads shall have the form and dimensions indicated in figure 3, and not more than 2 such treads shall be used in any pilot ladder. Repair treads shall be replaced by normal treads as soon as practicable. Damage to any other part of the pilot ladder or its associated equipment shall be made good in a manner conforming with the provisions of these rules before it is next put into use.

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## SECOND SCHEDULE

PERFORMANCE STANDARDS FOR MECHANICAL PILOT HOISTS

1. *General*—(1) Mechanical pilot hoists and ancillary equipment shall be of such design and construction as to ensure that the pilot can be embarked and disembarked in a safe manner. The hoist shall be used solely for the embarkation and disembarkation of personnel.

(2) The working load shall be the sum of the weight of the ladder and falls in the fully lowered condition and the maximum number of persons which the hoist is designed to carry, the weight of each person being taken as 150 kg. The working load shall be permanently marked on the hoist.

(3) Every pilot hoist shall be of such construction that when operating under the defined working load each component shall have an adequate factor of safety, having regard to the material used, the method of construction, and the nature of its duty.

(4) In selecting the materials of construction, due regard shall be paid to the conditions under which the hoist will be required to operate.

(5) The pilot hoist shall be located within the parallel body length of the ship and clear of all discharges.

(6) The operator shall be able to control the hoist when he is in a standing position and looking over the ship's side for the purpose of observing the hoist, even in its lowest position.

(7) The manufacturer of the pilot hoist shall supply with each installation an approved maintenance manual, together with a maintenance log. Each installation shall be kept in good order and maintained in accordance with the instructions of the manual. All maintenance and repairs of the installation shall be recorded in the log.

2. *Construction*—The hoist shall generally consist of the following 3 main parts, but hoists of other equally efficient construction may be considered:

SECOND SCHEDULE—*continued*

(a) A mechanical powered appliance together with means for a safe passage from the hoist to the deck; and
(b) Two separate falls; and
(c) A ladder consisting of 2 parts:
(i) A rigid upper part for the transportation of the pilot upwards or downwards; and
(ii) A lower part consisting of a short length of pilot ladder, which enables the pilot to climb from the pilot launch to the upper part of the hoist.

3. *Mechanical powered appliance*—(1) The source of power for the winches may be hydraulic or pneumatic, or, except in the case of ships carrying inflammable cargoes in bulk, electrical. In the case of a pneumatic system, an exclusive air supply shall be provided with arrangements to control its quality. All systems shall be capable of efficient operation under the conditions of vibration, humidity, and change of temperature likely to be experienced in the vessel in which they are installed.

(2) The design of the winch shall include a brake or other equally effective arrangement such as a properly constructed worm drive, which is capable of supporting the working load in the event of power failure.

(3) Efficient hand gear shall be provided to lower or recover the pilot at a reasonable speed in the event of power failure. The brake or other arrangement specified in subclause (2) of this clause shall be capable of supporting the working load when the hand gear is in use.

(4) Crank handles provided for manual operation shall, when engaged, be interlocked so that the power supply is automatically cut off.

(5) Hoists shall be fitted with safety devices to automatically cut off the power supply before the ladder comes against any stop to avoid overstressing the falls or other parts of the hoist. In the case of hoists operated by pneumatic power, the safety cut-out device may be omitted, provided the maximum torque available from the air motor cannot result in overstressing of the falls or other parts of the hoist.

(6) All hoist controls shall incorporate an emergency stop to cut off the power supply.

(7) The winch controls shall be clearly and durably marked to indicate the action to "Hoist", "Stop", and "Lower". The movement of these controls shall correspond with the movement of the hoist, and shall return to the stop-position when released.

(8) Efficient arrangements shall be provided to ensure that the falls wind evenly onto the winch-drums.

(9) Pilot hoists shall be securely attached to the structure of the ship. Proper and strong attachment points shall be provided for hoists of the portable type on each side of the ship. Attachment of the pilot hoist shall not be by means of the ship's side rails.

(10) The winch shall be capable of hoisting or lowering the pilot at a speed of between 15 and 30 metres per minute.

(11) There shall be safe means of access between the top of the hoist and the deck. Such access shall be gained directly by a platform securely guarded by handrails.

(12) Any electrical appliance associated with the ladder section of the hoist shall be operated at a voltage not exceeding 25 volts.

SECOND SCHEDULE—*continued*

4. *Falls*—(1) Two separate wire rope falls shall be used, made of flexible steel of adequate strength and resistant to corrosion in a salt-laden atmosphere.

(2) Wire ropes shall be securely attached to the winch-drums and the ladder. These attachments shall be capable of withstanding a proof load of not less than 2.2 times the load on such attachments. The falls shall be maintained at a sufficient relative distance from one another.

(3) The wire rope falls shall be of sufficient length to allow for all conditions of freeboard encountered in service and to retain at least 3 turns on the winch-drums with the hoist in its lowest position.

5. *Ladder section*—The ladder section shall comprise a rigid and a flexible part, complying with the following requirements:

(a) The rigid ladder shall be not less that 2.50 metres in length, and shall be equipped in such a way that the pilot can maintain a safe position while being hoisted or lowered. The ladder shall be provided with—

(i) Suitable protection against extremes of temperature to provide safe handholds and fitted with non-skid steps; and

(ii) A spreader at the lower end of not less than 1.80 metres. The ends of the spreader shall be provided with rollers of adequate size which will roll freely on the ship's side during the whole operation of embarking or disembarking; and

(iii) An effective guard ring, suitably padded, so positioned as to provide physical support for the pilot without hampering his movements; and

(iv) Adequate means for communication between the pilot and the operator and the responsible officer who supervises the embarkation or disembarkation of the pilot; and

(b) Below the rigid ladder mentioned in paragraph (a) of this clause, a section of pilot ladder comprising 8 steps shall be provided, constructed in accordance with the requirements of the First Schedule to these rules; and

(c) The steps of the flexible pilot ladder and those of the rigid ladder shall be in the same vertical line, of the same width, spaced vertically equidistant, and placed as close as practicable to the ship's side. The handholds of both parts of the ladder shall be aligned as closely as possible.

6. *Operational aspects*—(1) Rigging and testing of the hoist and the embarkation and disembarkation of a pilot shall be supervised by a responsible officer of the ship. Personnel engaged in rigging and operating the hoist shall be instructed in the safe procedures to be adopted, and the equipment shall be tested prior to the embarkation or disembarkation of a pilot.

(2) Lighting shall be provided at night such that the pilot hoist overside, its controls, and the position where the pilot boards the ship shall be adequately lit.

(3) An adequate protected stowage position shall be provided for the portable hoist. In very cold weather to avoid the danger of ice formation, the portable hoist shall not be rigged until use is imminent.

(4) The assembly and operation of the pilot hoist shall form part of the ship's routine drills.

SECOND SCHEDULE—*continued*

7. *Testing*—(1) Every new pilot hoist shall be subjected to an overload test of 2.2 times the working load. During this test the load shall be raised through a distance of not less than 5 metres.

(2) An operating test of 10 percent overload shall be carried out after installation on board the ship to check the attachment and performance of the hoist to the satisfaction of a Surveyor of Ships.

(3) Subsequent examinations of the hoists under working conditions shall be made at each survey for the renewal of the ship's safety-equipment certificate.

P. G. MILLEN,
Clerk of the Executive Council.

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EXPLANATORY NOTE

*This note is not part of the rules, but is intended to indicate their general effect.*

These rules replace the Shipping (Pilot Ladders) Rules 1968.

They apply to all New Zealand ships and to all other ships while they are within, approaching, or leaving any port in New Zealand.

Every ship which requires or may require the services of a pilot is to be provided with a pilot ladder that is capable of reaching sea level under all normal conditions of draught and trim and complies with the requirements of the rules. The provisions of the 1968 rules classifying ships for this purpose are omitted.

The rules require a power-operated pilot hoist complying with the requirements of the Second Schedule to be provided if the distance between the waterline and the point of access to the ship exceeds 9 metres.

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Issued under the authority of the Regulations Act 1936.
Date of notification in *Gazette*: 4 July 1974.
These rules are administered in the Ministry of Transport.