

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <u>Helsingborg</u>
having <u>R.Q.D., Bridge and Forecastle</u>					Date of Survey <u>26th & 27th Aug. 1932</u>
(Type of Superstructures.)					Name of Surveyor
Ship's Name <u>S/S. WALBORG</u>	Nationality and Port of Registry <u>Swedish</u> <u>Örebrohamm</u>	Official Number <u>2969</u>	Gross Tonnage <u>1483</u>	Date of Build <u>1896.11</u>	Particulars of Classification <u>*100 A1</u>
Moulded Dimensions: Length <u>77.72 M</u> Breadth <u>11.23 M</u> Depth <u>5.41 M</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					
Coefficient of fineness for use with Tables <u>787</u>					

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth	(a) Where D is greater than Table depth (D—Table depth) R =	Moulded Breadth (B)
Stringer plate	<u>+ 40</u>	Standard Round of Beam = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Ship's Round of Beam =
Depth for Freeboard (D) = <u>5.422</u>	If restricted by superstructures	Difference
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$ = <u>NIL</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>801</u>
" overhang						Percentage covered $\frac{S}{L}$ =
Bridge enclosed						" " $\frac{S_1}{L}$ =
" overhang aft						" " $\frac{E}{L}$ = <u>64.62</u>
" overhang forward						Percentage from Table, Line A.
F'cle enclosed						(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, <u>Line B.</u> <u>TIMBER</u> = <u>81.27</u>
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...						Deduction = <u>801 × 81.27 = 651</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 =
$\frac{1}{6}$ L from A.P.		4					4			Mean standard sheer aft =
$\frac{2}{6}$ L "		2					2			Mean actual sheer forward =
Amidships		4					4			Mean standard sheer forward =
$\frac{2}{6}$ L from F.P.		2					2			Length of enclosed superstructure forward of amidships =
$\frac{1}{6}$ L "		4					4			" " aft of " =
F.P.		1					1			
Total										

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

+ 15

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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Fresh Deck (if required)	<u>847</u>
Depth to Freeboard Deck = <u>5.422</u>	Displacement in salt water at summer load water line	Correction for coefficient	<u>914</u>
Summer freeboard = <u>318</u>	$\Delta =$	Depth Correction	<u>40</u>
Moulded draught (d) = <u>5.104</u>	Tons per inch immersion at summer load water line	Deduction for superstructures	<u>651</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48}$ inches = <u>106^m/m</u>	T =	Sheer correction	<u>15</u>
Addition for Winter North Atlantic Freeboard (if required) = $\frac{a}{36} =$ <u>142^m/m</u>	Deduction = $\frac{\Delta}{40 T}$ inches = <u>106^m/m</u>	Round of Beam correction	
		Correction for Thickness of Deck amidships	
		Other corrections, scantlings, etc.	
		Summer Freeboard = <u>318</u>	

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

TIMBER	Tropical Fresh Water	line above Centre of Disc	... 377 ^m	TIMBER	Tropical Fresh Water	Freeboard	... 318 ^m
"	Fresh Water Line	" "	... 271 ^m	"	Fresh Water	"	... 212 ^m
"	Tropical Line	" "	... 271 ^m	"	Tropical	"	... 212 ^m
"	Winter Line	below above	... 23 ^m	"	Winter	"	... 460 ^m
"	Winter North Atlantic Line	" below	... 141 ^m	"	Winter North Atlantic	"	... 624 ^m
"	SUMMER	above	... 165 ^m				

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