



Corkeen[®]
by Amorim

PIP Safety Surfacing

Installed By



Making Playgrounds Safe Since 1989

Brand Master PA, NJ, DE
WWW.SAFETYTURF.COM

**Bringing
nature back
into play**



WWW.CORKEEN.COM



RECYCLED



HANDICAP
ACCESSIBLE

SAFETY TURF, INC.

POURED-IN-PLACE RESILIENT SURFACING

Falls are the leading cause of playground injuries. Therefore, choosing a playground surface is your most important consideration. Selecting **Safety Turf, Inc.**, with over **30 years of experience in the manufacture and installation of playground safety surfacing**, will reduce the number and severity of injuries caused by falls to the surface.

Corkeen® Play Original Playground Surfacing is a 2-layer, seamless system comprised of a base layer of 100% subproduct from cork stoppers extraction, granulated cork & polyurethane binder and a top layer of the same origin granulated cork and polyurethane binder. The porous system is field applied in any configuration and dimension to achieve required fall heights. Corkeen® Play Original is in the process of being certified by the International Play Equipment Manufacturers Association (IPEMA).

Why Cork?



- **LOW SURFACE TEMPERATURE**

Because cork is a natural insulator, the surface temperature remains low.

- **LOW MAINTENANCE**

Requires no raking, debris can be swept or blown off.

- **SLIP RESISTANT**

Non-skid wet or dry

- **HANDICAP ACCESSIBLE**

Expected to conform with the Americans with Disabilities Act and ASTM F 1951. Testing planned.

- **SEAMLESS**

No unsightly seams or tripping hazards (Day seams may be necessary for larger areas)

- **DURABLE**

Guaranteed for five years

- **PORUS**

Water drains through the surface

- **CONFORMS W/ CPSC GUIDELINES**

Exceeds "Gmax" and "HIC" standards

- **100% NATURAL and RECYCLABLE**

Cork is an exceptional, 100% natural, organic raw material with negative CO2 emissions

SAFETY TURF, INC. POURED-IN-PLACE RESILIENT SURFACING



INTRINSIC & PHYSICAL PROPERTIES

Health & Environment after Curing	Sustainable and Eco-friendly Non-allergenic Non-polluting
Free of Toxins and Chemicals	Free of heavy metals, EDCs, T-VOCs, formaldehyde or PAHs
Resistance to Wear, New (BS 7188)	Pass
Resistance to Wear, After hot air aging (BS 7188)	Pass
Resistance to Wear, After hot water aging (BS 7188)	Pass
Dry and Wet Slip Resistance (BS 7188)	Pass
Permeability (EN 12616)	72,000 mm/h
Ease of Ignition (BS 7188)	Pass



SPECIFICATIONS

1 General

1.1. **Poured In Place Cork Playground Surfacing:**

- A. Corkeen® Play Original Playground Surfacing is a 2-layer, seamless system comprised of a base layer of 100% subproduct from cork stoppers extraction, granulated cork & polyurethane binder and a top layer of the same origin granulated cork and polyurethane binder. The porous system is field applied in any configuration and dimension to achieve required fall heights.
- B. This is a specification summary. Refer to <http://safetyturf.com> for the complete Safety Turf Corkeen® specification.

1.2. **Quality Assurance:**

- A. Utilize an installer trained and approved by the manufacturer, having experience with other projects of the scope and scale of the work described in this section.
 - 1 Approved installer: Safety Turf, Inc. P.O. Box 908, Royersford PA 19468. 1-800-804-4595 (<http://safetyturf.com>).
 - 2 If requested, impact attenuation results will be provided per ASTM F3313 Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field for an additional cost.

1.3. **Project Site Conditions:**

- A. Install surfacing on a dry sub-surface with no prospect of rain within initial drying period, and within 50 degrees F and 90 degrees F.
- B. An inclination of 1 % for "flat" surfaces is important, especially if the subbase has low or no permeable properties, like asphalt or concrete.
- C. There are three (3) Sub-Base applications acceptable for Poured-In-Place applications. Any of these suggestions needs to be able to comply with permeability of Corkeen®:
 - 1 Installations may be performed over 4" minimum compacted stone base, 3/4" clean.
 - 2 Installations may be performed over fully cured (30 days) Asphalt (with proper drainage).
 - 3 Installations may be performed over Concrete (porous or not, porous preferable) with a minimum of 7 Days cure time and as much as 30 days dependent on conditions and temperature.
- D. Other Sub-Base requirements – see complete specification for details.
- E. Barricade area to prohibit foot traffic on the surface for the time specified by the manufacturer.

1.4. **Limitations:**

- A. Some chemicals may cause damage to the playground surface and should be avoided. See complete specification for a list.

1.5. **Maintenance:**

- A. Hose off entire playground surface to remove food, drink, sand, dirt and loose debris. The surface is best cleaned with brushes and water. While surface is still damp, apply a mild household or commercial cleaner to a small area using a sprayer. Scrub using a medium bristle brush. Once entire surface has been cleaned, rinse using a garden hose with spray nozzle attachment. To increase longevity and performance of your surfacing it is recommended to maintain monthly maintenance work.
- B. As a preventative measure, leaves and other organic material must be removed with a leaf blower and/or regular sweeping. This kind of cleaning prevents aging of the system, rotting caused by moss, algae, and weeds. It also prevents other vegetation to take roots.
- C. Remove sand and gravel, which can cause the risk of breaking down and deteriorating the surface. Should additional maintenance recommendations be necessary contact the manufacturer or technical services.

2 Products

- 2.1. Playground surface shall consist of a mix of natural materials with an agglomeration binder meeting the requirements of this specification. Corkeen® Play Original components shall be installed by a certified installer. A primer application should be considered before the base layer is applied.

- A. Certified Installer: Safety Turf, Inc. P.O. Box 908, Royersford PA 19468. 1-800-804-4595 (<http://safetyturf.com>).

2.2. **Base Layer:**

- A. Primer: Polyurethane. Corkeen binder BT01.1 or similar per manufacturer's instructions.
- B. Corkeen® Base Layer Engineered Cork Granules L. Color: Natural Cork Color (beige).
- C. Corkeen® Play Original: Blend 100% granulated cork and Polyurethane to the proper ratios based on weight.
- D. Base Thickness: May vary as determined by the fall height of the play equipment and as required to meet ASTM F1292 requirements for critical fall height.

2.3. **Top Layer:**

- A. Aromatic Polyurethane Primer. Corkeen binder BT01.1 or similar per manufacturer's instructions.
- B. Corkeen® Top Layer Engineered Cork Granules.
- C. Colors: Cork natural color (some variation expected, given that it is a natural material).
- D. Poured In Place Top Layer: Blend of Top layer engineered cork granules and Polyurethane.
- E. Nominal thickness of Cork Top Layer 0.59", with a minimum 0.325" and a maximum 0.75".
- F. System Total Thickness: To be not less than the fall height of the play equipment which may vary and as required meet ASTM F1292 requirements for critical fall height.

2.4. **Performance Requirements:**

- A. Impact Attenuation: Critical fall height tested according to ASTM F 1292 for equipment as specified in Drawings.
- B. Accessibility Standard: Yet to be certified, minimum surfacing performance expected to meet ASTM F 1951.

3. Execution

- A. Comply with the instructions and recommendations of the surfacing manufacturer.

3.2. **Examination:**

- A. Verification of Site Conditions: Verify that substrate conditions are suitable for installation of the poured in place surfacing. Do not proceed with installation until unsuitable conditions are corrected.
- B. Drainage: Proper drainage is critical to the longevity of the surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas and void the warranty.

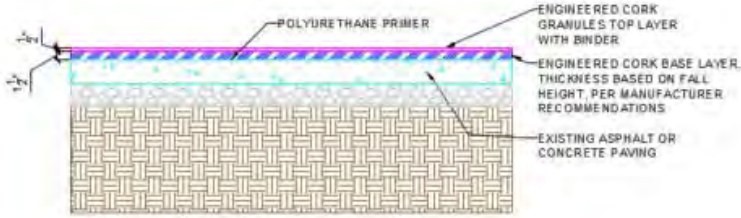
3.3. **Preparation:**

- A. Existing Substrate Preparation: Remove any loose or delaminated material that would be deleterious to application of the new surface. Fill cracks in existing concrete with cementitious patching compound.
- B. Surface Preparation: Using a brush or short nap roller, apply primer to the substrate surface, substrate perimeter and any adjacent vertical barriers (such as playground equipment).

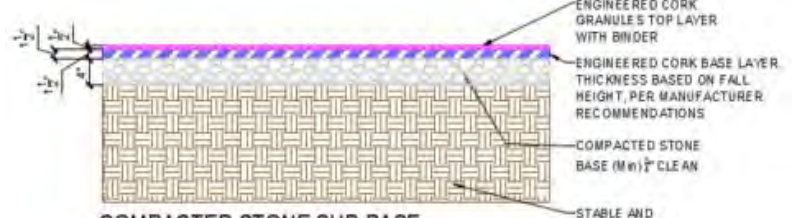
3.4. **Installation:**

- 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. Consider dust and traffic in adjacent work areas that may impact surfacing finish.
- B. Primer Application: Using a brush or short nap roller, apply primer to the base layer perimeter and any adjacent vertical barriers that will contact the surfacing system. The approved Brand Master should use the Corkeen's recommended and approved installation tools.
- C. Base Layer Installation:
 - 1 Using screeds and hand trowels, install the base layer to the specified thickness. The Brand Master should use the Corkeen's recommended and approved installation tools and methods to achieve the target density.
 - 2 Allow base layer to cure for sufficient time so that indentations are not left in the base layer from applicator foot traffic or equipment.
 - 3 Do not allow foot traffic or use of the base layer surface until it is sufficiently cured.
- D. Top Layer Installation:
 - 1 Using a hand trowel, install top layer to a nominal thickness of 0.5" (230 kg/m³). The Brand Master should use the Corkeen's recommended and approved installation tools and methods to achieve the target density.
 - 2 Allow top layer to cure for a minimum of 48 hours with Aromatic binder and up to 72 hours with Aliphatic binder, (dependent on weather conditions).
 - 3 At the end of the minimum curing period, verify that the 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.

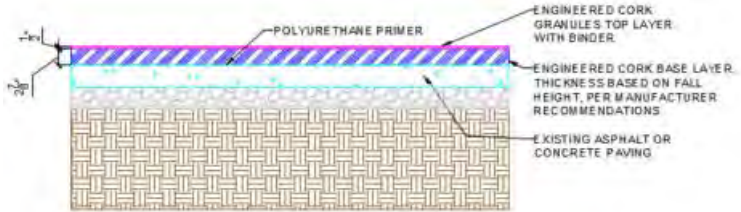
INSTALL DETAILS AND CFH GRAPH



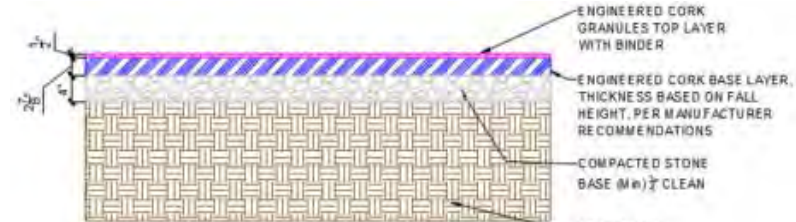
ASPHALT OR CONCRETE SUB-BASE
ENGINEERED CORKEEN® PLAY ORIGINAL
5' FALL HEIGHT - SECTION



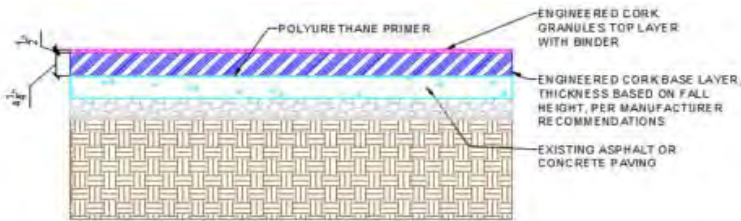
COMPACTED STONE SUB-BASE
ENGINEERED CORKEEN® PLAY ORIGINAL
5' FALL HEIGHT - SECTION



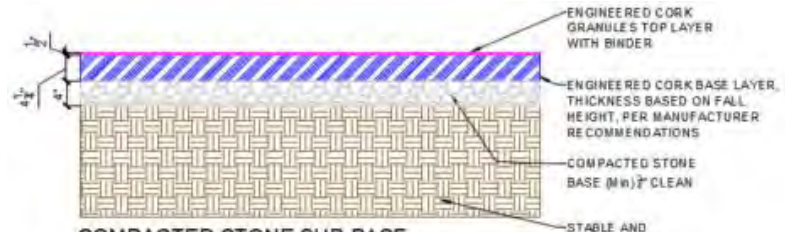
ASPHALT OR CONCRETE SUB-BASE
ENGINEERED CORKEEN® PLAY ORIGINAL
7' FALL HEIGHT - SECTION



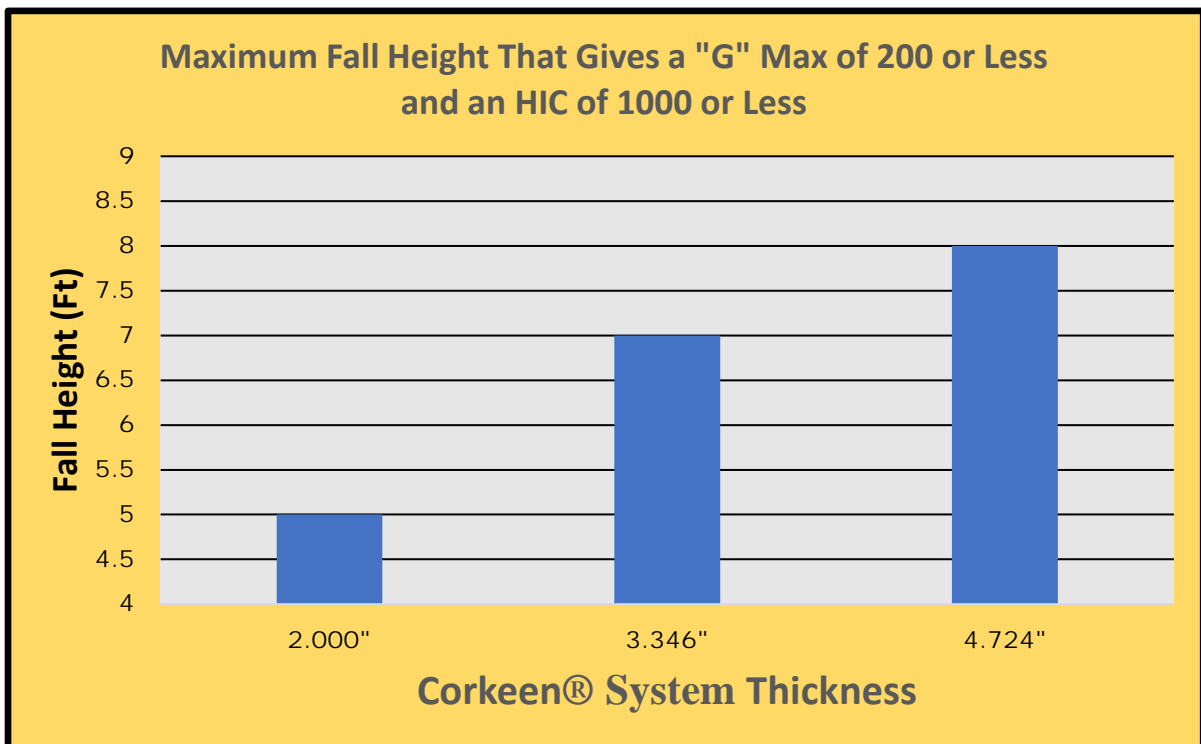
COMPACTED STONE SUB-BASE
ENGINEERED CORKEEN® PLAY ORIGINAL
7' FALL HEIGHT - SECTION



ASPHALT OR CONCRETE SUB-BASE
ENGINEERED CORKEEN® PLAY ORIGINAL
8' FALL HEIGHT - SECTION



COMPACTED STONE SUB-BASE
ENGINEERED CORKEEN® PLAY ORIGINAL
8' FALL HEIGHT - SECTION



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