

TIMBER FREEBOARDS.

Rpt. C.11.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. **27280**
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having POOP, BRIDGE & FORECASTLE

(Type of Superstructures.)

Ship's Name <u>S.S. MIRAFLORES</u>	Nationality and Port of Registry <u>Spanish Bilbao</u>	Official Number	Gross Tonnage <u>3209</u>	Date of Build <u>1919-1</u>
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Moulded Dimensions: Length 330.66 ✓ Breadth 46.50 ✓ Depth 25.50 ✓
Moulded displacement at moulded draught = 85 per cent. of moulded depth 7247 ✓ tons
Coefficient of fineness for use with Tables .761 ✓

Port of Survey _____
Date of Survey 3.5.31
Name of Surveyor _____
Particulars of Classification +100 A1

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth	(a) Where D is greater than Table depth (D - Table depth) R = <u>+8.88</u> ✓	Moulded Breadth (B) _____ Standard Round of Beam = $\frac{B \times 12}{50} =$ _____ Ship's Round of Beam = _____
Stringer plate	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = _____	Difference _____ Restricted to _____
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ _____	If restricted by superstructures _____	Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <u>- .08</u> ✓
Depth for Freeboard (D) = <u>25.54</u> ✓		

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure _____
„ overhang						„ „ R.Q.D. _____
R.Q.D. enclosed						Deduction for complete superstructure <u>37.38</u> ✓
„ overhang						Percentage covered $\frac{S}{L} =$ _____
Bridge enclosed						„ „ $\frac{S_1}{L} =$ _____
„ overhang aft						„ „ $\frac{E}{L} =$ <u>48.54%</u> ✓
„ overhang forward						Percentage from Table, Line A: _____
Fore enclosed						(corrected for absence of forecastle (if required))
„ overhang						Percentage from Table, Line B: <u>68.33%</u> ✓
Trunk aft						(corrected for absence of forecastle (if required))
„ forward						Interpolation for bridge less than 2L (if required) ✓
Tonnage opening aft						Deduction = <u>37.38</u> x <u>.6833</u> = <u>-25.54</u> ✓
„ „ forward						
Total						

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product	
A.P.		1				1		Mean actual sheer aft = <u>Excess</u>
$\frac{1}{8}$ L from A.P.		4				4		Mean actual sheer forward = <u>Excess</u>
$\frac{3}{8}$ L „		2				2		Mean standard sheer forward _____
Amidships		4				4		Length of enclosed superstructure forward of amidships = <u>.156</u> ✓
$\frac{3}{8}$ L from F.P.		2				2		„ „ aft of „ = <u>.141</u> ✓
$\frac{1}{8}$ L „		4				4		
F.P.		1				1		
Total								

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ -2.05 ✓

If limited on account of midship superstructure. _____

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. _____

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Ft.
Depth to Freeboard Deck = 25.54
Summer freeboard = 2.95
Moulded draught (d) = 22.59

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.65 ✓
Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3}$ = 7.53 ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$ 7611
Tons per inch immersion at summer load water line
 $T =$ 30.4
Deduction = $\frac{\Delta}{40T}$ inches = 6.19 ✓

TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient

	+	-	
Depth Correction	<u>8.88</u> ✓		
Deduction for superstructures		<u>25.54</u> ✓	
Sheer correction		<u>2.05</u> ✓	
Round of Beam correction		<u>.08</u> ✓	
Correction for Thickness of Deck amidships			
Other corrections, scantlings, etc.			
	<u>8.88</u>	<u>27.67</u>	<u>-18.79</u> ✓
			Summer Freeboard = <u>35.44</u> ✓

TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—										35.44" = 900 ³ mm
Timber	Tropical Fresh Water Line above Centre of Disc	24.15 = 613mm	Timber	Tropical Fresh Water Freeboard	...	23.60 = 600 "				
"	Fresh Water Line	18.50 = 470 "	"	Fresh Water	...	29.25 = 743 "				
"	Tropical Line	17.96 = 456 "	"	Tropical	...	29.79 = 757 "				
"	Winter Line	4.78 = 121 "	"	Winter	...	42.97 = 1092 "				
"	Winter North Atlantic Line	5.63 = 143 "	"	Winter North Atlantic	...	53.38 = 1356 "				
"	Summer	12.31 = 313 "								

5m,3,32.

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not marked
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