Calcium Build-Up on Pool Tile

- *What it is: Grey or white scales or lines on waterline tile created by calcium build up. There are two types of calcium compounds that can form in pool water and create scaling- calcium carbonate and calcium silicate. To identify which it is, place a few drops of muriatic acid on a sample. If the deposit reacts by foaming, it is calcium carbonate. If there is no foaming, it is calcium silicate.
- *What caused it: When the pH levels are off in a pool, it can cause calcium to build up on the coping/waterline tiles.
- *Steps to take when it occurs: Partially drain the pool. Test the alkalinity of the pool and adjust accordingly. The optimum calcium level of a pool is between 200-400 ppm. Refill the pool and test the alkalinity once more to confirm the calcium has lowered.

The next step is to test the pH level of the pool. Use a phenol red solution to test. It will turn different colors depending upon the level of pH in the pool. If the water is high, add pool acid in, a little at a time and very slowly. Typically you should add 1 gallon of pool acid for every 10,000 gallons of water. Retest after 12 hours.

- *Removing calcium carbonate: Use an acid-free calcium removing releaser/cleaner. Next, try using a pumice stone on tile and concrete to remove the calcium. A commercial stain remover can also be used to remove calcium. That product comes with an attachment to make reaching areas easier.
- *Removing calcium silicate: A pumice stone and a lot of scrubbing is what is needed to remove calcium silicate. Professional calcium removers will help to aid the process. Another option is to have professionals come in and bead-blast the affected area.
- *Preventative measure: Sealing natural stone/concrete will help to protect against calcium buildup. Apply a calcium prohibitor or blocker to pool tiles and/or glass. Keeping the pH level of the pool between 7.4-7.6 will help to prevent calcium buildup from occurring. Installing a pool cover and using it when the pool is not in use will keep the water from evaporating in the pool. When the pool water evaporates it leaves salt, calcium and mineral buildup on pool tiles. A pool cover will help to stop that from happening.