

## **Capacity Ratings by Floor Area & Buoyancy**

		Floor Area	Buoyancy
ISAF Offshore		Carrying Capacity: 0.096 of the volume of the main buoyancy tubes (3.39 ft <sup>3</sup> .); 0.372 of the inner horizontal cross-sectional area (4 ft <sup>2</sup> )	Persons Definition: naked weight of 165lbs. (75kg.)
SOLAS/USCG	Number of persons permitted to occupy liferaft should be equal to the lesser of:	Total buoyancy tube volume (in ft³) divided by 3.388  OR  The total floorspace (in ft²) divided by 4  OR  The number of people, with an avg weight of 182lbs, wearing life jackets, that can be seated with sufficient comfort & headroom.	Assumed Average Occupant Mass: 182lbs. (82.5kg.) Buoyancy shall be sufficient to support the number of persons permitted with positive freeboard, with one of the two buoyancy chambers deflated.
FAA-TSO C70a / ETSO-2C70a	Capacity based on usable sitting area of liferaft deck:	Rated Capacity: 3.6ft <sup>2</sup> per person; Overload Capacity: 2.4ft <sup>2</sup> per person.  OR  The number of seating spaces that accommodate the following size, with a min of 8" of back support:  39.4*  OR  Demonstrate the rated capacity by providing no less than 3ft <sup>2</sup> sitting area per person, no less than 14.7"  (W) x 8" (H) back support per person, and at least 30%, but not more than 50% of tha participants must be female.	Avg. occupant's weight not less than 170lbs. (77.1kg.)  OR  Type 1 Raft: consists of 2 independent tubes that can support the rated capacity with a min of 12" of freeboard, and a min of 6" freeboard with one tube deflated.  Type 2 Raft: If single-tube construction, raft must have internal bulkheads to support occupants out of fresh water if a chamber is deflated, and provide 6" of freeboard when fully inflated.
ETSO-2C505*		Normal rated capacity: number of occupants that can be accommodated when each occupant is provided with a minimum of 3.6ft <sup>2</sup> (0.33m <sup>2</sup> ) of floor area.  Overload rating: nearest whole number of occupants at normal capacity times 1.5, with minumum floor area of 2.4ft <sup>2</sup> (0.22m <sup>2</sup> ).	An average occupant weight of 200lbs. (90kg.)  Minimum freeboard should be: a) 12" at normal rated occupancy; b) 6" at normal rated occupancy with the most critical chamber deflated c) a positive freeboard at overload rated occupancy with the most critical chamber deflated.

 $<sup>\</sup>hbox{*EASA Standard for Helicopter Liferafts for operations to or from Helidecks Located in a Hostile sea area.}$