



celebrating
50 years

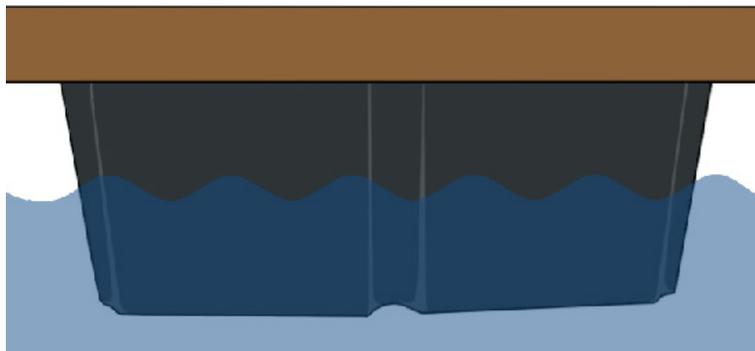
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Calculate Buoyancy/Displacement & Freeboard of Your Dock

BARR Plastics offers a standard dock kit design that typically floats at approx. 12-14" of freeboard depending on loading. Freeboard is the height of the deck from the surface of the water. This freeboard is in the preferred range for recreational docks. By using an established and proven design there is minimal guess work involved.

Buoyancy / Displacement is 55 lbs. per cubic foot. 1 cubic foot of floatation displaces 55 lbs. This value is consistent no matter what type of floatation is used.

If your desire is to build a dock of your own design you will need to do much more in the way of calculations to determine your desired freeboard. To start you will need to calculate the total weight of your dock package. Floats, lumber, hardware, accessories, furniture and people. We will only be considering recreational residential docks in this scenario.



Ideally you want your float to be half submerged to provide stability. If the float sits too high in the water the dock will not very stable. The most stable docks are 8 - 10' wide and are the most popular sellers.

Example: If your dock package weighs 1000 lbs. you will require 2000 lbs. of buoyancy for your float to be half submerged. There are several float depths available which can be used to raise or lower the dock to achieve your desired freeboard.