



# ECOmax 2-1/2" Tiles for Live & Play Surfaces

## Technical Manual

### Installation · Maintenance · Warranty

**Manufactured in the U.S.A.**

Revised on 13Dec2023  
Supersedes all previous versions.  
Check website for updates.

<b>Base Preparation</b>	
General Information	2
Tool/ Material Required	3
Site Work	3
Base Options	3
Material Storage and Handling	4
<b>Installation</b>	
Site layout	4
General Information	4
Fully Adhered Installation	4
Quad Blok Installation	5
Poly Foam Pad Installation	6
Cutting & Accessories	7
<b>Maintenance</b>	
Indoor Maintenance	8
LOBADUR® 2K InvisibleProtect	9
Prep	9
Application	10
Cleaning and Stripping	11
Outdoor Maintenance	12
<b>Warranty</b>	
Warranty	12

## Base Preparation

### I. GENERAL INFORMATION

ECOmax For Live & Play Surfaces tiles and accessories can be installed on concrete, asphalt, wood or compacted gravel base surfaces, except for limitations noted herein.

**NOTE:** Dimensional tolerance is +/- 1/8" for thickness and +/- 1/8" for width. It may be necessary to hand select some tiles to make sure the course lines remain straight during the installation. Color tone and shading may vary to the extent that some hand selection is required to maintain uniformity throughout the site.

**NOTE:** Slight variance in shade and color chip dispersion is normal. It is the installer's responsibility to inspect all products to ensure the correct style, thickness, and color. Any moderate to severe discrepancies should be reported immediately before beginning installation. No labor claim will be honored on material installed with visual defects.

ECOmax 2-1/2" Tiles For Live & Play Surfaces				
	Interior		Exterior	
Surface	24" x 24" x 2-1/2"		24" x 24" x 2-1/2"	
	Quad Blok <sup>1, 5</sup>	Full Glue <sup>1,2,5</sup>	Quad Blok <sup>1,4</sup>	Full Glue <sup>1,2</sup>
Concrete Surface	Approved	Approved	Approved	Approved
Concrete Pavers	Approved	Approved	Approved	No
Asphalt Surface	Approved	Approved	Approved	Approved
Plywood	Approved	Approved	Approved	No
Flakeboard / OSB	Approved	No	No	No
Compacted Gravel <sup>3</sup>	Approved	No	Approved	No
Wood or Tile	Approved	No	Approved	No
Resilient Flooring	Approved	No	Approved	No
Rubber Roofing <sup>4</sup>	N/A	N/A	Approved	No
Please note:				
1. Tile must always be glued to top of Quad Blok				
2. "Full glue" requires full spread adhesive using ES-90 with 1/8" square notch trowel. Bond test is recommended; installer responsible to determine suitability.				
3. Compacted Gravel sub-base may experience movement and subsidence; sub-base out-of-flatness, movement, subsidence, etc. are warranty exclusions.				
4. Only adhere tile to Quad Blok connector; do not glue Quad Bloks or Tiles to the roof				
5. Radiant heat - Installation over radiant heat not recommended				

## TOOLS/MATERIALS REQUIRED

- |   |                                       |
|---|---------------------------------------|
| 1. Tape measure                               | 2. Safety glasses                     |
| 3. Chalk line                                 | 4. Rags                               |
| 5. Blades for saber saw (7-10 teeth per inch) | 6. Mineral spirits/ denatured alcohol |
| 7. Solvent safe rubber gloves                 | 8. Push broom / high velocity blower  |
| 9. Utility knife                              | 10. Dustpan                           |
| 11. Framing square / metal straight edge      | 12. Rags                              |
| 13. Marking pencils                           | 14. Trash bags                        |
| 15. Standard size caulk gun                   | 16. Installation instructions         |
| 17. Notched trowel (1/8" square notch)        | 18. String line                       |
|   | 19. Cutting table (shipping pallet)   |

## II. SITE WORK

**NOTE:** Dimensional tolerance for tiles is +/- 1/8 in. for thickness and width. It may be necessary to periodically measure and hand select tiles to ensure course lines remain straight. Shading may vary and some hand selection is required to maintain maximum uniformity throughout site.

### A. Site Elevation

1. On grade installation - The finished installed height of the tiles will be equal to or slightly higher than the perimeter grade but not more than 1" higher unless approved by the project engineer.
2. Above grade installation - Installation on existing decks or slabs requires perimeter reducers to transition back to floor elevation unless termination is at vertical surface.
3. Tiles must be fully supported by the substrate. Substrate irregularities, unevenness, roughness, etc. should not be apparent after tile installation.

### B. Site Slope / Drainage

1. Allow for 1" in 8 LF slope for drainage as applicable.
2. An acceptable drainage system needs to be put in place to eliminate standing water.

## III. BASE OPTIONS

### A. Hard Base Construction

#### 1. Concrete Base

- a. Concrete shall have a minimum compressive strength of 3000 psi. New concrete slabs should cure for a minimum of 28 days. It must be fully cured and permanently dried. Care should be taken to provide for the stated slope. The surface should be flat to the equivalent of 3/16 in. (4.8 mm) in 10 ft. (3.0 m). A light broom finish is best for maximum adhesion. Use Portland-based patching and self-levelers that are moisture resistant and rated to withstand the RH moisture levels on the project.

#### 2. Paved Asphalt Base

- a. Use a coarse asphalt aggregate mixture; the preferred aggregate size for the adhered system is 3/8" to 1/2". Avoid asphalt mixtures with high fines percentage. they may become less stable hot weather.
- b. Compact soil subgrade with two passes minimum using a 10-ton vibratory roller with no soft or moving areas upon completion. Also compact crushed stone base with two passes minimum using a 10-ton vibratory roller. Binder and wear courses of the asphalt must both meet 95% of the theoretical maximum density of the JMF (Job Mix Formula).
- c. Allow asphalt to cure 28 days before adhering ECOmax.

**Analysis of Asphalt Wear Course**

Total Passing Sieve	Percent by Weight
1/2"	100
3/8"	80-100
#4	45-90
#8	30-65
#50	5-25
#200	2-8
Asphalt Cement	6-8

**B. Compacted Loose Base Construction**

1. Constructed an adequate perimeter footer to contain compacted loose base; top of footer is to be flat to equivalent of 3/16 in. (4.8 mm) in 10 ft. (3.0 m).
2. Provide **either** a 6 in. or an 8-1/2 in. deep footer:
  - a. Provide a 6 in. deep footer and compact the fill to the top of the footer so the 2-1/2 inch tile can be laid over the top of the footer and hide it.
  - b. **Or** provide an 8-1/2 in. deep footer and place and compact the aggregate to 6 in. so the top of the 2-1/2 in. tile and the top of footer have the same elevation.
3. By adding additional stone and compacting to the top of concrete footer, the tiles can be laid over the top of the footer concealing it, if so desired.
4. The crushed stone must be compacted to 95% standard proctor compaction and should be a homogeneous mix suitable for and available in your geographic area. One example AASHTO Screenings Sieve Analysis mix might be:

Total Passing Sieve	Percent by Weight
3/8"	100
#4	85-100
#100	10-30

5. Cover the entire stone dust area with geo-textile fabric, including the top of the footer if the tile extends over the footer. Overlap successive geo-textile sections a minimum of 4". The geo-textile should be permanently adhered to the top of the entire footer on all sides.

NOTE: Compacted Gravel sub-base may experience movement and subsidence. Subbase out-of-flatness, movement, subsidence, etc. are warranty exclusions.

6. Radiant Heat – ECOmax For Live & Play Surfaces is not recommended for installation over radiant heat.
  - a. Ecore rubber flooring has an approximate R-Value of R1 per inch of thickness, meaning the 2 ½” tiles will have a higher R-Value of R-2 or more. Check with radiant system heat manufacturer for suitability.

IV. MATERIAL STORAGE AND HANDLING

- A. Deliver the material to the job site in its original unopened packaging with all labels intact and stored appropriately inside to prevent damage.
- B. Shrink wrap is to secure and stabilize material on pallet during shipment only. Please remove shrink wrap from pallet immediately upon receipt, as damage to material could result from not doing so. After removing shrink wrap, do not expose material to sunlight. Store appropriately
- C. inside and securely cover for protection until installation.
- D. Inspect all material for visual defects before beginning the installation. Verify the material delivered is the correct type, thickness, and amount. Report any discrepancies immediately. Centaur will honor no labor claim on material installed with any visually apparent defects.
- E. The material and any adhesive must be acclimated at room temperature for a minimum of 48 hours before starting the installation.

**Installation**

I. SITE LAYOUT

- A. Sweep area clear of all dust and loose debris.
- B. Determine a starting point for the first course of tile to best suit the site area. Because most walls are not straight or corners square, tile installation generally starts in the middle of the area. Measure width and length of space, divide the room into 4 equal quadrants and snap chalk lines that are perpendicular (90 degrees) to each other.
- C. Place the first tile’s edges where the two perpendicular chalk lines meet.  
Hint: Adjust starting point to balance the tiles in the space and not end up with small cuts of tile against the perimeter. Begin installation where the two (adjusted) perpendicular chalk lines meet.

**NOTE: Trimmed / partial tiles may require additional site-engineered support.**

II. GENERAL INFORMATION

**NOTE: For rooftop and specialty applications, adhere tiles to Quad Bloks BUT NO ADHESION Of QUADBLOKS OR TILES TO ROOF MEMBRANE to avoid potential damage to the roof membrane.**

III. FULLY ADHERED INSTALLATION

**NOTE: Quad Bloks must always be used and installed per Quad Blok installation section.**

**NOTE: Fully adhered installation method is NOT permitted over Poly Foam or rubber roofing**

If fully adhering tiles on an **interior** installation, moisture must be measured using the RH Relative Humidity test method per the ASTM F2170 test standard. Moisture content should not exceed the allowable limit of the selected adhesive. The selected Portland-based patching and self-leveling materials must be moisture resistant and rated to withstand the RH moisture levels on the project.

ES-90 – RH limit of 90% – normally selected

E-Grip 95 – RH limit of 95% – higher RH applications  
E-Grip 99 – RH limit of 99% – highest RH applications

If RH levels exceed selected adhesive's RH limit, stop and correct situation.  
If outside, simply use ES-90.

- A. In the event that a moisture mitigation system is required, it must conform to the ASTM F3010 Standard Practice for Two-Component Resin Based Membrane Forming Moisture Mitigation Systems for use Under Resilient Floor Coverings.
- B. Perform pH tests on all concrete floors. If greater than the allowable limit of the selected adhesive, neutralize prior to installation.
- C. Using a 1/8" square-notched trowel, apply the ES-90 adhesive slightly wider than the tile being placed. Coverage rates for the ES-90 using a 1/8" square-notched trowel are approx. 45 sq/ft gal on concrete and approx. 40 sq/ft gal on asphalt. Do not spread more adhesive than can be covered in 30 minutes.
- D. Place tiles with QuadBlok into the fresh adhesive bed following pre-established lines. If applicable, place ramps into the fresh adhesive in a similar manner.

**NOTE: Do not allow adhesive to cure on your hands or the flooring; it is very difficult to remove. We strongly suggest wearing gloves.**

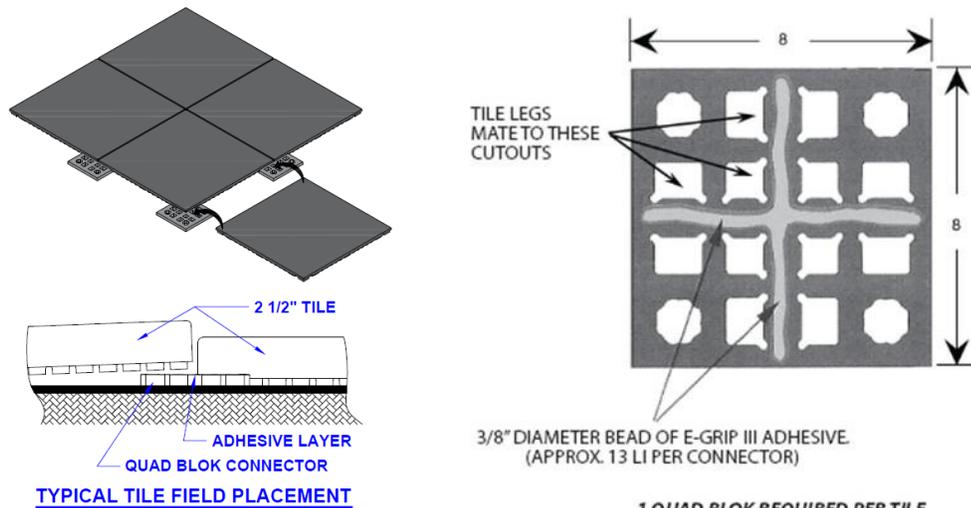
**NOTE: Immediately wipe off excess adhesive from floor with a rag dampened with mineral spirits or denatured alcohol and immediately remove the mineral spirits/ denatured alcohol with a rag damp with water. Use mineral spirits sparingly!**

- E. Roll the tiles with a 75-100 pound three section flooring roller to ensure adhesive transfer to the back of the tile feet.
- F. Allow 24 hours for adhesive to cure before opening area for foot traffic, and 72 hours prior to placing equipment.

## **G. QUAD BLOK INSTALLATION**

- A. **NOTE: Quad Bloks are required over Poly Foam**
- B. Follow the Site Layout instructions.
- C. Once chalk lines are established, place the first tile at the intersection of two chalk lines, aligning adjacent edges of the tile with the chalk lines.
- D. Apply a continuous 3/8" diameter bead of **E-Grip III** adhesive along the center axis of all Quad Blok connectors. Insert tile into Quad Blok **WHILE ADHESIVE IS STILL WET**. Adhesive open / working time is dependent upon environmental conditions.
- E. One 28-ounce tube of E-Grip III is required for approx. 28 of the 2 1/2" Quad Blocks.
- F. Fit the first tile with four prepared Quad Blok connectors by lifting each tile corner slightly, sliding the connectors under each corner and engaging the four corner legs of each tile with the

respective apertures in the Quad Blok. Continue to sequentially lay the tile and to set the Quad Blok connectors along one chalk line until the first course of tile is complete.



**Note:** Do not allow adhesive to cure on your hands or the flooring. Cured adhesive is very difficult to remove. We strongly suggest wearing gloves.

**NOTE:** Immediately wipe off excess adhesive with a rag slightly dampened with mineral spirits or denatured alcohol. Follow with a rag dampened with water. Use mineral spirits/ denatured alcohol sparingly. Saturating the rubber may cause darkening and the adhesive to be pushed into the pores of the rubber.

**NOTE:** Cut Quad Blok connectors in half for full tile edges against walls or curbs.

- G. Complete the other three quadrants of the roof deck in a similar fashion.
- H. Roll floor with 75-100 lb. flooring roller after gluing tiles into Quad Bloks. Roll again in 1 hour.
- I. Allow 24 hours for adhesive to cure before opening area for foot traffic, and 72 hours prior to placing equipment.
- J. One 28-ounce tube of E-Grip III is required for approx. 28 of the 8" x 8" Quad Bloks.

V. POLY FOAM PAD INSTALLATION (UNDER TILE AND QUAD BLOK)

**CAUTION! Please note:**

1. Quad Bloks **must** be used when installing over Poly Foam
  2. The **top** of the Poly Foam Pad is covered with fabric.
  3. **Plan ahead!** Position the Poly Foam (cut if necessary) so an edge of a tile **does not line up with an edge of a Poly Foam pad** section.
  4. The Poly Foam Pads are **only** to be used with both the **2-1/2"** tile and **Quad Bloks**
- A. Sweep area clear of all dust and loose debris.
  - B. Determine starting point for the first course of the 39-1/16" x 90-9/16" x 2-1/4" thick Poly Foam Pad. For irregular configurations, the best starting point is often in the center to ensure a symmetrical

finish for tiles that require trimming along the perimeter. Some installations are best started in the corner or along the edge that represents the length or width dimension of the site.

- C. Once the layout is determined, apply ES-90 adhesive with a 1/8" square notched trowel to a 6" x 6" area at each of the 4 bottom corners of every 39-1/16" x 90-9/16" Poly Foam Pad and adhere to concrete. Extra adhesive may be necessary over rough substrate surfaces. Place the Poly Foam pads tightly against each other. Rough substrates or windy conditions may require weighing down the Poly Foam pads until the adhesive develops a firm set.

**NOTE:** The **top** of the Poly Foam Pad is covered with fabric.

- D. The most accurate cuts are made using a heavy-duty high carbon steel linoleum knife and a straight edge. A saber saw utilizing a 7-10 TPI wood cutting blade also does an acceptable job, especially for free-form cuts. Blade must be long enough to penetrate the 2-1/4" pad.
- E. When installing pad around equipment posts, a minimum 6" perimeter area of adhesive should be utilized. Standard hole saws work well for making cutouts, but a lead in cut is required to place the pad in place around the posts.
- F. To install tile and Quad Blok over the Poly Foam Pad, begin by following the Site Layout Installation Instructions to prepare the site for the installation of 2-1/2" tile.
- G. Follow the Quad Blok Installation Instructions to prepare the site to install tile and Quad Blok connectors.

## VI. CUTTING TILES & ACCESSORIES

- A. Do not leave a cut tile edge exposed to foot traffic. Any tile that has its factory molded, radiused edge removed for any reason should be backed along that edge using a masonry or timber edging or placed against a wall or other vertical member.
- B. Use a heavy-duty utility knife and a straight edge for a clean, neat surface cut followed by a saber saw using a 7-10 TPI wood cutting blade to finish cutting. Silicone spray lubricant can make cutting easier. Consider using a band saw on larger jobs.
- C. It may be necessary to cut tiles to fit around the play equipment supporting posts. Make the cutout approximately 1/4" larger in all dimensions than the support to prevent binding of the tile around the support. Voids between the equipment supports and tile cuts should be filled in with silicone urethane sealant or adhesive.
- D. Lay out tile cuts out by referencing dimensions from the edges of tiles already in position, and then transfer these dimensions to the tile to be cut.
- E. Ramps should be miter cut at corners.

## Maintenance and Assigned Responsibilities

### It is the Specifier's responsibility to:

- Mandate covering and protection of floor from damage and construction debris until construction is complete.
- Assign to the appropriate party responsibility for the initial cleaning of floor following published procedures.

ECOsurfaces recommends our environmentally friendly line of maintenance products, including E-Cleaner.

**It is the General Contractor’s responsibility to provide:**

- A building or installation area that is fully enclosed from the elements, e.g., finished roof, windows, doors, etc.
- Temperature that is climate controlled with a minimum uniform temperature of 65° F for 48 hours prior to, during, and after the flooring installation, for acclimation of flooring materials.
- Protection for those areas of the flooring that are subject to direct sunlight through doors or windows by having the doors or windows covered for such time until the installation of the material is complete.
- Protection for flooring from damage and construction debris by using an appropriate floor covering until such time that the recommended initial cleaning may be performed.

**I. Indoor maintenance**

<b>Indoor Maintenance</b>	<b>Cleaning Product</b>	<b>Mixture</b>	<b>Diluted Coverage</b>	<b>Equipment</b>
Initial Cleaning	E-Cleaner	10 oz./gal. water	2,000 sq. ft./gal.	Vacuum. Scrub with soft Nylon Brush or 3M 4100 White or 4200 Beige Pad on low-speed scrubber. Vacuum up water. Dry
Maintenance Cleaning	E-Cleaner	2-4 oz./gal. water	6,000 sq. ft./gal.	Vacuum. Scrub with soft Nylon Brush or 3M 4100 White or 4200 Beige Pad on low-speed scrubber. Vacuum up water. Rinse and dry
Heavy Soil	E-Cleaner	10 oz./gal. water	2,000 sq. ft./gal.	Scrub with soft Nylon Brush or 4200 Beige Pad on low-speed scrubber. Vacuum up water. Rinse and dry
Restorative Cleaning <b>(CAUTION – E-Strip removes factory ECOguard coating)</b>	E-Strip	16 oz./gal. water	1,000 sq. ft./gal.	Vacuum. Scrub with 3M 5300 Blue pad, Brown 7100 or Black 7200 pad on low-speed scrubber. Do <b>NOT</b> use a High Productivity Stripper Pad. Vacuum up water. Rinse & dry.

1. Initial Cleaning
  - a. Remove all surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming with a high CFM vacuum.
  - b. Scrub floor with E-Cleaner (10 oz. /gal. of water), using buffer or auto scrubber with a soft nylon brush or pad per table above. Avoid flooding the floor.
  - c. Pick up solution with a wet vacuum. Rinse with clean water, picking up the rinse water with a wet vacuum and allowing it to dry thoroughly (6-8 hours).
2. Daily/Regular Cleaning
  - a. Remove surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming.
  - b. Hose or power wash with E-Cleaner diluted (2-4 oz. /gal. of water)
3. Heavy Soil

- a. Remove surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming.
  - b. Scrub floor with E-Cleaner with low-speed scrubber or auto scrubber & pad per table.
  - c. Pick up solution with a wet vacuum, rinse with clean water, and allow to dry thoroughly (6-8 hours).
4. Restorative Maintenance
- a. Remove surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming.
  - b. Heavily scrub floor with E-Strip diluted per table. This cleaning may be performed with an auto scrubber or low speed scrubber with pad per table above.
  - c. Vacuum soiled solution with a wet/dry vacuum.
  - d. Pick up solution with wet vacuum. Rinse with clean water and allow floor to dry thoroughly (6-8 hours).
  - e. **CAUTION – A standard black pad** should be the most aggressive pad used. **DO NOT USE high-performance black pads such as 3M's 7300 series or floor damage may result.**

## II. LOBADUR® 2K InvisibleProtect

### Description

LOBADUR® 2K Invisible Protect is an interior, matte finish, 2-component waterborne coating.

### Tools / Materials Required

Safety glasses  
Latex or rubber gloves

Trash bags  
Rags

LOBATOOL Roller Deluxe 120  
Paint roller tray

#### A. LOBADUR® 2K InvisibleProtect surface prep.

1. An improperly prepared surface can act as a bond breaker and result in a project failure. It is important to remove all dirt, grease, wax, oil, paint, or other contaminants before applying the LOBADUR® 2K InvisibleProtect.
2. **Note:** The LOBADUR® 2K InvisibleProtect can be applied over ECOguard after lightly stripping the ECOguard finish.

#### B. Precautionary Notes

1. Allow LOBADUR® 2K InvisibleProtect to cure for 24 hours before introducing foot traffic, and for 48 hours before cleaning or placing furniture.
2. If traffic or other activities need to be introduced earlier, protect surface as required.
3. Remove spills and drips immediately from other surfaces.
4. Apply each coat to entire space in one step rather than in sections for best results. Work from one side of room to the other with scrubbing motion and keep a wet edge.
5. Use microfiber pad to apply; use foam pad to cut in and for perimeter.

6. **Do not use string mops or other applicators to apply! The use of mops may result in a poor application and complete removal may be required.**

7. Full cure achieved in 5-7 days; extra coats extend cure time. See “Application” below.

**C. Application of LOBADUR® 2K InvisibleProtect**

1. Wait until adhesive is fully cured, and floor has been cleaned and it is fully dried.
2. Acclimate the Origins and LOBADUR® 2K InvisibleProtect to room temp. Do not apply at temperatures below 55°F.
3. Shake larger base container well.
4. Pour contents of small, .09 gal can of hardener into larger, base 0 .91 gallon container (ratio of 10:1) and shake to mix. For smaller quantities, use ratio of 10:1 and shake to mix. Pot life: 2 hrs.



5. Apply using LOBATool Roller Deluxe 120 and paint tray. Coverage with LOBATool Roller Deluxe 120 roller is 400-500 sq. ft. / gal.



6. **NOTE: For a generic roller, use a 3/8” short nap microfiber roller. They are prone to under-application, lap lines and roller marks. Ensure enough LOBADUR® 2K InvisibleProtect is on floor for leveling agents to work.**

**NOTE: Avoid streaks, puddles, and lap marks. Do not thin. Do not add water.**

**NOTE: Maintain adequate ventilation during coating and drying process.**

7. Earliest recoating after 4-6 hours. Apply second coat at right angle to first.
8. Clean up immediately with water.
9. Light foot traffic after 24 hours; floor is still susceptible to scuffing / marring. Protect as required.
10. Plasticizer containing materials e.g., rubber furniture pads or chair mats, may lead to discoloration of finish. Use felt furniture pads.

**D. Cleaning ECOmax For Live & Play Surfaces Coated with Field-Applied LOBADUR® 2K InvisibleProtect**

Steps	Products	Dilute	Tools
Initial Cleaning	E-Cleaner	10 oz. / Gal Water	Microfiber Mop, Soft Nylon Brush, or Red pad
Daily/Weekly Cleaning	E-Cleaner	2-4 oz. / Gal Water	Microfiber Mop, Soft Nylon Brush, or Red pad
Heavy Soil Cleaning	E-Cleaner	10 oz. / Gal Water	Microfiber Mop, Soft Nylon Brush, Red or Black pad

**1. Initial Cleaning**

- A. Remove all surface soil, debris, sand, and grit by sweeping or vacuuming.
- B. Scrub with E-Cleaner and scrubber, brush or pads from table above.
- C. Wet vac, damp mop and allow floor to dry.

**2. Daily/Weekly Cleaning**

- A. Remove all surface soil, debris, sand, and grit by sweeping or vacuuming.
- B. Scrub with E-Cleaner and scrubber, brush or pads from table above.
- C. Wet vac, damp mop and allow floor to dry.

**3. Heavy Soil Cleaning**

- A. Remove all surface soil, debris, sand, and grit by sweeping or vacuuming.
- B. Scrub floor with E-Cleaner with a soft nylon brush or pads from table above, following dilution schedule above.
- C. Wet vac, damp mop floor and allow floor to dry.

**Note:** Nylon deck brush may be used to remove scuff marks or heavy soil.

**E. Stripping LOBADUR® 2K InvisibleProtect**

- 1. LOBADUR® 2K InvisibleProtect is difficult to completely remove and may require several attempts with the approved stripping pad and E-Strip. Anything used to chemically remove the sealer will jeopardize the integrity of the rubber.
- 2. Use 32 oz. (1 qt.) E-Strip / gallon cold water & low-speed buffer & Black stripping pad.
- 3. Apply a liberal amount of diluted stripper to floor and allow to sit for 5-10 minutes. Work buffer from side to side until sealer is removed. This may require several attempts and effectiveness will be influenced by unevenness in the substrate.
- 4. **CAUTION – A standard black pad should be the most aggressive pad used. DO NOT USE high-performance black pads such as 3M’s 7300 series or floor damage may**

result. ECOsurfaces assumes no liability in the event of damage to the rubber in the removal process. LOBADUR® 2K Invisible Protect is considered a permanent sealer and not intended to be stripped from the rubber as a standard procedure.

5. To re-apply the LOBADUR® 2K InvisibleProtect, please see “Coating Instructions” above.

## II. OUTDOOR MAINTENANCE

Outdoor Maintenance	Cleaning Product	Mixture	Diluted Coverage	Equipment
Initial Cleaning	E-Cleaner	10 oz./gal. water	2,000 sq.ft./gal.	Vacuum or leaf blower, hose or power wash, or scrub with soft Nylon Brush or 4200 Beige Pad.
Maintenance Cleaning	E-Cleaner	2-4 oz./gal. water	4,000 – 6,000 sq. ft./gal.	Blow, vacuum or sweep loose debris and power wash or hose.
Periodic Cleaning	E-Cleaner	2-4 oz./gal. water	4,000 – 6,000 sq. ft./gal.	Vacuum or leaf blower, hose or power wash, or scrub with soft Nylon Brush or 4200 Beige Pad. Vacuum or squeegee dry.
Heavy Soil and Restorative Cleaning	E-Cleaner E-Strip	10 oz./gal. water 16 oz./gal. water	2,000 sq.ft./gal 1,000 sq.ft./gal.	Power wash or scrub using 3M Brown 7100 or Black 7200 pad on low-speed scrubber. Do <b>NOT</b> use High Productivity Pad.
Power Scrubber	<ul style="list-style-type: none"> <li>Low speed (175-300 rpm) 17" rotary floor scrubber with brush / pad attachment</li> </ul>			
Auto Scrubber	<ul style="list-style-type: none"> <li>Unit with clear rinse feature and wet vacuum with wand pickup nozzle</li> </ul>			
Cold Water Pressure Washer	<ul style="list-style-type: none"> <li>Extensions for trigger gun and quick disconnect fittings</li> </ul> <p><b>CAUTION: Use all applicable PPE when using power washers. Use power washer least 18" from tile surface with the appropriate pressure and recommended 40° wash nozzle. Power washers can cause significant and permanent damage. Hire a professional if unsure regarding power washing safety or use.</b></p>			

### Warranty

ECOsurfaces warrants that the ECOmax For Live & Play Surfaces tiles will be free from defects in materials and workmanship, that surface wear due to ordinary abrasion from pedestrian traffic will not penetrate the wear course of the surface, and that, when installed according to the manufacturer’s specifications, will ensure the surface remains fixed and functional. If found to be defective under normal non-abusive conditions, at the discretion of ECOsurfaces, the sole remedy against the seller will be to repair, to replace, or to issue a credit not exceeding the selling price of the defective goods. These warranties only apply to the original purchaser.

Please see the ECOsurfaces Warranty Guide for length specifics.

This warranty shall not cover dissatisfaction due to improper installation, normal wear or quality of installation expected from the use or environment of 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 ECOsurfaces, slight shade variations or shade variations due to exposure to direct sunlight, or differences in color between samples or photographs and actual flooring.

Any applications other than children's playgrounds or adult pedestrian rooftop & patio use require prior written approval by ECOsurfaces Technical Services.

### **Excluded from Warranty**

These warranties do not apply to the following:

1. The exact matching of shade, color, or mottling.
2. Any express or implied promise made by any salesperson or representative.
3. Tears, burns, cuts, or damage due to improper installation, improper use or improper cleaning agents or maintenance methods.
4. Wear from chairs or other furniture without proper floor protectors will void the warranty. Care should be taken to protect the flooring from damage by using good quality protective feet for chairs, tables, and other furniture. Chair mats may be required under chairs with casters/wheels.
5. Labor costs for installation of original or replacement material.
6. Sale of "Remnants," "Seconds," "Off Goods" or other irregular (non-first quality) flooring materials. With respect to "Seconds," "Off Goods," or "Remnants" such are sold "as is," and ECOsurfaces makes no warranties whatsoever, express or implied with respect thereto, including warranties of merchantability or fitness for a particular purpose.
7. Problems caused by moisture, hydrostatic pressure, or alkali in the sub-floor.
8. Problems caused by uses, maintenance, and installation that are contrary to ECOsurfaces specifications, recommendations, or instructions.
9. Material installed with obvious defects.
10. Damage to flooring products from high heels or spike heels.
11. Damage to flooring products from rubber mats, rubber-backed mats, or vehicle tires.
12. Installation with adhesives other than those recommended by ECOsurfaces.
13. Fading and/or discoloration resulting from heavy sunlight penetration and ultraviolet ray exposure from direct or glass-filtered sunlight.
14. Material that is not installed and maintained as recommended by ECOsurfaces.
15. Damage to flooring products from pallet jack and tow-motor traffic.
16. Environments where the product will be exposed to animal fats, vegetable oils, grease, or petroleum-based materials. (i.e.: commercial kitchens our auto repair facilities.)
17. Premature wear and deterioration from spikes and skate blade exposure.
18. Differences in color between products and photography.
19. Embossing / density deviations between product and samples, photography.

This warranty is in lieu of any other warranty, whether expressed or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. ECOsurfaces shall not be liable for incidental or consequential losses, damages or expenses directly or indirectly arising from the sale, handling, or use of the materials (goods), or from any other cause relating thereto. For complete and latest warranty information, please visit [www.ecosurfaces.com](http://www.ecosurfaces.com)



833-888-1760

[www.ecosurfaces.com](http://www.ecosurfaces.com)

Manufactured in the U.S.A.

© 2022 All designs and colors are copyrighted by ECOsurfaces