

PAVESAFE™



Technical Manual

Installation – Maintenance - Warranty

Manufactured in the USA by:



www.pavesafe.com

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Check website for updates.

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INSTALLATION

I. PAVESAFE SPECIFICATIONS CHART

SPECIFICATIONS				
Product	Dimensions	Thickness-Weight	Usage	Color
Pavers	7 3/4" x 6 1/2" x 4 3/8"	7/8" – 1.17 lb. /pc.* 1 3/4" – 2.49 lb. /pc.	Parade areas Saddling areas Barn Corridors Service roads	Terra cotta red Forrest green Black Slate gray
Paver tiles	2' x 2'	5/8" – 10.0 lb. /pc. 1 1/4" – 20.0 lb. /pc. 1 3/4" – 28.0 lb. /pc.	Stalls Wash bays Breeding Sheds Sales areas	
Wall tiles	39 3/8" x 19 5/8" (1m x 0.5m)	5/8" – 13.25 lb. /pc. 1 1/4" – 26.50 lb. /pc. 1 3/4" – 38.00 lb. /pc.	Stall walls Wash bays Breeding stalls	
Border edges / Safety Curbing	2" x 3' 3"	10" – 22 lb. /pc.	Curbing for edges	
Beveled / Anti Stumble edges	2 3/8" x 3' 3" 12" x 3' 3"	7/8" / 7/16" – 1.70 lb. /pc. 1-11/16" / 7/16" – 14.00 lb. /pc.		

*Not available in slate gray

II. JOB SITE CONDITIONS

1. Installation should not begin until after all other trades are finished in the area. If the job requires other trades to work in the area after the installation of the floor, the flooring should be protected with an appropriate cover.
2. Indoor areas to receive fully adhered flooring should be weather tight and maintained at a minimum uniform temperature of 65° F (18° C) for 48 hours prior to, during and after installation.
3. Pavesafe can be installed indoors over wood, concrete and asphalt. It can be installed outdoors over concrete, asphalt or crushed stone.

III. SUBFLOOR

Pavesafe may be installed over concrete, approved Portland based self-leveling materials such as Ardex K-15 or equivalent, and wood.

Note: Ardex Engineered Cements
400 Ardex Park Drive
Aliquippa, PA 15001
(724) 203-5000

INSTALLATION

Note: Gypsum based patching and leveling compounds are not acceptable

1. Wood Subfloors: Wood subfloors should be double construction with a minimum thickness of 1". The floor must be rigid, free from movement and have at least 18" of well-ventilated air space below.
2. Underlayments: The preferred underlayment panel is APA underlayment grade plywood, minimum thickness of 1/4", with a fully sanded face. Note: Particle board, chip board, Masonite and lauan are not considered suitable underlayments.
3. Concrete Floors: Concrete shall have a minimum compressive strength of 3000 psi. It must be fully cured and permanently dry.

IV. SUBFLOOR REQUIREMENTS AND PREPARATION

1. Subfloor shall be dry, clean, smooth, level, and structurally sound. They should be free of dust, solvent, paint, wax, oil, grease, asphalt, sealers, curing and hardening compounds, alkaline salts, old adhesive residue and other extraneous materials, according to ASTM F710.
2. Subfloor should be smooth to prevent irregularities, roughness, or other defects from telegraphing through the new flooring. The surface should be flat to the equivalent of 3/16" (4.8 mm) in 10 feet (3.0 m).
3. Mechanically remove all traces of old adhesives, paint or other debris by scraping, sanding or scarifying the substrate. Do not use solvents. All high spots shall be ground level and low spots filled with an approved cementitious based patching compound.
4. All saw cuts (control joints), cracks, indentations and other non-moving joints in the concrete must be filled with an approved cementitious based patching compound.
5. Expansion joints in the concrete are designed to allow for expansion and contraction of the concrete. If a floor covering is installed over an expansion joint, it more than likely will fail in that area. Expansion joint covers designed for resilient floor coverings should be used.
6. Always allow patching materials to dry thoroughly and install according to the manufacturer's instructions. Excessive moisture in patching material may cause bonding problems or a bubbling reaction with the E-Grip III adhesive

HAZARDS:

SILICA WARNING - Concrete, floor patching compounds, toppings and leveling compounds can contain free crystalline silica. Respirable crystalline silica (particles 1-10 micrometers) can be produced by cutting, sawing, grinding, or drilling. Respirable silica is classified by OSHA as an IA carcinogen and is known to cause silicosis and other respiratory diseases. Avoid actions that cause dust to become airborne. Use local or general ventilation, or protective equipment, to reduce exposure below applicable exposure limits.

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ASBESTOS WARNING - Resilient flooring, backing, lining felt, paint or asphaltic “cutback” adhesives can contain asbestos fibers. Avoid actions that cause dust to become airborne. Do not sand, dry sweep, dry scrape, drill, saw, beadblast or mechanically chip or pulverize. Regulations may require that the material be tested to determine asbestos content. Consult the documents titled, “Recommended Work Practices for Removal of Existing Resilient Floor Coverings,” available from the Resilient Floor Covering Institute.

LEAD WARNING - Certain paints can contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state, and local laws and the publication, “Lead Based Paint: Guidelines for Hazard Identification and Abatement in Public and Indian Housing,” available from the United States Department of Housing and Urban Development.

7. Maximum moisture vapor emission of the concrete must not exceed 5.5 lbs. per 1000 sq. ft. in a 24 hour period as measured by the calcium chloride moisture emission test conducted in accordance to ASTM F1869. If the emissions exceed the limitations, the installation should not proceed until the problem has been corrected.
8. It is essential that pH tests be taken on all concrete floors. If the pH is greater than 9, it must be neutralized prior to beginning the installation.
9. Adhesive bond tests should be conducted in several locations throughout the area. Glue down a 3' x 3' area of the flooring with the recommended adhesive and trowel. Allow to set for 72 hours before attempting to remove. A sufficient amount of force should be required to remove the flooring, and there should be adhesive on the subfloor and the back of the flooring

V. Material Storage and Handling

1. Material should be delivered to the job site in its original unopened packaging with all labels intact.
2. Material should only be stored on a clean, dry, smooth surface.
3. Inspect all material for visual defects prior to beginning the installation. No labor claim will be honored on material installed with visual defects. Verify the material delivered is the correct style, color and amount. Any discrepancies must be reported immediately before beginning installation.
4. For indoor installations, the material and adhesive must be acclimated at room temperature for a minimum of 24 hours before starting installation
5. Adhered outdoor installations must be completely clean, dry and with temperatures between 40° and 100°F

VI. ADHERED INSTALLATION

Note: Split Pavers (7/8” thick) must always be adhered to the substrate. Full Pavers (1-3/4” thick) may be adhered or loose-laid. If loose-laid, pavers must be installed against a perimeter border system. Glue down installation on fully cured concrete and asphalt are suitable options for load bearing areas with heavy traffic or moving vehicles.

INSTALLATION

1. The material and adhesive must be acclimated at room temperature for a minimum of 48 hours before starting installation.
2. Inspect all pavers for visual defects including shade variances prior to beginning installation. No labor claim will be honored on material installed with visual defects or shade variations. It may be necessary to lay out and hand select tiles for color consistency. Any discrepancies must be reported immediately before beginning the installation. Ensure that all job site and subfloor conditions are met.
3. Measure the width of the area to be covered.
4. Mark the center of the area at two points, one at each end.
5. Snap the chalk line, line #1, through these two points.
6. Determine the center point of the chalk line.
7. Using a Carpenter's square, a 3-4-5 right triangle or another method, snap a second chalk line, line #2, perpendicular (at 90 degrees) to the first line. The lines should intersect at their centers.
8. The area to be covered is now divided into quarters. Begin the installation at the center of the area, where the two lines intersect.
9. After the above procedure is performed, begin application of E-Grip III, ECORE's recommended one-component polyurethane adhesive. Apply E-Grip III to the substrate at a rate of approximately 65 square feet per gallon using a 1/8" square-notch trowel.
10. Take care not to spread more adhesive than can be covered by flooring and rolled within 30 minutes.
11. Place the first paver, A, into the wet adhesive making sure that the edges are precisely placed along the chalk lines and where they intersect.
12. Lay pavers from left to right along chalk line #1 up to the wall on the opposite side of chalk line #2. The last row of pavers will likely have to be cut to fit against the wall.
13. Do not allow E-Grip III to cure on your hands or the flooring. Wipe off excess adhesive with a rag dampened with mineral spirits! Cured adhesive is very difficult to remove.

VII. LOOSE LAY INSTALLATION

Note: Split Pavers (7/8" thick) must always be adhered to the substrate. Full Pavers (1-3/4" thick) may be adhered or loose-laid. If loose-laid, pavers must be installed against a perimeter border system.

INSTALLATION

1. Loose laid pavers must be installed butting up against perimeter border system. You may use our rubber curbing or pour a concrete curb.

Note: Pavesafe Anti-stumble Edges must be adhered to a concrete or an asphalt base.

2. Install perimeter border system.
3. Lay pavers in desired pattern.
4. A crushed stone base must contain sand and crushed stone. If the area is to be loose laid, a perimeter border system is required and the pavers must be installed butting up against the border system.
5. Excavate approximately 12 inches (300 mm) of soil below the required finished level of Pavesafe.
6. Replace the soil with approximately 9 inches (230 mm) of compacted, crushed rock and one inch (25 mm) maximum of stone dust. This will allow moisture to penetrate between surface joints and to evaporate in the base. Some bases will require a plastic perforated drain to remove possible moisture build-up.
7. 95% standard proctor compaction per ASTM D1557 is critical.
8. The stone for the base must be compacted so it meets the above standard and should be a homogeneous mix of the following sizes:

<u>Sieve Size</u>	<u>% Passing</u>
1"	90-100
5/8"	50-80
1/4"	30-50
#4	15-35
#8	10-30
#30	3-5
#200	0-3

9. Make sure to allow for a 1.5% slope or fall for moisture movement to drainage pit.
10. The material and adhesive must be acclimated at ambient temperature (between 40 and 100F) for a minimum of 48 hours before starting installation.
11. Inspect all pavers for visual defects including shade variances prior to beginning installation. No labor claim will be honored on material installed with visual defects or shade variations. It may be necessary to lay out and hand select tiles for color consistency. Any discrepancies must be reported immediately before beginning the installation. Ensure that all job site and subfloor conditions are met.

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12. Measure the width of the area to be covered.
13. Mark the center of the area at two points, one at each end.
14. Snap the chalk line, line #1, through these two points.
15. Determine the center point of the chalk line.
16. Using a Carpenter's square, a 3-4-5 right triangle or another method, snap a second chalk line, line #2, perpendicular (at 90 degrees) to the first line. The lines should intersect at their centers.
17. The area to be covered is now divided into quarters. Begin the installation at the center of the area, where the two lines intersect.
18. Place the first paver, A, making sure that the edges are precisely placed along the chalk lines and where they intersect.
19. Lay pavers from left to right along chalk line #1 up to the edge on the opposite side of chalk line #2. The last row of pavers will likely have to be cut to fit.

MAINTENANCE

IMPORTANT INFORMATION FOR THE SPECIFIER

ECORE recommends our environmentally friendly line of Maintenance Products and Procedures for maintaining its rubber flooring products.

Proper protection and maintenance of pavers post-installation should be specified by the architect/designer. ECORE's products are not pre-coated with a factory finish; therefore, they should not be subject to construction debris and potential damage caused from heavy duty construction activities.

FLOOR PROTECTION

The specifier should include specification details to protect the floor post-installation and until job construction is complete, such as covering the entire floor with paper or other floor covering device (plastic, plywood, etc.) until construction is completed and thorough cleaning and maintenance can be implemented.

ASSIGNMENT OF CLEANING AND MAINTENANCE

The specifier should determine and assign the responsibility for the initial cleaning and finishing. This responsibility should be specifically assigned to the flooring contractor, general contractor, maintenance contractor or owner.

Steps	Cleaning Product	Mixture	Diluted Coverage	Equipment
Initial Cleaning	ECORE's E-Cleaner	10 oz./gal. water	2,000 sq. ft./gal.	Soft nylon brush or approved pad*
Finishing (optional)	ECORE's E-Finish	None	1,500 sq. ft./gal.	Soft nylon brush or microfiber mop
Daily Cleaning	ECORE's E-Cleaner	2-4 oz./gal. water	4,000 – 6,000 sq. ft./gal.	Soft nylon brush, microfiber mop, or approved pad*
Heavy Soil and Restorative Cleaning	ECORE's E-Strip	16 oz./gal. water	1,000 sq. ft./gal.	Approved pad*
Stripping (optional)	ECORE's E-Strip	42 oz./gal. water	500 sq. ft./gal.	Approved pad*

***Please contact ECORE's Technical Department for guidance on pad selection. 800-322-1923.**

MAINTENANCE

CLEANING AND MAINTENANCE PROGRAM FOR PAVESAFE PRODUCTS

Outdoor Cleaning & Maintenance Procedures

Daily cleaning: Sweep or blow away debris or hose off dirt.

Periodic cleaning (as needed): Pressure wash with no more than 1200 psi maximum.

Indoor Cleaning & Maintenance Procedures:

Note: This product is not intended for “Indoor” Residential use, and should only be used Indoors where a suitable drainage system is in place.

Daily cleaning: Vacuum floor or sweep floor to remove loose debris.

Periodic cleaning: Vacuum floor or sweep floor to remove loose debris.

Follow Cleaning Procedures as listed on Page 8.

WARRANTY

All ECORE International™ rubber flooring is guaranteed by ECORE to be free from manufacturing defects on both material and workmanship. If such a defect is discovered, the customer will notify ECORE either through the contracting installer, distributor, or directly. If found to be defective within 3 years under normal non-abusive conditions, the sole remedy against the seller will be the replacement or repair of the defective goods, or at the sellers option, credit may be issued not exceeding the selling price of the defective goods.

The Pavesafe warranty shall not cover dissatisfaction due to improper installation, damage from improper maintenance or usage, or general misuse, including and without limitation: burns, cuts, tears, scratches, scuffs, damage from rolling loads, damage from cleaning products not recommended by ECORE, shade variation, or differences in color between samples or photographs and actual flooring.

ECORE International reserves the right to make updates to this manual at any time. For the most updated version please visit www.pavesafe.com.

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