

TIMBER

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, TANKER.)

Index No. **35672.**
(For London Office only).

Ship's Name "MIRAMAR"	Official Number	Nationality and Port of Registry <i>Swedish. Gothenburg.</i>	Gross Tonnage	Date of Build 1938.	Port of Survey <i>Thelsingborg.</i>
Moulded Dimensions: Length 44.905 M. Breadth 11.58 M. Depth 5.335					Date of Survey <i>28th May. 1938.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature <i>P. O. Sjogren.</i>
Coefficient of fineness for use with Tables .769.					Particulars of Classification 100 A1. <i>Strengthened for navigation in ice.</i> <i>(contemplated).</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 5.335	(a) Where D is greater than Table depth (D - Table depth) R = + 25 mm.	Moulded Breadth (B)
Stringer plate012	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck $\cdot T \left(\frac{L-S}{L} \right) =$ ✓	If restricted by superstructures ✓	Ship's Round of Beam =
Depth for Freeboard (D) = 5.347.		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) =$ negligible.

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					
Fore enclosed					
.. overhang					
Trunk aft					
.. forward					
Tonnage opening aft					
.. .. forward					
Total					

Standard Height of Superstructure **1847 mm.**
" " R.Q.D. **1243 mm.**
Deduction for complete superstructure **802 mm.**
Percentage covered $\frac{S}{L} =$ **88.84 ✓**
" " $\frac{S_1}{L} =$ **84.64 ✓**
" " $\frac{E}{L} =$ **83.59 ✓**
Percentage from Table, Line A. **TIMBER = 89.74 ✓**
(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)
Deduction = **802 × .8974 = 720 mm.**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.		1					1		
$\frac{1}{4}$ L from A.P.		4					4		
$\frac{2}{4}$ L "		2					2		
Amidships		4					4		
$\frac{3}{4}$ L from F.P.		2					2		
$\frac{1}{4}$ L "		4					4		
F.P.		1					1		
Total									

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ **-2 mm ✓**
If limited on account of midship superstructure **✓**

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
L

" " aft of " =

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

Ft.
Depth to Freeboard Deck = **5.347**
Summer freeboard = **.207**
Moulded draught (d) = **5.140**

Deduction for Tropical ~~freeboard~~ and addition for ~~Winter~~ freeboard = $\frac{d}{48} \times \text{mm} =$ **107 mm**

Addition for Winter ~~North Atlantic~~ Freeboard (if required) = $\frac{d}{36} =$ **143 mm.**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$ **3657**

Tons per inch immersion at summer load water line

T = **19.55**

Deduction = $\frac{\Delta}{40 T}$ inches = **4.68**
= **119 mm**

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~

Correction for coefficient $\frac{.769 + .68}{1.36} = \frac{1.449}{1.36}$

Depth Correction **25**

Deduction for superstructures **720**

Sheer correction **2**

Round of Beam correction **-**

Correction for Thickness of Deck amidships **-**

Other corrections, scantlings, etc. **-**

+	-
25	-
-	720
-	2
-	-
-	-
25	722

Summer Freeboard = **207 mm.**

848 mm.

904 mm.

57.38
2.6

- 697 mm.

TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck: **207 mm.**

TIMBER	Tropical Fresh Water Line above Centre of Disc	306 mm
"	Fresh Water Line	199
"	Tropical Line	187
"	Winter Line below	63
"	Winter North Atlantic Line	155

TIMBER	Tropical Fresh Water Freeboard	19
"	Fresh Water	88
"	Tropical	100
"	Winter	350
"	Winter North Atlantic	442