



## PRODUCT DATA

### DESCRIPTION

Petra Natural Quartz flooring is a combination of NATURAL QUARTZ (SILICA) AGGREGATE and a specially formulated, pigmented 100% solids epoxy binder and aliphatic urethane top coat. The surface texture is by design a non-skid finish, but smoother finishes can be achieved with multiple top-coats. It can be applied on a variety of substrates including concrete, wood decking, etc. but is designed to go over properly prepared concrete surfaces.

### MAIN FEATURES

- Even, uniform surface appearance
- Lowers maintenance costs
- Installs and cures rapidly
- Easy to keep sanitary, non-porous, seamless, with integral cove base if specified.
- Good chemical resistance.

### TYPICAL USES

- Automotive Shops
- Maintenance Facilities
- Bottling Plants
- Aircraft Maintenance
- Dairies
- Pharmaceutical Plants
- Meat Preparation Areas
- Commercial Kitchens
- Hospitals
- Walk-in Coolers
- Cosmetic Plants
- Food Processing Plants
- Shower & Locker Rooms
- Animal Shelters
- Vet Clinics
- Bathrooms

### THICKNESS

*Single Broadcast* - Nominal 60 Mil for light traffic.

*Double Broadcast* - Nominal 100 Mil for moderate traffic, or more even coverage

### APPLICATION PROCEDURE AND SPREAD RATES

A Double Broadcast application should yield a uniform appearance and a nominal 100 Mil thickness.

1. Prepare substrate as recommended.
2. Apply Petra WH 7000 epoxy at approximately 135-150 sq. ft. per gallon.
3. Broadcast Natural Quartz at approximately .33 lbs per square foot (to refusal).
4. Let cure a minimum of 8-10 hours at 70 degrees F.
5. Sweep up excess sand, and blow or vacuum floor to remove all loose particles.
6. Apply Petra WH 7000 binder at approximately 95 sq. ft. per gallon. This step serves as a base coat for a second broadcast.
7. Broadcast Natural Quartz at approximately .33 lbs per square foot (to refusal).
8. Repeat steps 4 & 5.
9. Apply first topcoat of Petra WH 7000 at 85 -95 sq. ft. per gallon (thicker for less texture).
10. Let Cure a minimum of 8 - 10 hours at 70 degrees F.
11. Apply a top coat of Petra Aliphatic Urethane at 350 square feet per gallon.

### PHYSICAL CHARACTERISTICS

Compressive Strength.....	10,000 PSI (ASTM D-695)
Hardness, Shore D.....	75/65 (ASTM D2240)
Tensile Strength.....	2,000 PSI (ASTM C307)
Tensile Elongation.....	7.5% (ASTM D638)
Flexural Strength.....	6,250 PSI (ASTM D-790)
Linear Shrinkage.....	0.02% (ASTM D-2566)
Coefficient of Linear Expansion.....	12°F to 140°F (ASTM D-696)
In./in. degrees F .....	20 x 10-6 (ASTM D-696)
Bond Strength to Concrete.....	335 PSI concrete fails (ACI-403)
Indentation.....	025 max. (MIL D-3134)
Impact Resistance.....	no cracking or de-lamination (MIL D-3134)
Water Absorption.....	0.04% (ASTM D-570)
Electrical Conductivity.....	non-conductive
Flammability.....	self extinguishing (ASTM D-635)
Abrasion Resistance Taber Abrader.....	avg. 24.0 mg. loss (CS-17 Wheels, 2000 gm. load, 1000 cycles)
Toxicity.....	non-toxic.

## COLORS:

Standard WH 7000 colors available. See Petra Coating's Color Chart.

## SUBSTRATE PREPARATION

Proper preparation is critical to ensure proper bonding. The substrate must be dry and free of all grease, wax, oils, dirt, loose or foreign materials and laitance. Any loose particles (laitance, unbonded cement, etc.) must be removed by abrasive shot blasting or mechanical scarification. Oil, dirt and other contaminants may be removed by scrubbing with an industrial strength detergent and rinsing with clean water. Substrate must have a sandpaper-like texture after preparation preferably to a CSP 3 - 4 surface texture, and be completely dry. New concrete should be cured for at least 28 days, and tested to ensure moisture content does not exceed 3 lbs per 1,000 sf (using calcium chloride test) or 85% using relative humidity test. If moisture levels exceed the recommended limits, a moisture mitigating primer should be used. For more information on proper substrate preparation, call Petra Coatings LLC.

## Abbreviated Architectural Specifications

### Petra Natural Quartz Broadcast Systems:

- Nominal 60 Mil, Single Broadcast
- Nominal 100 Mil, Double Broadcast
- Pigmented, three Component Epoxy System with Aliphatic Urethane Top Coat (Resin Part A, Catalyst Part B, and Colored Quartz aggregate)
  - Epoxy Mix Ratio (By volume):
    - 2.5 parts "A" Resin
    - 1 part "B" Catalyst
    - Part "C" natural quartz aggregate to be broadcast to refusal into wet floor.
- Color: Standard WH 7000 colors.
- Two or three coat process.
- Cure Time: 8-10 hours @ 70° F per coat.
- Can be medium or heavy non-skid texture based on top coat thickness.
- Coat Description:
  - 1) Squeegee mixed epoxy, part A & B over substrate @ 125- 150 sq. ft. per gallon.
  - 2) Broadcast natural quartz into floor to refusal.
  - 3) Allow to dry 8-10 hours.
  - 4) Sweep off excess quartz and vacuum.
  - 5) For Top Coat: With squeegee, apply top coat of epoxy @ 85-95 sq. ft. per gallon, back roll, and finish roll to make even and level.
- For Double Broadcast repeat steps 1-4 using a spread rate of 100 sq. ft. per gallon to broadcast into.
- Final Top Coat with Aliphatic Urethane at 350 sf/gal. Mix 2 Parts A with 1 Part B and mix for 3 minutes. Dip and roll keeping wet edge for uniform color.

### NOTE:

Petra Coatings LLC believes this information to be accurate at time of publication and useful for evaluation purposes. Petra Makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time without prior notice. 1/20/2020



[www.PetraCoatings.com](http://www.PetraCoatings.com)

Petra Coatings LLC  
533 Red Bird Lane  
Bowie, TX 76230  
(940) 872-8832 Office  
(940) 872-8833 Fax