

A division of Unity Rubber Products, LLC.

"Unity" Surfacing Systems™

Presents



PAVE-LAND

TILES
MATS
BLOCKS

Pave-Land is Unity's 1 1/2" (custom) and 1 3/4" thick rubberized safety surfacing, flooring and paver products that are made from 100% recycled (waste) tires and rubber. These double tiles-mats-blocks-pavers are used to sit, walk, travel and/or play on. Passing four (4') and five (5') foot "drop height" tests and many other safety tests, these products are ideal for: playgrounds, rooftops, daycare centers, recreational areas, pools & patios, walkways, basements and marina & docks. They are used in many other applications that are found indoors and outdoors as well as acoustical areas and even walls. **SIZE - WEIGHT - LONGEVITY - SAFETY - QUALITY - DURABILITY** is the core of Unity's products. They are easy to clean. They do not displace during usage resulting in consistent shock absorbency year round. The low life cycle costs make for very good footing and help to prevent leg fatigue. **Pave-Land** does not harbor foreign objects, such as glass commonly found in loose filled materials, nor does it require constant maintenance. There are no retaining edges needed and all of Unity's rubberized safety surfacing, flooring & paver products are accessible to the handicapped. They are also water permeable to allow for "free flow drainage" to a drainage outlet. They are easy to install and are fully warranted, presenting a superior product that no one can match.

Not only is **Pave-Land** resilient and can be installed over most existing surfaces and rooftops, but they are also *independently laboratory tested exceeding* ADA (Americans with Disabilities Act), ASTM (American Standard for Testing Materials) and CPSC (Consumer Product Safety Commission) guidelines for: FALL SAFETY HEIGHTS, SKID RESISTANCE, FIRE RETARDANT, WEATHER (AGING), ACCESSIBILITY, THERMAL CONDUCTIVITY TESTS, REFLECTANT/SRI and LEAD TESTS.

Hard materials such as concrete (cement) and blacktop (asphalt) are very unsafe to sit, stand, walk and/or play on, and increase the likelihood of leg fatigue and injury. They fall short of providing safety to an area as well. *Loose filled products* attract cats and dogs to use as their litter boxes. Bees, hornets, wasps and other insects tend to use these same surfaces as their new homes. Everyone dislikes the fact that loose filled materials build up in ones sneaker or shoe and can be tracked into a clean home, building, school, facility or daycare center. Unity solves these problems by providing you with a solid unitary, resilient rubberized safety surfacing, flooring and paver product that is clean and safe to use, indoors and out.

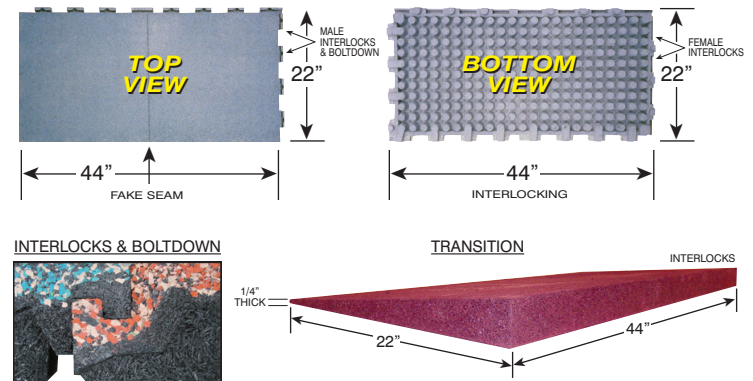
Additionally, Unity has created an impressive way to turn unwanted rooftops into usable spaces, while at the same time providing thermal and mechanical protection. The performance, long term value, color diversity and safety of our products has satisfied architects, engineers, designers building owners and managers economical needs of renovation and/or retrofit projects. As a member of the "United States Green Building Council" you may be eligible to receive "LEED" points and/or credits when using our recycled products.

The sheer size, weight, durability, interlocking design, and built-in pedestal system, coupled with our specially formulated one-part adhesives provides resistance to premature wear-and-tear and wind-uplift. Unity's resilient tile/mat/block/paver system will conform to almost any sloped waterproofing membrane system, old or new, while at the same time providing noise reduction.

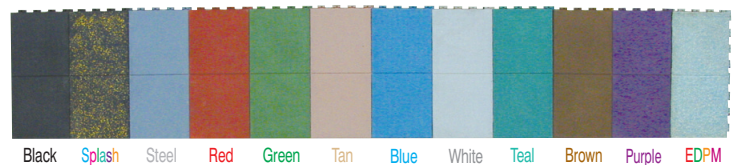
Installation of this product is placed in the intermediate category. Adhesive may be applied to the base and/or interlocks for extra strength and security. A utility knife or jigsaw is used for cutting as well as a straight edge to make your cuts accurately. A straight line and tape measure are also needed. A trowel or caulking gun may be needed for glue down purposes as well.



TECHNICAL DATA



COLORS



THICKNESS	WEIGHT PER UNIT	WEIGHT PER FOOT	FALL HEIGHTS
*1 1/2" (inches)	33.6 lbs.	5 lbs.	3' (foot) drop (custom)
1 3/4" (inches)	36.96 lbs.	5.5 lbs.	5' (foot) drop



ADA



General Description

All necessary material components and application information required to install the molded one and three-quarters (1.75") inch thick "Pave-Land" series, composed of clean rubber granules, using the "step-&-repeat" system, gluing the interlocks, shall be by Unity Creations Ltd. / Unity Surfacing Systems or approved equal, either of which has been manufactured in the United States of America for a period of ten (10) or more years.

General Quality Assurance

Qualifications: Manufacturer shall have manufactured and marketed this system in the United States of America for a period of ten (10) years, using clean rubber granules, that has been recycled here in the United States of America from tires and rubber derived from the same. **Installation:** Labor shall be completed by "certified" installers with five (5) years experience installing safety surfacing, flooring and paver products. Installation instructions shall be provided by Unity Creations, Ltd. / Unity Surfacing Systems. Glue shall be applied to the interlocks (both in the joint and on top of the joint) as well as to the base (underside) for product-to-sub base adhesion; Screw-bolts shall be applied through the interlocks, and countersunk. **Base gluing (glue-down) and screw-bolts do not apply to rooftop installations. Glue being applied to the interlocks, both in the joint and on top of the joint, shall be maintained.** **Design & Detailing:** The "Pave-Land" series is one and three-quarters inch (1.75") thick utilized in the safety zones under and around all areas, etc. as an impact absorbing resilient unitary rubberized safety surfacing, flooring and paver application. "Pave-Land" is designed to meet ADA, CPSC, ASTM and USGBC-LEED requirements. Acceptable substrates and substitute systems are: concrete (cement), asphalt (blacktop). As well as: compacted crushed stone, RCA, stone blend (call for details and specs), wood decking, roofing membranes (call for details and specs), indoor flooring and surfacing systems that do not have stress cracks, Unity Creations, Ltd. / Unity Surfacing Systems shall approve other substrates. Conditions of all substrates with respect to structural performance shall be evaluated and approved by the certified applicator prior to installing the "Pave-Land" series using the "step-&-repeat" system.

General Submittals

Product data in the form of manufacturer's technical data, specifications and installation instructions. Submit product samples of unitary rubberized safety surfacing, flooring and pavers in all available colors. Submit product samples showing both the "male" and "female" interlocking connection, as well as the bolt-down mechanism. Submit shop drawings showing layout of safety surfacing, flooring and pavers; include edge detail(s), cut paver detail(s), fastening detail and details at penetrations for playground equipment.

General Delivery, Storage and Handling

All materials shall be delivered in good condition in its original unopened packages, bound and shrink wrapped with labels intact. All materials shall be protected from weather; and the adhesive (glue) shall be stored at temperatures of 40 degrees Fahrenheit (4 degrees Celsius) or greater.

General Job Conditions

At the time of application ambient air temperature shall be 40 degrees Fahrenheit (4 degrees Celsius) or greater for a period of twenty-four (24) hours. All materials shall be un-stacked and layed out prior to installing. Color blending may be necessary to achieve uniformity. All materials shall be protected from weather and other damage prior to application, during applications and while glue is curing.

General Alternatives & Allowances

The architect and / or engineer, in writing, prior to bid date, shall approve any system or series, to be considered equal to "Pave-Land". Samples of equal materials showing self-interlocking connection and bolt-down capabilities, in all colors, must also be submitted prior to bid date.

Products: General

All material components of the "Pave-Land" series shall be obtained from Unity Creations, Ltd. / "Unity Surfacing Systems or its authorized distributors and / or manufacturers only. "Pave-Land" shall be manufactured in the United States of America, and meet standards specifications under the LEED (Leadership in Energy and Environmental Design) criteria developed by the USGBC (United States Green Building Council) establishing up to five (5) points / credits.

Products: Materials

Unity Creations, Ltd. / Unity Surfacing Systems: tiles/mats/blocks shall be produced on a rectangular configuration of 22" (inches) by 44" (inches) in size with a shadow-center (fake seam) joint to achieve the use of the "step-&-repeat" system to stagger (zigzag) the seams as if you were installing brickwork, lining real seam up with fake seams. As a result, symmetry of 22" by 22" squares will be seen on properly completed jobs (installations). Each tile-mat-block is 6.72 square feet in size and has a coned (feet &/or leg) bottom design. Thickness is one and three-quarters (1.75") inch thick for the "Pave-Land" series to meet a five (5') fall rating (please consult with the contractor, architect, and or, engineer to determine which thickness is needed based on drop height requirements).

Testing:

ASTM: American Standard for Testing Materials. **CPSC:** Consumer Product Safety Commission. **ADA:** Americans with Disabilities Act. **USGBC-LEED:** United States Green Build Council – Leadership in Engineering and Environmental Design

Shall be tested for the following technical specifications: **Fall Safety Heights:** ASTM F 1292-04, F-355-04. To meet a five (5') foot fall rating; **Weathering (Aging):** ASTM C-67, D-573, F1292-95 To meet a five (5') foot fall rating; **Spread of Flames:** ASTM E108, E108 modified for roof coverings and E648 Class I: Minimum 0.45 watts/cm2; **Skid Resistance:** ASTM 303-93; **ADA:** Standard Spec for Determination of Accessibility of Surface Systems under and Around Playground Equipment: ASTM F-1991-99; **R-Value:** Thermal Conductivity ASTM: C518-98; **LEAD Content:** CPSC-CH-E1002-08 via US Public Law 110-314 (HR 4040 act of 2008); **Reflectance/SRI & Emittance:** ASTM E903, E-891, E-1980; **Water Penetration:** Storm Water Management / Sustainable Run-off via drain ability; **USGBC:** Five (5) LEED Points / Credits; MR 4.1, MR 4.2, MR 5.1, MR 5.2, MR 2.1 & MR 2.2, EQ 4.1. **Glue:** "Unity's: Chemrex 948 Urethane (glue), shall be a one-part binder, requiring no on site mixing. Excellent strength, tenacity and grab for male interlock-to-female interlock as well as product-to-sub base installations. **Bolts:** "Unity's" Screw-Bolts shall contain a weather-resistant beveled recess-able head to be counter-sunk through the interlock; shall be a length necessary to securely fasten the tile/mats/block to the solid sub-base material. Excellent strength and grab for product-to-sub base installations. DO NOT USE BOLTS ON ROOFTOP INSTALLATIONS.

Exclusions:

Inspections: Prior to application of the Unity Creations, Ltd. / Unity Surfacing Systems "Pave-Land" series: the installer shall evaluate the substrate's structural performance. Notify all contractors, architects and engineers of all displacements or stress cracks. Work shall not proceed until unsatisfactory conditions are corrected and signed by the contractors, architects and engineers; And Unity's installation manual/guide has been read.

Installations: Recessed installations are strongly encouraged to avoid the use of transitional ramps (edging). Contractor shall first install an approved solid sub-base material consisting of concrete (cement), asphalt (blacktop) roofing membrane or approved equal. Approved sub-base material shall extend three (3") inches past the desired safety surfacing, flooring and paver zone of installation. Once cured, Unity Creations, Ltd. / Unity Surfacing Systems products shall be installed as specified. After completion of Unity Creations, Ltd. / Unity Surfacing Systems products, an approved boarding system consisting of concrete (cement), asphalt (blacktop) fencing or approved equal shall be installed to be level with the finished edge of the newly installed Unity Creations, Ltd. / Unity Surfacing Systems products. Said boarding system shall connect with the newly installed tiles/mats/blocks.

Unity Creations Ltd. / Unity Surfacing Systems products shall be installed using the "step-&-repeat" system to stagger (zigzag) the seams as if you would install "brickwork", so real seams line up with fake seams. Adhesive shall be applied to the interlocks and base*, especially the corners of each product being installed. Screw-bolts shall be applied through the interlocks, and counter-sunk. Products shall be cut and aligned as required to fit without any gaps. The installation manual / guide shall also be read in full.

* **Base gluing (glue-down) and screw-bolts do not apply to rooftop installations. Glue being applied to the interlocks, both in the joint and on top of the joint, shall be maintained.**