

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Port of Survey

(Type of Superstructures.)

Date of Survey

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Name of Surveyor

Particulars of Classification

Moulded Dimensions: Length

Breadth

Depth

Moulded displacement at moulded draught = 85 per cent. of moulded depth tons

Coefficient of fineness for use with Tables

75

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded depth

(a) Where D is greater than Table depth
(D - Table depth) R =

+ 3.63

Tringer plate

(b) Where D is less than Table depth (if allowed)
(Table depth - D) R =

Heating on exposed deck

 $T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) =

18.03

If restricted by superstructures

Moulded Breadth (B)

Standard Round of Beam = $\frac{B \times 12}{50} =$

Ship's Round of Beam =

Difference

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = - .02''$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
Trunk enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total					

Standard Height of Superstructure

" " R.Q.D.

Deduction for complete superstructure 30.10

Percentage covered $\frac{S}{L} = 91.8$ " " $\frac{S_1}{L} = 83.3$ " " $\frac{E}{L} = 83.3$ Percentage from Table, Line A. Timber
(corrected for absence of forecastle (if required)) 89.56Percentage from Table, Line B.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $30.10 \times .8956 = 26.96''$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
P.		1				1	
from A.P.		4				4	
" "		2				2	
amidships		4				4	
from F.P.		2				2	
" "		4				4	
P.		1				1	
Total							

Mean actual sheer aft =
Mean standard sheer aft =Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = - .75''$

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 18.03

Summer freeboard = 1.15

Moulded draught (d) = 16.88

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 4.22 = 4¼

Addition for Winter North Atlantic Freeboard (if

required) = $\frac{d}{3} = 5.63 = 5¾$

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ =

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40 T}$ inches

= 4¼

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	3.63	-
Deduction for superstructures	-	26.96
Sheer correction	-	.75
Round of Beam correction	-	.02
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	5.72	-

9.35 27.73 - 18.38
Summer Freeboard = 13.69

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

Timber	Tropical Fresh Water Line above Centre of Disc	1½	Tropical Fresh Water Freeboard	0.54
"	Fresh Water Line " "	7¼	" Fresh Water " "	0.94
"	Tropical Line " "	7¼	" Tropical " "	0.94
"	Winter Line below " "	2¾	" Winter " "	1.72
"	Winter North Atlantic Line " "	6¼	" Winter North Atlantic " "	1.11