

SECTION 10.23C

SITE IMPROVEMENTS ATHLETIC FACILITIES

EXTERIOR/INTERIOR

ACRYLIC TYPE

CUSHIONED SUB-SURFACE

PLEXICUSHION® SYSTEM

INSTALLATION FOR CONCRETE SURFACES

1.0 DESCRIPTION

The Plexicushion System combines the unique resilience and shock-absorbing properties of EPDM Rubber with the uniform play characteristics of the Plexipave Surfacing System. The Plexicushion System is designed for new or existing asphalt or concrete surfaces that have a sound, well-drained base of adequate thickness and stability. Plexicushion will not resolve cracking or structural problems of the underlying surface.

The success of the all-weather characteristics of coating is dependent on a sound base with good drainage, the concrete being constructed in accordance with specifications of the U.S. Court & Track Builders Association and the surface being prepared in accordance with this specification. **Care must be taken to provide adequate surface water drainage and an appropriate vapor barrier below outdoor concrete.** Failure will likely occur if a vapor barrier is not in place. Surface variation should not exceed 1/8 inch in 10 feet (3mm in 3m) when measured with a straight edge and slope of 1" in 10 feet all in one plane.

2.0 MATERIALS

- 2.1 Concrete Preparer** - shall comply with Specification 10.13 of California Products Corporation.
- 2.2 California Ti-Coat** - shall comply with Specification 10.17 of California Products Corporation.
- 2.3 Court Patch Binder** - shall comply with Specification 10.14 of California Products Corporation.
- 2.4 Plexipatch** - Shall comply with Specification 10.21 of California Products Corporation.
- 2.5 Acrylic Resurfacer** - shall comply with Specification 10.8 of California Products Corporation.
- 2.6 Plexicushion Base Coat** - shall comply with Specification 10.9 of California Products Corporation.
- 2.7 Plexicushion** - shall comply with Specification 10.3 of California Products Corporation.
- 2.8 Fortified Plexipave®** - shall conform to Specification 10.12 of California Products Corporation.
- 2.9 Plexichrome®** - shall conform to Specification 10.1 of California Products Corporation.
- 2.10 Plexicolor® Line Paint** - shall conform to Specification 10.4 of California Products Corporation.
- 2.11 Water** - shall be fresh and potable.

3.0 RECOMMENDED SYSTEMS

Plexicushion Club

1 coat Acrylic Resurfacer
4 coats Plexicushion
Plexipave Color System
Plexipave Color System

Plexicushion Tournament

1 coat Acrylic Resurfacer
2 coats Plexicushion Base Coat
3 coats Plexicushion
Plexipave Color System

Plexicushion Prestige

1 coat Acrylic Resurfacer
3 coats Plexicushion Base Coat
3 coats Plexicushion

4.0 CONSTRUCTION

Concrete shall have a wood float or broom finish. DO NOT STEEL TROWEL CONCRETE. DO NOT ALLOW CURING AGENTS OR HARDENERS TO BE USED. New concrete must cure for 28 days in summer conditions.

4.1 Surface Preparation - The surface to be coated must be sound, smooth, and free from dust, dirt or oily materials. The concrete surface must be etched with Concrete Preparer at an undiluted rate of .01-.03 gallons per square yard. Dilute 1 gallon of Concrete Preparer with 4 gallons of water and apply by pouring onto the surface and spreading by broom. After drying, all latent material must be removed from the surface. The courts should then be flooded to check for minor depressions or irregularities. Puddled areas that cover a nickel and other irregularities shall be filled with Court Patch Binder and trowel leveled using the following mix:

100 lbs. 60-80 mesh silica sand (dry)
3 gallons Plexipave Court Patch Binder
1 to 2 gallons Portland Cement (dry) (depending on humidity and temperature).

Areas to be patched shall be pretreated with a tack coat of 1 part Court Patch Binder diluted with 2 parts water and allowed to thoroughly dry prior to patching. For more information see California Products Corporation Specification 10.14.

Note: Plexipatch may be used as an alternate for patching birdbaths up to 1/8" deep.

After patching, the surface shall not vary more than 1/8" in ten feet measured in any direction.

4.2 Concrete Primer - New and uncoated concrete surfaces must be treated with California Ti-Coat. Add equal parts by volume of component "A" to component "B" and mix well. Let mix stand for 20-30 minutes and apply a thin, wet coat with a short nap phenolic core roller.

Note: The next coat of the Plexicushion System must be applied within 1 to 3 hours of the Ti-Coat application. The Ti-coat application should be dry but still tacky to the touch.

4.3 Surface Course Preparation - In order to promote adhesion and to provide a smooth, dense underlayment for the Plexicushion, one application of California Acrylic Resurfacer shall be applied to the surface. Dilution with water and sand is required utilizing the following mix:

Acrylic Resurfacer - 55 gallons
Water - 20-27 gallons
Sand (60-80 mesh) - 600-700 lbs.
Liquid Yield - 112-120 gallons

Coverage - .07-.05 gallons per square yard
Apply with squeegee

5.0 PLEXICUSHION BASE COAT APPLICATION

After the Acrylic Resurfacer application has thoroughly dried, application of the Plexicushion Base Coat may begin. No application shall be covered by a succeeding application until thoroughly cured.

- 5.1** Plexicushion Base Coat shall be applied in applications at an average rate of 0.22 gallons per square yard per coat (select desired system from Section 3.0).
- 5.2** Plexicushion Base Coat shall be applied with a 24" or 36" 50-durometer rubber squeegee or approved mechanical spray equipment. Plexicushion Base Coat must be thoroughly mixed prior to application. Plexicushion Base Coat may be diluted 4 parts Base Coat to 1 part water. When applying, maintain a narrow windrow of material on the surface. Constantly re-wet the windrow with small amounts of fresh material. If material becomes heavy, remove from the surface and intermix with fresh material.
- 5.3** Extreme care should be taken that ridges are not allowed to form between passes of the squeegee. Any ridges that do form must be removed prior to the next application.
- 5.4** Allow Plexicushion Base Coat applications to dry at least 24 hours before continuing Plexicushion applications.

6.0 PLEXICUSHION APPLICATION

After the Plexicushion Base Coat application has thoroughly dried, application of the Plexicushion may begin.

- 6.1** Plexicushion shall be applied with a 24" or 36" 50-durometer rubber squeegee. Plexicushion may be diluted with water at a rate of 4 parts Plexicushion to 1 part water.
- 6.2** Apply 3-4 coats of Plexicushion at a rate of .10 to .11 gallons per square yard per coat. For the first application over Plexicushion Base Coat, Plexicushion shall be applied at a rate of .16 gallons per square yard. Subsequent applications shall be applied at a rate of .10 to .11 gallons per square yard per coat.

(No fewer than 3 applications are acceptable over the Plexicushion Base Coat System).
- 6.3** Extreme care should be taken that ridges are not allowed to form between passes of the squeegee. Any ridges that do form must be removed prior to the next application.

7.0 FORTIFIED PLEXIPAVE APPLICATION

- 7.1 Allow the last coat of Plexicushion to thoroughly dry for at least 6 hours in good weather conditions. The Fortified Plexipave Color Surface System shall be applied according to California Products Corporation's Specification 10.12. Fortified Plexipave is job mixed using the following mixture:

Plexipave Color Base	30 gallons
Plexichrome	20 gallons
Water	20 gallons

A minimum of 3 applications of Fortified Plexipave shall be applied at the rate of .06 gallon per square yard per coat. If a faster surface is desired a final finish of Plexichrome may be applied at the rate of .04 gallon per square yard.

- 7.2 The first coat of Fortified Plexipave shall be sanded with a mechanical sander after the application has thoroughly dried and prior to subsequent coats to insure long term surface uniformity.
- 7.3 All line markings shall be applied with Textured Plexicolor Line Paint.

8.0 PRECAUTIONS

- 8.1 Do not allow Plexicushion to drop on adjacent areas.
- 8.2 Do not apply Plexicushion on existing outdoor concrete surfaces unless there is clear evidence that a proper vapor barrier is in place.
- 8.3 Temperature must be 60° F (15°C) and rising to allow proper curing of the Plexicushion System. Do not apply if surface temperature is in excess of 140°F (60°C).
- 8.4 Shady areas and high humidity will extend curing and drying time.
- 8.5 Indoor applications require good ventilation for proper installation.

9.0 GENERAL

- 9.1 Upon completion, the contractor shall remove all containers, surplus materials and debris and leave the site in a clean and orderly condition acceptable to the owner. Gates shall be secured and all containers shall be disposed of in accordance with state, local and federal regulations.
- 9.2 Materials specified for the Plexicushion Color System shall be delivered to the site in sealed, properly labeled containers with California Products Corporation labels and stenciled with the proper batch code numbers. Products packaged or labeled in any other manner will not be accepted. Mixing with clean fresh water shall only be done at the job site. Coverage rates are based upon materials prior to mixing with water as directed.