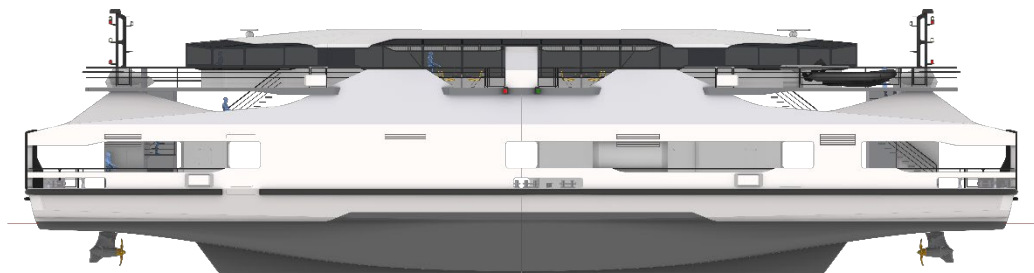


# FREEBOARD CALCULATION

ROPAX 75 DOUBLE ENDED  
75 PAX / 8 CAR / 6 LONG TRUCK / DOUBLE ENDED



**CORO.**  
DESIGN

Specified for MED MARINE  
Release 20240304.01

## FREEBOARD CALCULATION

VESSEL TYPE "B", SEE ICLL REG. 27-(5) AND (6).

LENGTH= 47.680 m.

DISPLACEMENT AT .85\*DEPTH= 1606. m.TONS

BREADTH= 15.000 m.

THICKNESS OF STRINGER PLATE= 9.000 mm

DEPTH= 4.250 m.

THICKNESS OF KEEL PLATE= 9.000 mm

\*\*\* TABULAR FREEBOARD= 416.16 mm

\*\*\* BLOCK COEF. CORRECTION FACTOR= 1.000 (MINIMUM BLOCK COEF.=.68)

BLOCK COEFFICIENT= 0.6065

E/L= 0.00/ 47.68= 0.0000

PERCENTAGE ALLOWED= 5.00 %

E/L FOR FOCSLE= 0.0000

REDUCTION= 5.00 %

100% ALLOWANCE= 547.98 mm

PERCENTAGE ALLOWED= 0.00 %

SUPERSTRUCTURE CORRECTION= 0.00 mm

\*\*\* DEPTH CORRECTION= 107.31 mm

DEPTH FOR FREEBOARD= 4.259 M. LENGTH/15= 3.179 m.

\*\*\* "FLUSH DECK PENALTY":

CORRECTION FOR "B" VESSELS UNDER 100M= 137.34 mm

\*\*\* SHEER CORRECTION:

STANDARD SHEER= 647.66 (AFT= 215.89 FORWARD= 431.77)

ACTUAL SHEER= 0.00 (AFT= 0.00 FORWARD= 0.00)

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(STANDARD - ACTUAL)/2= 323.83 mm (ACTUAL SHEER DEFICIENT FORE AND AFT.)

LENGTH FACTOR= 0.750

SHEER CORRECTION= 242.87 mm

## VESSEL TYPE "B" FREEBOARD RESULTS

TABULAR FREEBOARD = 416.16 mm

"FLUSH DECK PENALTY" = 137.34 mm

CORRECTED FOR BLOCK COEFFICIENT = 553.50 mm

DEPTH CORRECTION = 107.31 mm

SUPERSTRUCTURE CORRECTION = 0.00 mm

SHEER CORRECTION = 242.87 mm

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CALCULATED SUMMER FREEBOARD = 903.68 mm

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\*\*\* BOW HEIGHT CORRECTION:

Bow Height exemption has been applied.

CALCULATED SUMMER FREEBOARD = 903.68 mm

\*\*\* MOLDED DRAFT= 3.355 m. EXTREME DRAFT= 3.363m.