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

DISTRICT BID ADDENDUM NO. 1

Date: February 20, 2025

To: All Bidders
From: Nadia Brewer, Director of Purchasing
Project: 2024-25-13 Early Learning Enrichment Center Playground 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:

1. Pre-Bid RFI Responses

Question: How much is the engineer's estimate?

Answer: There is no engineer's estimate available.

Question: Is there an allowance?

Answer: The allowance for this project is $10,000.

Question: Who is the project manager?

Answer: There will be a District Project Manager. We will not use a Construction Managing Firm.

Question: Do we have to be prequalified?

Answer: You do not need to be prequalified.

Question: Please clarify the color of the new poured-in-place safety surfacing? For example, 50% Standard Color / 50% Black or 100% Color Blend to be determined?

Answer: 50% Black 50% Tan

Question: Please confirm the binder type to be used within the top ½" thick wear course layer of poured-in-place safety surfacing is to be Aromatic

Answer: 3.3 Materials: The MaxPour™ play surface shall be manufactured from a precise blend of color MaxPour**™** TPV rubber granules by Rosehill, mixed with MaxPour**™ AROMATIC** polyurethane binder. Polyurethane binder containing any TDI shall not be allowed due to environmental regulations. For hot, humid climates which may accelerate the cure of polyurethanes, PlayMax may substitute a slower-curing version of this binder. Systems requiring color mixes containing black shall use black EPDM granules for this purpose.

2. District approved substitution request form for MaxPour – see attached request for substitution documents.
3. District approved substitution request form for PlayMax – 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 (SpectraPour)
- Addendum 01 – Request for Substitution – PlayMax (Flexground Surfacing)
- Addendum 01 - Request for Substitution – MaxPour (Pro Services Poured Rubber)

END OF DISTRICT BID ADDENDUM NO. 1

REQUEST FOR SUBSTITUTION

Addendum 01 - 02/20/25

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

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

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	Contractor Agrees to Provide Specified Item if request to Substitute is Denied (circle one)	District Decision (circle one)
1.	32 18 16 Poured-in-place	MaxPour	SpectraPour	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: SpectraTurf

By: Cassandra Hove

District: _____

By: _____

To be completed by District:

☑ Approved
☐ Denied

Nadia Brewer | Purchasing Director | 2/13/25

Print Name | Title | Signature | Date

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

SpectraTurf

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Playground Protective Surfacing Submittal

SpectraPour Aromatic

Early Learning and Enrichment Center Murrieta

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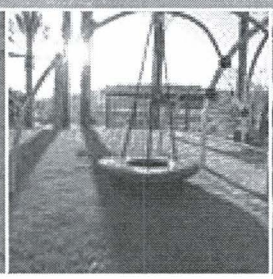
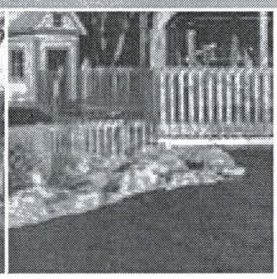




Advancing Fun Play & Healthy Recreation for Every Age and All Abilities.

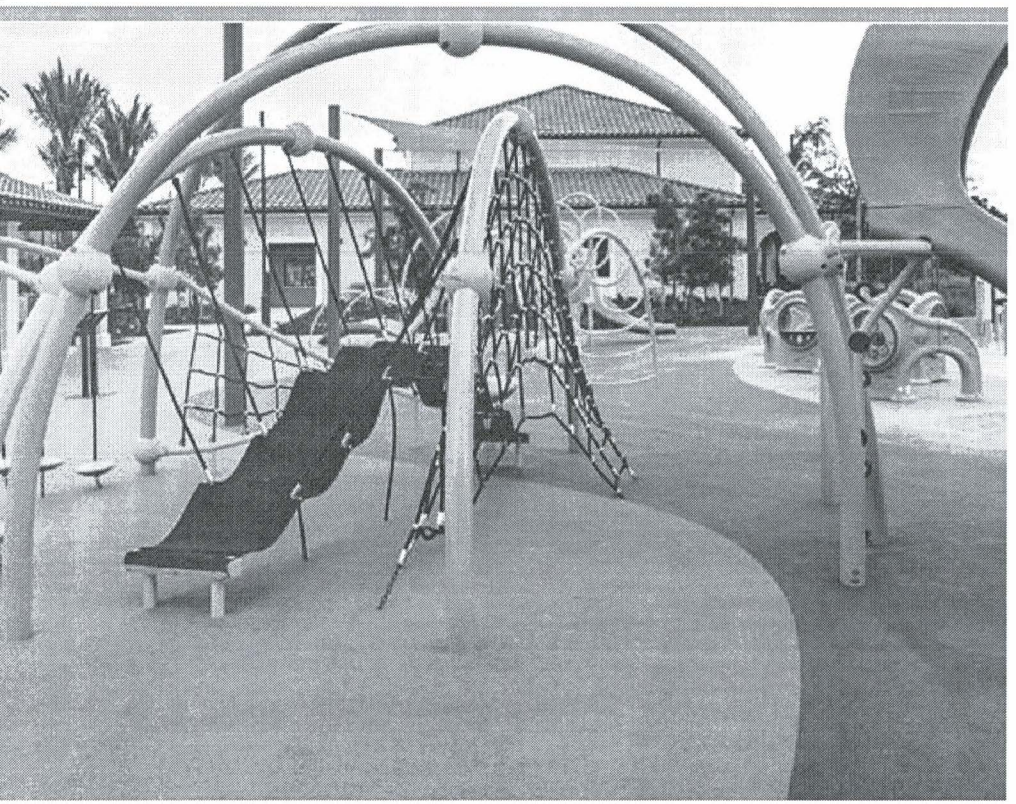
SpectraTurf 10/26/2021

Side by side comparison chart

	SpectraPour by SpectraTurf	**MEET OR EXCEED**	**MaxPour** by PlayMax (Confirm if they are still in business?)
Parent Company	Ecore International		PlayMax
IPEMA Certified System	Yes	EXCEED	No
Warranty Length	5 Years	EXCEED	5 Years
Base (Cushion) Layer Material	SBR (Recycled Tire) 0.5 mm - 3.0 mm thick 3.0 mm - 20.0 mm length	MEET	SBR rubber particles of heterogeneous distribution
Base Layer Resin Binder / content*	Standard Aromatic Resin Not Less than 16% by weight	EXCEED	Ratio unkown? aromatic polyurethane binder applied to 100% of the rubber
Top Layer Material	1-4mm EPDM / TPV rubber	MEET	granules by TPV Rosehill, or black EPDM rubber 1-3.5 mm granules
Top Layer Thickness	1/2" thick minimum	MEET	1/2" thick
Wear Layer Resin Binder / content*	Aromatic or Aliphatic Resin Not Less than 22% by weight	EXCEED	Ratio unkown? polyurethane binder applied to 100% of the granules

*Information obtained from PlayMax specification on their website

SpectraPour:
Pour-in-Place Rubber Playground Surfacing



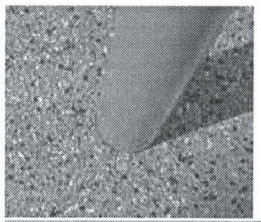
SpectraPour safety playground surfacing has been our flagship poured-in-place system since its inception in 1986. SpectraPour has been used on thousands of projects throughout the US at parks, schools, daycare centers, and other applications requiring a high quality, poured rubber safety surface.

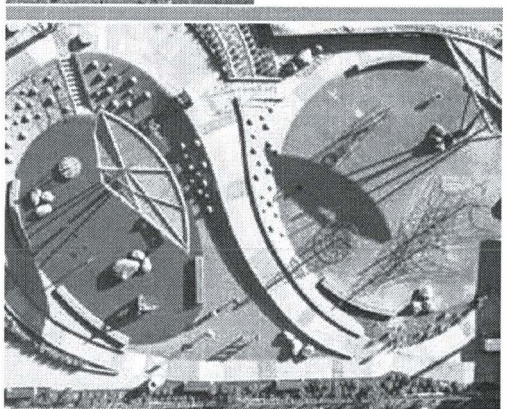
SpectraPour's pour-in-place installation and wide variety of colors allows us to create intricate and visually pleasing designs. This enhances any gathering space – hotel play areas, playgrounds, shopping centers, community centers – into a welcoming and friendly location. SpectraPour's shock-absorbing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

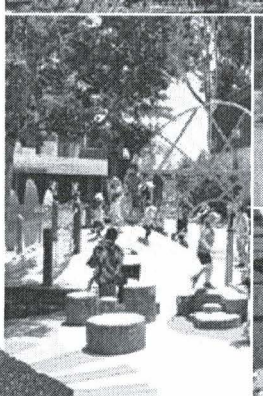
SpectraPour is mixed on-site, and may be used to provide ADA access to existing playgrounds, to retrofit existing play areas, or to fill entire new playgrounds with quality rubber surfacing that stays in place during use.

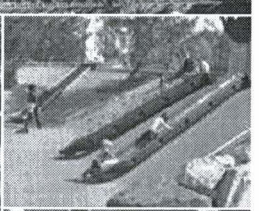
SpectraPour System Data

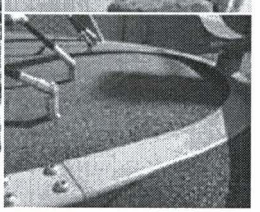
- 2-layer system – mixed, poured & troweled on-site
  - Base layer of shock-absorbing rubber material
  - Half-inch-thick wearing surface of rubber granules
- Available in 20 colors (colors can be mixed)
- Create custom shapes and designs
- Porous system may be installed over Type 2 road base, concrete, 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

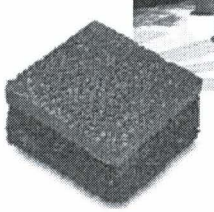












IPEMA ASTM F3351-19E1 CERTIFICATE OF COMPLIANCE

ISSUE DATE: February 20, 2024
Requested By: Casandra Hove
Project: IPEMA Certification

In the interest of public playground safety, IPEMA provides a third-party certification service whereby TÜV SÜD American uses this test method to determine the shock absorption properties of a playground surface at a specific impact height in order to evaluate a particular playground surfacing system using the g-max and HIC values described in Specification F1292.

The manufacturers listed below have received written validation from TÜV SÜD America that the products listed conform with the requirements of ASTM F-3351-19e1.

TÜV SÜD America validates that the impact attenuating performance criterion specified by ASTM F3351-19e1 has been met or exceeded.

MODEL #	COMMERCIAL NAME OF PRODUCT	PRODUCT LINE	THK/HT	MANUFACTURER
SP5	SpectraPour	SpectraPour Safety Surfacing	2" / 5'	SpectraTurf
SP6	SpectraPour	SpectraPour Safety Surfacing	2.5" / 6'	SpectraTurf
SP7	SpectraPour	SpectraPour Safety Surfacing	3" / 7'	SpectraTurf
SP8	SpectraPour	SpectraPour Safety Surfacing	3.5" / 8'	SpectraTurf
SP10	SpectraPour	SpectraPour Safety Surfacing	4.25" / 10'	SpectraTurf

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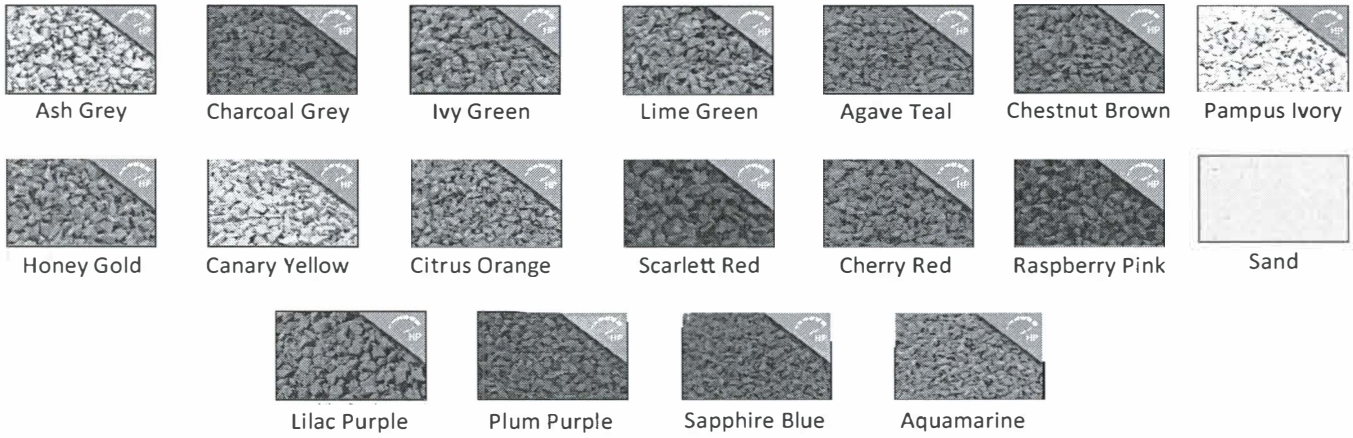
SPECTRATURF COLOR CHART

AVAILABLE IN 1-4mm GRANULE SIZES

Standard Colors

Premium Colors



- ☒ 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.
- ☒ All Premium Colors have additional costs and potential long lead times
- ☒ Some Premium Colors may have minimum order requirements

555 S Promenade Ave, Suite 103, Corona, CA 92879 Ph: 800-875-5788 Fax: 951-734-3630
www.spectraturf.com

SEPTEMBER 2023

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

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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 Visual	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

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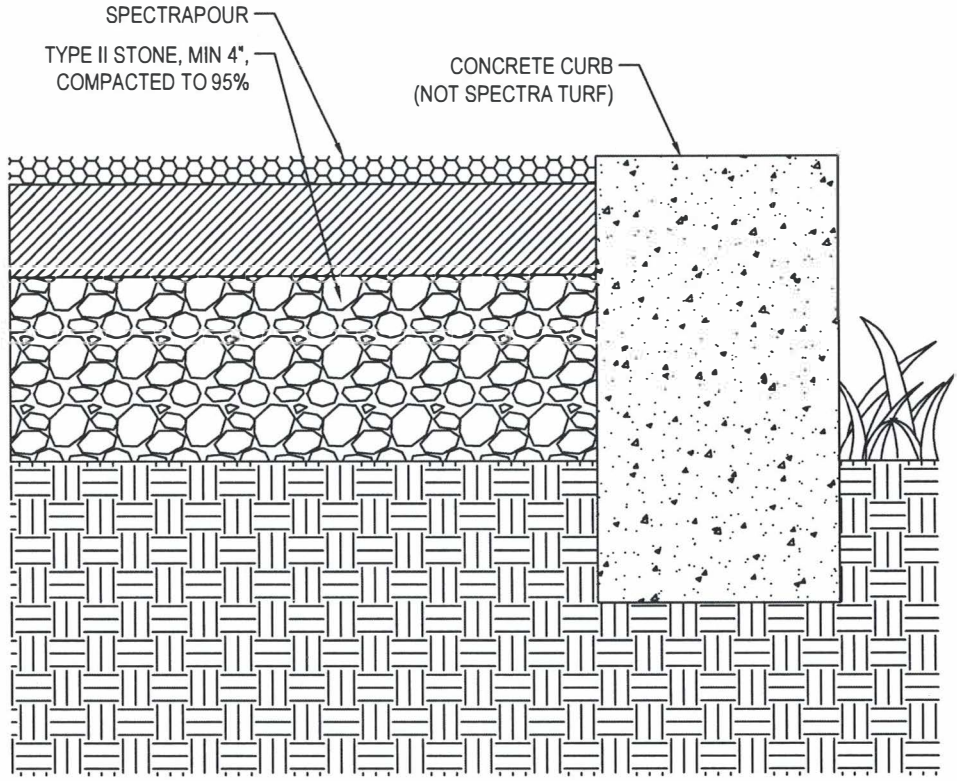

SECTION

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.
5. 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

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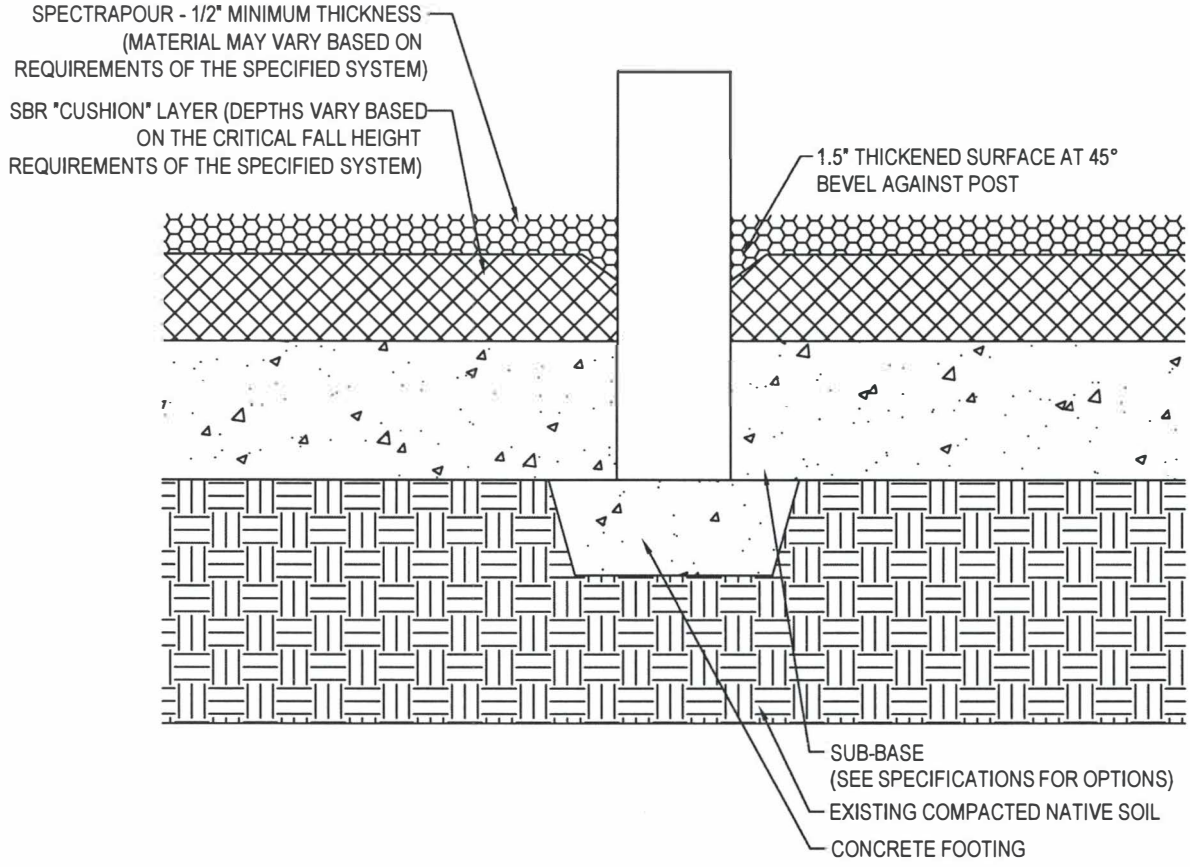

SPECIFICATIONS

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:

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5. 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

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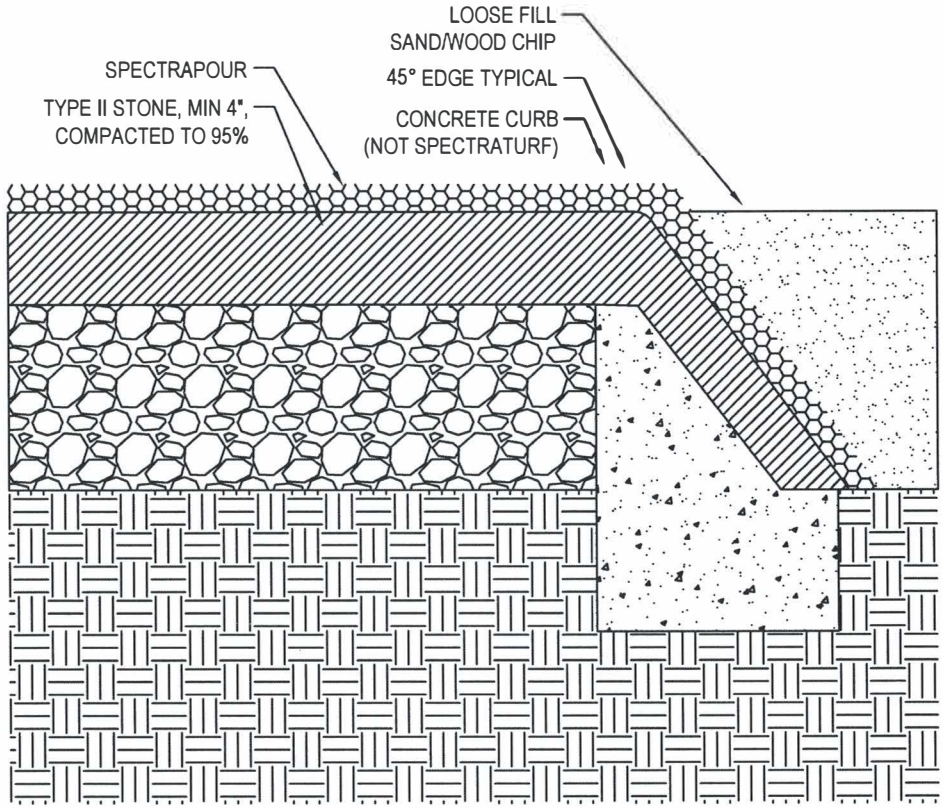

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5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 092-031

SPECTRAPOUR POUR-IN-PLACE

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

092-031

REVISION DATE 29/05/2019

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CORONA, CA 92879
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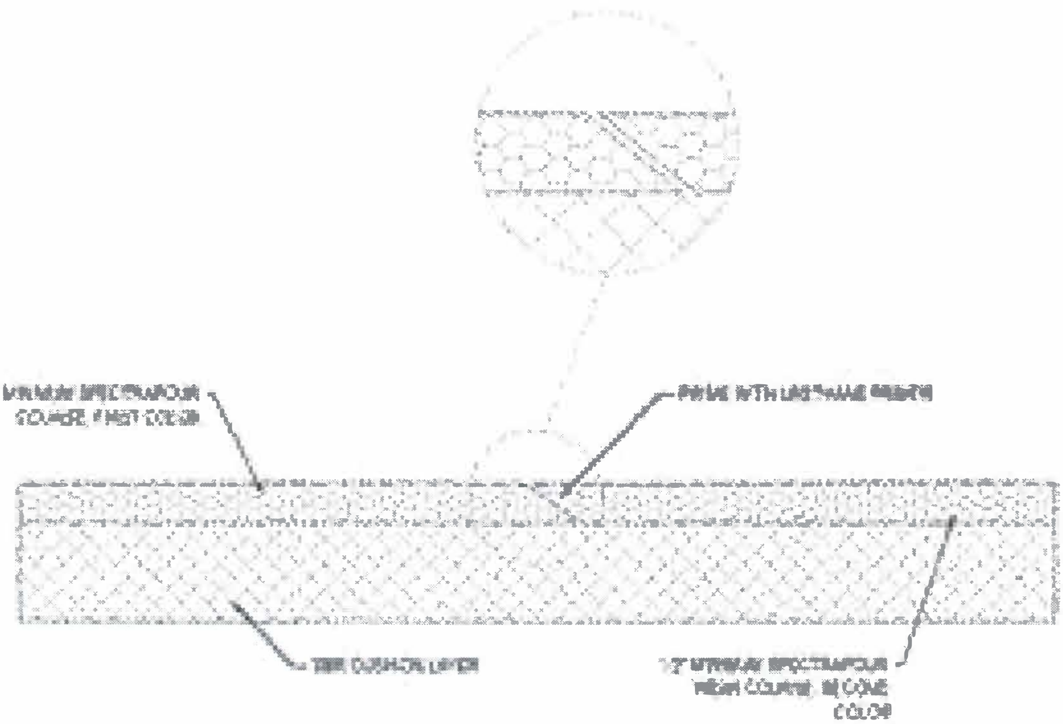

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5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER [illegible]

SPECTRAPOUR POUR-IN-PLACE

SPECTRAPOUR: BEVEL CUT FOR SEAM LAYER

REVISION DATE: [illegible]

CADdetails.com

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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.

2. 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:

1. 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

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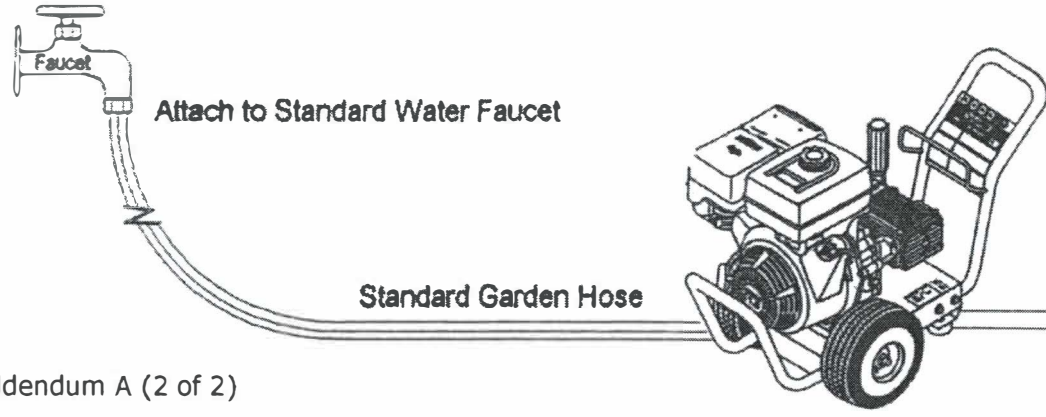
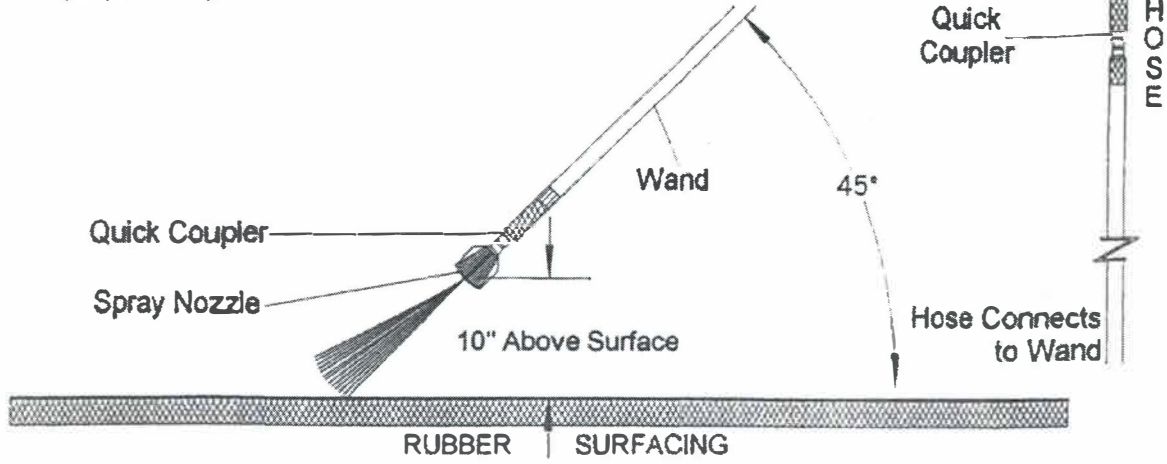
MAINTENANCE GUIDELINES



Addendum A (2 of 2)

The use of the Power Washer is a simple procedure.

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: info@spectraturf.com
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.

4. 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:

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

Premium Colors: **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 **notated in bold lettering.** 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.

REQUEST FOR SUBSTITUTION

Addendum 01 - 02/20/25

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

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

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	Contractor Agrees to Provide Specified Item if request to Substitute is Denied (circle one)	District Decision (circle one)
1.	Section 02791 32181613	MaxPour	ProServices Poured 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

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: Pro Services General Contractors

By:_____

District: _____

By: _____

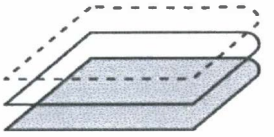
To be completed by District:

☑ Approved
☐ Denied

Nadia Brewer | Purchasing Director | 2/12/25

Print Name | Title | Signature | Date

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



LIC#1074114

PRO SERVICES

POURED IN PLACE RUBBER

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.
l. 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

1. 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.
2. 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.
4. 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

Addendum 01 - 02/20/25

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

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1.	SAFETY SURFACING	PLAYMAX	FLEXGROUND SURFACING	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

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Name of Bidder: ORTCO INC.

By: Billy Police

District: _____

By: _____

To be completed by District:

☒ Approved
☐ Denied

Print Name	Title	Signature	Date
Nadia Brewer	Director of Purchasing		2/13/25

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

flex GROUND
INNOVATIVE • QUALITY • SURFACING

2029 Opportunity Dr
Suite #3
Roseville, CA 95678

916.474.5430
916.472.6904
info@flexground.com

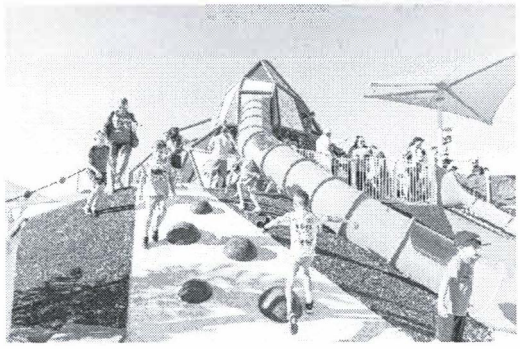
At FlexGround, we are extremely proud to stand tall as the premier recreational surfacing company in the Western United States.

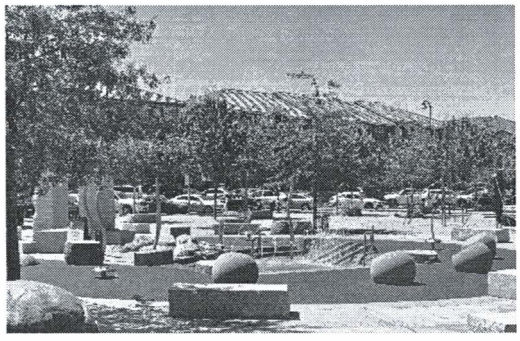
We didn't arrive here by accident. We leveraged 80+ years of in-depth industry knowledge in overseeing the successful installation of over 10+ million square feet of aquatic and playground safety surfacing. We did it all using our own, custom-engineered surfacing products that revolutionized the industry, 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.

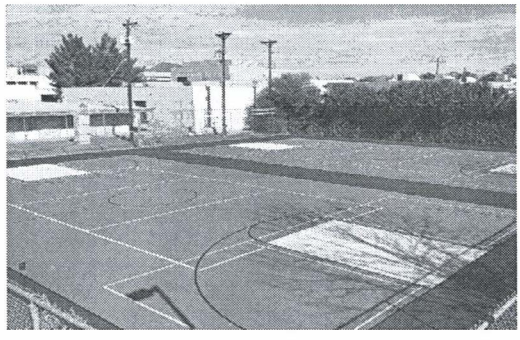
The industry has spoken on our accomplishments. Our designs and installations have been recognized around the country in publications such as Landscape Architect magazine, Landscape Contractor publications, and we are the country's only Inc. 500 award-winning recreational and safety surfacing company.

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.







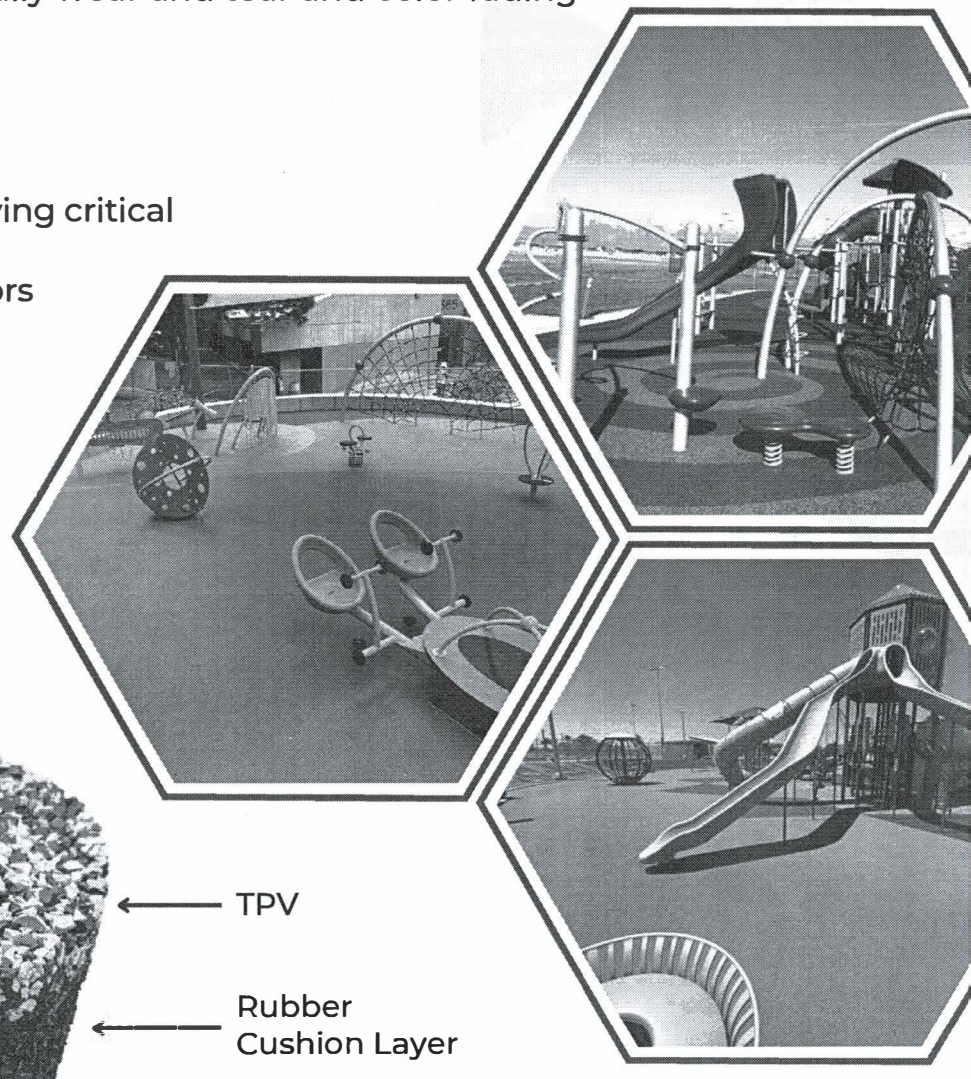
EnduraFlex™

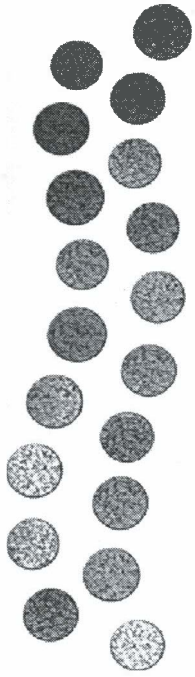
HIGH-QUALITY TPV POURED-IN-PLACE

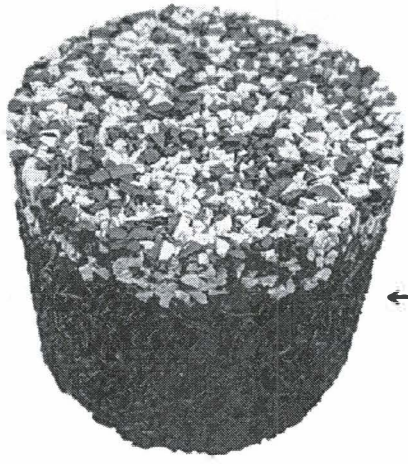
EnduraFlex is a superior poured-in-place rubber surface. It consists of two layers: a cushioned base and a surface layer of TPV granules (each granule being 1-4 mm). TPV is a vulcanized product, making it better equipped to withstand daily wear and tear and color fading from consistent UV exposure.

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.

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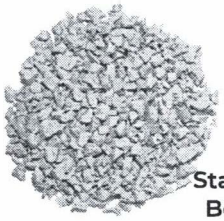
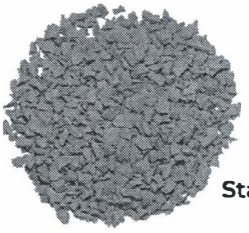
Rosehill TPV

TPV COLOR CHART


Standard Beige
RH30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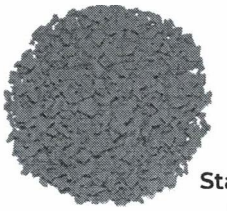
RH01


Standard Blue
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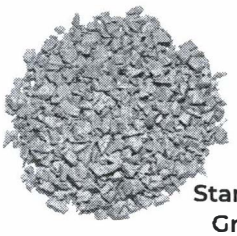
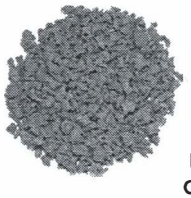

Standard Green
RH10

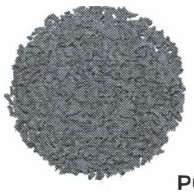

Light Blue
RH22

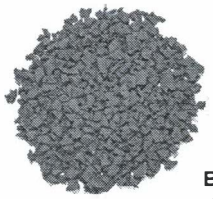

Azure
RH23

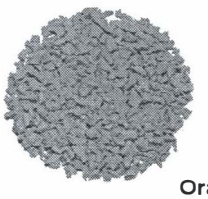

Turquoise
RH26

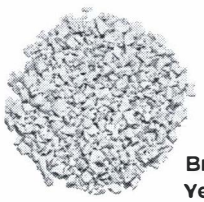

Bright Green
RH11

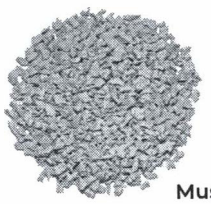

Dark Green
RH12


Purple
RH21

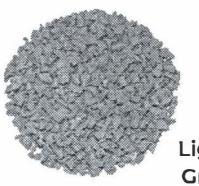

Bright Red
RH02

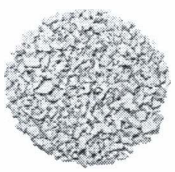

Orange
RH50

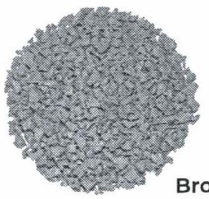

Bright Yellow
RH41

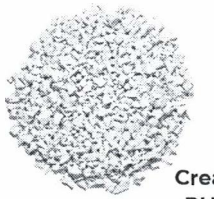

Mustard
RH40


Dark Grey
RH60


Light Grey
RH61


Pale Grey
RH65


Brown
RH32


Cream
RH31

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 Surfacing
888-571-1080 | info@flexground.com | www.flexground.com

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.

I. 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 (½").

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.

IPEMA Certificate of Compliance

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
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

America

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IPEMA CERTIFIED ASTM

PROJECT LIST
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

ARIZONA
Lic #288687 & 283192
602.954.0000

CALIFORNIA
Lic#1003439
916.474.5431

NEVADA
Lic #0076764 & 0077757
702.303.8701

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.com

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

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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

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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

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702.303.8701

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

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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

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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: lduran@cityofsancarlos.org

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