

A division of Unity Creations, Ltd.



"Unity" Surfacing Systems™

Interlocking, Unitary Rubberized Safety Surfacing, Flooring & Pavers

ATHLETIC AND RECREATIONAL



DO IT RIGHT...THE FIRST TIME!





RESIDENTIAL · COMMERCIAL · INDUSTRIAL · INSTITUTIONAL



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From This...



USGBC - The USGBC (United States Green Build Council) / LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. Available for virtually all building, community and home project types, LEED provides a framework to create healthy, highly efficient and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement. As a member of this organization, using our products will help close the loop by achieving up to seven (7) LEED points/credits.

Please Note: None of Unity's photographs are not digitally altered, edited,

... To This



School Playground
Beaumont, TX



Pool Area
Atlanta, GA



Fitness Area
Washington, DC



Housing Play Yard
Brooklyn, NY

developed or computer generated to fool you. Our images are 100% authentic and real!

Our Safety Surfacing, Flooring and Paver Solutions:

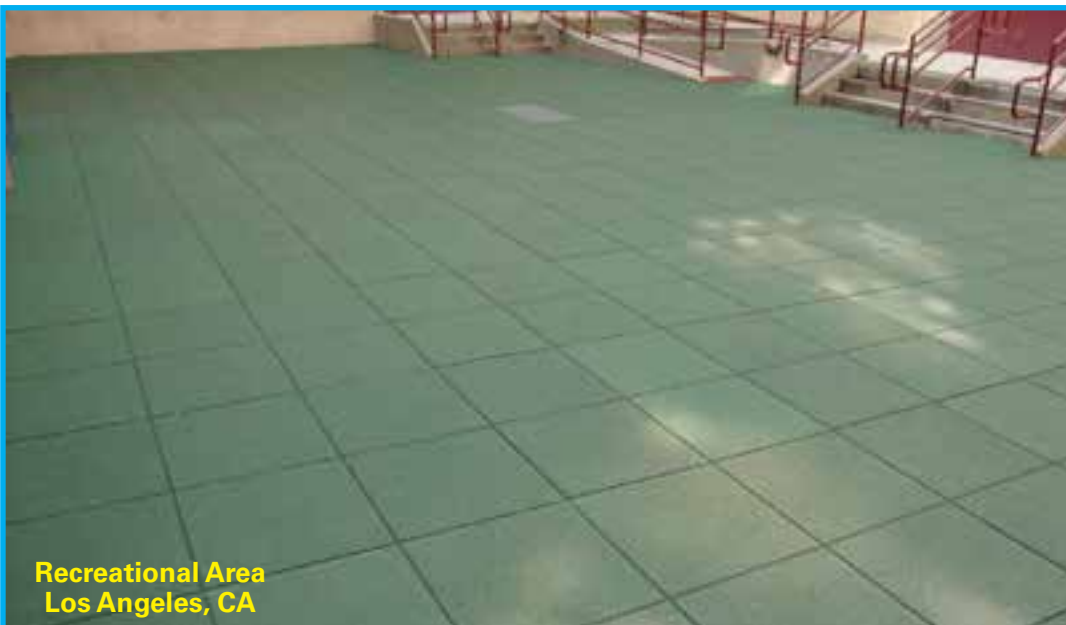
Unity Creations, Ltd. / Unity Surfacing Systems products are engineered and manufactured using the best and safest materials available through our sister company which recycles tires and rubber in-house. Unity, a manufacturing business since 1987, has developed and patented a superior, resilient product made from 100% recycled tires and rubber that is clean and safe to use in almost any environment. Our ingenious design and unique features give us an unparalleled advantage over competing products in the industry.



Park Playground
Far Rockaway, NY

Safety, Quantity, Durability, Performance and long term value define Unity's products. The advantages to our system over others on the market today include:

- Will not decompose
- Provides noise reduction
- No retaining edge needed
- Easy cleaning/maintenance
- Very stable footing
- Low life cycle costs
- Excellent drainage
- Attractive appearance
- Will not displace during usage by anyone
- Consistent shock absorbency year round
- Will not harbor foreign objects (glass)
- Provides vandalism protection



Recreational Area
Los Angeles, CA

A fall onto a shock absorbing surfacing is less likely to cause serious injury in contrast to a fall onto a hard unsafe surface. Head impact injuries from falls onto unsafe are almost always life threatening. The severity of injury is decreased when using shock absorbing surfaces such as our unitary rubberized safety surfacing, flooring products. Additionally; walking, playing, running, standing, or simply just enjoying our products helps avoid leg fatigue in people of all ages.



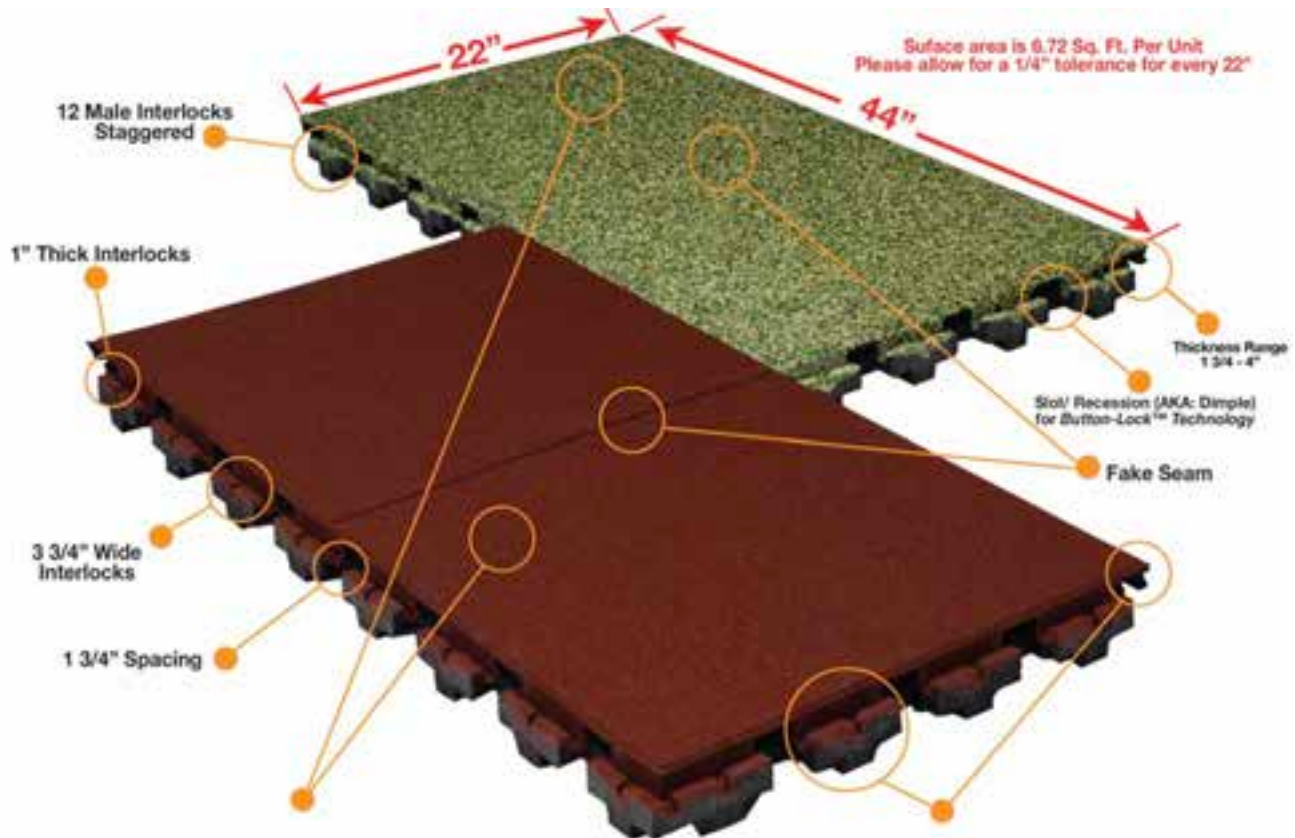
A playground or any surfacing and flooring area that has uncontrolled access may require a unitary surface (i.E. Rubber tiles/mats/blocks and/or pavers) to ensure the highest standard of safety. It also reduces high maintenance costs commonly associated with loose filled products and/or turf materials.



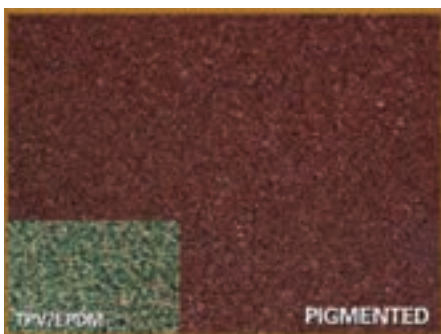
Space is the most valuable asset in most major cities. There is an increasing demand for our products to be installed on rooftops and indoors. We are the only manufacturer to pass several types of class “ A ” fire tests, including modified versions specifically for these applications, making our products superior for such installations. If required, other fire rated versions are available prior to ordering.

PRODUCT SPECIFICATIONS - Top Side

Unlike other playground surfaces, Unity features a flexible *double* tile/ mat/ block/ paver system. With it has a fake seam down the middle to accommodate and adjust to, minor variations in sub-bases. Our resilient double panel allows us to have a monolithic *Step & Repeat* pattern, which lines real seams with fake seams as if you were installing “brickwork.” These technological developments in design act as a backup to further resist separation, curling, peeling and vandalism across a playground area. Fake seam force real seams to stay in place.

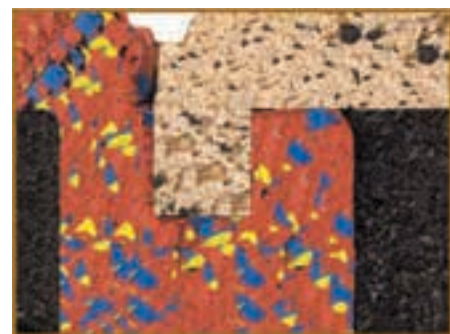


High Density Wear Tops



Our **wear-top** is manufactured using recycled rubber in conjunction with a wide variety of slip resistant Pigments and/ or blended EDPM/TPV material, coupled with our specially formulated binders. These high density, textured wear-top options are resilient and won't crack, puncture or heave in the most hostile of weather conditions. This versatility is unmatched and provides year round use to the end-user.

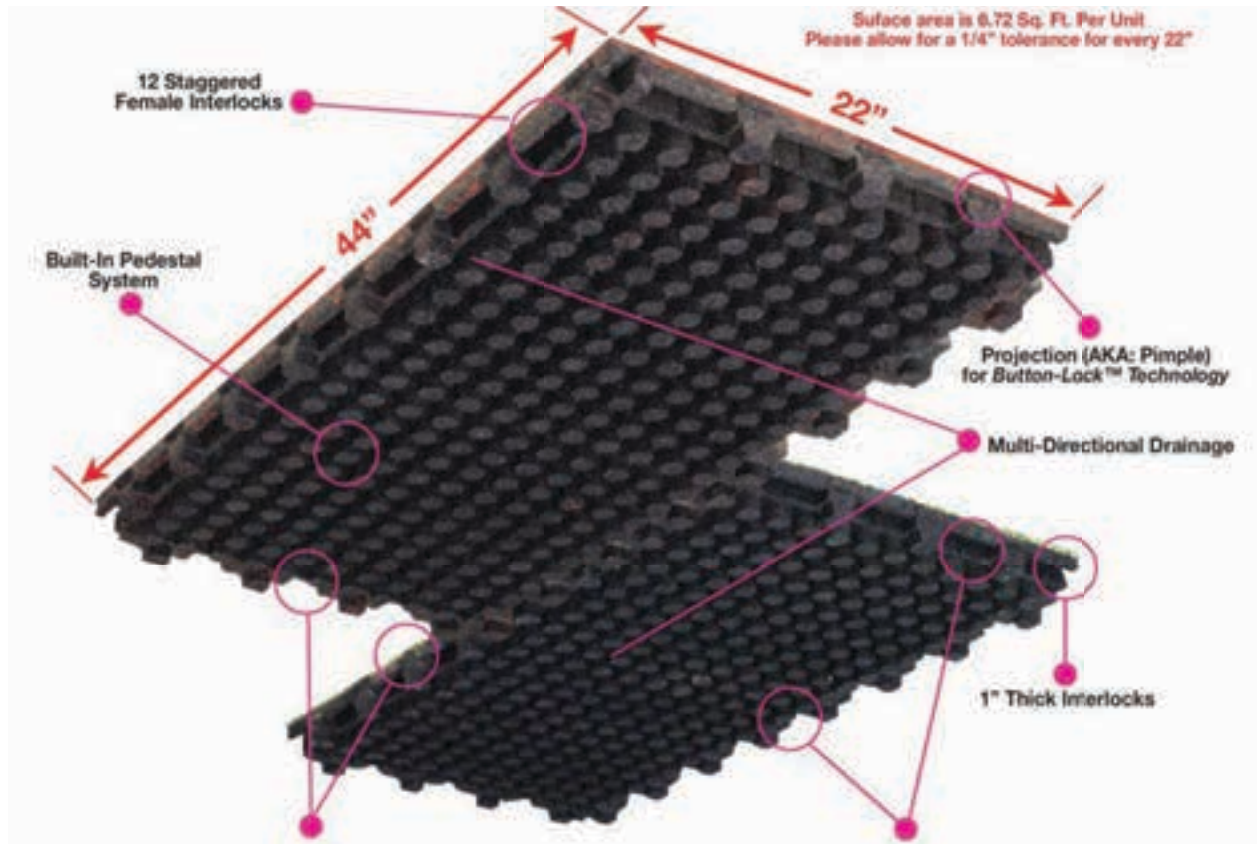
Self Interlocking Design



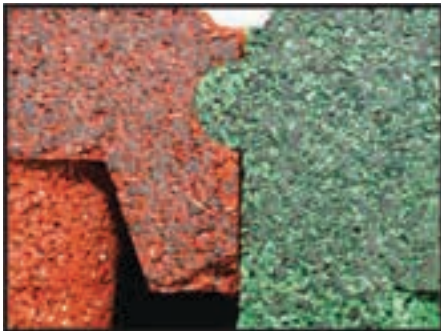
The **patented durable C-shaped** self-interlocking design is built directly into the product itself. It locks tightly together thanks to the supporting “back-wall,” which prohibits unnecessary separation, curling, peeling and shifting that may result in vandalism. It is installed with our specially formulated glue/ adhesive, while still providing unlimited access for any maintenance related issues.

PRODUCT SPECIFICATIONS - Bottom Side

With this view from the bottom, one can see that our solid coned (feet and/ or leg) design acts as a shock absorber from falls onto the surface below. Being a water permeable product, it also helps with storm water management, by allowing water to flow freely and evenly to the drainage outlet when installed on a crushed stone or a solid sub-base such as concrete (cement) and/ or asphalt (blacktop). Our product design also eliminates any “hard spots” and/ or “picture framing,” a common design problem with other competing products on the market today.

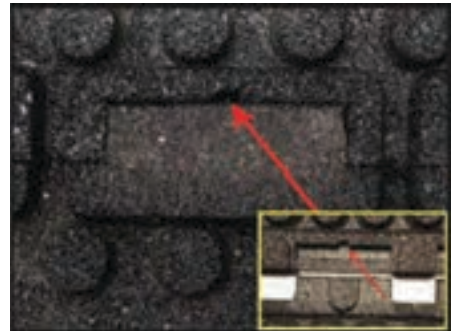


New Button-Lock™ Technology



A revolutionary advancement in design is our patented *Button-Lock™ technology* where the projection of one rubber paver is receivable by a corresponding slot/recession of another rubber paver. It is designed to literally “snap and hook” into place, which has been tested to provide an extra layer of protection to the end user. This additional locking mechanism provides the most secure installations on the market, both horizontally and vertically.

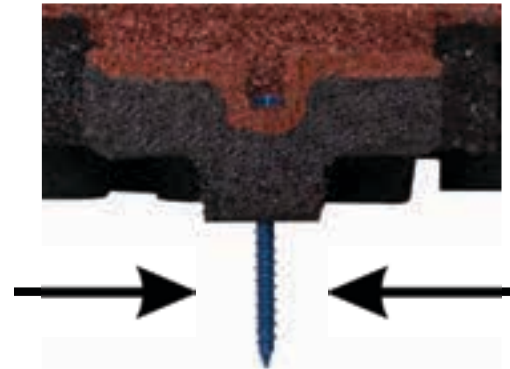
Glue Reservoir



Our unique *glue drainage port* is the only patented system on the market specifically engineered and designed to allow any access glue/adhesive, applied during the installation process, to ooze down and away from the top of our products. This provides the completed area with a nice clean finished look without the burden of glue being tracked onto the newly installed product by untrained contractors/ installers.

Bolt-Down Capabilities

A **feature** that is exclusive to Unity Creations, Ltd. / Unity Surfacing Systems attributed to its additional patents, is the BOLT-DOWN capability that is found within the male portion of our interlocking system. It is countersunk for added strength and security, even under the most extreme environmental conditions and/or usage. Twelve bolts are used across various portions of the product to ensure that vandalism will not be tolerated by Unity and its products.



Handicapped Accessibility

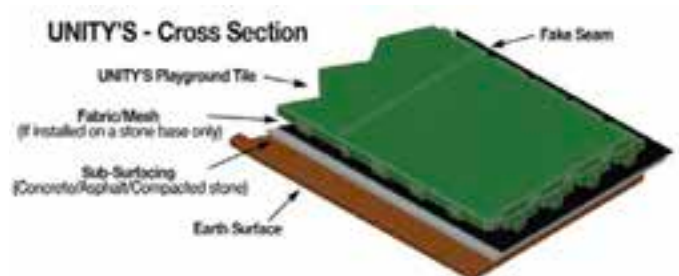


More and more agencies are becoming aware of the fact that all public facilities must be handicapped accessible. With the 1991 passage of the “Americans with Disabilities Act” (ADA), many areas are being planned or modified to give people with disabilities an opportunity to participate in more everyday activities. Regardless of who you are, we make it easy to maneuver strollers, crutches, wheel chairs, canes, walkers, etc., as all of our products are designed to give those with or without disabilities and varying mobility’s access to freely navigate as per ASTM’s *Accessibility-Rotational Penetrometer* test.

“We have determined that Unity significantly outshines all other rubber tiles. The determining factors: The product is double the size of all other brands throughout the industry. The self-interlocking feature, variety of color choices, and pliability of material make this an ideal product for our playground and should be for all others as well. Keep up the good work.” Carol - board director.

Sub-Surfacing/Base Options

With **life expectancy** of our products being about 20 years or more (if properly maintained), we suggest installing a solid sub-base material (concrete or asphalt) leaving a slight pitch for drainage. Other types of sub-base material include: Compacted crushed stone (quarry, blend), decking, roof membrane and/or any standard indoor/outdoor flooring that does not have large stress cracks.

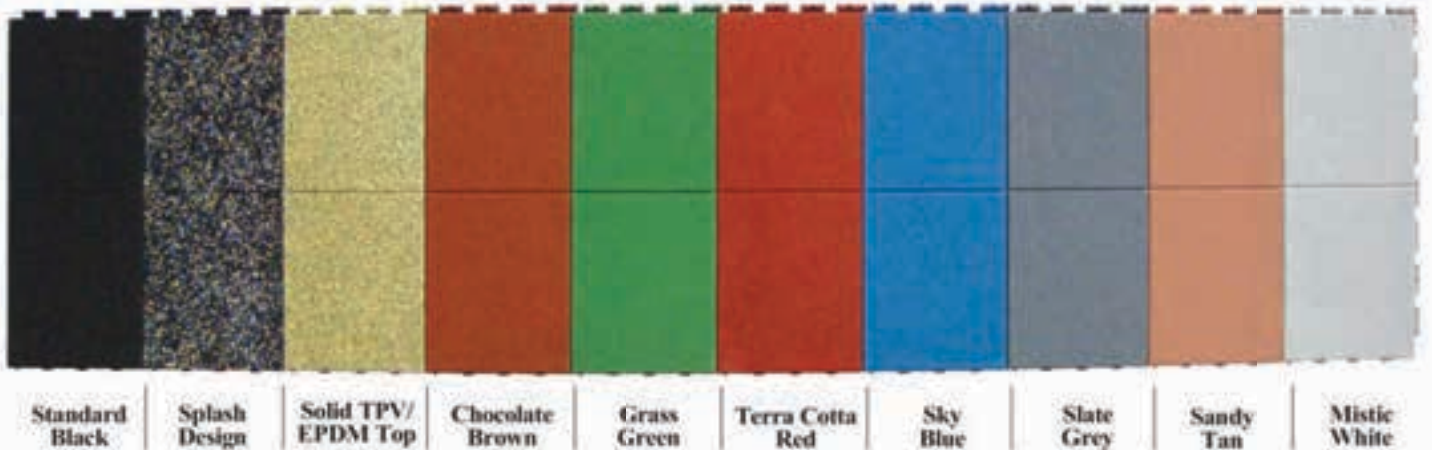


Product Series: Thicknesses



Standard Color choices (Pigment & EPDM)

All of Unity's interlocking unitary rubberized safety surfacing, flooring and paver products are made with tire buffing and crumb rubber granules recycled in-house and mixed with a clear urethane. Colorized products are made with pigmented dyes combined with black rubber. These pigments are dispersed throughout the top. A wide variety of colors to choose from include: **Black**, **Splash Design**, **Solid TPV/EPDM TOP**, **Chocolate brown**, **Grass Green**, **Terra Cotta Red**, **Sky Blue**, **Slate Grey**, **Sandy Tan** & **Mystic White**.



UV Stabilization Chart



EPDM/TPV Chip Choices

The **Splash Design** and **SOLID TPV/EPDM TOP** tiles/mats/blocks/pavers can be manufactured using diverse color combinations and/or percentages generated from the TPV/EPDM granule chart listed below. As a result, one can have unlimited design potential that would compliment any playground, day care facility, fitness, athletic and/or recreational areas. TPV/EPDM color choices include:



Installation

Our products place in the intermediate category regarding installation difficulty. Contractors carry out most of the installations. An installation manual/guide is available upon request and shipped with every order. Adhesive must be applied to a solid base and/or interlocks of our products. Tools that are common for typical installations include: a utility knife or jig saw for cutting, a straight edge to make your cuts accurately, a string line and tape measure. A trowel or caulking gun may be needed for gluing purposes.



The newly developed interlocking features can provide several types of installation procedures allowing one to stagger the joints/interlocks anywhere. This allows for free-flowing designs, layouts and patterns that are effortless to achieve with the "running bond" method, known as our "Step & Repeat", being most popular.

Designs/Layouts/Patterns



Park Playground
Atlantic City, NJ



Housing Playground
Chicago, IL



Military Playground
Main Island, HI



School Playground
Hudson, NJ

Painting Systems

After many years of use, like other products on the market today, Unity's products can be painted for a fresh new look. We provide the necessary paints that can be sprayed on or simply rolled on for a brand new look. This application can provide less heat build up and extend the life of our products for many more years to come. We typically carry our standard pigmented colors. However, custom coloring is available upon request.



Test Results

Fall Safety Heights

G-MAX & HIC test results conducted at an independent testing laboratory per ASTM F-1292-09, F-355 Procedure C (ANSI Head-Form C), **PASSED**.



Weathering (Aging) Test

Test results conducted at an independent laboratory per ASTM C-67, & ASTM D-573, **PASSED**

Skid Resistance Test

Test results conducted at an independent laboratory per ASTM E-303, **PASSED**

Fire Retardant Test

Test results conducted at an independent laboratory per ASTM E-108 & E-648, **PASSED**

Accessibility: Rotational Penetrator (ADA)

Test results conducted at an independent laboratory per ASTM F-1951-99, **PASSED**

Impact Resistance Test

Test conducted at an independent laboratory per UL 2218, Class 4, **PASSED**

Lead Content Test

Testing conducted at an independent laboratory per CPSC CH-E 1002-06 (HR 4040 CPSA Act Of 2008) No Lead, **PASSED**

These critical tests are the value of avoiding legal problems resulting from lawsuits that stem from inappropriate ground cover. Unity meets or exceeds these ASTM, CPSC & ADA standards by up to 42% when compared with other competing products on the market today. Please ask about the many other tests we have completed as well.

Warranty

Due to the extreme durability of our safety surfacing, flooring and paver system, each and every product manufactured by Unity Creations, Ltd./Unity Surfacing Systems is backed by a full warranty to protect you and your investment from manufacturing defects. New "extended" warranties have also been added to further strengthen the guarantee of our products and services. Our warranties are specifically designed to assist architects, engineers, project managers and owners to maximize the cost and performance warranty benefits associated with our system. In the end, we offer our customers exceptional value that is unmatched in the industry. Contact Unity directly for more information. A written warranty is available upon request.

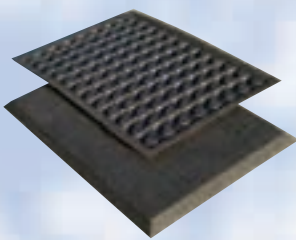


Finished Edging: Transition Ramps/Boarder Guards (Rubber Curbs)



When a wall, fence, curb, parapet or other bordering systems are not available, the transitional ramps and rubber curbs that we offer are a great solution to complement any area, giving it a complete “ finished ” look. Our ramps provide easy access to any surfacing/flooring area. They also comes in a wide variety of colors and thicknesses to fit your needs.

OEM **Wear-Pads** **Border-Guard**



*Please ask us about other OEM products that we can produce exclusively for you and your needs.

Approvals, Sponsors, Affiliates & Memberships

ADA - The Access Board Effective 1992, the Americans with Disabilities Act (ADA), a federal law, prohibits disability-based discrimination by states, local governments, and private entities. The ADA specifically requires that “each service, program, or activity conducted by a public entity, when viewed in its entirety, be readily accessible to, and usable by, individuals with disabilities”. The Access Board provides resources, information and guidance related to the ADA, including insight on developing public spaces like rooftops that meet ADA guidelines. Unity meets or exceeds these standards via ASTM-F-1951-99.

ASTM - The American Society for Testing and Materials (ASTM) is the scientific and technical organization chiefly responsible for developing standards for testing different materials. ASTM introduced Standards for Consumer Safety Performance Specifications for Rooftop Applications designated as D3161, C518-98. It is the standard that establishes minimum acceptable performance specifications for most types of surfacing, flooring and pavers on rooftops. Unity meets or exceeds

these standards as seen throughout our brochure.



CPSC - The consumer product safety commission (CPSC) is an independent agency for the United States federal government whose purpose is to inform the public risks associated with consumer products. The CPSC’s handbook for public playground safety is the reference tool for the playground industry; including specifications for the use of playground surfacing and recommendations. Unity meets or exceeds these standards as seen throughout our brochure.



ECOCYCLABLE - Ecocyclable™ is defined as any product being used more than once (i.e. reusable) as the same, or different, recycled product. Unity’s safety surfacing, flooring and paver products can be used in many different locations over and over again. We are the only manufacturer to receive such a prestigious symbol.



NPPS - To address the growing concern for playground safety, the National Program for Playground safety (NPPS) was established in 1995 through a grant from the Center for Disease Control and Prevention. Located at the University of Northern Iowa, NPPS serves as a public resource for the latest in information on playground safety and injury prevention. Unity Creations, LTD./ Unity Surfacing Systems is a proud member of this organization.



USGBC - The USGBC (United States Green Building Council) via the LEED (Leadership in Energy & Environmental Design) is the nation’s foremost coalition of leader s from across the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live and work. It is leading a national consensus for producing a new generation of buildings that deliver high performance inside and out. As a member of the USGBC program, using our products will help to achieve up to seven (7) LEED points/credits.



Unity believes that our products size, weight, durability, longevity, fall protection ratings (the highest in the industry), and ability to have an integrated self-interlocking feature (for rooftop applications), with bolt-down capabilities (for playground use), can be effectively and easily secured on site to eliminate the potential for wind-up-lift, vandalism and maintenance issues. Everyone at Unity Creations, Ltd. / Unity Surfacing Systems would like to thank you for your interest in our products and services.

www.surfacingssystem.com