

TEXTURED ACRYLIC COLOR SURFACING FOR TENNIS COURTS AND PLAY AREAS

PART 1 GENERAL

1.1 GENERAL DESCRIPTION

- A. Textured acrylic surfacing for tennis courts and similar play areas.

1.2 RELATED SECTIONS

A. Related Work

1. Concrete pavement (sec _____)
2. Court marking for tennis courts (sec _____)
3. Cushion underlayments for tennis courts (sec _____)
4. Athletic equipment (sec _____)

B. References

1. American Concrete Institute (ACI)
2. American Sport Builders Association (ASBA)

1.3 QUALITY ASSURANCE

- A. If intended for sports use, surfacing shall conform to the guidelines of the ASBA for planarity.
- B. Concrete shall have a vapor barrier in accordance with ASTM E-1745.
- C. Concrete mixes should be placed with a water/cement ratio of .45.
- D. Concrete surface should have a medium-broom finish.
- E. Curing compounds should not be used unless the curing compound manufacturer specifically states the surface may be coated with water based acrylic coatings.
- F. All surface coatings products shall be supplied by a single manufacturer.
- G. The contractor shall record the batch number of each product used on the site and maintain it through the warranty period.
- H. The contractor shall provide the inspector, upon request, an estimate of the volume of each product to be used on the site.
- I. The installer shall be an authorized applicator of the specified system.
- J. The manufacturer's representative shall be available to help resolve material questions.

1.4 SUBMITTALS

- A. Manufacturer specifications for components, color chart and installation instructions.
- B. Authorized Applicator certificate from the surface system manufacturer.
- C. Reference list from the installer of at least 5 projects of similar scope done in each of the past 3 years.
- D. Current Material Safety Data Sheets (MSDS).
- E. Product substitution: If other than the product specified, the contractor shall submit at least 7 days prior to the bid date a complete type written list of proposed substitutions with sufficient data, drawings, samples and literature to demonstrate to the owners satisfaction that the proposed substitution is of equal quality and utility to that originally specified. Information must include a QUV test of at least 1000 hours illustrating the UV stability of the system. The color system shall have an ITF pace rating. Under no circumstances will systems from multiple manufacturers be considered.

1.5 MATERIAL HANDLING AND STORAGE

- A. Store materials in accordance with manufacturer specifications and MSDS.
- B. Deliver product to the site in original unopened containers with proper labels attached.
- C. All surfacing materials shall be non flammable.

1.6 GUARANTEE

- A. Provide a guarantee against defects in the materials and workmanship for a period of one year from the date of substantial completion.

1.7 INSTALLER QUALIFICATIONS

- A. Installer shall be regularly engaged in construction and surfacing of acrylic tennis courts, play courts or similar surfaces.
- B. Installer shall be an Authorized Applicator of the specified surface system.

1.8 MANUFACTURER QUALIFICATIONS

- A. System manufacturer shall be a US owned company.
- B. System manufacturer shall be a member of the ASBA.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. California Products Corp., Andover, MA. 01810 / DecoTurf, www.decoturf.com

B. Substitutions: Submit requests at least 7 days prior to the bid date with a complete type written list of proposed substitutions with sufficient data, drawings, samples and literature to demonstrate to the owner's satisfaction that the proposed substitution is of equal quality and utility to the specified product. Information must include a QUV test of at least 1000 hours illustrating the UV stability of the system.

2.2 MATERIALS

- A. Patching Mix (California Court Patch Binder) - for use in patching cracks, holes, depressions and other surface imperfections.
- B. Crack Filler (California Crack Filler) - for use in filling fine cracks.
- C. Concrete Preparer is a specially formulated acid heat for use in neutralizing the concrete in preparation for the DecoTurf System.
- D. Acrylic Wearing Surface (Acrylotex/DecoColor MP) – for use as the finish color and texture. DecoColor MP and Acrylotex are blended at the job site to achieve the correct surface texture.
- E. Line Paint (California Line Paint) – for use as the line marking on the court/play surface.
- F. Water – for use in dilution/mixing shall be clean and potable.

2.3 MATERIAL SPECIFICATIONS

- A. Court Patch Binder – 100% acrylic resin blended with Portland Cement and silica sand.
Weight 8.7-8.9 lbs./gallon
- B. California Crack Filler – 100% acrylic resin heavily filled with sand.
Weight 15 lbs./gallon
- C. Concrete Preparer – Phosphoric Acid based surface treatment
Weight 9.5-9.6 lbs./gallon
- D. DecoColor MP – 100% acrylic resin (no vinyl copolymerization constituent) with selected light fast pigments. Green shall contain not less than 10% chrome oxide.
 - 1) Percent solids by weight (minimum) 43.0%
 - 2) Weight 10.5./gallon
- E. Acrylotex I Neutral – 100% acrylic resin blended with DecoColor MP and Portland Cement. Contains not more than 63% rounded silica sand.
 - 1) Percent solids by weight (minimum) 71%
 - 2) Weight 11.9 lbs./gallon
- F. California Line Paint – 100% acrylic resin (containing no alkyds or vinyl constituents). Texturing shall be rounded silica sand.

Weight

12-12.3 lbs./gallon

All surfacing materials shall be non-flammable and have a VOC content of less than 100g/l, measured by EPA method 24.

Local sands are not acceptable in the color playing surface. Sands must be incorporated at the manufacturing location to insure quality and stability.

PART 3 EXECUTION

3.1 WEATHER LIMITATIONS

- A. Do not install when rainfall is imminent or extremely high humidity prevents drying.
- B. Do not apply unless surface and air temperature are 50°F and rising.
- C. Do not apply if surface temperature is in excess of 140°F.

3.2 PREPARATION FOR ACRYLIC COLOR PLAYING SYSTEM

A. Clean surfaces of loose dirt, oil, grease, leaves, and other debris in strict accordance with manufacturer's directions. Pressure washing will be necessary to adequately clean areas to be coated. Any areas previously showing algae growth shall be treated with OxiCourt or approved product to kill the organisms and then be properly rinsed.

B. Holes and cracks: Cracks and holes shall be cleaned and a suitable soil sterilant, as approved by the owner, shall be applied to kill all vegetation 14 days prior to use of **Court Patch Binder** according to manufacturer's specifications.

C. Depression: Depressions holding enough water to cover a five cent piece shall be filled with Court Patch Binder Patching Mix: 3 gallons of Court Patch Binder, 100 lbs. 60-80 silica sand, 1 gallon Dry Portland Cement (Type I). The contractor shall flood all the courts and then allow draining. Define and mark all areas holding enough water to cover a nickel. After defined areas are dry, prime with tack coat mixture of 2 parts water/1 part Court Patch Binder. Allow tack coat to dry completely. Spread Court Patch Binder mix true to grade using a straight edge for strike off. Steel trowel or wood float the patch so that the texture matches the surrounding area. Never add water to mix. Light misting on surface and edges to feather in is allowed as needed to maintain work ability. Allow to dry thoroughly and cure.

NO WORK FROM THIS STAGE ON SHALL COMMENCE UNTIL AN INSPECTOR HAS ACCEPTED THE SURFACE.

D. Acid Treatment: Concrete Preparer shall be applied to all uncoated concrete surfaces at the rate of .01 to .012 gallon per square yard. Dilute 1 gallon of Concrete Preparer with 4 gallons of potable water. Apply liberally to the surface and spread with a soft hair push broom. After the surface has dried remove any dust or latent material.

3.3 APPLICATION OF ACRYLIC COLOR PLAYING SURFACE

A. All areas to be color coated shall be clean, free from sand, clay, grease, dust, salt or other foreign matters. The Contractor shall obtain the Engineer's approval, prior to applying any surface treatment.

B. Blend Acrylotex and DecoColor MP with a mechanical mixer to achieve a uniform mixture. The mix ratio shall be:

Acrylotex	30 gallons
DecoColor MP	10 gallons
Water	15 gallons
Portland Cement	1-2 gallons

One gallon equals approximately 22 pounds dry Portland cement. Additional Portland cement will provide further hardness and faster drying. Portland Cement is optional on asphalt, but it will improve wear resistance. White Portland Cement is preferred. The diluted material shall be homogeneous. Segregation before or during application will not be permitted. A mechanical drill mixer is recommended and mixture should be stirred until homogeneous. Periodic mixing should take place as job progresses to ensure consistent application.

C. Application shall be made by 50 durometer rubber faced squeegees. The mixture should be poured on to the court surface and spread to a uniform thickness in a regular pattern.

A. A total of 2 applications of textured Acrylotex/DecoColor MP mix shall be made to achieve a total application rate of not less than .10 gal./sy/coat. No application should be made until the previous application is thoroughly dry.

B. Multi Sport play areas with concentrated wear areas such as basketball alleys may receive an extra coat of the Acrylotex mix to extend life expectancy.

3.4 LINE PAINTING

A. If intended for sports use, lines shall be carefully laid out in accordance with ASBA guidelines. The area to be marked shall be taped to insure a crisp line. The California Line Paint shall have a texture similar to the surrounding play surface. Application shall be made by brush or roller at the rate of 150-200 sf/gal.

3.6 PROTECTION

A. Erect temporary barriers to protect coatings during drying and curing.

B. Lock gates to prevent use until acceptance by the owner's representative.

3.7 CLEAN UP

A. Remove all containers, surplus materials and debris. Dispose of materials in accordance with local, state and Federal regulations.

B. Leave site in a clean and orderly condition.