§ 401.7 Fenders.

(a) Where any structural part of a vessel protrudes so as to endanger Seaway installations, the vessel shall be equipped with permanent fenders—

(1) That are made of steel, hardwood, or teflon or a combination of two or all of these materials, are of a thickness not exceeding 15 centimeters, with well tapered ends, and are located along the hull, close to the main deck level; and

(2) On special application, portable fenders, other than rope hawsers, may be allowed for a single transit if the portable fenders are—

(i) Made of a material that will float; and

(ii) Securely fastened and suspended from the vessel in a horizontal position by a steel cable or a fiber rope in such a way that they can be raised or lowered in a manner that does not damage Seaway installations.

(b) Tires shall not be used as fenders.

(c) On special application, ships of unusual design may be permitted to utilize temporary or permanent fenders not greater than 30 cm in thickness.

[61 FR 19551, May 2, 1996, as amended at 70 FR 12970, Mar. 17, 2005]

§ 401.8 Landing booms.

(a) Vessels of more than 50 m in overall length shall be equipped with at least one adequate landing boom on each side.

(b) Vessels' crews shall be adequately trained in the use of landing booms.

(c) Vessels not equipped with landing booms must use the Seaway's tie-up service at approach walls.

[70 FR 12970, Mar. 17, 2005]

§ 401.9 Radiotelephone equipment.

(a) Self-propelled vessels, other than pleasure craft of less than 20.0 m in overall length, shall be equipped with VHF (very high frequency) radiotelephone equipment.

(b) The radio transmitters on a vessel shall:

(1) Have sufficient power output to enable the vessel to communicate with Seaway stations from a distance of 48 km; and

(2) Be fitted to operate from the conning position in the wheelhouse and to communicate on channels 11, 12, 13, 14, 17 and 66a.

(68 Stat. 93–96, 33 U.S.C. 981–990, as amended and secs. 4, 5, 6, 7, 8, 12 and 13 of sec. 2 of Pub. L. 95–474, 92 Stat. 1471)

[39 FR 10900, Mar. 22, 1974, as amended at 40 FR 11721, Mar. 13, 1975; 47 FR 51121, Nov. 12, 1982; 48 FR 20690, May 9, 1983; 61 FR 19551, May 2, 1996; 70 FR 12970, Mar. 17, 2005]

§ 401.10 Mooring lines.

(a) Mooring lines shall:

(1) Be of a uniform thickness throughout their length;

(2) Have a diameter not greater than 28mm;

(3) Be fitted with a hand spliced eye or Flemish type mechanical spliced eye not less than 2.4 m long;

(4) Have sufficient strength to check the vessel; and

(5) Be arranged so that they may be led to either side of the vessel as required.

(6) Be certified and a test certificate for each mooring line shall be available on board for inspection.

(b) Unless otherwise permitted by an officer, only wire rope mooring lines with a breaking strength that complies with the minimum specifications set out in the table in this section shall be used for securing a vessel in lock chambers.

(c) Synthetic lines may be used for mooring at approach walls, tie-up walls and docks within the Seaway.

(d) Notwithstanding paragraphs (a) through (c) of this section, nylon line is not permitted.

TABLE

Overall length of vessels	Length of mooring lines (m)	Breaking strength (M/T)
40 m or more but not more than 60 m	110	10
More than 60 m but not more than 90 m	110	15
More than 90 m but not more than 120 m	110	20
More than 120 m but not more than 180 m	110	28
More than 180 m but not more than 222.5 m	110	35

(68 Stat. 93–96, 33 U.S.C. 981–990, as amended and sec. 4, 5, 6, 7, 8, 12 and 13 of sec. 2 of Pub. L. 95–474, 92 Stat. 1471)

[39 FR 10900, Mar. 22, 1974, as amended at 47 FR 51121, Nov. 12, 1982; 48 FR 20691, May 9, 1983; 48 FR 22545, May 19, 1983; 61 FR 19551, May 2, 1996; 65 FR 52913, Aug. 31, 2000; 70 FR 12970, Mar. 17, 2005]

§ 401.11 Fairleads.

Mooring lines, and synthetic hawsers where permitted, shall:

(a) Be led at the vessel's side through a type of fairlead acceptable to the Corporation and the Authority;

(b) Pass through not more than three inboard rollers that are fixed in place and equipped with horns to ensure that leins will not slip off when slackened and provided with free-running sheaves or rollers; and

(c) Where the fairleads are mounted flush with the hull, be permanently fendered to prevent the lines from being pinched between the vessel and a wall.

[39 FR 10900, Mar. 22, 1974, as amended at 70 FR 12971, Mar. 17, 2005]

§ 401.12 Minimum requirements—mooring lines and fairleads.

(a) Minimum requirements in respect of mooring lines, which shall be available for securing on either side of the vessel, winches, and the location of fairleads on vessels are as follows:

(1) Vessels of 80 m or less in overall length shall have at least three synthetic hawsers, two of which shall be independently power operated and one of which shall be hand held:

(i) One synthetic hawser shall lead forward from the break of the bow and one synthetic hawser shall lead astern from the quarter and be independently power operated by winches, capstans or windlasses and lead through closed chocks or fairleads acceptable to the Manager and the Corporation; and

(ii) One synthetic hawser shall be hand held and lead astern from the break of the bow through closed chocks to suitable mooring bitts on deck.

(2) Vessels of more than 80 m but not more than 100 m in overall length shall have four synthetic hawsers, of which three shall be independently power operated by winches, capstans or windlasses and one being hand held. All lines shall be led through closed chocks or fairleads acceptable to the Manager and the Corporation, of which three mooring lines:

(i) One shall lead forward and one shall lead astern from the break of the bow and one lead astern from the quarter and all three lines shall be independently power operated; and

(ii) One shall lead forward from the quarter and be hand held;

(3) Vessels of more than 100 m but not more than 120 m in overall length shall have four mooring lines or synthetic hawsers independently power operated by winches, capstan or windlasses as follows:

(i) One mooring line shall lead forward and one mooring line shall lead astern from the break of the bow and shall be independently power operated by the main drums of adequate power operated winches, and

(ii) One synthetic hawser shall lead forward and one synthetic hawser shall lead astern from the quarter and shall be independently power operated by either winches, capstan or windlasses;

(4) Vessels of more than 120 m in overall length shall have four mooring lines, two of which shall lead from the break of the bow and two of which shall lead from the quarter, and;

(i) All shall be independently power operated by the main drums of adequate power operated winches and not by capstans or windlasses; and

(ii) All shall be led through a type of fairlead acceptable to the Corporation and the Manager.

(5) Every vessel shall have a minimum of two spare mooring wires available and ready for immediate use.

(b) The following table sets out the requirements for the location of fairleads for ships of 80 m or more in overall length:

TABLE

Overall length of ships	For mooring lines Nos. 1 and 2	For mooring lines Nos. 3 and 4
80 m or more but not more than 120 m.	Between 12 m & 30 m from the stem.	Between 15 m & 35 from the stern.
More than 120 m but not more than 150 m.	Between 12 m & 35 m from the stem.	Between 15 m & 40 from the stern.
More than 150 m but not more than 180 m.	Between 15 m & 40 m from the stem.	Between 20 m & 45 from the stern.