ESTIMATING COVERAGE AND MATERIAL REQUIREMENTS

1.
Different amounts of resin are required to wet out different forms of fiberglass. For example, one gallon of resin will wet out approximately the following amounts of fiberglass:

40 square foot of 8 to 10 oz. cloth
50 square foot of ¾ oz. mat
30 square foot of 1½ oz. mat
35 square foot of 24 oz roving

In the event successive layers of glass are laid up before previous layers gelled, coverage will be greater.

2.
The desired thickness for gelcoat is generally 15 mils (0.15”). This is equivalent to 25 square feet per quart or 100 square feet per gallon.

For example, suppose a boat is to be fabricated having a hull area of 100 square feet using gelcoat, ¾ oz. mat, and
2 layers of 1½ oz. mat. Based upon the rules stated in #1 and #2, the following is required:

From #2, one gallon of gelcoat is required.

From #1, resin needed is:

(100 sq. ft. ¾ mat) / 50=2 gallons of resin
(200 sq. ft. 1½ mat) / 50=2 gallons of resin

8 gallons total of resin

3.
The percentage of glass to resin in various laminates is:

Type of Fiberglass	**%Glass**	**%Resin**
Chopped Glass Lay-Up	25	75
Mat Lay-Up	30	70
Woven Roving Lay-Up	40	60
Cloth Laminate	45	55

4.
The weight of a finished fiberglass and resin laminate is approximately:

Thickness	Weight
1/4"	**2 lb.**
1/8"	**1 lb.**
1/16"	**1/2 LB.**

5.
Casting resin and table top resin for various thickness of pour are:

Thickness	Sq. ft/Gal.	Sq. ft./Qt
1/4"	**6**	**1-1/2**
1/8"	**12**	**3**
1/16"	**24**	**6**
1/32"	**48**	**12**
1/64"	**96**	**24**

The above figures will vary depending upon the worker, thickness of laminate, and method used. In general, the higher the percentage of glass, the stronger the laminate.