

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
"KING EDGAR"	169444	British, London.	7058	1945	Cardiff
Moulded Dimensions: Length 425.68 Breadth 56.0 Depth 36.83 to upper deck.					Date of Survey 15th + 16th Dec., 1946
Moulded displacement at moulded draught = 85 per cent. of moulded depth 16400 tons					Surveyor's Signature E. Brimblecombe
Coefficient of fineness for use with Tables 769 ✓					Particulars of Classification 100A1 "Blas Contemplated"

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth ...	36.83	(a) Where D is greater than Table depth (D - Table depth) R = (36.89 - 28.37) × 3 = + 25.56 ✓ 8.52		Moulded Breadth (B)	56
Stringer plate06	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	13.44 ✓
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$				Ship's Round of Beam	14.00
				Difference	.56
Depth for Freeboard (D) =	36.89	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.56}{4} \times .9189 = -.13$ ✓

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 ...					
F'cle enclosed ...	34.54	34.54	7.5	✓	34.54
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	34.54	34.54			34.54

Standard Height of Superstructure	7.5 ✓
„ „ R.Q.D.	
Deduction for complete superstructure	42.0 ✓
Percentage covered $\frac{S}{L} =$	
„ „ $\frac{S_1}{L} =$	8.11 ✓
„ „ $\frac{E}{L} =$	
Percentage from Table, Line A.	4.05 ✓
(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 = 42.0 × .0405 =	-1.70 ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	52.57	1		52.57	54.00	54.00	1		54.00
$\frac{1}{4}$ L from A.P. ...	23.39	4		93.56	24.18	24.18	4		96.72
$\frac{3}{8}$ L „ ...	5.78	2		11.56	6.25	6.25	2		12.50
Amidships ...	-	4		-	-	-	4		-
$\frac{5}{8}$ L from F.P. ...	11.57	2		23.14	12.00	12.00	2		24.00
$\frac{3}{4}$ L „ ...	46.79	4		187.16	47.72	47.72	4		190.88
F.P. ...	105.14	1		105.14	108.00	108.00	1		108.00
Total ...				473.13					486.10

Mean actual sheer aft =
Mean standard sheer aft = } Excess ✓

Mean actual sheer forward =
Mean standard sheer forward = }

Length of enclosed superstructure forward of amidships =
L

„ „ aft of „ = } Nil

Sheers rough checked afloat. The stormy conditions did not permit of accurate measurements.

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{12.97}{18} \left(\frac{.75 - .0405}{2} \right) = -0.51$ ✓

If limited on account of midship superstructure. YES - NIL

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

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	80.77 ✓
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{79.56 + 1.21}{1.36} = \frac{1.449}{1.36}$	86.05 ✓
Depth to Freeboard Deck = Et. 36.89	Δ = 13499	Depth Correction ...	25.56
Summer freeboard = 10.71	Tons per inch immersion at summer load water line	Deduction for superstructures ...	- 1.70
Moulded draught (d) = 26.18	T = 48.06	Sheer correction ...	-
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.54 = 6½ ✓	Deduction = $\frac{\Delta}{40 T}$ inches = 7.02	Round of Beam correction ...	- .13
Addition for Winter North Atlantic Freeboard (if required) = ✓	= 7"	Correction for Thickness of Deck amidships ...	-
		Other corrections, scantlings, etc. 6. correspond to summer moulded draught of 26.2½	18.72
			44.28
		Summer Freeboard =	128.50 ✓

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

Tropical Fresh Water Line above Centre of Disc ...	13½"	Tropical Fresh Water Freeboard ...	10' 8½"
Fresh Water Line „ „ ...	7"	Fresh Water „ „ ...	9' 7"
Tropical Line „ „ ...	6½"	Tropical „ „ ...	10' 1½"
Winter Line below „ „ ...	6½"	Winter „ „ ...	10' 2"
Winter North Atlantic Line „ „ ...	-	Winter North Atlantic „ „ ...	11' 3"

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £

ML-D



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Foundation