

# AQUAFIN-TC300V

## Hybrid, aliphatic, polyurea waterproofing membrane

### CSI Div. 07

07 18 00 Traffic Coatings  
 07 18 13 Pedestrian Traffic Coatings  
 07 18 16 Vehicular Traffic Coatings

### Product Description:

AQUAFIN-TC300V is a two component, fast setting, rapid curing and solvent free, high solids, hybrid aliphatic polyurea elastomeric membrane. AQUAFIN-TC300V can be applied to properly prepared interior or exterior concrete surfaces. It is typically used as a top coat over AQUAFIN-TC200P for vehicular traffic bearing applications and any exterior pedestrian traffic bearing applications where UV stability is required. AQUAFIN-TC300V can also be used as a stand alone system for helicopter landing pads.

### Typical Applications:

AQUAFIN-TC300V can be used for a wide range of applications including:

- Pedestrian Traffic Surfaces such as Walkways, Patios, Balconies, Sundecks, Breezeways, Stairways, etc.
- Vehicular Traffic Decks
- Helicopter Landing Pads

### Advantages:

- High Tensile Strength
- Meets USDA Criteria
- Non-Gassing
- Quick Cure
- Seamless
- UV Stable

### Substrate Preparation:

- All areas of concrete to be treated must be sound, clean and free from loose sand, dirt, dust, oil, grease, paint, and other foreign substances that could interfere with adhesion.
- Remove existing floor coverings, coatings, adhesives, curing compounds, and sealers.
- Concrete must be at least 28 days old and must have reached a minimum 3,000 psi (20 MPa) compressive strength. Repair all spalled areas of concrete using a suitable concrete repair product such as MORTAR-40 CI.
- All concrete surfaces must be primed with PRO-Tekt SP (Sealant Primer) prior to the application of AQUAFIN-TC300V. Refer to the current PRO-Tekt SP (Sealant Primer) Technical Data Sheet for all application instructions, including surface preparation, etc.
- Ensure AQUAFIN-TC300V is applied to primed surfaces within the required recoat times.
- Primed surfaces must be completely dry and clean.
- Hot surfaces should be cooled and shaded while cold surfaces should be heated and sheltered.
- Only proceed with application when ambient temperature is minimum

Physical and Technical Data AQUAFIN-TC300V	
Pot Life @ 75°F (24°C), 50% R.H	30 ± 10 minutes
Cure Time @ 75°F (24°C), 50% R.H.	2-4 Hours
Solids by Weight, ASTM D2669	94 ± 2%
Solids by Volume, ASTM D2697	94 ± 2%
Hardness, ASTM 2240	85 ± 5 Shore A
Tensile Strength, ASTM D412	3200 ± 200 psi 22.1 ± 1.4 MPa
Ultimate Elongation, ASTM D412	400 ± 50%
Adhesive Peel Strength on Primed Concrete, ASTM D903	40 ± 10 pli 7.0 ± 1.7 kNm
Moisture Vapor Transmission, ASTM E96	1.54 perms
Water Absorption, ASTM D471	1.3% by weight
Tear Resistance, ASTM D624	300 ± 20 pli 52.6 ± 8.8 kN/m
VOC, ASTM D2369	<0.12 lb/gal <15 gm/liters
U.V. Stability, Q Panel Weather O-Meter, (No cracking or crazing; no physical damage)	2000 Hours
<b>Theoretical Coverage:</b> note product waste and substrate variances will affect coverage rates	100 ft <sup>2</sup> /gal @ 15 (± 1) dry mils 78 ft <sup>2</sup> /gal @ 18 (± 1) dry mils 66 ft <sup>2</sup> /gal @ 23 (± 1) dry mils

40°F (4°C) and rising, and more than 6°F above dew point. Temperatures must be maintained within this range for at least 24 hours after the installation of AQUAFIN-TC300V. Do NOT proceed with application when the temperatures drop below 20°F (-6.7°C) or if precipitation is imminent. Special precautions are to be taken when ambient and/or substrate temperatures are approaching, at, or above 95°F (35°C) and it may be necessary to limit material application to evening hours for exterior exposed decks. Do not apply if humidity is at or above 95%.

- Expansion and control joints are to be prepared in accordance with project specifications.

### Mixing:

- AQUAFIN-TC300V is supplied in the appropriate mixing ratio. Always mix full units.
- Use chemical resistant (Nitrile) gloves and goggles when mixing or applying AQUAFIN-TC300V.

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- For ease of mixing and placement, the temperature of the “A” and “B” components should be between 70°F to 80°F (20°C to 26°C).
- Pre-mix the “A” and “B” components to ensure all raw material and pigments are dispersed uniformly.
- Mix for 1-2 minutes. Box the materials. Mix the combined Side-A and Side-B mixture thoroughly until uniform color is attained. Thoroughly scrape sides of pail as material is mixed.
- Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life. Do not mix in an up and down motion.

## Installation:

### Read all instructions thoroughly prior to installation.

- For best results, use a squeegee or notched trowel. A phenolic resin core roller may be used but extra care should be taken not to trap air which may result in bubbles.
- Apply material in a continuous coating (wet on wet) application to minimize lines and/or streaking.

### Pedestrian Applications where UV Stability is required:

- **Primer:** Apply PRO-Tekt SP (Sealant Primer). Refer to PRO-Tekt SP (Sealant Primer) TDS for full mixing and application instructions. Pay close attention to recoat times.
- **Base Coat:** Apply AQUAFIN-TC200P within 16 hours at a max. of 100 ft<sup>2</sup> per gal to achieve a minimum of 15 DFT (± 1) (dry film thickness). Refer to AQUAFIN-TC200P TDS for full mixing and application instructions.
- Allow coat to cure for 2-4 hours (at 75°F (24°C) and 50% relative humidity).
- **Top Coat:** Apply AQUAFIN-TC300V within 12 hours at a max. of 66 ft<sup>2</sup> per gal to achieve a minimum of 23 (± 1) DFT (dry film thickness).
- Immediately (within 2 minutes) after application, broadcast Aquafin Coated Quartz Sand at a rate of 10-20 lbs/100 ft<sup>2</sup> (0.49 - 0.98 kg/m<sup>2</sup>) or as required to achieve a slip-resistant finish and immediately backroll sand into the wet coating so that the sand is fully encapsulated. The aggregate should be applied vertically, allowing it to fall onto the AQUAFIN-TC300V. As a second option, clean, dry, washed, oven dried, rounded sand, 2-16 or 16-30 mesh (1.19 mm), 6.5+ Mohs minimum hardness can also be used for the sand broadcast.
- **Total System Thickness:** 38 mils DFT + 15 mils DFT due to sand aggregate broadcast

### Vehicular Applications, Drive Lanes and Standard Exposure:

- **Primer:** Apply PRO-Tekt SP (Sealant Primer). Refer to PRO-Tekt SP (Sealant Primer) TDS for full mixing and application instructions. Pay close attention to recoat times.
- **Base Coat:** Apply AQUAFIN-TC200P within 16 hours at a max. of 66 ft<sup>2</sup> per gal to achieve a minimum of 24 (± 1) DFT (dry film thickness). Refer to AQUAFIN-TC200P TDS for full mixing and application instructions.
- Allow base coat to cure for 2-4 hours (at 75°F (24°C) and 50% relative humidity).
- **Top Coat:** Apply AQUAFIN-TC300V within 12 hours at a max. of 78 ft<sup>2</sup> per gal to achieve a minimum of 18 (± 1) DFT (dry film thickness).
- Immediately (within 2 minutes) after application, broadcast Aquafin Coated Quartz Sand at a rate of 10-20 lbs/100 ft<sup>2</sup> (0.49 - 0.98 kg/m<sup>2</sup>) or as required to achieve a slip-resistant finish and immediately backroll sand into the wet coating so that the sand is fully encapsulated. The aggregate should be applied vertically, allowing it to fall onto the AQUAFIN-TC300V. As a second option, clean, dry, washed, oven dried, rounded sand, 2-16 or 16-30 mesh (1.19 mm), 6.5+ Mohs minimum hardness can also be used for the sand broadcast.

- **Total System Thickness:** 42 mils DFT + 15 mils DFT due to sand aggregate broadcast

### Vehicular Applications, Turn Lanes, Ramps and Heavy Duty Exposure:

- **Follow all steps in “Drive Lanes and Standard Exposure” listed above.**
- Allow Top Coat to cure for 2-4 hours (at 75°F (24°C) and 50% relative humidity).
- **Second Top Coat:** Apply AQUAFIN-TC300V within 12 hours at a max. of 100 ft<sup>2</sup> per gal to achieve a minimum of 15 (± 1) DFT (dry film thickness).
- Immediately (within 2 minutes) after application, broadcast Aquafin Coated Quartz Sand at a rate of 10-20 lbs/100 ft<sup>2</sup> (0.49 - 0.98 kg/m<sup>2</sup>) or as required to achieve a slip-resistant finish and immediately backroll sand into the wet coating so that the sand is fully encapsulated. The aggregate should be applied vertically, allowing it to fall onto the AQUAFIN-TC300V. As a second option, clean, dry, washed, oven dried, rounded sand, 2-16 or 16-30 mesh (1.19 mm), 6.5+ Mohs minimum hardness can also be used for the sand broadcast.
- **Total System Thickness:** 57 mils DFT + 15 mils DFT due to sand aggregate broadcast

### Helicopter Landing Pads:

- **Primer:** Apply PRO-Tekt SP (Sealant Primer). Refer to PRO-Tekt SP (Sealant Primer) TDS for full mixing and application instructions. Pay close attention to recoat times.
- **Base Coat:** Apply AQUAFIN-TC300V within 16 hours at a max. of 66 ft<sup>2</sup> per gal to achieve a minimum of 23 (± 1) DFT (dry film thickness).
- Allow base coat to cure for 2-4 hours (at 75°F (24°C) and 50% relative humidity).
- **Intermediate Coat:** Apply AQUAFIN-TC300V within 12 hours at a max. of 66 ft<sup>2</sup> per gal to achieve a minimum of 23 (± 1) DFT (dry film thickness).
- Immediately (within 2 minutes) after application, broadcast Aquafin Coated Quartz Sand at a rate of 10-20 lbs/100 ft<sup>2</sup> (0.49 - 0.98 kg/m<sup>2</sup>) or as required to achieve a slip-resistant finish and immediately backroll sand into the wet coating so that the sand is fully encapsulated. The aggregate should be applied vertically, allowing it to fall onto the AQUAFIN-TC300V. As a second option, clean, dry, washed, oven dried, rounded sand, 2-16 or 16-30 mesh (1.19 mm), 6.5+ Mohs minimum hardness can also be used for the sand broadcast.
- Allow intermediate coat to cure for 2-4 hours (at 75°F (24°C) and 50% relative humidity).
- **Top Coat:** Apply AQUAFIN-TC300V within 12 hours at a max. of 100 ft<sup>2</sup> per gal to achieve a minimum of 15 (± 1) DFT (dry film thickness).
- Immediately (within 2 minutes) after application, broadcast Aquafin Coated Quartz Sand at a rate of 10-20 lbs/100 ft<sup>2</sup> (0.49 - 0.98 kg/m<sup>2</sup>) or as required to achieve a slip-resistant finish and immediately backroll sand into the wet coating so that the sand is fully encapsulated. The aggregate should be applied vertically, allowing it to fall onto the AQUAFIN-TC300V. As a second option, clean, dry, washed, oven dried, rounded sand, 2-16 or 16-30 mesh (1.19 mm), 6.5+ Mohs minimum hardness can also be used for the sand broadcast.
- **Total System Thickness:** 61 mils DFT + 15 mils DFT due to sand aggregate broadcast

Note: product waste and substrate variances will affect coverage rates.

### Curing:

- At 75°F (24°C) and 50% relative humidity, allow each coat to cure a minimum of 2-4 hours. Cure time will vary depending on temperature and humidity. If more than 12 hours passes between coats, contact Aquafin Technical Department for recommendations prior to proceeding.

- Allow a minimum of 2 to 4 hours before permitting light pedestrian traffic and 48 hours before permitting heavy pedestrian or vehicular traffic on the finished surface. These times are of course predicated on ambient temperature and humidity.
- AQUAFIN-TC300V is sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes.

**Clean-up:**

Immediately clean all equipment and tools with polyurethane-grade solvent (alcohol free).

**Limitations:**

- Higher temperatures will result in shortened working times and faster drying time.
- Color may vary due to batch to batch variation, always “box” different batches to avoid it.

**Note:**

Proper application is the responsibility of the user. Field visits by AQUAFIN personnel are for the purpose of making technical recommendations and not for supervising or providing quality control on-site.

**Packaging:**

**Colors:**

- AQUAFIN-TC300V is available in a Light Gray and Tan color.
- **4.4 gal kits:** One 5 gallon (net 4 gallons, 15.4 liters) pail of Side-A and one 1/2 gallon (net 0.4 gallon, 1.54 liters) jar of Side-B.

NOTE: Aquafin Coated Quartz Sand is sold separately and is not included in kits.

**Storage and Shelf Life:**

Shelf Life: 1 year in original unopened container. Store material between 40°F to 90°F (4°C to 32°C). Store in a dry environment and out of direct sunlight.

**Safety:**

Refer to SDS. For commercial use only. Avoid contact with skin and eyes. Wear rubber gloves and safety goggles during mixing and application. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of water for 15 minutes and seek medical advice. KEEP OUT OF REACH OF CHILDREN.

LIMITED WARRANTY: AQUAFIN, INC. warrants this product for a period of one year from the date of installation to be manufactured free of defects and to be consistent with its technical properties as stated in our current Technical Data Sheet. This product must be used as directed and within its stated shelf life. AQUAFIN INC. will replace or at our discretion refund the purchase price of any product, excluding cost of labor, which is proven to be defective. Our product recommendations are based on industry standards and testing procedures. It is the buyer’s obligation to test the suitability of the product for an intended use prior to using it. We assume no warranties written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

**For Professional Use Only.**

**The following colors are available:**



**Light Gray**



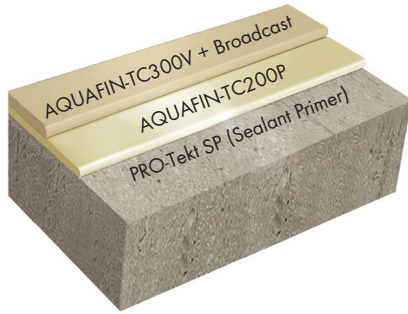
**Tan**

Color Chart is a representation of the actual color only. Every effort has been made to reproduce these color samples as faithfully as possible. Color variations between batches may exist. Colors may vary due to differences in surface texture, lighting, and methods of application. When ordering additional products make sure you use the same batch number. You will find the batch number on the product label. Not all colors are available always available. Contact Aquafin with questions regarding colors prior to ordering any materials or starting a project.

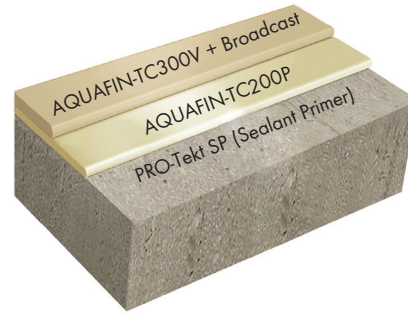
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## System Build-Up Options:

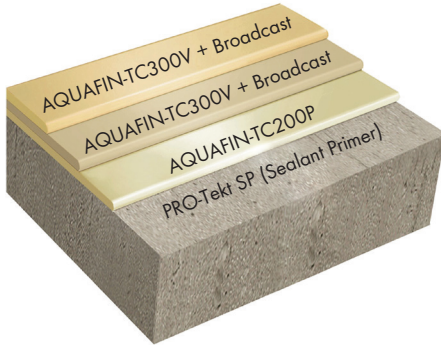
**Pedestrian Applications where UV Stability is required:**



**Vehicular Applications, Drive Lanes and Standard Exposure:**



**Vehicular Applications, Turn Lanes, Ramps and Heavy Duty Exposure:**



**Helicopter Landing Pads:**



### AQUAFIN-TC200P and AQUAFIN-TC300V - Application Rates for System Build-Up Layers:

DFT (dry film thickness) requirements are provided in mils

	Pedestrian Applications	Vehicular Applications		Helicopter Landing Pads
	UV Stability is required:	Drive Lanes and Standard Exposure:	Turn Lanes, Ramps and Heavy Duty Exposure:	
<b>1st Layer</b>	PRIMER: PRO-Tekt SP (Sealant Primer)	PRIMER: PRO-Tekt SP (Sealant Primer)	PRIMER: PRO-Tekt SP (Sealant Primer)	PRIMER: PRO-Tekt SP (Sealant Primer)
<b>2nd Layer</b>	BASE COAT: AQUAFIN-TC200P at 100 sq. ft. per gal / 15 (± 1) DFT	BASE COAT: AQUAFIN-TC200P at 66 sq. ft. per gal / 24 (± 1) DFT	BASE COAT: AQUAFIN-TC200P at 66 sq. ft. per gal / 24 (± 1) DFT	BASE COAT: AQUAFIN-TC300V at 66 sq. ft. per gal / 23 (± 1) DFT
<b>3rd Layer</b>	TOP COAT: AQUAFIN-TC300V at 66 sq. ft. per gal / 23 (± 1) DFT + Coated Quartz Sand	TOP COAT: AQUAFIN-TC300V at 78 sq. ft. per gal / 18 (± 1) DFT + Coated Quartz Sand	TOP COAT: AQUAFIN-TC300V at 78 sq. ft. per gal / 18 (± 1) DFT + Coated Quartz Sand	INTERMEDIATE COAT: AQUAFIN-TC300V at 66 sq. ft. per gal / 23 (± 1) DFT + Coated Quartz Sand
<b>4th Layer</b>			SECOND TOP COAT: AQUAFIN-TC300V at 100 sq. ft. per gal / 15 (± 1) DFT + Coated Quartz Sand	TOP COAT: AQUAFIN-TC300V at 100 sq. ft. per gal / 15 (± 1) DFT + Coated Quartz Sand

**Notes:** Application rates and yield values are approximate. Actual coverage may vary due to substrate variances. Failure to achieve the required DFT (dry film thickness) will compromise the effectiveness of the product and void the warranty. It is the applicator's responsibility to verify that the required dry mil thickness has been attained.