

TEXTURED ACRYLIC COLOR SURFACING FOR TENNIS COURTS AND PLAY AREAS

PART 1 GENERAL

1.1 GENERAL DESCRIPTION

A. Textured acrylic surfacing for concrete tennis courts, basketball courts, pickleball 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. United States Tennis Association (USTA)
3. International Tennis Federation (ITF)
4. American Sport Builders Association (ASBA)

1.3 QUALITY ASSURANCE

- A. All concrete surfaces shall have a medium broom finish. Smooth or steel trowel finishes will not be acceptable and will require shot blasting to create texture.
- B. Concrete shall have a **Class B** vapor barrier in accordance with ASTM E-1745 placed directly beneath slab. An approved waterproofing membrane for elevated slabs is also acceptable.
- C. Concrete mixes should be placed with a water/cement ratio of 0.45
- D. Curing compounds should not be used unless the curing compound manufacturer specifically states the surface may be coated with water based acrylic coatings.
- E. Surfacing shall conform to the guidelines of the ASBA for planarity.
- F. All surface coating 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. ITF classification certificate for the system to be installed.

D. Reference list from the installer of at least 3 projects of similar scope done in each of the past 3 years.

E. Current Material Safety Data Sheets (SDS).

F. 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 owner's satisfaction that the proposed substitution is of equal quality and utility to that originally specified. 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 SDS.

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.

C. Installer shall be a builder member of the ASBA.

1.8 MANUFACTURER QUALIFICATIONS

A. System manufacturer has been involved in surface manufacturing for the tennis industry for a

minimum of 10 years.

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

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Har Tru Sports, 2200 Old Ivy Rd, Charlottesville, VA/ [Har Tru Sports Coatings System](#)
- 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.

2.2 MATERIALS

- A. Concrete Primer (Har Tru Concrete Primer) – for use in mitigating moisture migration and as an adhesion promoter for specifically prepared concrete surfaces.
- B. Patching Mix (Har Tru Court Patch Binder) - for use in patching cracks, holes, depressions and other surface imperfections.
- C. Acrylic Filler Course (Har Tru Acrylic Resurfacer) – for use as a filler for new or existing asphalt or concrete surfaces. The 100% acrylic filler shall be blended with approved silica sand at the job site.
- D. Acrylic Color Playing Surface (Har Tru Non-Textured) – for use as the finish color and texture. Har Tru Non-Textured is blended at the job site with approved silica sand to achieve the correct surface texture. *Har Tru Textured may be used as an alternative material.
- E. Line Paint (Har Tru Line Coating) – 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. Har Tru Concrete Primer – 100% water based acrylic resin.
 - 1) Percent solids by weight (minimum) 36%
 - 2) Weight 8.7-8.9 lbs./gallon
- B. Har Tru Court Patch Binder – 100% acrylic resin blended with Portland Cement and silica sand.
 - 1) Percent solids by weight (minimum) 46%
 - 2) Weight 8.7-8.9 lbs./gallon

D. Har Tru Acrylic Resurfacer – 100% acrylic resin (no vinyl copolymerization constituent).

- 1) Percent solids by weight (minimum) 46%
- 2) Weight 10.6-11.2 lbs./gallon

E. Har Tru Non-Textured – 100% acrylic resin (no vinyl copolymerization constituent) with selected light fast pigments. Light Green shall contain not less than 8% chrome oxide.

- 1) Percent solids by weight (minimum) 48%
- 2) Weight 10.0-10.2 lbs./gallon

F. Har Tru Line Coating – 100% acrylic resin containing no alkyds or vinyl constituents. Texturing shall be rounded silica sand.

- 1) Percent solids by weight (minimum) 38%
- 2) Weight 12-12.3 lbs./gallon

All surfacing materials shall be non-flammable and have a VOC content of not less than 100g./ltr. Measured by EPA method 24.

Local sands must be approved by Har Tru Sports prior to use in the color playing surface.

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, efflorescence, calcium, clay, 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 bleach solution to remove the organisms and then be properly rinsed. Acid washing or approved detergents may be necessary to remove all efflorescence, calcium, or other latents from new concrete surfaces.

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 **Har Tru 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, 1gallon Dry Portland Cement (Type I). **This step shall be accomplished prior to the application of Har Tru Concrete Primer.** 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 (never a squeegee) 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 workability. Allow to dry thoroughly and cure.

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

G. Primer (Har Tru Concrete Primer): Har Tru Concrete Primer shall be applied to the clean and dry underlying surface to obtain a quantity of no less than .06 gallons per square yard. Undiluted material may be applied with ½” nap roller, fine haired broom, or rubber squeegee. Allow to thoroughly dry, approximately one hour in full sun. Primer may have slight tacky feel.

E. Filler Course. (Har Tru Acrylic Resurfacer): Filler course shall be applied to the clean underlying surface to obtain a quantity of not less than .06 gallon per square yard per coat based on the material prior to any dilution. Har Tru Acrylic Resurfacer may be used to pre-coat depression and crack/hole repairs to achieve better planarity prior to filler course application.

1. Over a properly repaired surface of asphalt on existing courts, apply one coat of Har Tru Acrylic Resurfacer according to the following mix:

Acrylic Resurfacer	55 gallons
Water	45-55 gallons
Sand	600-800 pounds / 60-80 mesh
Liquid Yield	118-138 gallons

On new asphalt, two coats of Har Tru Acrylic Resurfacer shall be used to properly fill all voids in the asphalt surface. Use clean, dry 60-80 mesh sand and clean, potable water to make mixes. The quantity of sand and water in the above mix may be adjusted within above limits to complement the roughness and temperature of the surface.

2. Mix the ingredients thoroughly using accepted mixing devices and use a 70 Durometer rubber bladed squeegee to apply each coat of Har Tru Acrylic Resurfacer as required.

3. Allow the application of Har Tru Acrylic Resurfacer to dry thoroughly. Scrape off all ridges and rough spots prior to any subsequent application of Har Tru Acrylic Resurfacer or subsequent cushion or color surface system.

3.3 APPLICATION OF ACRYLIC COLOR PLAYING SURFACE

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

B. Blend Har Tru Non-Textured and silica sand with a mechanical mixer to achieve a uniform Har Tru Textured mixture. The mix shall be:

Har Tru Non-Textured	55 gallons
Silica Sand	300 - 385 Pounds

Water

45 -55 gallons

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

D. A total of 3 applications of Har Tru Textured shall be made to achieve a total application rate of not less than .15 gal./SY. No application should be made until the previous application is thoroughly dry.

3.4 LINE PAINTING

A. All lines shall be 2" wide unless otherwise noted on the drawings. Lines shall be carefully laid out in accordance with ASBA and USTA guidelines. The area to be marked shall be taped and tape edges sealed with Har Tru Line Primer prior to Har Tru Line Coating installation to insure a crisp line. The Har Tru Line Coating 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. (3/4 gal. per tennis court).

3.5 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.

3.6 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.