

# Keeping You Informed

**Scottco & Premier take pride in providing the highest quality Dock Products.  
Please take a few minutes to consider the subject of Buoyancy**

## **Dock Float Buoyancy!**

- 1) What is it?
- 2) How is it measured?
- 3) Why is it important?

**Buoyancy** is the rating of how much weight the Dock Float will handle.

**Buoyancy** is calculated by measuring the outside dimensions of the Float shape.

**Buoyancy** is important because it is what holds the dock system above the water at some predetermined freeboard. It has been a measured or estimated number. This is how it's been done forever by every manufacturer even though the method has not been totally accurate.

**In 2007 Ace changed to the most accurate method for calculating true Float Buoyancy.** We designed and built a test tank with digital instrumentation to “**Tank Test**” every one of our 56 models. This process takes into account the Floats weight in calculating the Floats true buoyancy rating. The rating is what it takes to sink the Float until water trickles over its top.

## **Why is “Tank Tested Buoyancy” Important / Required!**

- 1) Allows engineers and/or dock builders to select the proper Float to handle the required freeboard for the live and dead loads including roof requirements.
- 2) Proper buoyancy minimizes the size and quantity of Floats required to be purchased.
- 3) Proper buoyancy minimizes the potential for any lawsuits if the dock system has critical problems of any nature such as a dock collapse or extreme loss of freeboard.
- 4) Proper buoyancy provides the end customer with the best quality dock system and most cost effective Float price based on cost per pound of buoyancy.

Currently, Ace is the only rotational molded Float manufacturer that has now published it's “tank tested buoyancy”. We have also started to randomly test other Float manufacturers to see how close their published ratings are to their actual buoyancy.

The first manufacturer's Floats we tested produced the following results. We “tank tested” 16 of their models from 3648-12 through 4896-32. The test results of these 16 models ranged from **minus** 2% to **minus** 21.9% less than their published ratings. The average was **minus** 14.5%. These results are a serious issue for the dock designer. Maybe this is why docks sink in snow/ice storms. Also, the customer is paying for the published buoyancy but is receiving up to 21.9% less.

If you are considering buying other than Ace Floats we extend the following offer. Send us a sample or samples of the ones you are considering and we will tank test them for you at no charge so you know what you will be receiving. Also, ask us if we have tested the manufacturer and size you are looking at which will give you a quick answer without having to ship the samples.