

QUARTZ 100

Technical Data Sheet



ATLAS
POLYMERS

MATERIAL DESCRIPTION

Atlas Quartz 100 is an odorless, 100% solids and chemically resistant three component self priming epoxy concrete system. Quartz 100 was engineered to be easily applied and to provide excellent protection for new, old or damaged concrete, against a wide range of severe mechanical abuses. USDA approved for incidental contact with food.

INTENDED USES

- Pipe support bases
- Food & Chemical Processing Areas
- Loading Docks
- Secondary Containment
- Pulp and paper mills
- Anti-slip Surfaces
- Reconstruction of concrete / masonry
- Warehouse Floors

STORAGE AND TECHNICAL INFORMATION

Unit Size 5 US Gallon Pails (43 Lbs)
 Shelf Life 3 Years when stored between 20 °F and 86 °F
 Application Temperature (Ambient) 40 °F - 95 °F (Ambient)
 Mixing Ratio (Volume) 5 Base : 1 Hardener : 27 Aggregate
 Coverage Rate @ 1/4" 15 ft² per unit
 Volume Capacity 540 in³ (0.31 ft³) per unit
 VOC 0.0 Lbs/Gal; 0.0 g/L
 Consistency Trowelable Mortar
 Available Colors Gray, Red, Natural

PRODUCT PERFORMANCE

Heat Resistance:	300 °F Dry / 220 °F Immersed	NACE TM 0174
Compressive Strength:	11,000	ASTM D412
Tensile Strength:	2,000	ASTM D412
Flexural Strength:	4,000	ASTM D624
Hardness:	86 Shore D	ASTM D2240
Impact Resistance:	0.45 ft-lb/in	ASTM D429
Adhesion to Concrete:	>500 (Concrete Failure)	TABER- H18

CURE SCHEDULE

Service / Temperature	41 °F	59 °F	77 °F	86 °F	90 °F
Pot Life	1.5 hrs	1 hr	1 hr	45 mins	30 mins
Light Traffic	16 hrs	6 hrs	4 hrs	3 hrs	2 hrs
Heavy Traffic	24 hrs	16 hrs	10 hrs	8 hrs	6 hrs
Full Cure (Chemical Immersion)	10 days	8 days	72 hrs	48 hrs	48 hrs

CHEMICAL RESISTANCE

***EX = 30 Days @ 72°F**

10% Lactic Acid	Ex*	10% Hydrochloric Acid	Ex*	Bleach	Ex*
10% Nitric Acid	Ex*	75% Phosphoric Acid	Ex*	Diesel	Ex*
50% Sulfuric Acid	Ex*	10% Acetic Acid	Ex*	Oil	Ex*
Motor Oil	Ex*	Diesel Fuel	Ex*	Kerosene	Ex*

TECHNICAL SUPPORT

Atlas Quartz 100 is backed with technical support from staff engineers, certified coatings inspectors, research laboratories and personnel 24 hours a day 7 days a week.
Call (786) 312-1231

MADE IN THE USA

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Material Application Guidelines



SURFACE PREPARATION

Surfaces to which Atlas Quartz 100 is to be applied must be clean firm and dry. Any contamination such as rust, mill scale, dust, oils, grease, fats, waxes, laitance and other coatings/sealers must be removed and or washed prior to the application of Quartz 100.

- Surfaces should be abraded through mechanical means to provide a surface profile of CSP-3 to 5 for concrete and NACE No. 2 / SSPC-SP 10 with a profile of 3 mils for metals. The surface roughness of these profiles is equal to 60-grit sandpaper or coarser.
- New concrete must cure for a minimum of 28 days and have a vapor transmission rate of no more than 3 pounds per 1,000 ft² over a 24 hour period. This could be confirmed through a calcium chloride test as per ASTM E-1907.
- Concrete that has been contaminated with chemicals or other foreign matter must be neutralized to a neutral pH prior to the application of Quartz 100. Neutralization should be carried out by rinsing the contaminated concrete with water and either baking soda or ammonia.
- Please note that any surface irregularities such as cracks, expansion joint and control joints should be properly addressed prior to the application of Quartz 100. Also, please note that waxes, oils or greases should be removed with water and soap. Solvent such as acetone or MEK will not remove them.



CLEAN-UP AND CONSIDERATIONS

Clean Atlas Quartz 100 from tools with isopropyl alcohol, acetone or mineral spirits. This should only be done before it has hardened. Once hard, it can only be removed through mechanical abrasion or grit-blasting.

The cured surface of Atlas Quartz 100 provides is ideal for providing anti-slip resistance. If a smooth surface is desired please contact Atlas Polymers technical service team.



SAFETY & WARRANTY

Atlas Quartz 100 is an epoxy resin system. Please refer to the Material Safety Data Sheets prior to using this product. Do not weld on or near the Hardener epoxy, hazardous fumes will be released.



MIXING

1. To mix Atlas Quartz 100 pour the contents of the Hardener into the Base.
2. Mix for 2-3 minutes using a Jiffy Mixer and a slow speed drill (Less than 800 RPM).
3. Ensure that amount of material mixed can be used within the stated pot life.
4. Using a slow speed drill or a rotating pail mixer add the resin and half of the aggregate to the pail.
5. Let mix for 1-2 minutes.
6. Add the remaining aggregate.
7. Mix for an additional 2-3 minutes.



APPLICATION

1. Immediately pour out the mixed kit onto the floor in 7-10" wide strips.
2. Spread evenly with a clean trowel (steel finishing trowel, 3 x 14).
3. Quartz 100 should be troweled to a finished thickness of at least 1/4", but may be built to 1" or more.
4. Finish each kit before mixing another to insure proper working times and surface textures.
5. As Quartz 100 begins to set up the trowel will pull on the surface creating a porous surface, this can be corrected by cleaning the trowel with isopropyl alcohol or acetone.

Atlas Polymers, Corp. guarantees this product will meet the performance claims stated herein when material is stored and used as instructed in this document. Atlas Polymers further guarantees that all its products are carefully manufactured to ensure the highest quality possible and tested strictly in accordance with universally recognized standards. Since Atlas Polymers has no control over the use of the product described herein, no warranty for any application can be given.