which the bulbous bow projects beyond the stem.


§ 401.7 Fenders.

(a) Where any structural part of a vessel protrudes so as to endanger Seaway installations, the vessel shall be equipped with only horizontal 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.


§ 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 or not using landing booms must use the Seaway’s tie-up service at approach walls using synthetic mooring lines only. Maximum of 4 lines will be handled by Seaway personnel and the service does not include let go service.


§ 401.9 Radio telephone and navigation 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) radio-telephone 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.

(c) Gyro compass error greater than 2 degrees must be serviced prior to transiting the Seaway, and if noted during a Seaway transit, it must be reported to the nearest Seaway station and the gyro compass must be serviced at the first opportunity.

(d) When magnetic compass error is greater than 5 degrees, the vessel is required to have the compass swung and a new deviation card produced, unless the “record of deviations” has been properly maintained and verified.


§ 401.10 Mooring lines.

(a) Mooring lines shall:

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

(2) Have a diameter not greater than 28 mm for wire line and not greater than 64 mm for approved synthetic lines;

(3) Be fitted with a hand spliced eye or Flemish type mechanical spliced eye of not less than 2.4 m long for wire lines and 1.8 m long spliced eye for approved synthetic lines;
§ 401.12 Minimum requirements—mooring lines and fairleads.

(a) Unless otherwise permitted by the officer the minimum requirements in respect of mooring lines which shall be available for securing on either side of the vessels, winches and the location of fairleads on vessels are as follows:

(1) Vessels of more than 100 m but not more than 150 m in overall length shall have three mooring lines—wires or synthetic hawsers, which shall be independently power operated by winches, capstans or windlasses. All lines shall be led through closed chocks or fairleads acceptable to the Manager and the Corporation.

(i) One shall lead forward and one shall lead astern from the break of the bow and one lead astern from the quarter.

(ii) One synthetic hawser may be hand held or if wire line is used shall be powered. The line shall lead astern from the break of the bow through a closed chock to suitable bits on deck for synthetic line or led from a capstan, winch drum or windlass to an approved fairlead for a wire line.

(2) Vessels of more than 150 m in overall length shall have four mooring

Table

<table>
<thead>
<tr>
<th>Overall length of ships</th>
<th>Length of mooring line</th>
<th>Breaking strength</th>
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<tbody>
<tr>
<td>40 m or more but not more than 60 m</td>
<td>110 m</td>
<td>10 MT</td>
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<tr>
<td>More than 60 m but not more than 90 m</td>
<td>110 m</td>
<td>15 MT</td>
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<tr>
<td>More than 90 m but not more than 120 m</td>
<td>110 m</td>
<td>20 MT</td>
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<tr>
<td>More than 120 m but not more than 190 m</td>
<td>110 m</td>
<td>28 MT</td>
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<tr>
<td>More than 190 m but not more than 222.5 m</td>
<td>110 m</td>
<td>35 MT</td>
</tr>
</tbody>
</table>

Elongation of synthetic lines shall not exceed 20%

[88 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. 95-747, 92 Stat. 1471]

[a] All references are to the United States Code (USC) and Federal Register (FR).