

Calculation of Metacentric Height While Carrying Passengers

$$GM = \frac{NWb}{2\Delta} \tan \theta$$

GM: Metacentric height in mm.

N: Certified number of passengers.

W: Body weight of each passenger in kg, calculated according to the standards in the following table:

LOA less than 24m		LOA up to 24m
Passengers less than 150	150 passengers or more	
75kg, but may be reduced to 65kg in case passenger ship navigates in sheltered areas only and there are women and children on board.	85kg	

b: Distance from the center line of the ship to the geometric center of a side passenger deck.

Δ : Displacement in metric tons.

θ : Angle of heel, as the same regulated in Attachment 3.