

## Swimming Pool Leak Bucket Test

Evaporation is dependent on a variety of environmental and pool-related conditions such as wind, water temp, dew point and barometric pressure. Because of this the evaporation rate can vary greatly from day to day and even pool to pool.

If you suspect a leak, do a simple test to determine if water loss in your swimming pool is due to a leak or is just evaporation. This simple test is called the bucket test. Basically, the bucket test exposes water in a bucket to the same conditions as those affecting your swimming pool. By comparing the water loss in each, it is possible to determine if the pool is leaking or if supposed leaks are just the result of water being lost to evaporation.



### Bucket Test Procedure:

1. Bring the pool water to its normal level
2. Fill an empty bucket with pool water to about one inch from the top of bucket. (By filling the bucket close to the top you are ensuring that air movement over the surface of the bucket will be similar to that of the pool.)
3. Place the bucket on the first or second step of the pool. To keep it from floating away it may be necessary to place a few bricks or rocks into the bucket. (By placing the bucket in the pool water you are ensuring that the water temperature of each will be similar).
4. Mark the water level inside the bucket.
5. Mark the water level of the pool on the outside of the bucket, on the pool wall, or skimmer faceplate.
6. Operate the pool for 24 hours as it had been operated when a leak was first suspected.
7. After 24 hours, compare the two levels. If the pool water (outside mark) goes down more than the inside water level, there is probably a leak.

### Establishing suspected leak locations with a "Pump on/Pump off test"

Comparing the results of subsequent bucket tests with the pump on for 24 hours to the results with the pump off for 24 hours can provide additional information on the leak's location.

-If water loss with pump on is greater than water loss with pump off, suspect return plumbing leaks (pressure side plumbing).

-If water loss with pump on is less than water loss with pump off, suspect skimmer/main drain plumbing leaks (suction side plumbing).

-If water loss with pump on is equal to water loss with pump off, suspect shell, liner or fitting leaks (non-plumbing).

Although these tests are prone to false results because of varying environmental conditions during the tests, the information they provide can at least establish suspect locations to begin your leak search. Giving this information to a leak professional will help them to be more efficient when solving your pool leak.