



Coastal Construction Manual

FORMULA CALCULATOR

11.4 Vertical(Buoyant) Hydrostatic Force

γ :		$F_{buoy} =$	lb
Vol :			

$$F_{buoy} = \gamma (Vol)$$

F_{buoy} = vertical hydrostatic force in lb resulting from the displacement of a given volume of flood water

γ = specific weight of water (62.4 lb/ft³ for fresh water and 64.0 lb/ft³ for salt water)

Vol = volume of flood water displaced by a submerged object in ft³