

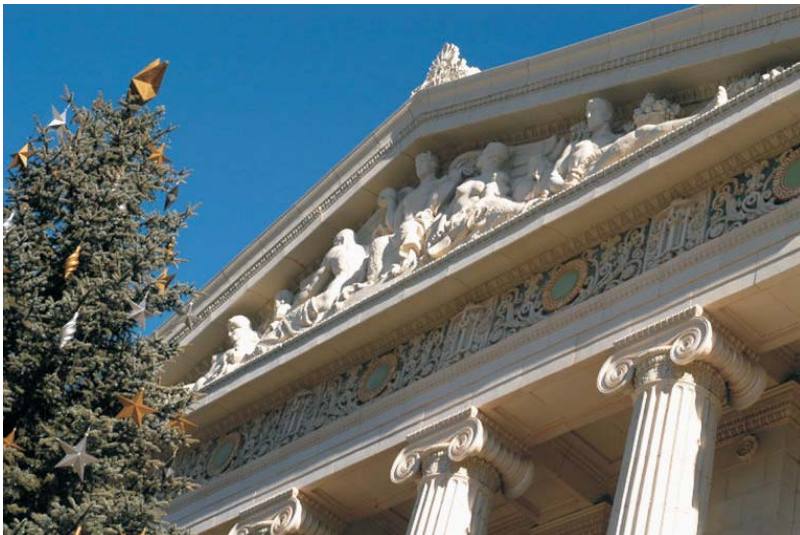


# AQUATHANE UA-210

## Waterborne Polyurethane Coatings



PHOTO, ABOVE: Dozens of custom Aquathane UA210 NCL colors were used to restore decorative terra cotta elements at this Florida museum.



### Specialty Coatings for Special Applications:

- ✓ ARCHITECTURAL
- ✓ ANTI-GRAFFITI
- ✓ TERRA COTTA RESTORATION
- ✓ INDUSTRIAL
- ✓ ANTI-CORROSION

PHOTO: Three custom colors of Aquathane UA210 E were used on extensive terra cotta glaze repairs at this Historic Register site.

# AQUATHANE UA210-Series

## DESCRIPTION:

**AQUATHANE UA-210** series products are high-performance waterborne polyurethane-based coatings. They are breathing, low in odor, VOC-Compliant and fast drying. The series includes products which cure to tough, flexible films of varying degrees of hardness for different applications.

## APPLICATIONS:

**AQUATHANE UA-210** applications include:

- ✓ Anti-Graffiti Coatings - Interior and Exterior
- ✓ Terra Cotta and Brick Glaze Replication
- ✓ UV-Stable, Chemical Resistant Seal Coats for Epoxy Flooring
- ✓ Wood, Stone and Concrete Sealers
- ✓ Stain Resistant Wall & Floor Coatings
- ✓ Many Previously Coated Surfaces

## COLORS & FINISHES:

**AQUATHANE UA210-**Series products are available in Clear and 900 standard colors. Custom color matching is also available.

**AQUATHANE UA-210** tint bases allow Edison Coatings Dealers to perform immediate in-house tinting.

**Gloss, Satin and Flat Finishes are offered.**

## AQUATHANE UA-210 Products

### TYPE H

### Severe Service

**Type H** is a reactive polyurethane emulsion designed for use in the most challenging applications. This self-crosslinking aliphatic urethane resists abrasion and intermittent exposure to water and many chemicals. It is used in interior and exterior concrete floor and deck coating, maintenance coating and many other specialty applications. Clear **Type H** is USDA-accepted for use on incidental food contact surfaces in federally inspected meat and poultry packing plants.

### TYPE A/G

### Anti-Graffiti

Similar in composition and appearance to **Type H**, the **A/G** formulation incorporates fluoropolymer stain-release agents to facilitate removal of spray paints, inks, crayons, markers and other coatings. **AQUATHANE UA-210 TYPE A/G** does not darken or discolor most surfaces. Low odor application permits easy use and touch-up in interior applications such as school buildings, residential hallways, underground parking structures, elevators and many institutional settings. Product resists hydrocarbon solvents typically incorporated in paints, markers and other coatings, allowing removal by use of similar solvents or proprietary cleaners.

### TYPE NCL

### Heavy Duty

Closely related in composition to **Type H**, **Type NCL** omits the self-crosslinking feature to produce more flexible films. Long service life and excellent appearance retention make **Type NCL** the preferred grade for wood finishing and other heavy-duty applications.

### TYPE E Architectural/Elastomeric

This highly flexibilized grade is designed for use on a wide variety of substrates. It may be used directly over porous substrates or in conjunction with **Type G Bonding Additive** or **#240 Primer** over glazed brick, terra cotta, polished stone and other substrates. It may be used over **Elastowall 351 and Elasto-Deck 350** breathable coatings, to provide luster and abrasion resistance without compromising crack-bridging performance. It has also been used as a seal coat over thermally sprayed zinc protection systems for steel structures, where the product's excellent resistance to weather and water extend the service life of the protective zinc treatment.

### TYPE EE

### Elastomeric

This highly elastomeric grade may be used wherever higher elongations and deflection are required. Sports floors, exterior decks and balconies are typical uses.

### TYPE F

### Floor Sealer

**Type F** provides a tough, traffic resistant film for sealing and dust-proofing concrete floors and providing resistance to intermittent exposure to a variety of chemicals.



## ADDITIVES & PRIMERS

Special additives are available to aid in the achievement of particular objectives.

### TYPE G ADDITIVE:

### Glass, Ceramic, Non-Porous Surfaces

For applications on glass, glazed masonry, hard stone, smooth/dense concrete and other non-porous substrates, **Type G Additive** is used to chemically bond **AQUATHANE UA-210** coatings to the substrate. The additive reacts with limestone, sandstone, concrete, marble, granite, stucco, iron, aluminum, lime and masonry mortars, resulting in durable adhesion. NOTE: Use of **Type G Additive** is not a replacement for proper cleaning, and surfaces cleaned with acidic cleaners must be neutralized with an alkaline detergent after-wash and thoroughly rinsed with clean water.

### TYPE A/G ADDITIVE

### Stain Release

This fluoropolymer additive may be added to any grade of **AQUATHANE UA-210** to improve resistance to staining, paints and markers.

### #240 PRIMER

### Dense Surfaces

This one-component waterborne primer develops high bond strength to a wide variety of surfaces, including glazed brick, terra cotta, hard-finished concrete and polished stone.

### AQUAPRIME 211Z

### Metal Primer

Corrosion-resistant zinc/acrylic primer for steel, galvanized steel and aluminum.

PROPERTIES	
PROPERTY	DESCRIPTION
Chemical Resistance* (After 7-day air dry)	Resists solvents, paints, markers, fuels, oils & water Toluene, 24 hr. Imm. No Effect Gasoline, 24 hr. Imm. No Effect Sodium Hydroxide, 1N, 1-hour spot test No Effect Methanol, 24 hr. Imm. Softens, Recovers Isopropanol, 24 hr. Imm. Softens, Recovers Water, 90-day immers. Swells, Recovers M. E. K. Rub Resistance 150+ Passed
Corrosion Resistance*, Humidity (100°F, 100% RH, 1000 hrs.)	Rusting (ASTM D-610) No effect Blistering (ASTM D-714) No effect Loss in Gloss No effect
UV Stability, ASTM G53, 6000 hrs.	Stable, dE<5; Premium, UV-Stable aliphatic urethane composition provides long service life for typical architectural and industrial applications
60° Gloss, Gardner	91 (Clear Gloss Formula)
Fast Drying (70°F, 50% RH)	Dry to touch: 30-60 minutes; Through dry: 60-120 minutes
Rapid Hardness Development (% of ultimate)	4 hours 25% 8 hours 35% 24 hours 60% 7 days 100% Force Cure 20 mins. @ 180°F
Sward Hardness	48
Abrasion Resistance, Taber Abraser, CS-17 Wheel, 1000 cycles, 1000g load	6 mg loss
Impact Resistance (Dir/Rev)	160/160 lb Pass
Composition	Aliphatic polyurethane emulsion with additives, catalysts, surfactants, pigments, resins and modifiers
Compatibility	May be applied over a wide variety of substrates and previous coatings (Confirm through testing prior to application.) Typical substrates include concrete, masonry, glazed brick and terra cotta, stone, wood, steel, aluminum and many latex, oil and epoxy-based coatings. Bonding Additive or Primer required for some substrates and exposures.
Colors, Finishes	Clear, White, Custom Colors Tint Bases may be tinted in-house by Edison Dealers to match 880-Color fan deck system. Gloss, Satin and Flat Finishes

\* Values shown are for clear *UA-210H*

VARIOUS GRADES - TYPICAL PROPERTIES		
TYPE	Elongation	Tensile Strength
H	50-70%	7000 psi
A/G	50-70%	6000 psi
NCL	100-150%	6000 psi
E	300-400%	4500 psi
EE	400-600%	3500 psi
F	10-25%	2500 psi

#### SAFETY:

*AQUATHANE* products are low in odor, non-flammable, low VOC, and non-hazardous when used with adequate ventilation and when care is taken to avoid eye and prolonged skin contact.

#### LIMITATIONS:

*AQUATHANE* products are not intended for use in continuous submersion or continuous high humidity exposures. For continuous immersion/high humidity services, we recommend using *AQUEPOXY 250* immersion-grade waterborne epoxy coating system.

*AQUATHANE* products must not be applied at temperatures below 50°F(10°C), as improper or damaged films may result.



#### APPLICATION

**1. Preparation:** *AQUATHANE UA-210* is supplied ready to use, and is generally not thinned. Flatted formulas may be thinned by addition of 5-10% clean potable water, if necessary. Pigmented formulas should be thoroughly stirred before each use. Applications involving use of *Type G bonding additive* require addition of the additive as a second component just prior to application. Mixtures with *Type G* should be used within one day.

Surfaces should be dust free and clean. Remove all grease, oil and other contaminants and roughen previous coatings to the extent required to get good wetting of the substrate. Prior to large-scale application, particularly over plastics, questionable surfaces or previous coatings, apply an inconspicuous test area to confirm adhesion and compatibility. If adhesion is inadequate, consult



Edison Coatings, Inc. regarding use of an adhesion-promoting primer.

**2. Application:** Apply *AQUATHANE UA-210* at 200 - 400 sq. ft./gallon by brush, pad, roller or low pressure airless spray. Apply evenly and moderately, avoiding rundown or ponding. Avoid excessive agitation or pressure, and avoid whipping air into the product as this may generate foam. A second coat may be applied, if needed, at any time following through-drying of the first coat. Do not apply at temperatures below 50°F (10°C) or when temperatures may fall below 50°F before through-drying. **NOTE:** Lo-Temp Aquathane UA210E or EE may be applied at 40°F.

**NOTE:** Temperature, humidity and air movement all effect drying and curing times. When working at marginal conditions, allow sufficient extra dry and cure times to compensate.

On porous surfaces, *UA-210* generally will require 2 or more coats. Gloss may be increased by applying additional coatings as required for particular job conditions.

In anti-graffiti applications, sufficient material must be applied to build a continuous surface film. Generally two coats will be adequate, but deeply textured or highly porous surfaces may require additional coatings. Multiple coatings (three or more) may limit capacity of the coating to “breathe”, or transmit vapor.

On wood surfaces, *AQUATHANE UA-210* may exhibit slight grain-raising tendencies. For smoothest finish, sand lightly between first and second coats. On hardwood floors, cedar siding or other natural wood surfaces, staining may be desired prior to *AQUATHANE UA-210* application. While the product is compatible with many oil and waterborne stains following overnight drying, compatibility testing in an inconspicuous area is always recommended. Some highly porous or moisture-sensitive fiberboards or simulated wood products may require the use of a sealer/primer before application of *AQUATHANE UA-210*.

On steel, galvanized steel and aluminum surfaces, abrasive cleaning is required to remove rust, loose scale or other corrosion products. This is followed by application of corrosion-inhibiting, adhesion-promoting primer *AQUAPRIME 211*.

Over *350-Series* coatings and *#240 Primer*, base coats must be thoroughly dry before application.

**3. Curing:** *AQUATHANE UA-210* requires curing time before developing full traffic and chemical resistance. *Type A/G* Graffiti resistance roughly parallels strength development, indicated above. Protection of surfaces from vandalism for at least 24-48 hours following application is recommended when possible. Cure may

be accelerated by heating to 180°F for 20 minutes, following drying. Do not subject uncured films to heavy moisture or standing water.

**4. Graffiti Maintenance:** *AQUATHANE UA-210 Type A/G* is intended to withstand repeated cleanings before reapplication is required. Most markers and spray enamels can be removed using Xylene without damage to the *AQUATHANE* coating. If stronger removal is required, methyl ethyl ketone may be used. Proprietary cleaners should be tested before use. Some highly durable stains may require the use of a heavy duty paste paint remover. When using strong removal agents, some loss of gloss in the *AQUATHANE* film may occur. This may be restored by light reapplication in the affected areas. After repeated cleanings, if the film appears rough or uneven, it is time for application of an additional *AQUATHANE UA-210 Type A/G* seal coat.

**CAUTION!:** Many solvents and cleaners commonly used for removing graffiti are hazardous chemicals requiring special care in storage and handling. Refer to manufacturers' Material Safety Data Sheets before using any chemical product.

**5. Storage and Handling:** KEEP FROM FREEZING. Keep container closed when not in use. Use with adequate ventilation. Avoid splashing into eyes or prolonged skin contact. Wash thoroughly after use. Clean tools and applicators immediately after use with warm water. Avoid depositing on shrubbery, windows, cars and other surfaces or property. In case of eye contact, flush with clean water for at least 15 minutes and consult physician. In case of ingestion, give water, do not induce vomiting. Keep out of reach of children. Observe all safety and handling guidelines as detailed in the Material Safety Data Sheets supplied with this product.

## FOR COMMERCIAL AND INDUSTRIAL USE.



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