



ECOmax 1" and 2 ½" Tiles

Technical Manual

Installation · Maintenance · Warranty

Manufactured in the U.S.A.

Revised 14Feb2022
Supersedes all previous versions
Check website for updates

1" and 2½" Base Preparation	2
Installation Surfaces and Methods	2
Tools / Materials Required	2
Site Work & Base Options	3
1" Interior Installation	4
General Information	4
Site Layout	5
Installation	5
Outer Course & ADA Ramps / Transitions	6
1" Fully Adhered Installation	7
Material and Site Prep	7
Full Glue Down with Quad Blok	7
2 ½" Interior and Exterior Installations	8
General Information & Site Layout	8
Fully Adhered Installation	9
Cutting 2 ½" Tiles and ADA Ramps / Transitions	11
Maintenance	11
Floor Protection	11
Indoor ECOguard Coated Maintenance	11
LOBADUR® 2K InvisibleProtect	12
Prep	12
Application	13
Cleaning and Stripping	14
Outdoor Maintenance	15
Warranty	16

1" and 2½" Base Preparation

I. INSTALLATION SURFACES & METHODS FOR 1" AND 2-1/2" THICK Tiles

INTERIOR INSTALLATION					EXTERIOR INSTALLATION				
Surface	Methods for 1" Thick ECOMax		Methods for 2-1/2" Thick ECOMax		Surface	Methods for 1" Thick ECOMax		Methods for 2-1/2" Thick ECOMax	
	Adhere to Quad Blok Only	Adhere to Quad Blok Plus Full Glue	Adhere to Quad Blok Only	Adhere to Quad Blok Plus Full Glue		Adhere to Quad Blok Only	Adhere to Quad Blok Plus Full Glue	Adhere to Quad Blok Only	Adhere to Quad Blok Plus Full Glue
ECOsilence Sound Control Underlayment ¹	Approved	Approved	Approved	Approved	ECOsilence Sound Control Underlayment ¹	Not Approved	Not Approved	Approved	Not Approved
Concrete	Approved	Approved	Approved	Approved	Concrete		Approved	Approved	Approved
Asphalt	Approved	Approved	Approved	Approved	Asphalt		Approved	Approved	Approved
Plywood	Approved	Approved	Approved	Approved	Plywood		Not Approved	Not Approved	Not Approved
Compacted Gravel ^{2,4}	Not Approved	Not Approved	Approved	Not Approved	Compacted Gravel ^{2,4}		Not Approved	Approved	Not Approved
Wood or Tile	Approved	Bond test ³	Approved	Not Approved	Wood or Tile		Not Approved	Approved	Not Approved
Resilient Flooring	Approved	Bond test ³	Approved	Not Approved	Resilient Flooring		Not Approved	Approved	Not Approved
Indoor/ Outdoor Carpet	Not Approved	Not Approved	Not Approved	Not Approved	Indoor/Outdoor Carpet		Not Approved	Not Approved	Not Approved
Roofing ⁵	Not Approved	Not Approved	Not Approved	Not Approved	Roofing ⁵		Not Approved	Approved	Not Approved

1. ECOSilence Sound Control Underlayment must be installed per applicable technical manual and full-adhered with E-Grip III
 2. Geo-textile fabric must be used between compacted gravel and tile
 3. "Full Glue" requires full spread adhesive using 1/8" square notch trowel. Bond test is recommended; installer responsible to determine suitability
 4. Compacted Gravel sub-base may experience movement and subsidence. Subbase out-of-flatness, movement, subsidence, etc. are warranty exclusions.
 5. Only possible for 2 ½" thick ECOMax. Adhere 2 ½" tile to Quad Blok connector; do not glue Quad Bloks or Tiles to the roof.

II. TOOLS/MATERIALS REQUIRED

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Two tape measures - 25' and 50' 2. Chalk line 3. Saber saw (Jig saw) or band saw 4. Blades for saber saw (7-10 teeth per inch, wood type) 5. Utility knife 6. Framing square/metal straight edge 7. Marking pencils 8. Standard size caulk gun 9. Slot blade screwdriver 10. 1/8" square notch trowels (exterior) 11. Safety glasses 12. 1-1/2" flexible putty knife | <ol style="list-style-type: none"> 13. Kneepads 14. Solvent-safe rubber gloves 15. Rags 16. Trash bags 17. Push broom or shop vac 18. Mineral spirits 19. Installation instructions 20. String line 21. Cutting table (shipping pallet) 22. Dustpan 23. 2-3 lb. hand sledgehammer or rubber mallet 24. 75-100 pound three-section floor roller |
|--|--|

III. 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 tile surface will be equal to or slightly higher than the perimeter grade 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. When preparing a new hard base, a minimum slope equal to 1 in. per 8 ft. of run shall be applied to the finished surface with slope toward the drain basin, drain trough, or down grade side of the site to eliminate standing water.

IV. 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.
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.

Asphalt

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: (2-1/2” ONLY)

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 in. ECOmax 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. ECOmax and the top of footer have the same elevation.
3. In all loose base areas, the base should be constructed of 6" of compacted limestone screenings mixture or equivalent aggregate common to your area. A screenings mixture is one having no aggregate larger than 3/8" and should conform to the following sieve analysis.

Loose Aggregate Base Material – AASHTO Screenings Sieve Analysis

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

4. Once the loose base has been installed and has achieved 95% compaction to the desired elevation, cover the entire area with geo-textile fabric, including the top of the footer where the 2-1/2” ECOmax extends over the footer. Overlap successive geo-textile sections by 4". Adhere geo-textile to the top of footer on all sides to keep it in place.

1” Interior Installation (Adhere to Quad Blok only)

GENERAL INFORMATION.

- A. The floor over which tile is installed must be level, in good condition, and clear of dirt/debris
- B. For installations requiring full adhesion to concrete, see section VI. (below) titled *1” FULLY ADHERED INSTALLATION*.
- C. Installation should not begin until after all other trades are finished in the area.
- D. Areas to receive flooring should be weather tight and maintained at a minimum uniform temperature of 65°F for 48 hours before, during, and after the installation.
- E. Unpack tiles and allow them to sit in the area to be installed. Tiles and adhesive must be acclimated at a uniform room temperature for a minimum of 48 hours prior to installation.

NOTE: Dimensional tolerance for tiles is +/- 1/8 in. in 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.

NOTE: ECOmax is manufactured from recycled materials and slight variance in shade and color chip dispersion is normal. It is the installer’s responsibility to inspect all products to insure the correct style, thickness, and color. Any moderate to severe discrepancies should be reported immediately before beginning the installation. No labor claims can be paid on material installed with visual defects.

As with any flooring product, dry laying and full inspection of all tiles will allow for a quality installation. Tiles should be inspected from several angles and adjusted as necessary.

I. SITE LAYOUT

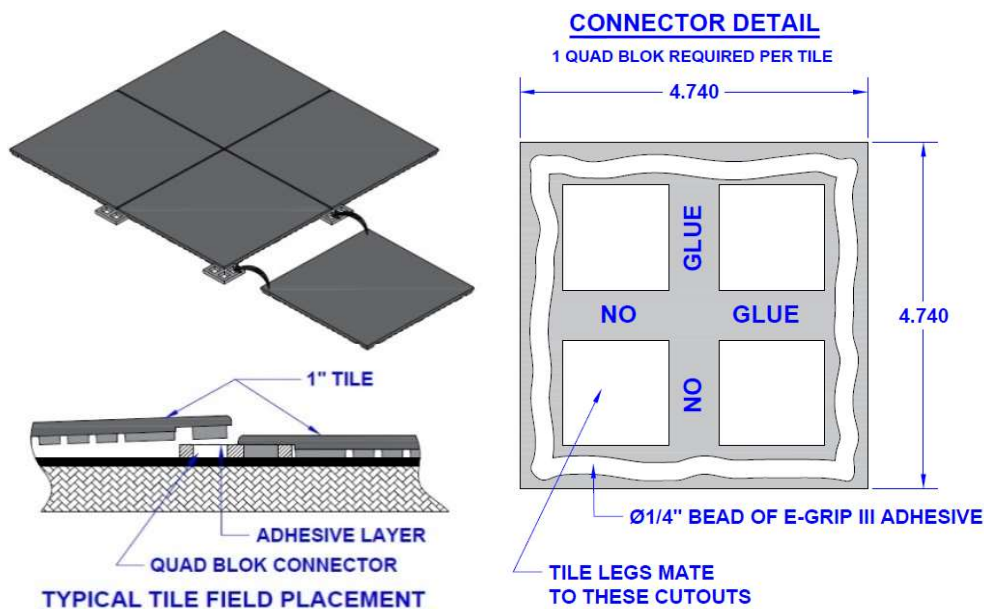
- A. Sweep area clear of all dust and loose debris.
- B. Determine a starting point for the first course of tile to best suit the site area. Because most walls are not straight or corners square, tile installation generally starts in the middle of the room, so measure the width and length of the space, 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 the starting point to balance the tiles side-to-side and not end up with small cuts of tile against the walls.
- D. **It is important to start installation from a perfectly straight chalk line or attached channel or timber.**

II. 1" INSTALLATION with QUAD BLOKs (Required on all 1" ECOMax)

- A. Follow the Site Layout instructions to prepare the area for the installation of the 1" tiles.
- B. 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.
- C. Apply a continuous 3/8" diameter bead of E-Grip III adhesive around the perimeter of the Quad Blok connectors. Working adhesive time is dependent upon environmental conditions.
- D. 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: Cut the Quad Blok connectors in half to secure full perimeter tiles

- E. Complete the other three quadrants in a similar fashion.
- F. Roll floor with a 75-100 pound flooring roller after gluing tiles into Quad Bloks. Roll again in 1 hour.
- G. Allow 24 hours for adhesive to cure before opening area for foot traffic, and 72 hours prior to placing equipment.
- H. One 10.1-ounce tube of E-Grip III is required for approx. 15 of the 1" Quad Blocks.



Note: Adhesive spills must be removed **while still wet**. Use a dry rag to pick up the majority of the adhesive. Wipe the remaining residue with a rag dampened with mineral spirits, followed with a rag damp with water to wipe off the mineral spirits. Cured adhesive can only be removed from surfaces by mechanical means, such as scraping or sanding.

III. INSTALLATION – OUTER COURSE TILE

- A. Tiles installed against a wall will most likely have to be cut to fit. Use a heavy-duty utility or carpet knife and a straight edge. A saber saw (jig saw) with a coarse, 7-10 TPI wood cutting blade also works well. A cutting table or a shipping pallet used to support the work is required during cutting.
- B. Avoid leaving a cut edge of a tile exposed to eyesight. To guarantee a finished appearance, any tile that has its factory molded, radius edge removed for any reason should be backed along that edge using a 1" masonry or timber edging, unless that edge is to be placed against a wall or other vertical member.
- C. Outer tiles which are not contained by walls should be adhered to the existing floor using E-Grip III adhesive with a 1/8" square notched trowel. Set tiles and ramps in the adhesive bed. Perimeter tiles set in the adhesive bed should be connected to the next inner course of tiles with Quad Bloks.
- D. Once tiles are laid into the wet adhesive, roll the floor with a 75-100-pound flooring roller. Adhesive should cure for 24 hours before foot traffic and 72 hours before any heavy loads.

IV. INSTALLATION – ADA RAMPS & TRANSITIONS

- A. Cut in the same way as the tiles. Corners should be miter cut.
 - B. The most accurate cuts are made using a heavy-duty utility or carpet knife and a straight edge. A saber saw (jig saw) using a 7-10 TPI wood cutting blade. A cutting table used to support the work is required during cutting. A standard shipping pallet works well.
 - C. Cut away any protruding Quad Blok material
 - D. Make sure that the subfloor is flat, clean, dry, and free of contaminants such as waxes, finishes, sealers, or other extraneous materials that would prevent a good adhesive bond.
 - E. Unpack the materials and allow them to sit in the area to be installed. Materials and adhesive must be acclimated at a uniform room temperature for a minimum of 48 hours prior to installation. Dry lay and make appropriate cuts before opening the adhesive.
- Note:** The toe edge of the ADA ramp contains wire reinforcement. Take care not to bend the edge as it will be difficult to get ramps with bent reinforcement to lay flat.
- F. Mark the areas where adhesive is to be applied and temporarily remove the ramps / transition.
 - G. Spread E-Grip III urethane adhesive using a 1/8" square notch trowel. Do not spread more adhesive than can be covered in 30 minutes.
 - H. Carefully place the ramps into the adhesive. Be sure to press down firmly to assure proper adhesive transfer to the back side of the ramp and roll with a 75-100 pound three section flooring roller.
 - I. Use weight to evenly hold down the entire ramp / transition.

Note: Weight the entire toe edge of ADA transition to prevent it from lifting out of the adhesive.

Note: Adhesive spills must be removed **while still wet**. Use a dry rag to pick up the majority of the adhesive. Wipe the remaining residue with a rag dampened with mineral spirits, followed by a rag dampened with water. Cured adhesive can only be removed from surfaces by mechanical means, such as scraping or sanding.

- J. After 24 hours, remove the weight.
- K. Clean and maintain the area in accordance with the instructions in the Maintenance Section below.

V. 1" FULLY ADHERED INSTALLATION – Mandatory for 1" exterior installations. Quad Blok Also Required.

- A. Follow the site layout instructions to prepare the site area for installation. The tiles, accessories, and substrates should be weather tight and maintained at a minimum uniform temperature of 65°F (18°C) for 48 hours before, during, and after the installation.
- B. Unpack tiles and allow them to sit in the area to be installed. Tiles and adhesive must be acclimated at a uniform room temperature for a minimum of 48 hours prior to installation.

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

As with any flooring product, dry laying and full inspection of all tiles will allow for a quality installation. Tiles should be inspected from several angles and adjusted as necessary.

NOTE: ECOMax Tile is manufactured from recycled materials and slight variance in shade and color is normal. It is the installer's responsibility to inspect all products to insure correct style, thickness, and color. Any moderate to severe discrepancies should be reported immediately before beginning.

NOTE: Use a 1/8" square notch trowel; E-Grip III coverage rate is approx. 60 square feet per gallon.

- C. For an *interior* fully adhered 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. All Portland-based patching and self-leveling materials must be moisture resistant and rated to withstand the RH moisture levels on the project.

E-Grip III – RH limit of 85% – 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 the selected adhesive's RH limit, stop and correct situation.

Note: For exterior, fully adhered installations, simply use E-Grip III.

- D. 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.
- E. Perform pH tests on all concrete floors. If greater than the allowable limit of the selected adhesive, neutralize prior to installation.

- F. Using a 1/8" square notch trowel, apply the E-Grip III adhesive out slightly wider than the tile being placed. Do not spread more adhesive than can be covered in 30 minutes.
- G. **Quad Bloks must always be used and installed per Quad Blok installation section above.**
- H. Place tiles with Quad Bloks into the fresh adhesive bed following pre-established course lines. If applicable, place ramps into the fresh adhesive in a similar manner.
- I. After placing tiles into adhesive bed, roll the tiles with a 75-100 pound three section flooring roller to ensure adhesive transfer to the back of the tile feet.
- J. Adhesive should be allowed to cure for 24 hours before allowing foot traffic. All heavy traffic and/or light rolling loads should be avoided for a minimum of 72 hours after installation to allow adhesive to develop strength. In cases where 72 hours is not possible, it is recommended to cover the floor with a rigid covering such as 1/2" plywood sheeting with a fully sanded face against the surface of the tiles.
- K. Tile cuts are typically laid out by referencing dimensions from the edges of the tiles, already in position, to a wall or other obstruction along or around which the tiles are to fit. These dimensions are then transferred to and laid out on the tile to be cut.
- L. Corner ramps should be miter cut.

2 1/2" Installation

I. GENERAL INFORMATION

- A. Install 2-1/2" ECOmax either with Quad Bloks only (most common) or with Quad Bloks and fully adhering. Installing tiles without using Quad Bloks may not result in an evenly spaced installation.

NOTE: Dimensional tolerance for tiles is +/- 1/8" in 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.

NOTE: For 2-1/2" ECOmax rooftop and specialty applications, use the Quad Bloks BUT NO FULL ADHESION TO ROOF MEMBRANE to avoid potential damage to the roof membrane.

NOTE: ECOsurfaces flooring is manufactured from recycled materials and some 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 visual discrepancies should be reported immediately before beginning installation. No labor claims can be paid on material installed with visual defects.

As with any flooring product, dry laying and full inspection of all tiles will allow for a quality installation. Tiles should be inspected from several angles and adjusted as necessary.

II. 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 room, so measure the width and length of the 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.
- D. Hint: Adjust the starting point to balance the tiles side-to-side and not end up with small cuts against the walls.

III. 2 ½" FULLY ADHERED INSTALLATION

- A. Follow the site layout instructions to prepare the site area for installation. The tiles, accessories, and substrates must be dry before, during and 24 hours after the application of adhesive.
- B. **Installing tiles without using Quad Bloks may not result in an evenly spaced installation.**
- C. Using a **1/8" square-notched trowel**, apply the E-Grip III adhesive out slightly wider than the tile being placed; the 1/8" square-notched trowel yields 60 sq. ft. /gal. on concrete and 50 sq. ft. /gal. on asphalt.
- D. For an *interior* fully adhered 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.
 - 1. E-Grip III – RH limit of 85% – normally selected
 - 2. E-Grip 95 – RH limit of 95% – higher RH applications
 - 3. E-Grip 99 – RH limit of 99% – highest RH applications

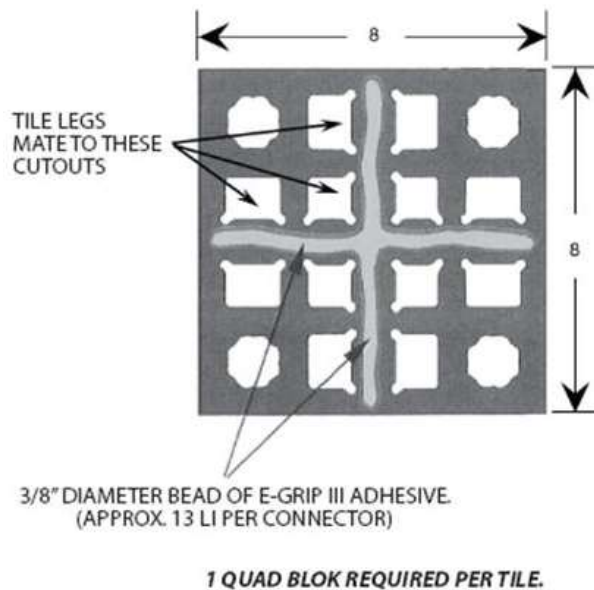
If RH levels exceed the selected adhesive's RH limit, stop and correct situation.

Note: For exterior, fully adhered installations, simply use E-Grip III.

- E. 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.
- F. Perform pH tests on all concrete floors. If greater than the allowable limit of the selected adhesive, neutralize prior to installation.
- G. Place tiles into the fresh adhesive bed following pre-established course lines. If applicable, place ramps into the fresh adhesive in a similar manner.
Note: Adhesive spills must be removed while still wet. Use a dry rag to pick up the majority of the adhesive. Wipe the remaining residue with a rag dampened with mineral spirits, followed by a rag dampened with water. Cured adhesive can only be removed from surfaces by mechanical means, such as scraping or sanding.
- H. Adhesive should be allowed to cure for 24 hours before the tiles are used.
NOTE: Although EComax tiles contain UV-resistant EPDM, an initial ambering of this product in outdoor environments is normal and will stabilize within 2-3 weeks.

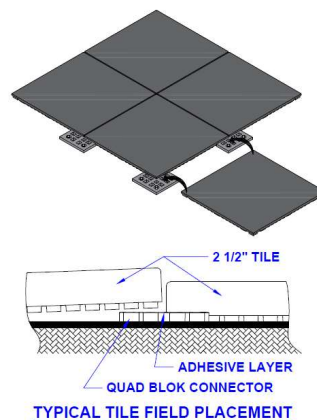
IV. 2 ½" QUAD BLOK INSTALLATION

- A. Follow the Site Layout instructions to prepare the base for the installation of 2-1/2" EComax tiles.
- B. 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.
- C. Apply a continuous 3/8" diameter bead of E-Grip III adhesive on both center axes of all Quad Blok connectors. Working adhesive time is dependent upon environmental conditions.
- D. One 10.1-ounce tube of E-Grip III is required for approx. 10 of the 2 ½" Quad Blocks.



- E. Fit the first tile with four prepared Quad Blok connectors by lifting each tile corner slightly, sliding the Quad Blok under each corner and engaging the four corner legs of each tile with the matching openings 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: Adhesive spills must be removed while still wet. Use a dry rag to pick up the majority of the adhesive. Wipe the remaining residue with a rag dampened with mineral spirits, followed with a rag damp with water to wipe off the mineral spirits. Cured adhesive can only be removed from surfaces by mechanical means, such as scraping or sanding.



NOTE: Cut the Quad Blok connectors in half with a utility knife and straightedge to connect the outside, perimeter tiles edges

- F. Complete the other three quadrants in a similar fashion.
- G. Roll floor with a 75-100 pound flooring roller after gluing tiles into Quad Bloks. Roll again in 1 hour.

H. Allow 24 hours for adhesive to cure before opening area for use.

V. CUTTING 2-1/2” TILES, ADA RAMPS / TRANSITIONS

- 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. Start tile cuts with a utility or carpet knife and straightedge and complete with a saber saw (jig saw) and a 7-10 TPI wood cutting blade, especially for radiused or free-form cuts. A cutting table (for example, a standard shipping pallet) to support the tile while cutting is very helpful.
- C. Corner ramps should be miter cut.

Maintenance

Important information for the specifier

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

Proper protection and maintenance of flooring post-installation should be specified by the architect/ designer. ECOsurfaces products must not be subjected to construction debris and damage from construction activities. The specifier should include details to protect the floor until job and construction are complete and floor is thoroughly cleaned.

Areas of the flooring that are subject to direct sunlight through doors or windows shall have the doors or windows covered for such time until the installation of the material is complete.

Assignment of cleaning and maintenance

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

I. Indoor Maintenance

Indoor Maintenance	Cleaning Product	Mixture	Diluted Coverage	Equipment
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 (CAUTION – E-Strip removes factory ECOguard urethane coating)	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 NOT use a High Productivity Stripper Pad. Vacuum up water. Rinse and 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 Indoor table. 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 all surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming with a high CFM vacuum.
 - b. Scrub floor with E-Cleaner (2-4 oz. /gal. of water), using buffer or auto scrubber with a soft nylon brush or pad per Indoor table. 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).
3. Heavy Soil
 - a. Remove surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming.
 - b. Scrub floor with E-Cleaner using a low-speed scrubber or auto scrubber with pad per Indoor table.
 - c. Pick up solution with a wet vacuum, rinse with clean water, and allow to dry thoroughly (6-8 hours).
4. Restorative Maintenance (CAUTION – E-Strip removes factory ECOguard urethane coating)
 - a. Remove surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming.
 - b. Heavily scrub floor with E-Strip diluted per Indoor table. This cleaning may be performed with an auto scrubber or low speed scrubber with pad per Indoor table.
 - 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.
 - 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.** ECOsurfaces assumes no liability in the event of damage to the rubber in the removal process. ECOguard is considered a permanent sealer and not intended to be stripped from the rubber as a standard procedure.
 - f. To re-apply sealer, see LOBADUR® 2K InvisibleProtect below.

II. LOBADUR® 2K InvisibleProtect

Description

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

Tools / Materials Required

Safety glasses	Trash bags	LOBATOOL Roller Deluxe 120
Latex or rubber gloves	Rags	
Paint roller tray	Applicator trim pads	

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 the factory applied ECOguard finish 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 .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 ECOsurfaces 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 from small areas.

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 NOT use High Productivity Pad.
Power Scrubber	<ul style="list-style-type: none"> Low speed (175-300 rpm) 17” rotary floor scrubber with brush / pad attachment 			
Auto Scrubber	<ul style="list-style-type: none"> Unit with clear rinse feature and wet vacuum with wand pickup nozzle 			
Cold Water Pressure Washer	<ul style="list-style-type: none"> Extensions and quick disconnect fittings for trigger gun <p><i>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.</i></p>			

Warranty

All ECOsurfaces rubber flooring is guaranteed to be free from manufacturing defects on both material and workmanship. If such a defect is discovered, the customer must notify ECOsurfaces either through the contracting installer, distributor, or directly. If found to be defective within five years 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.

ECOsurfaces 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 ECOsurfaces, slight shade variations or shade variations due to exposure to direct sunlight, or differences in color between samples or photographs and actual flooring.

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 salesman 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 "Seconds," "Off Goods," or other irregular (non-first quality) flooring materials. With respect to "Seconds" or "Off Goods," 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 rubber tires.
12. Installation of ECOsurfaces products 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, or 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.

These warranties are in lieu of any other warranty expressed or implied. ECOsurfaces shall not be liable for any incidental or consequential damages which may result from a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. These warranties give you specific rights, and you may also have rights which may vary from state to state. To know what your legal rights are in your state, consult your local or state Consumer Affairs Office or your State Attorney General. For complete and latest warranty information, please see www.ecosurfaces.com .



833-888-1760

www.ecosurfaces.com

Manufactured in the U.S.A.

©2022 All designs and colors are copyrighted by ECOsurfaces