§ 42.20–70
shall be obtained by linear interpolation. The maximum deduction for excess sheer shall be at the rate of 1\(\frac{1}{2}\) inches per 100 feet of length.


§ 42.20–70 Minimum bow height.

(a) The bow height defined as the vertical distance at the forward perpendicular between the waterline corresponding to the assigned summer freeboard and the designed trim and the top of the exposed deck at side shall be not less than:

(1) For vessels below 820 feet in length,

\[0.672L\left[1-(L^{1/1640})\right]\left[1.36/(C_b+0.68)\right]\] inches;

where:

- \(L\) is the length of the vessel in feet.
- \(C_b\) is the block coefficient which is to be taken as not less than 0.68.

(2) For vessels of 820 feet and above in length,

\[275.6\left[1.36/(C_b+0.68)\right]\] inches;

where:

- \(C_b\) is the block coefficient which is to be taken as not less than 0.68.

(b) Where the bow height required in paragraph (a) of this section is obtained by sheer, the sheer shall extend for at least 15 percent of the length of the vessel measured from the forward perpendicular. Where it is obtained by fitting a superstructure, such superstructure shall extend from the stem to a point at least 0.07\(L\) abaft the forward perpendicular, and it shall comply with the following requirements:

(1) For vessels not over 328 feet in length it shall be enclosed as defined in §42.13–15(j); and,

(2) For vessels over 328 feet in length it need not comply with §42.13–15(j) but shall be fitted with closing appliances to the satisfaction of the assigning authority.

(c) Vessels which, to suit exceptional operational requirements, cannot meet the requirements of paragraphs (a) and (b) of this section may be given special consideration by the assigning authority.


§ 42.20–75 Minimum freeboards.

(a) Summer freeboard. (1) The minimum freeboard in summer must be the freeboard derived from the tables in §§42.20–15 as modified by the corrections in §§42.20–3 and 42.20–5, as applicable, and §§42.20–20, 42.20–25, 42.20–30, 42.20–35, 42.20–60, 42.20–65 and, if applicable, §42.20–70.

(2) The freeboard in salt water, as calculated in accordance with paragraph (a)(1) of this section, but without the correction for deck line, as provided by §42.20–35, shall not be less than 2 inches. For vessels having in position 1 hatchways with covers which do not comply with the requirements of §§42.15–25(d)(1), 42.15–30, or 42.15–80, the freeboard shall be not less than 6 inches.

(b) Tropical freeboard. (1) The minimum tropical freeboard shall be the freeboard obtained by a deduction from the summer freeboard of one forty-eighth of the summer draft measured from the top of the keel to the center of the ring of the load line mark.

(2) The freeboard in salt water, as calculated in accordance with paragraph (b)(1) of this section, but without the correction for deck line, as provided by §42.20–35, shall not be less than 2 inches. For vessels having in position 1 hatchways with covers which do not comply with the requirements of §§42.15–25(d)(1), 42.15–30, or 42.15–80, the freeboard shall be not less than 6 inches.

(c) Winter freeboard. (1) The minimum winter freeboard shall be the freeboard obtained by an addition to the summer freeboard of one forty-eighth of summer draft, measured from the top of the keel to the center of the ring of the load line mark.

(d) Winter North Atlantic freeboard. (1) The minimum freeboard for vessels of not more than 328 feet in length which enter any part of the North Atlantic defined in §42.30–35 during the winter seasonal period shall be the winter
freeboard plus 2 inches. For other vessels the winter North Atlantic
freeboard shall be the winter freeboard.

(e) **Fresh water freeboard.** (1) The min-
imum freeboard in fresh water of unit
density shall be obtained by deducting
from the minimum freeboard in salt
water:

\[(\Delta/40 \ T) \text{ inches}\]

where:
\(\Delta\) = displacement in salt water in tons at the
summer load waterline; and, 
\(T\) = tons per inch immersion in salt water at
the summer load waterline.

(2) Where the displacement at the
summer load waterline cannot be cer-
tified, the deduction shall be one forty-
eighth of summer draft, measured from
the top of the keel to the center of the
ring of the load line mark.

[CGFR 68–60, 33 FR 10066, July 12, 1968, as
amended by CGFR 68–126, 34 FR 9016, June 5,

Subpart 42.25—Special Require-
ments for Vessels Assigned
Timber Freeboards

§ 42.25–15

Cost Guard, DHS

§ 42.25–15

**Application of this subpart.**

(a) The provisions of this subpart
42.25 apply only to vessels to which
timber load lines are assigned.

[CGFR 68–60, 33 FR 10067, July 12, 1968]

§ 42.25–5

**Definitions of terms used in
this subpart.**

(a) **Timber deck cargo.** The term “tim-
ber deck cargo” means a cargo of tim-
ber carried on an uncovered part of a
freeboard or superstructure deck. The
term does not include wood pulp or
similar cargo.

(b) **Timber load line.** A timber deck
cargo may be regarded as giving a ves-
able certain additional buoyancy and a
greater degree of protection against
the sea. For that reason, vessels car-
rying a timber deck cargo may be
granted a reduction of freeboard cal-
culated according to the provisions of
§ 42.25–20 and marked on the vessel’s
side in accordance with the provisions of
§ 42.13–30(c) and (d). However, in
order that such special freeboard may
be granted and used, the timber deck
cargo shall comply with certain condi-
tions which are laid out in § 42.25–15,
and the vessel itself shall also comply
with certain conditions relating to its
construction which are set out in
§ 42.25–10.

[CGFR 68–60, 33 FR 10067, July 12, 1968, as
amended by CGFR 68–126, 34 FR 9016, June 5,
1969]

§ 42.25–10 **Construction of vessel.**

(a) **Superstructure.** (1) Vessels, shall
have a forecastle of at least standard
height and a length of at least 0.07L. In
addition, if the vessel is less than 328
feet in length, a poop of at least stand-
ard height, or a raised quarter deck
with either a deckhouse or a strong
steel hood of at least the same total
height shall be fitted aft.

(b) **Double bottom tanks.** (1) Double
bottom tanks where fitted within the
midship half length of the vessel shall
have adequate watertight longitudinal
subdivision.

(c) **Bulwarks.** (1) The vessel shall be
fitted either with permanent bulwarks
at least 39\(\frac{1}{2}\) inches in height, specially
stiffened on the upper edge and sup-
ported by strong bulwark stays at-
tached to the deck and provided with
necessary freeing ports, or with effi-
cient rails of the same height and of
specially strong construction.

[CGFR 68–60, 33 FR 10067, July 12, 1968, as
amended by CGFR 68–126, 34 FR 9016, June 5,
1969]

§ 42.25–15 **Stowage.**

(a) **General.** (1) Openings in the
weather deck over which cargo is
stowed shall be securely closed and
battened down. The ventilators shall be
efficiently protected.

(2) Timber deck cargo shall extend
over at least the entire available
length which is the total length of the
well or wells between superstructures.
Where there is no limiting super-
structure at the after end, the timber
shall extend at least to the after end of
the aftermost hatchway. The timber
shall be stowed as solidly as possible,
to at least the standard height of a su-
perstructure other than a raised quar-
ter deck.

(3) On a vessel within a seasonal win-
ter zone in winter, the height of the
deck cargo above the weather deck
shall not exceed one-third of the ex-
treme breadth of the vessel.