

Murrieta Valley Unified School District 41870 McAlby Court Murrieta, CA 92562

DISTRICT BID ADDENDUM NO. 1

Date: April 16, 2025

To: All Bidders

From: Jose Contreras, Facilities Director

Re: 2024-25-16 Buchanan Playground Rubber System Replacement Project

The attached Addendum is issued for the purposes of amending certain requirements of the bid and hereby made part of and incorporated in full force as part of the Contract Documents. Unless hereinafter specifically noted or specified otherwise, all work shall confirm to the applicable provisions of the Contract Documents.

BID ADDENDUM NO. 1 DESCRIPTION:

Pre-Bid RFI Responses

Question: How much is the engineer's estimate?

Answer: There is no engineer's estimate for this project.

Question: Is there an allowance?

Answer: The project allowance is \$5,000.00.

- 2. District approved substitution request form for MaxPour see attached request for substitution documents.
- 3. District approved substitution request form for MaxPour see attached request for substitution documents
- 4. District approved substitution request form for MaxPour see attached request for substitution documents.

ATTACHMENTS:

- Addendum 01 Request for Substitution MaxPour (FlexGround)
- Addendum 01 Request for Substitution MaxPour (Pro Services Poured Rubber)
- Addendum 01 Request for Substitution MaxPour (SpectraPour)

REQUEST FOR SUBSTITUTION

(TO BE SUBMITTED AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO BID DEADLINE)

(<u>IF REQUEST FOR SUBSTITUTION IS APPROVED</u>, <u>SUBMIT THIS FORM AS APPROVED BY</u> <u>THE DISTRICT WITH THE BIDDER'S BID</u>)

Pursuant to Public Contract Code section 3400, bidder submits the following request to Substitute with the bid that is submitted. I understand that if the request to substitute is not an "or equal" or is not accepted by District and I answer "no" I will not provide the specified item, then I will be held non-responsive and my bid will be rejected. With this understanding, I hereby request Substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods, or types of construction:

	Specification Section	Specified Item	Requested Substituted Item	Agro Pro Specifi if req Subst De	ractor ees to vide ied Item uest to itute is nied e one)		Decision e one)
1.	32 18 16 Pour in Place	MaxPour	FlexGround	Yes	No (Grant	Deny
2.				Yes	No	Grant	Deny
3.				Yes	No	Grant	Deny
4.				Yes	No	Grant	Deny
5.				Yes	No	Grant	Deny
6.				Yes	No	Grant	Deny
7.				Yes	No	Grant	Deny
8.				Yes	No	Grant	Deny
9.				Yes	No	Grant	Deny
10.				Yes	No	Grant	Deny

This Request Form must be accompanied by evidence as to whether the proposed Substitution (1) is equal in quality, service, and ability to the Specified Item; (2) will entail no change in detail, construction, and scheduling of related work; (3) will be acceptable in consideration of the required design and artistic effect; (4) will provide no cost disadvantage to the District; (5) will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; (6) will require no change of the construction schedule or milestones for the Project; and, (7) Contractor agrees to pay for any DSA Fees or other Governmental Plan check costs associated with this Substitution Request. (See General Conditions Section 3.6)

The undersigned states that the following paragraphs are correct:

- 0. The proposed Substitution does not affect the dimensions shown on the Drawings.
- 1. The undersigned will pay for changes to the building design, including Architect, engineering, or other consultant design, detailing, DSA plan check or other governmental plan check costs, and construction costs caused by the requested substitution.
- 2. The proposed substitution will have no adverse effect on other trades, the Contract Time, or specified warranty requirements.
- 3. Maintenance and service parts will be available locally for the proposed substitution.
- 4. In order for the Architect and/or District to properly review the substitution request, the Contractor shall provide samples, test criteria, manufacturer information, and any other documents requested by Architect or Architect's engineers, consultants and/or District, including the submissions that would ordinarily be required under Article 3.7 for Shop Drawings along with a document which provides a side by side comparison of key characteristics and performance criteria (often known as a CSI side by side comparison chart).
- 5. If Substitution Request is accepted by the District, Contractor is still required to provide a Submittal for the substituted item pursuant to Article 3.7 and shall provide required Schedule information (including schedule fragnets, if applicable) for the substituted item as required under Article 8.3.2.1. The approval of the Architect, Engineer, or District of the substitution request does not mean that the Contractor is relieved of Contractor's responsibilities for Submittals, Shop Drawings, and schedules under Article 3.7 and 8.3.2 if the Contractor is awarded the Project.

Name of Bidder: Ortco Inc.			
By: Billy Police			
District: MVUSD			
Ву:			
To be completed by District:			
Approved Denied JOSE CONTRERAS	Director		> 4/14/25
Print Name Title		Signature	Date

^{**}If substitution request is approved, submit this form with approval at the time of bid submission.



At FlexGround, we are extremely proud to stand tall as the premier recreational surfacing company in the Western United States.

We didn't arrive here by accident. We leveraged 80+ years of in-depth industry knowledge in overseeing the successful installation of over 10+ million square feet of aquatic and playground safety surfacing. We did it all using our own, custom-engineered surfacing products that revolutionized the industry, time-after-time. We never stop appreciating the end-result of our work: A more colorful, safer and artistically-designed surface that springs to life under the feet of America's children at play.

The industry has spoken on our accomplishments. designs and installations have recognized around the country in publications as Landscape Architect magazine, Landscape Contractor publications, and we are the country's only Inc. 500 award-winning recreational and safety surfacing company.

While we are honored to receive such high accolades in our industry, it is not what drives us forward. Three-dimensional surfacing elevating from the ground in endless shapes and sizes (our current frontier), client amazement and children's audible glee over our creations - that is why we work as hard today as we did on day one. That is FlexGround.

It's who we are, it's how we're built, and it's how we build.









EnduraFlex™

HIGH-QUALITY TPV POURED-IN-PLACE

EnduraFlex is a superior poured-in-place rubber surface. It consists of two layers: a cushioned base and a surface layer of TPV granules (each granule being 1-4 mm). TPV is a vulcanized product, making it better equipped to withstand daily wear and tear and color fading from consistent UV exposure.

Advantages:

Can be modified to meet varying critical fall heights

• Offered in a wide array of colors

IPEMA Certified

• Wheelchair Accessible

Durable

 Can be installed indoors or outdoors

 Suitable for all-age playgrounds





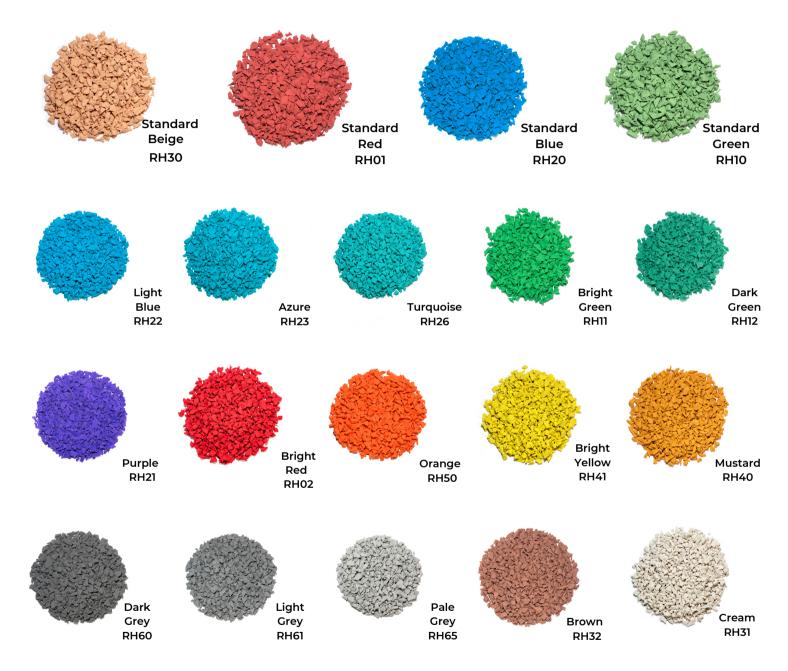


EnduraFlex is offered in a wide array of colors. Colors may be mixed or designed side-by-side. More intricate design work, involving numerous

colors and patterns, is also available.







Color Disclaimer: The colors printed here are for guidance only. Final selection should be made from the sample dishes which can be obtained by contacting the sales department.

All colors other than "Standard" may incur additional charges.





FlexGround EnduraFlex

Poured In Place Safety Surfacing

Manufacturer's Specifications

This document provides the specifications for a poured in place safety surfacing system composed of a wearing layer upper membrane and an underlying impact attenuation cushion layer.

There may be variations in the final specifications as required by the Client.

PART 1 - GENERAL

1.01 Work Included

Provide all labor, materials, and tools necessary for the complete installation of a poured in place safety surfacing system as outlined in these specifications. The system should consist of, but not necessarily be limited to, the following:

- A. Section includes: Resilient playground surfacing poured in place system.
- B. Related work: Playground equipment and resilient playground surfacing sub base.
- C. Quality Assurance: Manufacturer should have manufactured and installed playground poured in place safety surfaces for a minimum of 5 years, and meet current ASTM F-1292 Test Criteria. The installation of the poured in place product should be completed by FLEXGROUND. Manufacturer's detailed installation procedures should be submitted to the Architect and made part of the Bid Specifications.

1.02 Submittals

Prospective manufacturers and/or installers of the poured in place safety surfacing system should be required to comply with the following:

- A. The manufacturer must be experienced in the manufacturing of a poured in place safety surfacing system and provide references of five (5) specific installations in the last three (3) years.
- B. The installer must provide competent workmen skilled in this specific type of poured in place safety surfacing system installation. The designated supervisory personnel on the project must be competent in the installation of this material, including mixing, spreading and compacting the materials correctly.
- C. Installation should be in accordance with ASTM F1292 for Impact Attenuation of surface system under and around playground equipment. The poured in place system to be installed in compliance with the Critical Fall Height as determined by the Playground Equipment.





- D. IPEMA Certification specific to poured in place safety surfacing.
- E. IPEMA certification specific to ½" layer of 1-4mm TPV over cushion layer .5mm TPV or EPDM IPEMA certification not acceptable.
- F. Manufacturer should provide written instructions for recommended maintenance practices.
- G. Manufacturer should submit color samples for customer verification. Color samples shall be 6" x 6" of ½" top wearcourse layer with aromatic or aliphatic binder per client selection or specification; or 8 oz clear plastic jars with specified colored granules. Sample submittal format per client preference.

1.03 Definitions

- **A.** EPDM granules: EPDM rubber (ethylene propylene diene monomer (M-class) rubber), a type of synthetic rubber, is an elastomer characterized by a wide range of applications. The M refers to its classification in ASTM standard D-1418; the M class includes rubbers having a saturated chain of the polymethylene type.
- **B.** Critical Fall Height: A critical fall height (CFH) is the maximum height of fall from play equipment to the ground. It is important to note that safety surfaces do not prevent injury but aim to lessen the severity of any injury that may occur on falls from stated height(s).
- **C.** Fall Height: Fall height is a measurement defined as the vertical distance between a designated play surface and the protective surfacing beneath it.
- **D.** TPV: Thermoplastic Vulcanized Elastomer. Developed using resin and synthetic rubber with higher UV stabilization.
- **E.** SBR: Styrene-butadiene or styrene-butadiene rubber (SBR) describe families of synthetic rubbers derived from styrene and butadiene.

1.04 ASTM Testing Standards – FlexGround Standard meets or exceeds all required ASTM standards below.

- A. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
- B. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials
- C. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester
- D. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment
- E. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment





- F. ASTM C1028 Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method This standard replaces ASTM D2047
- G. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers- Tension

1.05 Warranty and Maintenance

The bidder and/or poured in place safety surfacing manufacturer must provide the following:

- A. The poured in place safety surfacing manufacturer should provide a warranty to the owner that covers defects in materials and workmanship of the rubber for a period of **FIVE (5) years** from the date of Substantial Completion.
- B. The manufacturer's warranty should include general wear and tear. The warranty should specifically exclude vandalism, high heel punctures, acts of war or acts of nature beyond the control of the owner or the manufacturer.
- C. All poured in place warranties should be limited to repair or replacement of the affected areas and should include all necessary materials, labor, transportation costs, etc. to complete said repairs.
- D. The manufacturer should instruct the owner's personnel on proper maintenance and repair of the ENDURAFLEX safety surface.
- E. All warranties, expressed or implied, are contingent upon the following: 1. installation being performed by FLEXGROUND, 2: Owner, at owner's expense, having a Flexcoat performed at 2 year intervals from date of substantial completion, and 3. Full payment by the owner of all pertinent invoices and adherence to any required maintenance procedures.

PART 2 – ENDURAFLEX MATERIAL

The ENDURAFLEX poured in place safety surfacing system should be in accordance with the following:

- A. A dual durometer poured in place system with a wearing layer upper membrane and an underlying impact attenuation cushion layer. The finished surface should be porous and capable of being installed at varying thickness to comply with the Critical Fall Height requirements of the playground equipment.
- B. FLEXGROUND primer is a 100% solids urethane primer/sealer. It is designed with low viscosity and penetrating abilities making this an ideal priming urethane.
- C. The cushion layer should be a mixture of black recycled rubber mixed with a 100% solids moisture cured aromatic Polyurethane binder (100 pounds of rubberized cushion layer to 12 pounds of binder) installed at the appropriate thickness. As an upgrade, a 5/8" chunk rubber





- derived only from high quality pre-consumer recycled rubber containing EPDM is available. The cushion layer should be porous.
- D. The ENDURAFLEX wearing surface should be manufactured from 1-4mm Thermoplastic Vulcanized (TPV) virgin colored rubber granules bonded by FLEXGROUND binder, 100% solids moisture cured aliphatic or aromatic Polyurethane binder (110 pounds of TPV to 22 pounds of binder), and applied to a minimum thickness of ½" (12.7 mm) over the cushion layer.
- E. The system color should be selected from Manufacturer's Color Chart by owner prior to bid.

PART 3 - SITE PREPARATION AND BASE

The ENDURAFLEX site preparation and base should be in accordance with the following:

- A. The sub-base will have a slope of 2%.
- B. The base aggregate should consist of a minimum of four inches (4") of ¾" Class 2 aggregate compacted to 95%. Finish slope of porous aggregate should be 2% from the centerline of the area to the perimeter, and the grade should not vary more than a quarter inch (¼") in ten feet (10').
- C. The sub base should be installed in two inch (2") lifts to appropriate thickness.
- D. The sub-base should be compacted using vibrating tamper, to approximately 95% Proctor density.
- E. The sub-base should no longer have any vegetation.
- F. Subgrade prior to aggregate installation: Sublevel grade is to be compacted prior to the ABC aggregate installation. Particular attention should be paid to areas of disturbed earth such as where footers for playground equipment enter the ground. Concrete used to fill said areas/footers should be poured to the top of sublevel surface.
- G. The sub-base installer and architect will accept the aggregate base in writing prior to the installation of the poured in place system.
- H. Any alterations must be agreed between all parties.
- Hard Base Construction: For concrete surfaces, shot blast, acid etch or power scarify as required to
 obtain optimal bond of the Cushion Layer to the concrete. Remove sufficient material to provide a
 sound surface, free of glaze, efflorescence, or form release agents. Remove grease, oil, and other
 penetrating contaminants.
- J. For concrete or asphalt surface that is not enclosed (i.e. a curb to curb pour), the concrete shall have keyway cuts 1.5" wide by 1.5" deep so that the system can be bull nosed down into the notch area.





PART 4- EXECUTION AND INSTALLATION

The poured in place safety surfacing installer should strictly adhere to the installation procedures outlined under these sections. Any variance from these requirements should be accepted in writing by the manufacturer's onsite representative and submitted to the architect/owner, verifying that the changes do not in any way affect the warranty.

4.01 Primer

- A. A urethane primer should be applied to concrete, asphalt, or wood surfaces at a rate of 200-250 square feet per gallon. The entire area does not need to be primed at once, instead, prime about 700 square feet at a time in immediate advance of rubber installation. This procedure should be continued until all areas are complete.
- B. The urethane primer should be applied to any playground equipment that will be surrounded by the poured in place safety surfacing system.

4.02 Cushion Layer

- A. The components of the poured in place safety surfacing should be mixed on site in a mixer to ensure a comprehensive mix according to manufacturer's instructions.
- B. The cushion layer comprised of SBR buffing's shall be mixed with the aromatic moisture cured polyurethane binder at a rate of 12% of the total weight of the material thoroughly so that the binder is evenly dispersed into the rubber base.
- C. The cushion layer comprised of non-tire derived SBR & EPDM Chunk Rubber shall be mixed with the appropriate amount of urethane so that the binder is evenly dispersed into the rubber base.
- D. The cushion layer mix should then be spread and troweled to the desired depth and allow to cure for 24 hours.

4.03 Wear Course Layer

- A. The wear course layer should be mixed with 1-4mm TPV granules and urethane binder at a rate of 20% of the total weight of the materials so the granules are covered thoroughly and evenly.
- B. The wear course layer mix should be spread and troweled to a depth of a half inch $(\frac{1}{2})^n$.
- C. Application in cooler temperatures require a minimum ambient temperature to be 40 degrees F. or above and rising during install and no more than a 35-degree temperature change from daytime to nighttime.
- D. Where seams are required due to color change, a step configuration with a 4" overlap will be constructed to maintain wear surface integrity.
- E. The finished texture shall be slip resistant, smooth, and even.
- F. The poured in place surface should be allowed to cure for 24-72 hours or until dry to the touch.





PART 5- SITE (GENERAL)

- A. Trailer/ Large truck access will be necessary for the installation. In the case that access for trailer/truck is not available the owner or general contractor will be responsible for transporting material to the job site.
- B. Crew is responsible for protecting the surface only while present on site. General Contractor or owner shall be responsible for the security of the surfacing overnight during installation, as well as during the product's cure period after completion of the install.
- C. Crew will leave site clean and shall remove all trash and debris.
- D. Owner/General Contractor shall provide a dumpster for all waste and trash.



CERTIFICATE

ISSUE DATE: 5/9/2012

In the interest of public playground safety, IPEMA provides a third-party certification service whereby TÜV SÜD America validates a manufacturer's certification of conformance to the ASTM F1292-09, Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment Standard. The

manufacturer listed below has received written validation from TÜV SÜD America that the products listed below conform with the requirements of ASTM F1292-09.

Manufacturer

1 of

Flexground, LLC 1950 West Rose Garden Lane, Suite 100 Phoenix, AZ 85027 United States (602) 954-0000

PRODUCT #	PRODUCT LINE	DESCRIPTION	THK/HT RATIO
EFTPV4	EnduraFlex Poured In Place	Rubber Poured in Place Playground Safety Surfacing	2.0" Thick, 4' CFH
EFTPV5	EnduraFlex Poured In Place	Rubber Poured in Place Playground Safety Surfacing	2.5" Thick, 5' CFH
EFTPV6	EnduraFlex Poured In Place	Rubber Poured in Place Playground Safety Surfacing	3.0" Thick, 6' CFH
EFTPV8	EnduraFlex Poured In Place	Rubber Poured in Place Playground Safety Surfacing	3.5" Thick, 8' CFH

You may verify this certificate by visiting IPEMA's website at http://www.ipema.org





www.flexground.com

2016 Completed Projects

Project: Culver City USD **Location**: Culver City, CA **Owner**: Culver City USD

GC: Balfour Beatty Construction Contract Amount: \$1.7 million Completed: September 2016

Reference: Robert Quin Tel: 310.842.4220 x4226 robertquinn@ccusd.org Reference: Gary Nenadal

Tel: 949.502.4000

Email: GNenadal@Balfourbeattyus.com

Project: Hardy Brown

Location: San Bernardino, CA

Owner: Fortune Schools of Education

Contract Amount: \$98,588 Completed: November 2016 Reference: Jerold Liggons

Facilities Manager

TEL: 916.924.8633 Ext 120
Email: ligons@fortuneschool

Project: Royal Ranch

Location: Lucerne Valley, CA Owner: Maggie Hodge Contract Amount: \$84,000 Completed: February 2016 Reference: Maggi Hodge

TEL: 310.903.6821

Email: maggihodge@gmail.com

Project: Bayer Park

Location: Santa Rosa, CA
Owner: City of Santa Rosa
Contract Amount: \$64,910
Completed: September 2016

Reference: Diede Construction, INC.

Tel: 209.369.8255

Email: estimating@diedeconsructions.com

2017 Completed Projects

Project: Heron Landing

Location: Rancho Cordova, CA

Owner: Cordova Recreation & Park District

GC: Olympic Land-Construction Contract Amount: \$190,795.88

Completed: July 2017

Reference: Jeff Smith, Olympic

Tel: 916.972.7148

Email: Estimating@olympicland.com

Project: Hancock Elementary School

Location: San Diego
Owner: San Diego USD
Contract Amount: \$54,591

Completed: Phase 1 – September 2017

Reference: USS Cal Builders, Inc. Jonathan Kliora

Email: Jkliora@usscalbuilders.com

Project: Freedom Neighborhood Park

Location: Modesto, CA
Owner: City of Modesto
Contract Amount: \$80,990
Completed: December 2017
GC: Docon Construction
Reference: Charles Dossett

Tel: 209.226.8382

Email: charles@godocon.com





www.flexground.com

Project: West Covina USD Location: West Covina, CA Owner: West Covina USD Client: The KYA Group Contract Amount: \$380,000 Completed: September 2017

Reference: Jeff Dunn

Tel: 714.592.0614 or 714.264.6120 **Email**: Jeff.dunn@thekyagroup.com

Project: Mutual Housing **Location**: Sacramento, CA

Owner: Mutual Housing California

Contract

Contract Amount: \$52,009 Completed: January 2017 Reference: Jessica Kitcher

Tel: 916.453.8400

Email:jessicakitcher@mutualhousing.co

<u>m</u>

Project: The Promenade

Location: West Sacramento, CA **Owner**: GBD Communities

Contract Amount: \$38,758 Completed: November 2017

Reference: Recreation Science - Craig

Creekmore **TEL**: 916.612.3871

Email: creekmore@mac.com

Project: San Jacinto USD Location: San Jacinto, CA Owner: San Jacinto USD Client: The KYA Group Contract Amount: \$150,375 Completed: September 2017

Reference: Neal Conijn, SJUSD Facilities

Tel: 951.929.7700

Email: Michelle.morris@thekyagroup.com

cconijn@sanjacinto.k12.ca.us

2018 Completed Projects

Project: Econome Family Park

Location: Folsom, CA
Owner: City of Folsom
Contract Amount: \$31,000
Completed: June 2018

Reference: Brad Nelson, City of Folsom

Tel: 916.531.1046

Email: bnelson@folsom.ca.us

Project: Alta Sierra

Location: Grass Valley, CA

Owner: Pleasant Ridge School District

Contract Amount: \$36,951 Completed: August 2018

Reference: Kelvin Fontano - BCI Burk

Tel: 916.764.8770

Email: kelvin@davebang.com

Project: Alta Loma Park

Location: S. San Francisco, CA Owner: City of S. San Francisco Contract Amount: \$79,000 Completed: February 2018

Reference: Greg Mediati, City of S. SF

TEL: 650.676.7689

Email: Greg.mediati@ssf.net





www.flexground.com

Project: Cottage Hills **Location**: Grass Valley, CA

Owner: Pleasant Ridge School District

Contract

Contract Amount: \$24,644 Completed: August 2018

Reference: Kelvin Fountano **Tel**: 916.764.8770

Email: kelvin@norcalplaygroup.com

Project: Anniston Army Base Location: Anniston, AL Owner: Anniston Army Base Contract Amount: \$6,729 Completed: July 2018 Reference: Paul Rehak

Tel: 858-428-0600

Email: paul@pdplay.com

Project: Eden Shores Tennis Court

Location: Hayward, CA
Owner: City of Hayward
Contract Amount: \$111,228
Completed: October 2018
Reference: Richard Nield

Tel: 510-583-8907

Email: richard.nield@hayward-ca.gov

2019 Completed Projects

Project: Greer Elementary School

Location: Sacramento, CA

Owner: San Juan Unified School District

Completed: February 2019 **Reference:** Steven Okea **Tel:** 415-282-1602 x 105

Email:

estimating@vintagecontractors.com

Project: Albert Park
Location: San Rafael, CA
Owner: City of San Rafael
Contract Amount: \$68,207
Completed: March 2019

Reference: Matt Mckamey

Tel: 707-791-7884

Email: matt@m3-co.com

Project: SJCOE **Location:** Tracy, CA

Owner: SJCOE Unified School District

Contract Amount: \$60,316 Completed: Feburary 2019 Reference: Thomas Swarm

Tel: 916-971-5795

Email: tswarm@sanjuan.edu

Project: Sierra Army Base **Location**: Herlong, CA **Owner**: Sierra Army

Contract Amount: \$36,103 Completed: April 2019 Reference: John Ogden

Tel: 415-937-1697

Email: john@pdplay.com

Project: Cannery Park Playgrounds

Location: Hayward, CA

Owner: Hayward Area Recreation & Park District

Contract Amount: \$332,084 Completed: May 2019 Reference: King Leong

Tel: 510-881-6732

Email: leok@haywardrec.org





www.flexground.com

Project: Rainbow Recreation Center

Location: Oakland, CA
Owner: City of Oakland
Contract Amount: \$29,541
Completed: March 2019
Reference: Mark Tillotson

Tel: (209) 369-8255

Email:

mtillotson@diedeconstruction.com

Project: New Republic Playgrounds

Location: Salinas, CA
Owner: City of Salinas
Contract Amount: \$60,307
Completed: March 2019
Reference: Steve Locke

Tel: 831-422-9696

Email: stevel@tomblesoninc.com

2022 COMPLETED PROJECTS

Project: Porter Youth **Location:** Seaside, CA

Owner: Army NAF Contracting Contract Amount: \$39,336 Completed: JANUARY 2020

Reference: PETER SILK **Tel:** 270-798-6578

Email: peter.w.silk@naf@mail.mil

Project: Kids Town Playground **Location:** Los Angeles, CA **Owner:** City of Los Angeles

GC: Koreatown Community Center

Contract Amount: \$25,665 Completed: February 2020 Reference: John St. John

Tel: 213-365-7400

Project: Kendrea Apartments

Location: Alamo, CA

Owner: Kendrea Apartments GC: Miracle Play Group Contract Amount: \$17,888 Completed: February 2020 Reference: Matt Durkin Tel: 916-317-0545

Email: matt@miracleplaygroup.com

Project: Mountain View Mobil Estates

Location: Santa Rosa, CA Owner: City of Santa Rosa Contract Amount: \$22,393 Completed: March 2020 Reference: Cheryl Settle

Tel: 707-546-6713

Project: Alta Sierra Additional Playground

Location: Grass Valley, CA
Owner: City of Grass Valley
GC: Burke Construction
Contract Amount: \$50,444
Completed: April 2020
Reference: Susan Dean

Tel: 916-764-8770

Email: sdean@bciburk.com

Project: Morgan Hills Cultural Center

Location: Morgan Hill, CA Owner: City of Morgan Hill Contract Amount: \$41,954 Completed: April 2020

Reference: Cynthia Iwanaga

Tel: (408) 776-7383

Email: cynthia.iwanaga@cmorganhill.ca.gov





www.flexground.com

Project: Valley Palm Apartment – Turf

Conversion

Location: San Jose, CA

Owner: Valley Palm Apartments Contract Amount: \$ 128,853.50

Completed: June 2020 Reference: Mark Ellis

Email:

valleypalms@villageinvestments.com

Tel: (949) 863-1500

Project: Fort Riley – Army Base

Location: Fort Riley, KS **Owner:** US Army

GC: PD Play

Contract Amount: \$ 103,000 Completed: August 2020 Reference: John Ogden Tel: (415) 937-1697

Email: john@pdplay.com

Project: SDUSD Playgrounds Location: San Diego, CA Owner: San Diego USD

GC: R.E. Shultz Construction Inc.
Contract Amount: \$ 300,000
Completed: April 2020

Reference: Doug Lewis **Tel:** (760) 703-3706

Email:

doug@reschultzconstruction.com

2021 COMPLETED PROJECTS

Project: Carrillo Elementary School **Location:** 2875 Poinsettia Lane

Owner: San Marcos Unified School District

GC: The Kya Group

Cotract Amount: \$ 73,000 Completed: February 2021 Reference: Roger Macias

Tel: (714) 552-6304

Email: linda.hubbard@thekyagroup.com

Project: Paso Verde School **Location:** Sacramento, CA **Owner:** Natomas USD

GC: Takehara Landscape, Inc. Contract Amount: \$ 160,000 Completed: March 2021 Reference: Delia Almaraz

Tel: (916) 386-9487

Email: dalmaraz@takeharainc.com

Project: San Francisco Airport - Green Roof

Location: San Francisco International **Owner:** City & County of San Francisco

GC: Austin Webcor Joint Venture Contract Amount: \$ 562,571 Completed: October 2021 Reference: Adrian Janoff

Tel: (510) 604-6722

Email: adrian.janoff@webcor.com

Project: Houlihan Park

Location: Planada, CA 95365
Owner: Merced County
GC: Miracle Play Group
Contract Amount: \$53,465
Completed: November 2021
Reference: Fred DiPietro

Tel: (831) 242-0063

Email: fred@miracleplaygroup.com

Page 5 of 7





www.flexground.com

Project: Alden Park

Location: 500 Sequoia Boulevard

Owner: City of Tracy

GC: Goodland Landscape

Construction

Contract Amount: \$31,889 Completed: December 2021 Reference: John Estruth

Tel: (209) 835-9956

Email: jestruth@goodlandca.com

2022 COMPLETED PROJECTS

Project: Rocky Hill Elementary - Primary

Location: 313 Sequoia Drive

Owner: Exeter Unified School District

GC: Miracle Play Group Contract Amount: \$ 142,105 Completed: January 2022 Reference: Kristen Kirk Tel: (559) 592-9421

Email: kkirk@exeter.k12.ca.us

Project: Hancock Elementary School

Location: 3303 Taussig Street
Owner: San Diego USD
GC: San Diego County
Contract Amount: \$32, 669
Completed: January 2022
Reference: Christine Kam

Tel: (619) 328-7194

Email: ckam@sandi.net

Project: Fair Oaks Park

Location: 540 N Fair Oaks Avenue

Owner: City of Sunnyvale GC: Bothman Construction Contract Amount: \$ 324,223 Completed: March 2022 Reference: Kyle Wood Tel: (408) 279-2277

Email:

Project: Residence Inn – Mt. View **Location:** 1854 W. El Camino Real **Owner:** Grand Prix Mountain View LLC

Contract Amount: \$ 21,809 Completed: February 2022 Reference: Emily Hsieh Tel: (650) 940-1300

Email: mountainviewgm@ih-corp.com

Project: Blossom Hills HOA **Location:** 391 Velasco Drive

Owner: Northern California Recreation **GC**: Northern California Recreation

Contract Amount: \$ 44,785 Completed: March 2022 Reference: Paul Rehak Tel: (760) 597-5990

Email: paul@pdplay.com

Project: Rocky Hill Elementary - Primary

Location: 313 Sequoia Drive

Owner: Exeter Unified School District

GC: Miracle Play Group Contract Amount: \$ 142,105 Completed: January 2022 Reference: Kristen Kirk Tel: (559) 592-9421

Email: kkirk@exeter.k12.ca.us





www.flexground.com

Project: Colton ES **Location:** Monterey, CA

Owner: Monterey Peninsula USD

GC: Sierra Play Partners Contract Amount: \$113,700 Completed: August 2022 Reference: Loren Jessop

Tel: (209) 541-9658

Email: loren@sierraplaypartners.com

Project: Highlands HS - Twin Rivers **Location:** North Highlands, CA

Owner: Twin Rivers USD GC: O.C. Jones & Sons, Inc. Contract Amount: \$101,600 Completed: 07/27/2022 Reference: Heidi Faria Tel: (510) 526-3424

Email: hfaria@ocjones.com

Project: Salt Creek Park Location: Redding, CA Owner: City of Redding GC: Builder Solutions Inc. Contract Amount: \$50,600 Completed: 08/03/2022 Reference: Michael Stickney

Tel: (530) 492-2984

Email: mike@thebuildersolution.com

Project: Grant HS - Twin Rivers **Location:** Sacramento, CA **Owner:** Twin Rivers USD **GC:** Abide Builders

Contract Amount: \$92,100 Completed: 06/03/2022 Reference: Phillip Pizzo Tel: (916) 417-9443

Email: ppizzo@abidebuilders.com

Project: Mill Street School Location: Orland, CA Owner: Orland USD

GC: Berliner Seilfabrik Play Equipment

Corporation

Contract Amount: \$128,100 Completed: 06/30/2022 Reference: Bridget Muck

Tel: (916) 276-0755

Email: bridget@berliner-playequipment.com

Project: Promontory Park **Location:** El Dorado Hills, CA

Owner: El Dorado Hills Community Service

District

GC: Miracle Play Group Contract Amount: \$64,500 Completed: 6/22/2022 Reference: Karl Maniglia

Tel: (916) 317-0545

Email: karl@miracleplaygroup.com

Project: Crestview Trail **Location:** San Carlos, CA **Owner:** City of San Carlos

GC: Flexground Contract Amount: Completed: 08/26/2022 Reference: Lou Duran Tel: (650) 802-4144

Email: Iduran@cityofsancarlos.org

REQUEST FOR SUBSTITUTION

Pursuant to Public Contract Code section 3400, bidder submits the following request to Substitute with the bid that is submitted. I understand that if the request to substitute is not an "or equal" or is not accepted by District and I answer "no" I will not provide the specified item, then I will be held non-responsive and my bid will be rejected. With this understanding, I hereby request Substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods,

or types of construction:

	s of construction.						
	Specification Section	Specified Item	Requested Substituted Item	Ag Pr Speci if re Sub	rest to rovide ified Item quest to stitute is enied ¹ cle one)	District I	
1.	Section 02791/32/8/6/3	MayPour	Proserrices Powled Rubber	Yes	No	Grant	Deny
2.		. ,		Yes	No	Grant	Deny
3.				Yes	No	Grant	Deny
4.				Yes	No	Grant	Deny
5.				Yes	No	Grant	Deny
6.				Yes	No	Grant	Deny
7.				Yes	No	Grant	Deny
8.				Yes	No	Grant	Deny
9.				Yes	No	Grant	Deny
10.				Yes	No	Grant	Deny
11.				Yes	Nous	Grant	Deny
12.				Yes	No.	Grant	Deny

This Request Form must be accompanied by evidence as to whether the proposed Substitution (1) is equal in quality, service, and ability to the Specified Item; (2) will entail no change in detail, construction, and scheduling of related work; (3) will be acceptable in consideration of the required design and artistic effect; (4) will provide no cost disadvantage to the District; (5) will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; (6) will require no change of the construction schedule or milestones for the Project; and, (7) Contractor agrees to pay for any DSA Fees or other Governmental Plan check costs associated with this Substitution Request. (See General Conditions Section 3.6)

The undersigned states that the following paragraphs are correct:

- The proposed Substitution does not affect the dimensions shown on the Drawings.
- 2. The undersigned will pay for changes to the building design, including Architect, engineering, or other consultant design, detailing, DSA plan check or other governmental plan check costs, and construction costs caused by the requested substitution.
- The proposed substitution will have no adverse effect on other trades, the Contract Time, or specified warranty requirements.
- Maintenance and service parts will be available locally for the proposed substitution.
- 5. In order for the Architect to properly review the substitution request, within five (5) days following the opening of bids, the Contractor shall provide samples, test criteria, manufacturer information, and any other documents requested by Architect or Architect's engineers or consultants, including the submissions that would ordinarily be required for Shop Drawings along with a document which provides a side by side comparison of key characteristics and performance criteria (often known as a CSI side by side comparison chart).
- 6. If Substitution Request is accepted by the District, Contractor is still required to provide a Submittal for the substituted item pursuant to the General Conditions and shall provide required Schedule information (including schedule fragnets, if applicable) for the substituted item. The approval of the Architect, Engineer, or District of the substitution request does not mean that the Contractor is relieved of Contractor's responsibilities for Submittals, Shop Drawings, and schedules under the General Conditions if the Contractor is awarded the Project.

Name of Bidder: Pro	Services La	eneral CONTRA	ACTORS
Signature: A any l			
To be completed by Distr	<u>ict</u>		
☐ Denied			
Jose Contraras Print Name	Director		4/14/25
rint Name	Title	Signature	Date

**If substitution request is approved, submit this form with approval at the time of bid submission.





BUILD SAFE PLAY HARD



About Us

in playground installation and surface replacement, dedicated to creating safe, durable, and engaging play environments. We specialize in poured-in-place rubber surfacing and adhere to the highest industry standards to ensure safety, impact absorption, and longevity. As an IPEMA-certified company, we bring

Pro Services General Contractors is a leader

expertise and reliability to every project. Our B License, D12 Synthetic Products, and D34 Prefabricated Equipment specialty licenses allow us to provide comprehensive playground and recreational installation services.

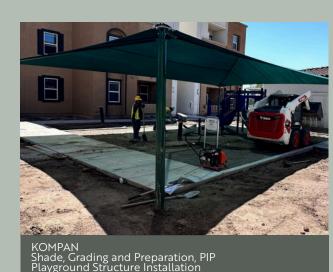
Santa Rosa School

- Client: Leonida Builders
- Scope: Full removal of surfacing and installation of a new, EPDM, IPEMA rubberized surface for a 1680 sq. ft. playground.
- Contact: Peter Arballo, (951) 672 2770

Inspiring Spaces Our extensive experience with municipal

Building Safe, Durable, and

parks, school districts, and private institutions ensures that we deliver exceptional results. Our commitment to quality and safety ensures we create vibrant, durable, and inclusive spaces that stand the test of time.



<u>Playground Equipment</u> Installation Custom-designed play structures,

- swings, climbing walls, and more. Professional installation of
- leading playground brands.



• <u>Client:</u> Hoffman & Associates

- Scope: Mulch and Dirt Removal, Base Preparation, Poured-in-
- Place Rubber Surfacing. • Contact: Hoffman & Associates, (310) 826-1785



<u>Playground</u>

Surfacing Solutions

Our specialty, providing durable, impact-absorbing surfaces. • Artificial Turf - A lowmaintenance, long-lasting option.

• Poured-In-Place (PIP) Rubber -

Budget-friendly and impactresistant. • Rubber Tiles - Good for accessibility and safety

• Rubber Mulch & Wood Mulch -

compliance.

GENERAL CONTRACTING &

Our Services

CONSTRUCTION • Concrete Work - Flatwork,

- sidewalks, curbs, slabs, and structural elements. Full Site Preparation – Grading,
- excavation, and base preparation. • Fencing & Retaining Walls – Secure
- and durable enclosures. Building & Facility Enhancements –
- Repairs, renovations, and new installations. <u>Custom Outdoor Spaces</u> – Including recreational areas, sports courts, and

landscaping. **Additional Enhancements**

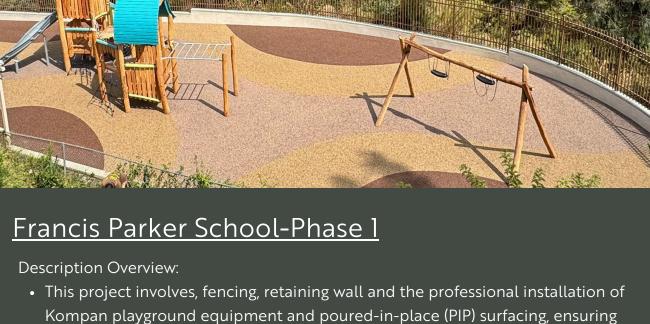
Protection from sun exposure. Durable Concrete Features – Including curbs, sidewalks, and slabs

• Shade Structures & Shelters -

for improved accessibility and safety.







compliance with all manufacturer specifications and safety standards. All playground equipment and footings installed following Kompan specifications to ensure durability, safety, and compliance.

Poured-in-Place (PIP) Rubber Surfacing: • Area: 3,693 square feet of 3 1/2" PIP installed to meet fall height requirements. • Colors and Designs: • Color #1: 50% Cream and 50% Black. • Color #2: 50% Beige and 50% Black. Color #3: 50% Brown and 50% Black.

• Safety & Certification: IPEMA-certified, ensuring compliance with ASTM and ADA

- **Why Choose Us?**
 - safety regulations. • Expert Installation: Specializing in poured-in-place rubber surfacing, playground

Contact: Mike Rhinehart, Head of Operations/CFO, 858-361-5383

- equipment, artificial turf, and concrete features. • Proven Track Record: Successful projects across Southern California. • Turnkey Solutions: From playground design to installation, we handle every stage



with precision.

durable surface that enhances the splash pad experience, creating the perfect spot for families to cool off and play. The combination of safety, functionality, and eyecatching design makes this project a standout addition to the resort.



Phone: 619-884-3559



PLAYGROUND SAFETY SURFACING

SYSTEM DESCRIPTION

- A. The poured-in-place rubber safety surface products shall meet or exceed the following criteria:
 - 1. Shock attenuation (ASTM F 1292-17A)
 - 2. GMAX less than 200.
 - 3. Head Injury Criteria: less than 1000
 - 4. Accessibility: Comply with requirements of ASTM F1951-14.
 - 5. Flammability (ASTM D412: 60 psi (413 kPa)
 - 6. Water Permeability: 0.4 gal/yd2/second
 - 7. Tear Resistance (ASTM D624): 140%

PRODUCTS/MATERIALS

- A. Poured-in-place safety surfacing system, includes the following:
 - 1. 1. Product components include:

TWO-LAYER POURED IN PLACE SYSTEM

BOTTOM CUSHION LAYER

- a. Impact Attenuating Cushion Layer: Cushion Layer consists of shredded styrene butadiene rubber (SBR) adhered with a 100 percent solids polyurethane binder to form a resilient porous material.
- b. Strands of SBR will be a various thickness of 0.5mm 2.00mm and 3.0mm 20mm in length bonded by a polyurethane binder

- applied to 100 percent of the rubber and installed according to thickness with IPEMA guidelines.
- c. Foam or standard rubber granules are not to be permitted in Cushion Layer.
- d. Base Binder shall be 16+% urethane (as ratio:14% urethane divided by 86% rubber and shall provide 100 percent coating of the particles.
- e. The Cushion Layer shall be compatible with the Wear Coarse and must meet requirements herein for impact attenuation.

TOP WEAR COURSE

- f. Wear course shall consist of TPV or EPDM with polyurethane binder formulated to produce an even, uniform, seamless surface.
- g. Top Wear Layer 22% Urethane (as ratio: 18% urethane divided by 82% Rubber)
- h. Size of TPV/EPDM shall be 1.5mm 4.0mm across. Binder shall not be less than 20 percent of total weight of rubber used in the wear surface, and shall provide 100 percent coating of the particles.
- i. Thickness of Wear Course shall be 3/8" ½" **PER JOSE MURRIETTA VALLEY UNIFIED SCHOOL DISTRICT TOP LAYER TO BE 1/2"**
- j. Wear Course shall be porous.
- k. No toluene diphenel isocyanate (TDI) shall be used in binder.
- 1. No filler materials shall be used in urethane such as plasticizers he catalyzing agent shall contain no heavy metals.

TWO BINDERS ARE OFFERED: Aromatic Binder or Aliphatic Binder

- a. Weight of polyurethane shall be no less than 8.5 lbs. per gallon and no more than 9.5 lbs. per gallon.
- b. No TDI shall be used in binder.
- c. Aliphatic Binder is recommended for 100% Color.

GEOTEXTURE FABRIC

Geotextile fabric may be used on systems.

QUALITY ASSURANCE

- 1. Licenses: California License C61/D12 for Poured In Place Rubber Installation
- 2. Certifications: Certification by Pro Services that installers are an approved installer of Poured In Place Rubber Surfacing.
- 3. Manufacturer Guidelines: Strict adherence to all International Play Equipment Manufacturers Association guidelines.
- 4. IPEMA CERTIFIED.

PERFORMANCE

- Poured in place rubber with playground equipment use zones shall meet or exceed the performance requirements of the CPSC, ADA and Fall Height Test ASTM F1292. The surface attenuation testing should yield both a peak deceleration of no more than 200 G-Max and a Head Injury Criteria (HIC) value of no more than 1,000 for a head-first fall from the highest accessible portion of play equipment being installed.
- Accessibility: Children's outdoor play areas shall be in compliance with the Uniform Federal Accessibility Standards 9UFAS FED-STD-795 and the Architectural and Engineer Instructions (9AE1) Design Criteria.
- 3. The Americans with Disability Act Accessibility Guidelines (ADAAG) 28 CFR Part 36 that provide equal or greater accessibility than the requirements of UFAS is also required in the children's play area.
- 4. Poured in place surfaces that are used as accessible paths of travel for persons with disabilities shall meet the requirements of ASTM F1951 and ASTM F1292.

SUB-BASE SURFACE OPTIONS

- 1. Preparation of area: The sub-base shall be clear of any trees, grass and shrubbery.
- 2. The native sub-base shall be graded and compacted to 90% maximum density.
- 3. Concrete/Asphalt: The PIP system can be installed over a minimum 3" layer pad.
- 4. Aggregate Sub-Base: Installation of a minimum of 4" of Class 2 Base and shall be a 95% compaction rating and a 1 ¼" level when measured with a ten foot straight edge in any direction.
- 5. Geotextile Fabric can be installed over Class 2 Base.
- 6. Drainage: Proper drainage needs to be verified to support the integrity of the PIP rubber.

INSTALLATION

- 1. Pro Services shall strictly shall install surfacing to the depth specified on the drawings or as specified from manufacturer per IPEMA guidelines.
- 2. Surfacing to be installed by Pro Services certified installers.
- 3. Cushion Layer Mix SBR per guidelines and mix ratio and apply to thickness of the required IPEMA guidelines fall height requirements. Mix till 100% of product is bonded.
- Wear Layer EPDM/TPV granules. Wear layer shall be mixed on sight according to proper mixtures and hand trawled with even pressure.
- 5. Pro Services recommends up to 74 hours of cure time depending on thickness and weather.

WARRANTIES

Pro Services offers a limited 7 year warranty but will meet or exceed any other Poured Rubber Company.

REQUEST FOR SUBSTITUTION

Pursuant to Public Contract Code section 3400, bidder submits the following request to Substitute with the bid that is submitted. I understand that if the request to substitute is not an "or equal" or is not accepted by District and I answer "no" I will not provide the specified item, then I will be held non-responsive and my bid will be rejected. With this understanding, I hereby request Substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods,

or types of construction:

of type	s of construction:						
	Specification Section	Specified Item	Requested Substituted Item	Pro- Specifi- if requ Substi	ractor ees to vide ed Item uest to itute is iied ¹ e one)	District I	200
1.	Playground rubber surface system	Max Pour by PlayM	ax SpectraPour by Spec	tra eurf	(No)	Grant	Deny
2.				Yes	No	Grant	Deny
3.				Yes	No	Grant	Deny
4.				Yes	No	Grant	Deny
5.				Yes	No	Grant	Deny
6.				Yes	No	Grant	Deny
7.				Yes	No	Grant	Deny
8.				Yes	No	Grant	Deny
9.				Yes	No	Grant	Deny
10.				Yes	No	Grant	Deny
11.				Yes	No	Grant	Deny
12.				Yes	No	Grant	Deny

This Request Form must be accompanied by evidence as to whether the proposed Substitution (1) is equal in quality, service, and ability to the Specified Item; (2) will entail no change in detail, construction, and scheduling of related work; (3) will be acceptable in consideration of the required design and artistic effect; (4) will provide no cost disadvantage to the District; (5) will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; (6) will require no change of the construction schedule or milestones for the Project; and, (7) Contractor agrees to pay for any DSA Fees or other Governmental Plan check costs associated with this Substitution Request. (See General Conditions Section 3.6)

The undersigned states that the following paragraphs are correct:

- 1. The proposed Substitution does not affect the dimensions shown on the Drawings.
- 2. The undersigned will pay for changes to the building design, including Architect, engineering, or other consultant design, detailing, DSA plan check or other governmental plan check costs, and construction costs caused by the requested substitution.
- 3. The proposed substitution will have no adverse effect on other trades, the Contract Time, or specified warranty requirements.
- 4. Maintenance and service parts will be available locally for the proposed substitution.
- In order for the Architect to properly review the substitution request, within five (5) days following the opening of bids, the Contractor shall provide samples, test criteria, manufacturer information, and any other documents requested by Architect or Architect's engineers or consultants, including the submissions that would ordinarily be required for Shop Drawings along with a document which provides a side by side comparison of key characteristics and performance criteria (often known as a CSI side by side comparison chart).
- 6. If Substitution Request is accepted by the District, Contractor is still required to provide a Submittal for the substituted item pursuant to the General Conditions and shall provide required Schedule information (including schedule fragnets, if applicable) for the substituted item. The approval of the Architect, Engineer, or District of the substitution request does not mean that the Contractor is relieved of Contractor's responsibilities for Submittals, Shop Drawings, and schedules under the General Conditions if the Contractor is awarded the Project.

Name of Bidder: Spect	ralurt		
Signature:Casand	lra Hove		
To be completed by Dis	trict		
☐ Approved			
☐ Denied			
Jose Contreras	Director	Jose Contreras	4/7/25
Print Name	Title	Signature	Date

**If substitution request is approved, submit this form with approval at the time of bid submission.



Playground Protective Surfacing Submittal

SpectraPour Aromatic

Substitution Request SpectraTurf is a direct Manufacturer & Installer Located in Corona.

Buchanan Playground Rubber Surface System Replacement Project

	SpectraPour		MaxPour
	by SpectraTurf	MEET OR EXCEED	by PlayMax
Parent Company	Ecore International		PlayMax
Installation	Direct Employees	EXCEED	Certified Subcontractors
IPEMA Certified System	Yes	MEET	Yes
Warranty Length	5 Years	EXCEED	5 Years
	SBR (Recycled Tire)		
	0.5 mm - 3.0 mm thick		
Base (Cushion) Layer Material	3.0 mm - 20.0 mm length	MEET	SBR rubber particles of heterogeneous distribution
	Standard Aromatic Resin		Ratio unkown? aromatic polyurethane binder applied
Base Layer Resin Binder / content*	Not Less than 16% by weight	EXCEED	to 100% of the rubber
			granules by TPV Rosehill, or black EPDM rubber 1-3.5
Top Layer Material	1-4mm EPDM / TPV rubber	MEET	mm granules
Top Layer Thickness	1/2" thick minimum	MEET	1/2" thick
	Aromatic or Aliphatic Resin		Ratio unkown? polyurethane binder applied to 100%
Wear Layer Resin Binder / content*	Not Less than 22% by weight	EXCEED	of the granules

^{*}Information obtained from PlayMax specification on their website







Advancing Fun Play & Healthy Recreation for Every Age and All Abilities.

SpectraPour: Pour-in-Place Rubber Playground Surfacing



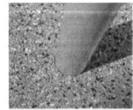
SpectraPour safety playground surfacing has been our flagship poured-in-place system since its inception in 1986. SpectraPour has been used on thousands of projects throughout the US at parks, schools, daycare centers, and other applications requiring a high quality, poured rubber safety surface.

SpectraPour's pour-in-place installation and wide variety of colors allows us to create intricate and visually pleasing designs. This enhances any gathering space - hotel play areas, playgrounds, shopping centers, community centers - into a welcoming and friendly location. SpectraPour's shock-absorbing qualities make it ideal for safety surfaces at critical fall heights as well as comfortable for any walking or standing application.

SpectraPour is mixed on-site, and may be used to provide ADA access to existing playgrounds, to retrofit existing play areas, or to fill entire new playgrounds with quality rubber surfacing that stays in place during use.

SpectraPour System Data

- 2-layer system mixed, poured & troweled on-site
- Base layer of shock-absorbing rubber material
- · Half-inch-thick wearing surface of rubber granules
- Available in 20 colors (colors can be mixed)
- Create custom shapes and designs
- Porous system may be installed over Type 2 road base, concrete, or asphalt surfaces
- Typically used outdoors
- Conforms to ADA requirements
- IPEMA Certified
- · ASTM F1292 for head impact protection
- ASTM F1951 for wheelchair accessibility
- Available for LEED® credits











IPEMA ASTM F1292-13 (SECTION 4.2) CERTIFICATE OF COMPLIANCE

ISSUE DATE: December 18, 2017 Requested By: Alex Stout

Project: Sample

In the interest of public playground safety, IPEMA provides a third party certification service whereby TÜV SÜD America validates a manufacturer's certification of conformance to ASTM F1292 13 Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment Standard, Section 4.2, Performance Criterion.

The manufacturers listed below have received written validation from TÜV SÜD America that the products listed conform with the requirements of ASTM F1292-13, Section 4.2.

The validation is made by testing at the specified fall height rating requested by the manufacturer, based upon its experience and knowledge of its products, instead of the "critical fall height" used in ASTM F1292 13. TÜV SÜD America validates that the impact attenuating performance criterion specified by ASTM F1292 13 (Section 4.2) has been met or exceeded.

PRODUCT	PRODUCT LINE	THK/HT	MANUFACTURER	DESCRIPTION
SP5	SpectraPour Safety Surfacing	2" / 5'	SpectraTurf	SpectraPour
SP6	SpectraPour Safety Surfacing	2.5" / 6'	SpectraTurf	SpectraPour
SP7	SpectraPour Safety Surfacing	3" / 7'	SpectraTurf	SpectraPour
SP8	SpectraPour Safety Surfacing	3.5" / 8'	SpectraTurf	SpectraPour
SP10	SpectraPour Safety Surfacing	4.25" / 10'	SpectraTurf	SpectraPour
SP12	SpectraPour Safety Surfacing	5" / 12'	SpectraTurf	SpectraPour



SPECTRATURF COLOR CHART

AVAILABLE IN 1-4mm GRANULE SIZES

Standard Colors















Premium Colors





Charcoal Grey Ivy Green



Lime Green







Ash Grey

















Citrus Orange



Scarlett Red







Sand

Honey Gold

Lilac Purple



Plum Purple





Sapphire Blue



- Colors may differ slightly from above due to photo reproduction process.
- All 0.5-1.5 Granule Size's must use Aliphatic Binder. Aliphatic binder HIGHLY recommended for all Lighter shades of color in 1-4mm Granule Size.
- \boxtimes All Premium Colors have additional costs and potential long lead times
- Some Premium Colors may have minimum order requirements

PIP BUFFINGS BLEND

PRODUCT DESCRIPTION

PIP BUFFINGS BLEND is used in the construction of the cushion layer in unitary safety surfacing systems.

PIP BUFFINGS BLEND consists of these materials: recycled SBR, pre-consumer or post-industrial non-tire polyurethane products, or reclaimed playground safety surfacing.

PIP BUFFINGS BLEND is produced through a state of the art recycling process that removes contaminants and produces a mixture of controlled sizes that are ideal for field manufactured poured in place rubber surfac-ing as well as compression molded rubber tiles produced in a factory environment.

Benefits

- √ Non Toxic: Certified Safe by UC Berkeley and The Corporation for Manufacturing Excellence
- Environmentally Friendly: reduces the number of waste tires disposed in land fills
- √ Locally Produced: Reduces green house gas emissions through reduced transportation and reduces freight costs.
- √ Quality: Consistent quality delivered through state of art recycling process

Packaging

50LB Bags or 2,000LB Sacks





SpectraPour Binder Product Data Sheet



TOP & BOTTOM LAYERS

SpectraPour Binder is a high-performance 100% solids, aromatic, single component, moisture-curing, MDI based prepolymer polyurethane resin binder designed for use with rubber granules. It is specifically designed for application of poured-in-place playground and other sports surfacing using appropriate recycled rubber and EPDM granules. SpectraPour Binder does not support fungal growth.

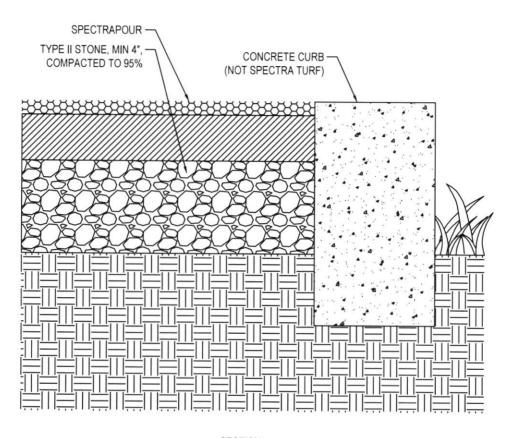
SpectraPour Binder requires surface and ambient temperatures must be at least 45 deg. F. Do not apply over wet or damp surface. Do not mix or apply when rain is imminent or falling. Substrate must be free of dust, oil and grease. Ambient temperature and relative humidity are critical to product reaction. Consult SpectraTurf whenever conditions of very high or very low temperatures and/or very high or low relative humidity are present of anticipated.

Specifications

Appearance	Amber Visu	al	Free NCO Content	7.5 / 8.5%
Density	approx. 1.1 g.cm3 @ 20 degrees C		% Solids by weight	>99%
Viscosity, 25 deg. C	approx. 2,000 / 2,300		PH value	n/a
Setting point	-18 degrees C		Evaporation Rate	Not applicable
Initial Boiling Point	260 degrees		Vapor Density	(Air=1) Heavier than air
Solubility in water	Reacts		Explosive limits	n/a
Flash point	> 200 degrees C		Thermal decomposition	n/a
Flammability limits in air by volume Lower - n/a Upper - n/a			Specific Gravity	(H20 = 1) 1.00-1.102



SPECTRATURF 555 S. PROMENADE AVE., #103 CORONA, CA 92879 TOLL FREE: 1-800-875-5788 www.spectraturf.com



SECTION

NOTES:

- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. DO NOT SCALE DRAWING.
- 3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
- 4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
- CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 092-030



SPECTRAPOUR POUR-IN-PLACE

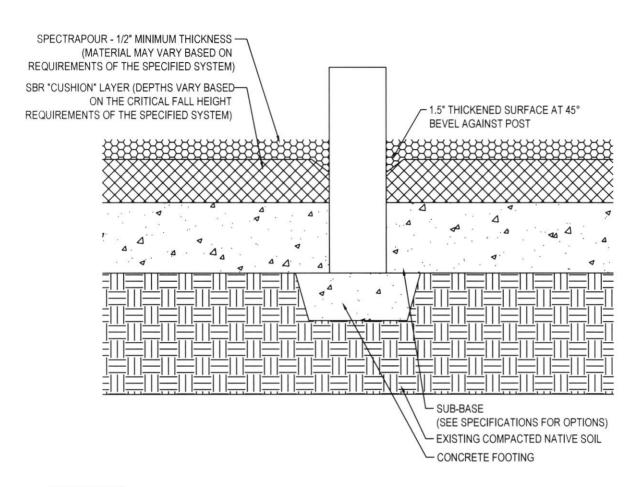
SPECTRAPOUR: STANDARD CURB - FLUSH TO CONCRETE CURB OR WALL

092-030

REVISION DATE 29/05/2019



SPECTRATURF 555 S. PROMENADE AVE., #103 CORONA, CA 92879 TOLL FREE: 1-800-875-5788 www.spectraturf.com



SPECIFICATIONS

SUB-BASE OPTIONS

COMPACTED AGGREGATE: 4" MINIMUM THICKNESS OF TYPE II ROAD BASE COMPACTED TO 95% IN 2" WATERED LIFTS.

CONCRETE: 4" MINIMUM THICKNESS OF MINIMUM 2500 PSI. MUST CURE FOR 7 DAYS* PRIOR TO INSTALLATION OF SAFETY SURFACING. (REQUIRES DRAINAGE DESIGN)

ASPHALT: 3" MINIMUM THICKNESS MUST CURE A MINIMUM OF 14 DAYS*, PRIOR TO INSTALLATION OF SAFETY SURFACING. (REQUIRES DRAINAGE DESIGN)

* MUST CURE MINIMUM OF 28 DAYS FOR WEAR LAYER ONLY INSTALLATIONS

NOTES

- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. DO NOT SCALE DRAWING.
- 3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
- ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
- CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 092-011



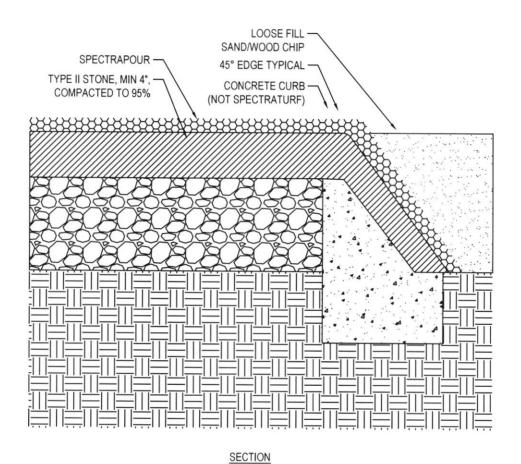
SPECTRAPOUR POUR-IN-PLACE

SPECTRAPOUR: INSTALLATION AT POST LOCATIONS

092-011 REVISION DATE 29/05/2019



SPECTRATURF 555 S. PROMENADE AVE., #103 CORONA, CA 92879 TOLL FREE: 1-800-875-5788 www.spectraturf.com



NOTES:

- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. DO NOT SCALE DRAWING.
- 3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
- ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
- CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 092-031



SPECTRAPOUR POUR-IN-PLACE

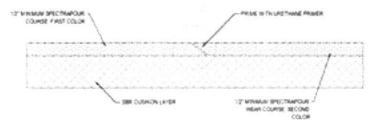
SPECTRAPOUR: TURNDOWN TO LOOSE FILL (45 DEGREE EDGE TYPICAL)

092-031

REVISION DATE 29/05/2019







- NOTES

 INSTRUCTION TO BE COMPLETED IN ACCOMMANDE WITH MANUFACTURIERS SPECIFICATIONS

 INSTRUCTION TO BE COMPLETED IN ACCOMMANDE WITH MANUFACTURIERS SPECIFICATIONS

 ON NOT SCALE SHAPPING

 THIS DRAWNING IN INTERIOR FOR USE BY ARCHITECTS (INSTRUCTION COMPLICATION COMPLETED AND DESCRIPTION OF POPULATION OF A MICHIGANIZATION CONTINUED AND PROPRIED BY THE PRODUCT SHAPPING THE PRODUCT SHAPPING THE PRODUCT SHAPPING THE PRODUCT AND COMPRISE TO BE CONSISTENCY OF THE PRODUCT SHAPPING THE PRODUCT SHAPPING THE PRODUCT AND COMPRISE TO BE CONSISTENCY OF THE PRODUCT SHAPPING THE PRODUCT SHAPPING THE PRODUCT AND COMPRISE TO SHAPPING THE PRODUCT AND COMPRISE THE PRODUCT SHAPPING THE PRODUCT AND COMPRISE THE PROPRIED SHAPPING THE PRODUCT AND COMPRISE THE PRODUCT THE PRODUCT

SPECTRAPOUR POUR-IN-PLACE

DESCRIPTION BENEFOR DESCRIPTION

MENDENDE COORDES

PROTECTED BY COPYRIGHT 4 39YS CASSISTALS CON LTD



MAINTENANCE GUIDELINES

Addendum A (1 of 2)

The following maintenance guidelines are hereby noted as an attachment to the SpectraTurf Statement of Warranty and are so noted in the report of Warranty as Addendum A.

SpectraTurf is under no obligation to repair or replace any of its Playground safety Surfacing Systems that are damaged by improper maintenance; vandalism; product misuse, abuse or alteration; improper drainage; normal wear and tear; damage from sharp objects; unapproved cleaning materials; or Acts of God.

Recommended Monthly Maintenance:

- 1. Power Wash the entire Playground Safety Surfacing to remove surface dirt, food, drink, sand, and various contaminants. Use an air blower to remove loose debris before Power Washing the Playground Safety Surface.
- On heavily stained isolated areas, after wetting, apply a sufficient amount of all-purpose cleaner
 and scrub with a 10" minimum bristle brush. Rinse thoroughly and repeat as necessary. Perform
 hand cleaning early in the morning or late afternoon so that the cleanser will have time to work
 before evaporating in high temperature conditions.
- 3. Power Washing can be performed any time during the day. Please refer to Addendum A (2 of 2) for illustrated procedures for power washing the Playground Safety Surfacing.

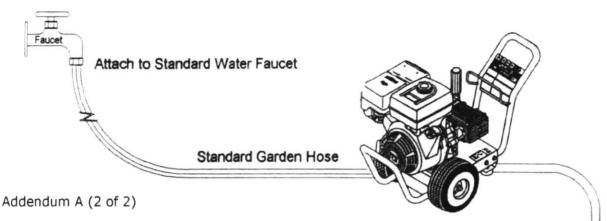
Other Recommended Maintenance:

Every 2 to 3 years, depending upon the amount of use the play area receives, an application (roll coat) of aliphatic resin should be applied to the Playground Safety Surfacing. Aliphatic resin should be applied by rollers (NOT air sprayers) at a rate of approx. 60 sq ft per gallon over the entire wear layer of the Playground Safety Surfacing and allowed to cure for a minimum 72 hours before use of the play area.

NEVER USE A STEEL OR HARD PLASTIC BRUSH ON MANUAL OR ELECTRIC CLEANING UNITS. CONSULT WITH SPECTRATURF AT (800) 875-5788 BEOFRE COMMENCING ANY CLEANING OPERATION THAT MAY BE HARMFUL TO THE PLAYGROUND SURFACING SYSTEM



MAINTENANCE GUIDELINES



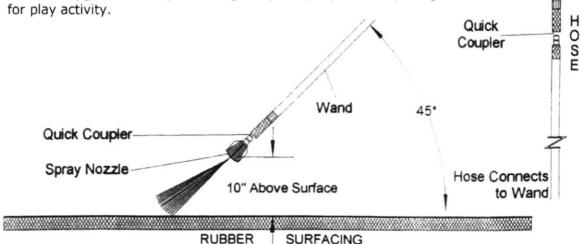
The use of the Power Washer is a simple procedure.

POWER WASHER

I G H

RHOOURH

- 1) Use a Power Washer with pressure set at 1500 PSI.
- 2) Connect the Power Washer to a water faucet outlet.
- 3) Use a Power Washer Nozzle with a 24/1000" orifice.
- 4) Turn on Power Washer and test pressure and spray pattern on a hard surface (i.e. cement) to gauge distance and impact of water spray.
- 5) Hold spray nozzle approximately 10 inches from surface being cleaned. for best results, spray on a slight angle between 45 60 degrees.
- 6) Start at the center of the rubber surface installation and power clean towards the outer edges in a continuous back and forth motion.
- 7) As you proceed, check the surface to make sure you did not miss any areas of contamination.
- 8) Let the Playground Safety Surfacing completely dry before opening for play activity.



500 E. Rincon Street #100, Corona, CA 92879-1352 (951) 736-3579 (800) 875-5788 Fax (951) 734-3630 www.spectraturf.com CA #854429

SpectraPour Poured-in-Place Specification

SpectraTurf 555 South Promenade Avenue #103 Corona, CA 92879 Phone: (951) 736-3579 Fax: (951) 734-3630

E-mail: <u>info@spectraturf.com</u> www.spectraturf.com

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: SpectraPour Poured-in-Place Playground Surfacing System.
- B. Related Sections: Sitework Sections: Materials and Methods, Excavation, Asphalt Paving, Concrete Paving, Sub-Drainage, Storm Drainage, Fencing, Playground Equipment and Structures.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
 - 2. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
 - 3. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
 - ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
 - 5. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.
 - 6. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
 - 7. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

1.03 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide a 2 layer rubber-urethane playground surfacing system which has been designed, manufactured and installed to meet the following criteria:
 - 1. Shock Attenuation (ASTM F1292):
 - a. Gmax: Less than 200.
 - b. Head Injury Criteria: Less than 1000.
 - 2. Flammability (ASTM D2859): Pass.
 - 3. Tensile Strength (ASTM D412): 60 psi (413 kPa).
 - 4. Tear Resistance (ASTM D624): 140%.
 - 5. Water Permeability: 0.4 gal/yd2/second.
 - 6. Accessibility: Comply with requirements of ASTM F1951.

1.04 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit manufacturer's product data and installation instructions.
- C. Verification Samples: Submit manufacturer's standard verification samples of 6" x 6" minimum.
- D. Quality Assurance/Control Submittals: Submit the following:
 - 1. Certificate of qualifications of the playground surfacing installer.
- E. Closeout Submittals: Submit the following:
 - 1. Warranty documents specified herein.

1.05 QUALITY ASSURANCE

- A. Qualifications: Installer must be a direct employee of the manufacturer's installation division, having 5 years' experience with other projects of the scope and scale of the work described in this section. Certified subcontracted installation not acceptable.
- B. International Play Equipment Manufacturers Association (IPEMA) certified.
- C. Comply with ASTM F1292 and F1951 Standards.

1.06 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirement Section.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).

1.07 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 40 degrees F and maximum ambient temperature is 105 degrees F. Exception to the temperature requirements can be made by the manufacturer of the surfacing system. Do not install in steady or heavy rain. Exceptions can be made for enclosed or tented areas.

1.08 WARRANTY

- A. Project Warranty: Standard manufacturer warranty period is 5 years from date of completion of work.
- B. Compaction and proper drainage are critical to the longevity of the SpectraPour Poured-in-Place surfacing system. Compaction and inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty. Acceptable subbase materials are concrete, asphalt, or class 2 aggregate.

PART 2 PRODUCTS

2.01 SPECTRAPOUR PLAYGROUND SURFACING SYSTEM

A. Manufacturer: SpectraTurf

1. Contact: 555 South Promenade Avenue, #103, Corona, CA 92879;

Telephone: (800) 875-5788; Fax: (951) 734-3630;

E-mail: info@spectraturf.com website: http://www.spectraturf.com.

B. Proprietary Products/Systems.

SpectraPour Poured-in-place playground surfacing system, including the following:

- 1. SpectraPour Poured-In-Place Primer:
 - a. Material: Urethane.
- 2. SpectraPour Poured-in-Place Basemat:
 - a. Material consists of US manufactured recycled SBR, pre-consumer or post-industrial non-tire polyurethane products, or reclaimed playground safety surfacing.

The type of playground equipment determines the required basemat thickness, and the basemat thickness may be different at various locations on the playground site. Depending on ASTM F1292 requirements for critical fall height (5', 6', 7', 8', 10', or 12'), select basemat thickness from options provided in subparagraph below (1-1/2", 2", 2 1/2", 3", 4" or 4 1/2" respectively). Specify project requirements below and coordinate with working drawings.

- b. Basemat Thickness: [1 1/2"] [2"] [2 1/2"] [3"] [4"] [4 1/2"]
- 3. SpectraPour Poured-In-Place Top Surface:
 - a. Material: Blend of US manufactured recycled EPDM (ethylene propylene diene monomer) rubber and Aromatic binder.
 Certificate of origin required.
 - * Aliphatic (UV-Stabilized) Resin available at additional costs
 - b. Top Surface Thickness: minimum 1/2".

c. Color:

<u>Standard Colors:</u> Inferno Red; Shamrock Green; Cobalt Blue; **Sky Blue;** Sandstone Beige; Pewter Gray; Jet Black

<u>Premium Colors:</u> Ash Gray; Charcoal Gray; Lime Green; Ivy Green; Agave Teal; Aquamarine; Sapphire Blue; Cherry Red; Scarlett Red; Raspberry Pink; Lilac Purple; Plum Purple; Canary Yellow; Honey Gold; Citrus Orange; Chestnut Brown; Pampus Ivory; Eggshell

Aliphatic urethane is recommended for the lighter or brighter colors <u>notated in bold lettering</u>. Standard aromatic binder "yellows" slightly upon exposure to ultraviolet rays. Most of this thin layer of urethane wears off with foot traffic and weathering typically within two to six months. *This characteristic applies industry-wide*.

- d. Dry Static Coefficient of Friction (ASTM D2047): 1.0.
- e. Wet Static Coefficient of Friction (ASTM D2047): 0.9.
- f. Dry Skid Resistance (ASTM E303): 89.
- g. Wet Skid Resistance (ASTM E303): 57.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

2.03 MIXES

- A. Required mix proportions by weight:
 - 1. Basemat: 14 16+% urethane (as ratio: 14% urethane divided by 86% rubber). 14% urethane, 86% rubber (based on entire rubber & urethane mix).
 - 2. Top Surface: 20 22% urethane (ratio: 18% urethane divided by 82% rubber). 18% urethane, 82% rubber (based on entire rubber & urethane mix).

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions, details, and recommendations of the attenuating playground surfacing manufacturer.

3.02 EXAMINATION

- A. Substrate preparation must be in accordance with surfacing manufacturer's specification. New asphalt must be fully cured up to 30 days. New concrete varies 1-5 days weather dependent.
- B. Compaction and proper drainage are critical to the longevity of the SpectraPour Poured-in-Place surfacing system. Compaction and inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty. Acceptable subbase materials are concrete, asphalt, or class 2 aggregate.

3.03 PREPARATION

A. Surface Preparation: Using a brush or short nap roller, apply primer to the substrate perimeter and any adjacent vertical barriers such as playground equipment posts, curbs, or anchor that will contact the surfacing system.

3.04 INSTALLATION

A. Do not proceed with playground surfacing installation until all applicable site work, including substrate preparation, fencing, playground equipment installation and other relevant work, has been completed.

B. Basemat Installation:

- 1. Using screeds and hand trowels, install the basemat at a consistent uniform thickness for required fall height.
- 2. Allow basemat to cure for sufficient time so that indentations are not left in the basemat from applicator foot traffic or equipment.

- 3. Do not allow foot traffic or use of the basemat surface until it is sufficiently cured.
- C. Primer Application: Using a brush or short nap roller, apply primer to the substrate perimeter and any adjacent vertical barriers such as playground equipment posts, curbs, or anchor that will contact the surfacing system.

D. Top Surface Installation:

- 1. Using a hand trowel, install top surface at a consistent uniform minimum thickness of 1/2".
- 2. Allow top surface to cure for a minimum of 48 hours for aromatic resin / 72 hours for aliphatic resin.
- 3. At the end of the minimum curing period, verify that the top surface is sufficiently dry and firm to allow foot traffic and use without damage to the surface.
- 4. Do not allow foot traffic or use of the surface until it is sufficiently cured.

3.05 PROTECTION

A. Protection of the work is excluded. The installation crew will protect its work only while on site working. The Owner or Contractor is responsible for protection after the crew leaves each day and after the crew leaves the site at substantial completion of their work.