

Surfacing Specification for Professional Cushioned Tennis Courts

PART 1 – GENERAL

1.1 General Description

A. This specification is for a colored and textured acrylic cushioned surfacing system for use on asphalt and concrete tennis courts.

B. This specification is for the surfacing/resurfacing of tennis courts located at:

City

State

Zip

1.2 Manufacturer Quality Assurance

A. The company shall be U.S. owned.

B. All coatings, patching and resurfacing compounds shall be ACRYTECH by Stegas, Inc. of Austell, GA or approved equal.

C. All coatings shall have a 2-year manufacturer warranty.

D. The surface installed shall be classified by the International Tennis Federation (ITF) as Medium.

1.3 Installer Quality Assurance

A. The installer shall be a certified installer of the manufacturer.

B. The contractor shall be a member of the ASBA. All work shall conform to American Sports Builders Association (ASBA) guidelines.

C. The contractor shall record the batch number of each product used on site and maintain it through the warranty period.

D. The contractor shall provide the inspector, upon request, an estimate of the volume of each product to be used on site.

1.4 Submittals (see www.tennispaint.com for items A-C)

A. Technical Data Sheets (TDS) for system components and one color chart

B. Safety Data Sheets (SDS) for system components

C. Manufacturer's warranty of no less than two years

D. Installer Certification from the manufacturer

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1.5 Material Handling and Storage

- A. Store and move materials in accordance with the manufacturer's TDS and SDS.

PART 2 – PRODUCTS

2.1 Manufacturer

- A. Stegas, Inc., Austell, GA, Product: ACRYTECH, www.tennispaint.com
- B. Approved Equal: Submit documentation to demonstrate to the owner that alternate products are of equal quality to the specified product.

2.2 Materials

- A. ACRYTECH Sport Patch (Deep Patch): A 100% acrylic latex emulsion, that when mixed with Portland cement and sand, produces semi flexible latex concrete that is ideal for patching depressions over 1/4" deep and filling cracks larger than 3/8" wide. ACRYTECH Sport Patch is appropriate for use when applied to asphalt or concrete surfaces, or to previously coated surfaces.
 - 1. Percent solids by weight: 47%
 - 2. Weight: 8.8 lbs/gal
- B. ACRYTECH AcryLock: A 100% acrylic latex emulsion, that when mixed with 1 part water penetrates and primes concrete surfaces.
 - 1. Percent solids by weight: 47%
 - 2. Weight 8.8 lbs/gal
- C. ACRYTECH Acrylic Resurfacer: A 100% acrylic latex emulsion concentrate designed for the addition of water and silica sand on site for hiding patchwork, smoothing, and preparing for ACRYTECH Colorguard. Apply 1-2 coats as according to section 3.5.
 - 1. Percent solids and pigments by weight: 45%
 - 2. Weight: 9.5 lbs/gal
- D. ACRYTECH Medium Cushion: A 100% acrylic latex emulsion concentrate filled with 0.5-1.0mm EPDM rubber granules.
 - 1. Percent solids by weight: 44%
 - 2. Weight: 8.72 lbs/gal
- E. ACRYTECH Small Cushion
 - 1. Percent solids by weight: 45%
 - 2. Weight: 9.1 lbs/gal

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- F. ACRYTECH Colorguard: A 100% acrylic latex emulsion concentrate designed for the addition of water and silica sand (texture) on site to be used as a secondary and final coating.
 - 1. Percent solids and pigments by weight: 47%
 - 2. Weight: 9.8 lbs/gal
- G. ACRYTECH Sand: 80 mesh silica sand specifically selected to meet the ITF Medium court pace classification rate when added at the proper rate seen in the Mixing and Court Speed of Play chart section 3.5 B.
- H. ACRYTECH Colorguard Premix: Colorguard factory mixed with silica sand at the ITF Medium court pace classification rate for use when precise ITF court pace is required at professional tournaments.
 - 1. Percent solids by weight: 65%
 - 2. Weight: 12.5 lbs/gal
- I. ACRYTECH Line Primer: Optional clear drying primer to prevent line bleeding and create the most precise lines. Recommended for professional courts.
 - 1. Percent solids and pigments by weight: 29%
 - 2. Weight: 10 lbs/gal
- J. ACRYTECH White Line Paint: A 100% acrylic latex emulsion textured bright white line marking paint. 20-25% of White Line Paint may be added to Colorguard colors to create lighter colors commonly used for QuickStart lines.
 - 1. Percent solids and pigments by weight: 71%
 - 2. Weight: 12.4 lbs/gal

PART 3 – EXECUTION

3.1 Limitations

- A. DO NOT APPLY WHEN:
 - 1. Rain is in the near forecast.
 - 2. Surface temperatures exceed 54°C (130°F). Surface temperatures may be reduced by misting surface with water prior to application except on the final Colorguard coat.
 - 3. When ambient air temperatures are below 10°C (50°F).

3.2 New Construction (asphalt)

- A. Allow asphalt to cure a minimum of 14 days.
- B. Inspect asphalt for irregularities, including contamination and unevenness. Findings, if any, shall be reported to general contractor.

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- C. Remove any mold, mildew, algae, dirt, grease, oil and other debris from surface using issue-specific cleaners and rinse as needed.
- D. Flood surface with water to check for depressions 1/16" or greater. Fill with ACRYTECH Sport Patch (Deep Patch) as needed and allow to completely cure.

3.3 New Construction (concrete)

- A. For proper bonding, concrete should have a broom finish and a vapor barrier installed.
- B. Allow concrete to cure a minimum of 30 days.
- C. Inspect concrete for irregularities, including contamination and unevenness. Findings, if any, shall be reported to general contractor.
- D. Acid bath concrete using muriatic acid. Follow manufacturers' recommendations. Pressure wash and rinse as needed.
- E. Flood surface with water to check for depressions 1/16" or greater. Fill with ACRYTECH Sport Patch (Deep Patch) as needed.
- F. Prime concrete with ACRYTECH AcryLock.

3.4 Existing Construction (concrete)

- A. Pressure wash surface to remove mold, mildew, algae, dirt, grease, oil and other debris.
- B. Inspect surface for irregularities, including contamination and unevenness. Findings, if any, shall be reported to general contractor.
- C. Fill cracks with ACRYTECH Sport Patch (Deep Patch).
- D. Use other specified crack repair method if specified.

3.5 Application - *No coatings shall be applied until inspector has approved the surface. See section 4 for all coating mixing instructions*

- A. All Surfaces-apply coatings with soft rubber squeegee. Allow each coat to completely dry (usually 1-3 hours) prior to applying next coat.
- B. Acrylic Resurfacer
 1. Apply 1 coat on new surfaces to help first medium cushion coat "grab."
 2. For hard court to cushion conversions, apply 1 coat only if previous surface has no remaining texture for cushion to "grab."
- C. Medium Cushion – allow each coat to thoroughly dry (Average application rate of .16 to .18 gal/sq yd per coat)
 1. Apply 1st coat at a rate of approximately .16 gal/sq yd. 1st coat may appear

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inconsistent as the cushion layer fills in surface imperfections and begins to “grab.”

2. Apply 2nd coat at a rate of approximately .18 gal/sq yd.
 3. Apply 3rd coat at a rate of approximately .18 gal/sq yd.
- D. Small Cushion – allow each coat to thoroughly dry
(Average application rate of .12-.13 gal/sq yd per coat)
1. Apply 1st coat at a rate of approximately .16 gal/sq yd. The 1st coat will use more product as it fills the voids in the medium cushion surface.
 2. Apply 2nd coat at a rate of .10-.11 gal/sq yd.
 3. (optional) Apply additional coats at a rate of .10-.11 gal/sq yd.
- E. Mix Colorguard according to the charts below. If Colorguard Premix is used, only add 15-18 gallons of water per 40 gallons of Premix.
1. Apply three coats of Colorguard.

3.6 Line Markings

- A. Apply only after ACRYTECH Colorguard is thoroughly dry, up to 24 hours after final coat.
- B. Lines shall be laid out in accordance with USTA guidelines.
- C. Lines shall be applied by painting in between machine laid masking tape with a soft bristle brush or high quality roller.
- D. Apply one coat of ACRYTECH Line Primer (optional) – Recommended for professional courts.
- E. Apply one coat of ACRYTECH White Line Paint. Depending on brush or roller quality, a second coat may be required.
 1. Up to 20 feet at a time if ambient air temperature exceeds 30°C (86°F).
 2. Up to 40 feet at a time if ambient air temperature is under 30°C (86°F).

3.7 Completion

- A. Remove all construction equipment, leftover materials and waste from site.
- B. No traffic of any kind shall be allowed on the surface for a period of 24 to 72 hours. After that period of time check surface to make sure the surface has sufficiently dried. Cloudy conditions, rain showers or temperatures below 70 degrees may extend the required drying time. ACRYTECH Recreational Coatings are fully cured in 30 days.

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4.0 Mixing Instructions

ACRYTECH Acrylic Resurfacer Mixing Chart
27.5 gal concentrate

Filling Power	Greater Filling (e.g. New asphalt)	Standard Filling
Sand Grade	80 mesh	80 mesh
Sand Qty	250 pounds	200 pounds
Water	15-18 gallons	15-18 gal

ACRYTECH Cushion Mixing Chart
Mix 4 parts Cushion to 1 part Water

Product	Concentrate (gal)	Water (gal)	Concentrate Coverage
Medium Cushion	44	11-12	.16-.20 gal/sq yd.
Small Cushion	44	11-12	.10-.12 gal/sq yd.

ACRYTECH Colorguard Mixing and Court Speed of Play chart
27.5 gal concentrate

Speed of Play	Medium-Slow	ITF Medium (Standard)	Medium-Fast
Sand Grade	80 mesh	80 mesh	80 mesh
Sand Qty	225 pounds	200 pounds	150 pounds
Water	15-18 gallons	15-18 gallons	15-18 gallons