TIPS FOR CHOOSING YOUR FLOATS

CALCULATING FREEBOARD

Freeboard is calculated by dividing the weight of the structure by the total drum buoyancy. This number is then multiplied by the float depth to produce the displacement. Subtract the displacement from the float depth to get the freeboard.

EXAMPLE:

Structure (20,000 lbs)	20,000 / 45,000 = 0.444
Total drum buoyancy (45,000 lbs)	0.444 x 32″ = 14.21″ (displacement)
Float depth (32″)	32″ – 14.21″ = 17.78″

17.78″ is the approximate freeboard from the top of the float to the surface of the water.

Slot Style Mounting

Top View

DETERMINING FLOAT QUANTITIES

Generally, residential docks should support about 30 pounds per square foot, while commercial docks should support 40 pounds. Imagine building a residential dock that is four feet wide by 20 feet long. Let's choose floats that support 400 pounds per unit. Below is a formula you may use to determine your float quantities.

EXAMPLE:

4'W x 20'L= 80 square feet
80 square feet x 30 lbs= 2,400 lbs (Total weight to support)
2,400 lbs / 400 lbs = 6 float drums

You would need to purchase six float drums that support 400 lbs per unit.

Side View

Note: Round up the number of floats to the nearest even number.