RECOMMENDED START-UP & MAINTENANCE PROCEDURES FOR PEBBLETEC®, PEBBLESHEEN®, PEBBLEFINA®, AND BEADCRETE®

(If you have a Salt Water Chlorination Generator System (SWCGS) please review recommended applicable Start-Up & Maintenance Procedures.)

Congratulations! Your pool interior has just been surfaced using Pebble Technology superior quality pool products developed to be visually stunning and offer long-lasting durability. In order to ensure the beauty and longevity of your finish, we recommended certain procedures for start-up and ongoing maintenance which are outlined in this document.

“Break-In” Period
The “break-in” period refers to the period of time directly after the finish is installed when the Builder or Authorized Applicator enhances the finish surface prior to turning it over to you for start-up and ongoing maintenance.

This is the final step of the installation/application process and lasts approximately 1-3 days. Your Builder/Authorized Applicator should communicate with you once this has been completed.

Start-Up Process
The start-up process is the finishing touch to insuring a beautiful and long lasting pool finish. The start-up process is not hard to perform but does require frequent water testing, brushing and chemical balancing. It is important to note that the start-up will have the most influence on the final appearance and longevity of your interior finish.

Please note: During the first twenty eight (28) days, the product develops most of its durability characteristics. Therefore, it is critical to adhere to the start-up instructions to prevent harm to the surface. It is natural for some white material (plaster dust) to release from the new surface and enter into the water resulting in raised pH and calcium levels.

It is very important that water chemistry be monitored closely. Frequently test and adjust the water within the acceptable ranges during this time. Failure to do so will result in white plaster dust adhering to the finish surface causing stains, blotchy discoloration and/or roughness.
1. Prior to Fill
   • It is recommended to test the source water prior to filling the pool, and to share that information with the responsible parties, so that necessary chemical adjustments can be made.

   Additional PebbleFina Finish Instructions:
   • *After application and prior to fill, the PebbleFina surface should remain uniformly dry. Therefore, it is important to evacuate or plug all plumbing lines leading to the pool.*
   • *Do not allow water to drip, spill, or puddle on the surface.*
   • *In the event of a rain episode during this time, immediately after the rain ceases, it is recommended to rinse the entire surface down to the deep end and continue with the filling of the pool at that time, by letting the water cascade into the accumulated water, which creates ripples and reduces the likelihood of forming a ‘waterline mark’ at any point during the fill process.*

2. The fill
   • Sometimes the “break-in” procedure involves filling the pool for you. If this is the case, jump ahead to step number three (3).
   • Fill the pool without interruption with clean, potable water to the midway point on the tile line or the midway point on the face of the skimmer.
   • Do not fill the pool with soft water.
   • Very important: If any hose bibs supply soft water, please notify the Builder/Authorized Applicator before filling.
   • **Do not stop water flow for any reason** as it will cause a “waterline mark” in the finish.
   • Do not enter the pool until it is completely filled with water (including pets).

3. Starting the equipment
   • Once the pool is full, turn on the pool equipment and circulate the water continuously for a minimum of five (5) days or until all white material (cement dust) has been removed, filtered out, and is no longer visible when the finish surface is brushed, whichever is longer.
   • Test the water, add diluted/dissolved chemicals and start brushing once the pool water is circulating.
   • Only add stabilizer conditioner/cyanuric acid (CYA) in liquid form. You may use powder form that is pre-dissolved in a bucket of water. If granular CYA is loaded into the skimmer, the pump must run continuously for three (3) days, as it can take several days to dissolve. Un-dissolved CYA (or concentrated CYA gathered in the filter) can irreversibly alter the pigment coloration of the finish surface.
   • The addition of a sequestering product is recommended during this initial break-in period, to help prevent staining or salt scale from attaching or discoloring the finish and to aid in the removal of particulate. It is necessary to follow the manufacturer’s directions.
4. Adjusting water chemistry

Once the pool equipment is running, adjust the water chemistry, first the pH, then alkalinity followed by the remaining parameters (brushing the pool between each chemical addition) to the ranges below:

<table>
<thead>
<tr>
<th>ACCEPTABLE START-UP RANGE* - FIRST 28 DAYS</th>
<th>PPM = Parts Per Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.0 – 7.4</td>
</tr>
<tr>
<td>TOTAL ALKALINITY</td>
<td>70 – 100 PPM</td>
</tr>
<tr>
<td>CALCIUM HARDNESS</td>
<td>150 – 250 PPM</td>
</tr>
<tr>
<td>TOTAL DISSOLVED SOLIDS</td>
<td>400 – 600 PPM</td>
</tr>
<tr>
<td>CHLORINE</td>
<td>1 – 3 PPM</td>
</tr>
<tr>
<td>CYA, CYANURIC ACID (STABALIZER/CONDITIONER)</td>
<td>20 – 30 PPM</td>
</tr>
<tr>
<td>LANGLEIEN SATURATION INDEX RANGE</td>
<td>Between -0.3 and 0.3</td>
</tr>
</tbody>
</table>

PTI Recommended Acceptable Start-Up Range is designed for high-performance finishes and not recommended for traditional pool plaster.

- Granular chlorine should always be dissolved before adding to the pool.
- Record and save water test results and amount of chemicals used for adjustments.
- Do not load chlorine into the skimmer as this can discolor the floor area around the drains.
- All in-line ‘stack’ chlorine tablet feeders must have looped plumbing on both sides of the feeder or other means, to prevent the migration of chlorine/acid ions during the time that the pumps are off. Failure to do so will result in a discolored or etched finish around the water returns.

- IMPORTANT... Report calcium hardness or total dissolved solids that are above these ranges to the Authorized Applicator or Builder immediately. It may be necessary to alter the Recommended Acceptable Ranges, chemically treat the water, or drain some/all of the water.
- Frequent additions of muriatic/hydrochloric acid (HCl) are normal during this time to maintain pH within the recommended acceptable range. It is not uncommon to add acid (HCl) to the water daily for the first 2 weeks, and 2 to 3 times per week during the remainder of the 28 days.

5. Brushing

- Brush the surface (walls & floor):
  - Three (3) times per day for the first 3 days, and
  - Two (2) times per day for the next 10 days
  - Brush after the addition of each chemical
- Extensive brushing during this time is imperative to ensure that the cement dust or other sand/dirt/construction residue does not adhere to the interior surface.
- Commonly available pool brushes may be used for PebbleTec, PebbleSheen, PebbleBrilliance and BeadCrete finishes. Only use a 100% nylon brush for PebbleFina finishes.
MAINTENANCE PROCEDURES

ACCEPTABLE ONGOING MAINTENANCE RANGE (AFTER 28 DAYS)

After the first twenty eight (28) days, balance the pool water according to APSP Ranges using the Langelier Saturation Index (LSI). This formula takes into account pH, carbonate alkalinity, water temperature, total dissolved solids, and calcium hardness.

For guidance, individual PTI recommended acceptable water chemistry parameters are given below:

<table>
<thead>
<tr>
<th>ACCEPTABLE ONGOING MAINTENANCE RANGE* - AFTER 28 DAYS</th>
<th>PPM = Parts Per Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.2 – 7.6</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>70 – 100 PPM</td>
</tr>
<tr>
<td>Calcium Hardness</td>
<td>150 – 300 PPM</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>400 – 800 PPM</td>
</tr>
<tr>
<td>Chlorine</td>
<td>1 – 3 PPM</td>
</tr>
<tr>
<td>CYA, Cyanuric Acid (Stabilizer/Conditioner)</td>
<td>20 – 30 PPM</td>
</tr>
<tr>
<td>Langelier Saturation Index Range</td>
<td>Between -0.3 and 0.3</td>
</tr>
</tbody>
</table>

* PTI Recommended Acceptable Ongoing Maintenance Ranges are designed for high-performance finishes and not recommended for traditional pool plaster. Individual parameter ranges may be outside the above PTI Ideal Ranges as long as adjustments are made to the remaining parameters to ensure the Langelier Saturation Index remains within the -0.3 and 3.0 range.

Important Notes

- Maintaining the Ongoing Acceptable Ranges will lessen the likelihood of calcium salts precipitating out of the water and staining the surface.
- Do not use automated cleaners that have wheels for twenty eight (28) days. Suction cleaners without wheels may be used, but brushing should continue until all cement dust residue is gone. Please refer to Builder/Authorized Applicator for recommendations regarding specific types of cleaners.
- Do not use heaters for the first fourteen (14) days and adjust plumbing to allow water to bypass the heater. Please only use heaters when there is no remaining plaster dust when pool is brushed.
- Please allow for first twenty eight (28) days before critiquing the final look and water color of your finish. All cementitious finishes have some variation in color, shading, consistency and exposure. Color variation and masking of the color is especially exaggerated in the first 28 days, as the cement continues to hydrate. These initial fluctuations in color tend to even out or subside with time.
- The finish will vary in color, shades, consistency and exposure. The darker colors will inherently have an increase in color variation, shading, consistency and exposure. This is the intended look of the finish and is not considered a defect. The color will vary throughout the day as the sunlight reflects from different angles.
- Failure to follow these instructions can result in costly service and repairs.
- Failure to maintain proper water chemistry will void the warranty. When submitting a PTI warranty claim, you will be required to submit weekly maintenance records. Many retail stores have computerized testing equipment to help monitor the chemical parameters, as well as others (cyanuric acid, metals, etc.). Ask your Builder/Authorized Applicator for the nearest location.
** THESE PROCEDURES ARE RECOMMENDATIONS ONLY. PTI IS NOT RESPONSIBLE FOR AND DOES NOT WARRANTY THE EFFECTS OF IMPROPER WATER CHEMISTRY (I.E. SCALE, ETCHING, STAINING, ETC.) EVERY POOL ENVIRONMENT IS DIFFERENT AND PTI CANNOT GUARANTEE THAT ADVERSE WATER CONDITIONS, WEATHER, UV EXPOSURE, ETC. WILL NOT AFFECT YOUR WATER CHEMISTRY IN AN ADVERSE MANNER EVEN IF THESE RECOMMENDATIONS ARE FOLLOWED.