

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. \_\_\_\_\_  
(For London Office only.)

Computation of Freeboard for Steamer Sailing Ship, Tanker  
*Enquiry for St. Joseph's Steamer*  
*Assuming no bridge fitted*

Port of Survey \_\_\_\_\_

Date of Survey *1-2-35*

Name of Surveyor \_\_\_\_\_

Particulars of Classification *100M*  
*arcform*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

*Arcwear*

Moulded Dimensions: Length *360.0* Breadth \_\_\_\_\_ Depth \_\_\_\_\_

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

Coefficient of fineness for use with Tables \_\_\_\_\_

### Depth for Freeboard (D)

Moulded depth ... ..

Keel plate ... ..

Weathering on exposed deck

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

Depth for Freeboard (D) = *26.78*

### Depth correction

(a) Where D is greater than Table depth

$$(D - \text{Table depth}) R =$$

*+7.70*

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

$$(\text{Table depth} - D) R =$$

If restricted by superstructures

### Round of Beam correction

Moulded Breadth (B)

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

$$\text{Ship's Round of Beam} =$$

Difference

Restricted to

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{26}{4} \times 82.32 = -0.05$$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<i>33.08</i>	<i>33.08</i>	<i>7.50</i>	-	<i>33.08</i>
„ overhang ... ..					
R.Q.D. enclosed ... ..					
„ overhang ... ..					
Bridge enclosed... ..					
„ overhang aft ... ..					
„ overhang forward ... ..					
F'cle enclosed ... ..	<i>30.58</i>	<i>30.58</i>	<i>7.50</i>	-	<i>30.58</i>
„ overhang ... ..					
Trunk aft ... ..					
„ forward ... ..					
Tonnage opening aft ... ..					
„ „ forward ... ..					
Total ... ..	<i>63.66</i>	<i>63.66</i>			<i>63.66</i>

Standard Height of Superstructure *7.10*

„ „ R.Q.D. *✓*

Deduction for complete superstructure *39.33*

$$\text{Percentage covered } \frac{S}{L} = \frac{17.68}{17.68} =$$

$$\frac{S_1}{L} = \frac{17.68}{17.68} =$$

$$\frac{E}{L} = \frac{17.68}{17.68} =$$

Percentage from Table, Line A. *8.84*

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

$$\text{Deduction} = 39.33 \times 0.884 = -3.48$$

### SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
... ..		1				1	
from A.P. ... ..		4				4	
„ ... ..		2				2	
amidships ... ..		4				4	
from F.P. ... ..		2				2	
„ ... ..		4				4	
... ..		1				1	
Total ... ..			<i>414.00</i>				<i>463.50</i>

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 „ = *311.0*

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) = \frac{49.50}{18} \left( 75 - \frac{0.884}{0.6616} \right) = -1.85$$

If limited on account of midship superstructure. *Yes. Nil.*

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 = *26.78*

Summer freeboard = *5.37*

Moulded draught (d) = *21.41*

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = *5.35 = 5¼*

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ =

Tons per inch immersion at summer load water line

T =

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

=

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... ..

Deduction for superstructures ... ..

Sheer correction ... ..

Round of Beam correction ... ..

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. ... ..

	+	-
Depth Correction	<i>7.70</i>	
Deduction for superstructures		<i>3.48</i>
Sheer correction		<i>.05</i>
Round of Beam correction		
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	<i>7.70</i>	<i>3.53</i>

Summer Freeboard = *64.53*

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

Tropical Fresh Water Line above Centre of Disc ... ..

Fresh Water Line

Tropical Line

Winter Line

Winter North Atlantic Line

Tropical Fresh Water Freeboard ... ..

Fresh Water

Tropical

Winter

Winter North Atlantic

*5' 4½*  
*4' 5¾*  
*4' 11*  
*4' 11½*  
*5' 9¾*

Lloyd's Register  
Foundation