



PebbleTec®

The Original

SUBMITTAL PACKET

Pebble 
Technology®
INTERNATIONAL

WHO WE ARE

Pebble Technology International® (PTI) has been a driving force in the transformation of the pool building and remodeling industry as the manufacturer of The World's Most Trusted Pool Finishes®. PTI maintains its position in the industry with an unwavering reputation for high quality pool finishes, outstanding customer support, and dedicated sales and technical teams.

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Five Star Finish

Describes the five pillars of the industry's most trusted pool finish



Product Data Sheet

Product description, mixing instructions, preparation, mix design and application



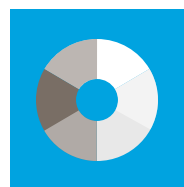
Technical Results

Chemical and physical properties and color lightness analysis



Warranty

Coverage & limitations and start-up & maintenance guidelines



PebbleTec Color Chart

Displays available colors in the product line

FIVE STAR FINISH



★ Premium Products

Pebble Technology International (PTI) searches far and wide for the highest quality, naturally tumbled stones. From New Zealand to Chile, we bring premium pebbles to you from around the world; from riverbeds and beaches to quarries and shorelines.

Once the perfect stones are found, we use a time-tested and quality controlled manufacturing process to deliver the purest rocks available. Each stone is screened to achieve size consistency for a uniform pool finish texture. In addition, proprietary additives are used to fortify our unique formulas bringing an enhanced durability to our naturally beautiful finishes.

★ Unparalleled Customer Support

PTI is here for you. We have a longstanding commitment to customer satisfaction by providing a dedicated team of experts that strive to support our customers. Our team is quick to assist you whether you need help in selecting the right finish, finding a pool builder or authorized applicator in your area or need resources for on-going pool maintenance.

★ Installations by Authorized Applicators

Each of our applicators has been hand-selected and put through a rigorous onboarding process to provide the most talented and skilled professionals to install our finishes. This nation-wide network of applicators, licensed by PTI, is the only group that has exclusive rights to purchase our products and use the PTI brand name. To keep them up-to-date on new methods and techniques, our dedicated quality control and R&D teams offer ongoing education and training.

★ Dedicated Quality Control and R&D Teams

We are proud of our industry-leading quality control technicians and R&D teams. These teams support our authorized applicators across the country on technical matters as well as provide in-depth product knowledge and on-site pool finish installation and maintenance expertise.

★ The Most Comprehensive Protection Plan

PTI offers the most comprehensive protection plan in the industry. This includes warranty details, start-up and maintenance procedures as well as other important information to help preserve the aesthetic beauty of your pool finish. Homeowners have the comfort of knowing they are covered by our dedicated and experienced team of experts.

PRODUCT DATA

PRODUCT DESCRIPTION

An exposed-aggregate coating that offers an earthy textured and natural looking interior finish for swimming pools, spas, and other water features.

ADVANTAGES

- Durable, non-slip, and stain-resistant surface
- Variety of colors
- Including PebbleTec pigments and fortifiers (P3 fortifier recommended), PebbleTec is a high-performance finish that provides the maximum amount of durability and chemical resistance for a swimming pool environment.

CONSIDERATIONS and/or LIMITATIONS

- Pump aid or hose lubrication is required prior to initial pumping.
- No other admixtures (pozzolan and/or polymers) should be used in conjunction with the P3 Fortifier and Workability Agent without first verifying compatibility with the PTI R & D department as well as the manufacturer of the other admixture.
- Set additives (accelerators and retarders) such as PTI's Extend Set Retardant or calcium chloride set accelerator may be used when needed.
- PebbleTec is not recommended for applications out of the water.
- PebbleTec is not warranted from deterioration, surface spalling, cracking, or debonding due to freeze/thaw damage.

SUBSTRATE PREPARATION – CONCRETE & SHOTCRETE (GUNITED)

Prior to applying PTI products, unsatisfactory substrate conditions should be corrected by the responsible party. The substrate should be free of loose material or foreign matter, which could cause bond failure. Surfaces should be free of any form-release agents, oils or other chemicals that can interfere with bonding. The substrate should be examined for exposed reinforcement bars, rebar ties, nails, etc., and if found, should be removed and sealed to prevent potential rust issues.

The substrate surface should have the ability to absorb water and surface roughness to provide the bond required for the pool finish. Smooth or non-absorbent surfaces should be chemically or mechanically prepared to ensure the pool finish achieves a sufficient bond to the substrate.

Dissimilar materials and abutments (tile, stone, etc.) should have a cut back of at least ½" for the PebbleTec finish to allow the pool finish to properly key into the material. Beveled or ramped material should not be allowed.

The substrate should be wetted or dampened prior to the pool finish being applied in order to obtain uniform suction. This helps ensure that a good mechanical bond is achieved. However, there should be no visible water on the surface when the pool finish is applied.

PRODUCT DATA

MIX DESIGN COMPONENTS

Water

Use potable water, or alternatively, water that complies with Standard ASTM C1602 for non-potable water. Mix design water volume will vary from job to job-based on these three factors:

- Weather conditions (water evaporation)
- Substrate conditions (water absorption)
- Application conditions (workability)

Therefore, supplemental water is allowed to facilitate pumping, placing, and finishing of the finish coating, and to ensure the materials set up before it dries out.

Cementitious Materials

Cementitious materials should conform to the following applicable ASTM Standards:

- ASTM C150 - Specification for Portland Cement
- ASTM C595 - Specification for Blended Hydraulic Cements
- ASTM C1157 - Performance Specification for Blended Hydraulic Cements

Admixtures

Admixtures should be allowed to mix for the amount of time necessary to produce a homogeneous mixture prior to placement. Generally, the manufacturer/supplier of an admixture will supply the recommended mixing procedures. For non-pigmented products, PTI recommends that each batch is allowed to paddle mix continuously for at least 3-three minutes, beginning from the time that all components of the mix design have been added into the mixer. For pigmented products, PTI recommends that each batch is allowed to paddle mix continuously for at least 5-five minutes, beginning from the time that all components of the mix design have been added into the mixer.

Calcium Chloride

Calcium chloride should not exceed 2% of the weight of the cementitious materials for any PTI product. Calcium chloride, whether in liquid, flake, or granular form, should be fully dissolved and dispersed within the mix water prior to the addition of the cementitious materials. Calcium chloride can cause an increase in white residue (plaster dust) after filling the swimming pool with water. Calcium chloride can cause light-colored coatings to exhibit a darker hue, and dark-colored coatings to exhibit an increased amount of blotchiness or mottling.

Pigments

The use of PTI pigments does not significantly alter the setting, strength development, or durability characteristics of the material. The uniformity of color cannot be guaranteed by PTI or by the Applicator. Color uniformity is affected by many factors, including ensuring the components of the mix are consistent from batch to batch; the cleanliness of equipment; the application and finishing techniques, the start-up procedures, curing of the cement binder, and ongoing water chemistry conditions.

PRODUCT DATA

APPLICATION

Each coat should be applied without interruption to avoid cold joints and changes in the uniform appearance of subsequent coats.

The application should be in two coats. A first coat, or scratch coat, that is troweled with sufficient pressure to ensure that a good mechanical bond is achieved. And, a second coat, or "double" coat, that is spread and trowel-worked to achieve the proper thickness needed to ensure a smooth and level finish. Additional coats are sometimes needed to reach the desired thickness.

The first coat should be permitted to stiffen or become rigid enough to support the second coat to ensure that the material does not sag, fall or damage the monolithic continuity of the first coat or its bond to the substrate. Once the first coat is sufficiently rigid, the second coat should be applied immediately to provide for more intimate contact with the first coat, a good bond between coats, and to reduce water loss. Floors can be shot in one coat but should be trowel forced into the substrate. A minimum of 3/8" thickness for PebbleSheen should be maintained.

Cold Weather

The pool finish should not be applied to a frozen substrate or substrates containing frost.

The placement of an interior finish in cold weather is considered an acceptable practice, as long as, the daily average mean temperature (the daily average of the highest high and the lowest low, from midnight to midnight) is above 40°F (4°C) and the substrate is not frozen. Special precautions can be taken to protect the material from freezing. The finish coating should not be allowed to freeze before the pool is filled.

Hot Weather

High-suction substrates should be evenly wetted with clean water to reduce the moisture absorption capacity of the substrate, and to begin the absorption process that facilitates the bonding of the pool finish to the substrate. Failure to do so can result in a loss of bond or premature drying of the pool finish resulting in inadequate finishing time and potentially weaker materials.

NEXT-DAY INSTRUCTIONS & FILL

On the following day after installation, the PebbleSheen surface must be treated. First, the finish must be lightly scraped with a trowel to remove any loose or protruding pebbles. Then, an acid solution is applied to the surface to remove any remaining cement residue, restore the coloration, and provide a consistent appearance. Power washing and buffing are other commonly used techniques to complete the finish.

Subsequently, the pool should be immediately filled with water, and continue filling without interruption until the finish is completely submersed.

PRODUCT DATA

SDS SHEETS & WARRANTY INFORMATION

Please contact an authorized representative at PTI for SDS safety sheets, warranty, or for any further information.

Pebble Technology International - Warranty Department

15540 North 77th Street

Scottsdale, AZ 85260

800.937.5058

customerservice@pebbletec.com

PLEASE NOTE: The application process and sequence may vary slightly based on the type of finish you select, where you are located, certain weather conditions and the Authorized Applicator installing the finish. The success of each project requires the tradesperson to have a thorough technical knowledge of appropriate building design, substrate conditions, and client's expectations to determine if PTI products are fit for the purpose expected for your particular project. PTI products should be installed in accordance with the provisions of the local building code and applicable ASTM standards.

TECHNICAL RESULTS

Color Lightness Analysis

Finish Name	Dry				Wet			
	CIE Values			LRV	CIE Values			LRV
	L*	a*	b*		L*	a*	b*	
PebbleTec Soft White	81.65	-0.85	4.32	59.7	74.58	-1.06	6.35	47.6
PebbleTec Sky Blue	83.60	0.01	3.83	63.9	79.11	-0.01	5.19	55.1
PebbleTec Artic White	83.60	0.01	3.83	63.9	79.11	-0.01	5.19	55.1
PebbleTec Commercial White WP-4/AW-6	83.92	-0.64	3.94	63.9	78.31	-1.14	5.24	53.7
PebbleTec Commercial White WP-3/AW-7	84.01	-0.82	3.87	64.1	76.97	-1.45	5.89	51.5

Report Date: Feb 2018, Completed by CTL Group

- The samples were submitted as cast mortar tiles with formed side and bottom surfaces. The top surfaces were exposed aggregate finishes. Measurements were first taken on the dry top surfaces. The surfaces were then placed under running water for approximately 15 seconds, lightly blotted to remove excess surface moisture, and re-tested in the wet condition.
- This analysis represents specifically the samples submitted.
- CIE Illuminant/standard observer: D65/10° (daylight 6500k, 10° observer). Description of CIE values: L* = lightness from black (0) to white (100); a* = green (-a) to red (+a); b* = blue (-b) to yellow (+b).
- LRV = light reflectance value. LRV is the measured CIE Y value.
- Lightness values were determined by utilization of ASTM Test Methods D1347, D1477, and D4086.

Compressive Strength

ASTM Spec C 109

7 day: 8,226 psi
 28 day: 9,913 psi
 90 day: 10,134 psi

Coefficient of Friction

ASTM Spec C 1028

Static (dry): 0.75
 Dynamic (Dry): 0.72
 Dynamic (Wet): 0.63

Drying Shrinkage

ASTM Spec C 596

7 day: 0.0923%
 14 day: 0.1318%
 21 day: 0.1570%
 28 day: 0.1658%

Tensile Strength

ASTM Spec C 307

28 day: 523 psi

WARRANTY

Pebble Technology International® (PTI) hereby warrants to the original owner of the pool finish, for residential applications, that the Material is free from defects for a period of 5 years* from the date of installation. For the purposes of this Limited Warranty, PTI material ("Material") is defined as pebble, glass bead, and pigment. This Limited Warranty is expressly limited to repair or replacement of the failed material, the remedy to be determined at the discretion of PTI, and does not include labor and other costs for repair or removal. The Limited Warranty does not extend to the failure of the Material caused by improper chemical maintenance, negligence, accidental misuse or structural failure.

The Limited Warranty is non-transferable and only applies to PTI Material when installed by an authorized applicator. PTI must be permitted sufficient time to evaluate and confirm any defect in the Material and to respond to any claims.

Limitations and Exclusions

1. PTI warrants only the Material and is not responsible for labor and other costs to repair the Material.
2. Any warranty on the installation of the Material, including any warranty relating to the quality of workmanship, is provided by the authorized applicator. Please contact the authorized applicator of your pool builder for issues related to installation and workmanship items.
3. Some loss of the Material, particularly pebble and glass, is to be expected during the curing process (usually in the first few weeks) and is not considered a defect in or a failure of the Material.
4. Color variations in appearance (including shading, mottling and pigment swirling) are inherent in natural stone, glass bead and cementitious materials. These variations in relation to environmental exposure, product samples or photography are not considered to be a defect in or a failure of the Material.
5. Scale buildup, which may be perceived to be a color variation, is not considered to be a defect in or a failure of the Material. Other problems resulting from improper chemical maintenance, including but not limited to: etching, discoloration, algae formation and staining are not covered by this Limited Warranty.
6. PTI shall only be obligated to repair or replace the Material at the area of failure. Cosmetic variation that may result between the new area of repair or replacement and the original surface is not a defect and is not covered by this Limited Warranty.
7. Incidental costs resulting from or related to the repair or replacement of Material including, but not limited to, replacement of water and chemicals, are not covered by this Limited Warranty.
8. Cracking of the finish in any form is not considered a Material defect or failure and is not covered by this Limited Warranty.
9. Cracking, delamination, and rock loss related to freezing & thawing is not considered a Material defect or failure and is not covered by this Limited Warranty.
10. This Limited Warranty is nontransferable and is only available to the original owner of the pool finish.
11. Some pool finishes may contain seashells, such as abalone and mother of pearl. Due to circumstances beyond our control, such as the nature of shell materials and variables of water chemistry, PTI cannot guarantee the lasting integrity of this shell material against degradation and loss of color.
12. Variation in color between the installed Material and a PTI finish sample, or photograph, is not covered by this Limited Warranty.

*Some authorized applicators and/or pool builders provide a different warranty term dependent on your region. Please contact your applicator or pool builder for more information.

ADDITIONAL LIMITATIONS AND DISCLAIMERS

PEBBLE TECHNOLOGY INTERNATIONAL (PTI) MAKES NO OTHER WARRANTIES OTHER THAN THOSE SET FORTH HEREIN AND ALL OTHER WARRANTIES ARE HEREBY DISCLAIMED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE LIMITED WARRANTIES SET FORTH HEREIN ARE LIMITED TO THE ORIGINAL OWNER OF THE POOL FINISH AND ARE NOT TRANSFERABLE THEREAFTER. IN NO EVENT SHALL PTI BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES TO THE POOL OWNER OR TO ANY THIRD PARTY, INCLUDING, WITHOUT LIMITATION, DAMAGES ARISING FROM PERSONAL INJURY, LOST PROFITS, LOSS OF BUSINESS OPPORTUNITY, ECONOMIC LOSSES, STATUTORY OR EXEMPLARY DAMAGES, WHETHER FROM NEGLIGENCE, WARRANTY, STRICT LIABILITY OR OTHERWISE.



Black Canyon



Black Marble



Black Pearl



Midnight Blue



Emerald Bay



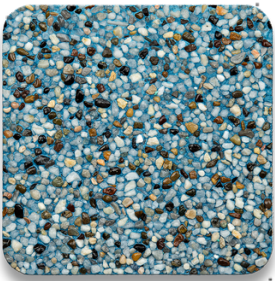
Tropical Breeze



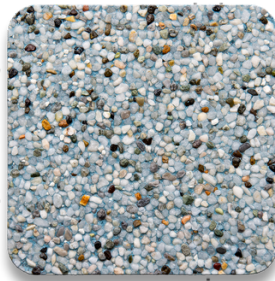
Tahoe Blue



Caribbean Blue



Blue Wave



Blue Lagoon



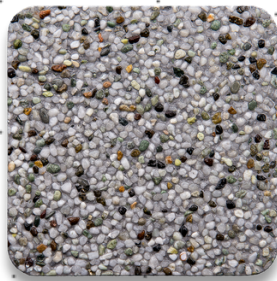
Sandy Beach



Jade



Creme de Menthe



Moonlight Grey



White Pearl



Soft White



Sky Blue

17 BEAUTIFUL COLORS



The ORIGINAL aggregate pool finish that delivers enduring elegance and durability. It is a perfect choice for natural environments.



Pebble 
Technology®
INTERNATIONAL


PebbleTec®
The Original


PebbleSheen®
Refined Textured Finish


PebbleFina®
Enduring Smooth Finish


PebbleBrilliance®
Elegant Infused Finish