TECHNICAL DATA SHEET

Structure Guard®-Blue

TECHNICAL DATA

TYPICAL PERFORMANCE CHARACTERISTICS*

CHARACTERISTICS	TEST METHOD	PERFORMANCE
Tensile Strength	ASTM D638	>9,000 psi | 62 MPa
Tensile Elongation	ASTM D638	6.6%
Tensile Modulus	ASTM D638	500 ksi | 3,450 MPa
Flexural Strength	ASTM D790	15,700 psi | 108 MPa
Flexural Modulus	ASTM D790	510 ksi | 3,516 MPa
Compressive Strength	ASTM D695	>12,000 psi | 83 MPa
Compressive Modulus	ASTM D695	535 ksi | 3,690 MPa
Adhesion to Concrete	ASTM D7234	Substrate Failure
Hardness, Shore D	ASTM D2240	87.5
Taber Abrasion	ASTM D 4060	1 kg load/1,000 cycles - <80 mg
Adhesion Steel	ASTM D4541	>1,000 psi | 6.9 MPa

**The values stated in inch-pound units are to be regarded as the standard. The values given in international system are for information only.*

PRODUCT DATA

- **Color: White**
- **Solids: 100% (No Solvents)**
- **No VOCs, Nonylphenol-free**
- **Thickness: Up to 250 mils | 6.4mm WFT in a Single Pass**
- **Theoretical Coverage: Minimum thickness of 80 mils for steel and 125 mils for concrete and masonry:**
  - **20.0 ft² | 1.86 m² per gallon @ 80 mil**
  - **12.8 ft² | 1.19 m² per gallon @ 125 mil**
- **Finish: Very Smooth (Manning Coefficient: .009)**
- **Flash Point: > 250°F | 121°C**
- **Ratio: 2A to 1B by volume**

QUADEX® A VORTEX COMPANY REPAIR MATERIALS

NSF 61 Certified Epoxy Protective Coating

DESCRIPTION

Quadex® Structure Guard®-Blue is a 100% solids, high-build epoxy coating formulated to provide long-term protection and structural enhancement for water infrastructure in both municipal and industrial applications. Structure Guard-Blue sets fast for a quick return-to-service and finishes smooth to enhance flow. NSF/ANSI/CAN 61 certified for pipe as small as 4" | 100 mm diameter and tanks 50 gallons | 189 L and larger, Structure Guard-Blue can be utilized for both interior and exterior pipe lining.

FEATURES AND BENEFITS

- **NSF/ANSI/CAN 61 Certified for potable water applications**
- **Excellent abrasion resistance**
- **2 Year shelf life (from date of manufacture)**

CURE TIME @ 70°F | 21°C

- **Re-coat — 2 hours**
- **Light loading — 1 hour**
- **Full chemical cure — 24 hours**
- **Immediate return to service upon full cure**

POT LIFE

- **@ 40°F | 4.4°C — 20 minutes**
- **@ 70°F | 21°C — 10 minutes**
- **@ 92°F | 33.3°C — 5 minutes**

PACKAGING

Structure Guard-Blue is available in 5 gallon | 18.9 L pails and 55 gallon | 208 L drums.

VORTEX

WARRANTY

Quadex, LLC warrants its products to be free of defects in material and workmanship. Unless superseded by project specifications and terms agreed upon in writing between installer and Quadex prior to bid, if within one year from purchase, any Quadex, LLC product is proven defective, the company will replace said product or refund its purchase price at its sole discretion. The company's obligation shall be limited solely to such replacement or refund. There are no other warranties by Quadex, LLC, expressed or implied. There is no warranty if Quadex products are stored or used contrary to Quadex, LLC's written directions.

TYPICAL COATING REQUIREMENTS

With Structure Guard®-Blue, only 1 coat is needed to attain finished thickness. If additional coats are called for they must be applied before the previous coat has completely cross-linked, typically for 2 hours @ 70°F | 21°C (higher temperatures/humidity will shorten this window). If re-coating is needed, brush blast before applying the next coat. Before re-coating, clean and dry surface thoroughly to remove all contamination, including amine blush or condensation. Small areas may be abraded by sanding or wire brushing.

The same requirements apply when overlapping seams of adjacent coating sections to create a continuous protective film. If the coating surface to be overlapped at the seam cannot be brush blasted, use a non-impact means, such as power brushing or sanding, to create adequate mechanical profile.

APPLICATION SYSTEMS

- **Heated Plural Airless Spray Units**
- **Minimum Output 5,000 psi | 345 bar**
- **Product Hose: Min. - Optimum I.D. 0.375 - 0.5 inch | 9.5 - 12.7mm**

SURFACE PREPARATION

Coating performance is largely determined by the degree of surface preparation. MORE IS BETTER.

CONCRETE AND MASONRY substrates must be prepared in a manner that provides a uniform, sound, clean, neutralized surface with sufficient profile suitable for the specified coating. The substrate may require cleaning prior to surface preparation compliant with SSPC-SP 1, as it must be free of all contaminants such as oil, grease, rust, scale or deposits. A surface profile equivalent to a CSP 5 or greater must be created in accordance with ICRI 310.2R, or the substrate must be prepared in accordance with SSPC WJ2; this can generally be achieved by abrasive blasting, shot blasting, or high pressure water cleaning (HPWC - 5,000-10,000 psi | 34-70 MPa).

STEEL surfaces may require cleaning prior to surface preparation compliant with SSPC-SP 1 to remove oil, grease and other soluble contaminants. Identification of the contaminants, along with their concentrations, may require additional laboratory and field testing. Surfaces to be coated should then be prepared according to SSPC-SP 10 "Near White Blast Cleaning" for all service. The resulting anchor profile shall be 3.5-5.0 mils and be relative to the coating thickness specified.