ecore Commercial



ECOmax 1" & ECOmax 2.5"

Technical Manual

Installation - Maintenance - Warranty

Manufactured in the U.S.A. by:



Revised 07/19/2018 Supersedes all previous versions Check website for updates

TABLE OF CONTENTS

1" AND 2-	1/2" BASE PREPARATION	3-5
	Recommended Installation Methods	3
1" & 2-1/2"	Tools/Materials Required	3
	Site Work	4
∞ =_	Base Options	4-5
Ţ		
1" INTERI	OR INSTALLATION	6-10
	General Information	6
	Site Layout	6
	Installation	7
	Fitting the Outer Course Tile	8
	ADA Ramps	8-9
1" FULL G	LUE DOWN INSTALLATION	10
	Site Layout, Full Glue Down & Quad Blok	10
T		
	TERIOR AND EXTERIOR INSTALLATION	11-14
	TERIOR AND EXTERIOR INSTALLATION General Information	11-14
2-1/2" IN		
2-1/2" IN	General Information	11
	General Information Site Layout	11 11
2-1/2" IN	General Information Site Layout Fully Adhered Installation	11 11 11-12
2-1/2" IN	General Information Site Layout Fully Adhered Installation Quad Blok Installation Cutting 2-1/2" ECOmax Tile and Ramps	11 11 11-12 12-13
2-1/2" IN	General Information Site Layout Fully Adhered Installation Quad Blok Installation Cutting 2-1/2" ECOmax Tile and Ramps	11 11 11-12 12-13 13-14
2-1/2" IN	General Information Site Layout Fully Adhered Installation Quad Blok Installation Cutting 2-1/2" ECOmax Tile and Ramps ANCE	11 11-12 12-13 13-14 15-17
2-1/2" IN	General Information Site Layout Fully Adhered Installation Quad Blok Installation Cutting 2-1/2" ECOmax Tile and Ramps ANCE Floor Protection	11 11-12 12-13 13-14 15-17
2-1/2" IN	General Information Site Layout Fully Adhered Installation Quad Blok Installation Cutting 2-1/2" ECOmax Tile and Ramps ANCE Floor Protection Assignment of Cleaning & Maintenance	11 11-12 12-13 13-14 15-17
2-1/2" IN	General Information Site Layout Fully Adhered Installation Quad Blok Installation Cutting 2-1/2" ECOmax Tile and Ramps ANCE Floor Protection Assignment of Cleaning & Maintenance Ecore Cleaning Chart	11 11-12 12-13 13-14 15-17 15 15



1" AND 2-1/2" BASE PREPARATION

I. RECOMMENDED INSTALLATION METHODS FOR 1" AND 2-1/2"

INTERIOR INSTALLATION			EXTERIOR INSTALLATION						
	24" x 24	" x 1"	24" x 24" x 2-1/2"			24" x 24" x 1"		24" x 24" x 2-1/2"	
Surface	Quad Blok Only	QB Plus Full Glue	Quad Blok	Full Glue	Surface	Quad Blok Only	QB Plus Full Glue	Quad Blok	Full Glue
Concrete					Concrete	N/A			
Asphalt					Asphalt	N/A			
Plywood					Compact Gravel ¹	N/A	N/A		N/A
Compact Gravel ¹	N/A	N/A		N/A	Wood or Tile	N/A			
Wood or Tile				N/A	Resilient Flooring	N/A			
Resilient Flooring		N/A		N/A	Indoor/Outdoor Carpet	N/A	N/A		
Carpet		N/A		N/A	Rooftops	N/A	N/A		N/A
□ = Approved N/A = NOT Approved QB = Quad Blok									

^{1.} Geo-textile fabric must be used over Compact Gravel

II. TOOLS/MATERIALS REQUIRED

- 1. Two tape measures 25' and 50'
- 2. Chalk line
- 3. Saber saw (Jig saw)
- 4. Blades for saber saw (7-10 teeth per inch, wood type)
- 5. Utility knife with heavy-duty blades
- 6. Framing square/metal straightedge
- 7. Silver or gold color paint pencils
- 8. Standard size caulk gun
- 9. 4" slot blade screwdriver
- 10. Notched trowels -1/8" square notch [outdoor] or 1/16" square notch [indoor]; 2 minimum plus 1 for each additional 400 sq. ft.
- 11. Safety glasses
- 12. 1-1/2" flexible putty knife
- 13. Kneepads
- 14. Solvent safe rubber gloves, long cuff style
- 15. Rags
- 16. Trash bags
- 17. Push broom or high velocity blower
- 18. Mineral spirits to clean mixing blades
- 19. Installation instructions
- 20. String line
- 21. Cutting table (shipping pallet)
- 22. Dustpan
- 23. 2-3 lb. hand sledge hammer or rubber mallet



BASE PREPARATION

III. SITE WORK

NOTE: Dimensional tolerance for tiles is +/- 1/8" in thickness and +/- 1/8" in width. From time to time during installation, it may be necessary to measure and hand select tiles to ensure course lines remain straight. Additionally, color tone and shading may vary to the extent that some hand selection is required to maintain maximum uniformity throughout the site.

A. Site Elevation

- On grade installation The finished installed height of the ECOmax surface 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 The installation of ECOmax over existing decks or slabs is referred to as "above grade installation" and will usually require the use of reducers around the perimeters of the area to transition smoothly back to the floor elevation, unless the site terminates at a wall or other vertical surface.

B. Site Slope/Drainage

- 1. When preparing a new hard base, a minimum slope equal to 1" per 10' of run shall be applied to the finished surface with slope toward the drain basin, drain trough, or down grade side of the site-whichever applies to your project.
- 2. An acceptable drainage system needs to be put in place to eliminate standing water.

IV. BASE OPTIONS

A. Hard Base Construction

1. Concrete Base

a. The base will be constructed of cast-in-place, non-structure, Class A or C concrete that will develop a minimum compressive strength of 3,000 PSI after 28 days cure (minimum thickness = 4"). Care should be taken to provide for the stated slope. The base should be free of depressions that would pond water. A light broom finish is best for maximum adhesion of the ECOmax tile. New concrete slabs should cure for a minimum of 28 days before installing ECOmax.

2. Paved Asphalt Base:

- a. Course aggregate mixtures will provide a stable base. The aggregate size best suited for the adhered system is 3/8" to 1/2". Do not use asphalt mixtures that contain a high percentage of fines as they are not stable in hot weather and may become soft enough to allow the tiles to slide in high use areas.
- b. The soil subgrade must be compacted with a minimum of two passes using a 10 ton vibratory roller with no soft or moving areas upon completion. The crushed stone base must also be compacted with a minimum of two passes using a 10 ton vibratory roller. The binder and wear courses of the asphalt must both meet 95% of the theoretical maximum density of the JMF (Job Mix Formula).

BASE PREPARATION

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

c. New asphalt surfaces should be allowed to cure for 28 days before the adhered ECOmax system is laid.

d.

- B. Compacted Loose Base: (2-1/2" ONLY)
 - 1. In outdoor areas or areas with no walls or confines, a perimeter footer will need to be constructed to contain the compacted loose base. The concrete footer is typically 6" x 18" with the top of the footer having a light broom finish.
 - 2. The area inside the footer should be excavated to receive 6" of loose aggregate fill. The amount of excavation and fill can be adjusted to allow the 2-1/2" ECOmax and footer finished surfaces to have the same elevation.
 - 3. By adding fill material and compacting to the top of concrete footer, the 2-1/2" ECOmax tile can be laid over the top of the footer, concealing it if so desired.
 - 4. 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 Limestone Screenings Sieve Analysis (AASHO T10)

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

5. 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. The minimum infield overlap of successive geo-textile sections is 4". The geo-textile should be adhered to the top of the footer on all sides to anchor the mat and keep it in place throughout the life of the installation.



1" INTERIOR INSTALLATION

I. GENERAL INFORMATION

- A. 1" ECOmax may be installed over most concrete, wood, or tile. The floor over which 1" ECOmax Tile is installed must be level, in good condition, and clear of dirt and loose debris.
- B. For installations requiring adhesion to concrete, moisture must be measured using the RH Relative Humidity test method per ASTM F2170 standard. Moisture content should not exceed 85% RH. If levels exceed the limitations the installation should not proceed until the situation has been corrected.
- C. 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.
- D. 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.
- E. Installation should not begin until after all other trades are finished in the area.
- F. 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.
- G. 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 +/- 1/8" in width. From time to time during installation, it may be necessary to measure and hand select tiles to ensure that course lines remain straight. Additionally, colortone and shading may vary to the extent that some hand selection is required to maintain maximum uniformity throughout the 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.

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.
 - Determine a starting point for the first course of tile to best suit the site area. For irregular site configurations, the best starting point is often in the center. This will ensure a symmetrical finish for tiles that require trimming along the perimeter. Other installations are best started in the corner or along one edge that represents the length or width dimension of the site.
- B. It is important to start the installation from a perfectly straight edge, such as a wall, or timber that is secured to the substrate. This will allow you to keep the tiles straight and snug during the installation process.
- C. Mark two points on the base surface at an equal distance from the edge of the installation. These points should be located near the opposite ends of the site in the length-wise direction.
- D. Snap a chalk line through the established points.
- E. Measure the length of the site along the chalk line. Mark a point at half the distance of the site.
- F. Using the 3-4-5 right triangle method, snap a chalk line to form a 90° angle to the previously established length-wise chalk line. These perpendicular reference lines will serve as a guide for laying the first course of tile. A channel or timber may be secured to the substrate to help keep the tiles snug during the installation process.

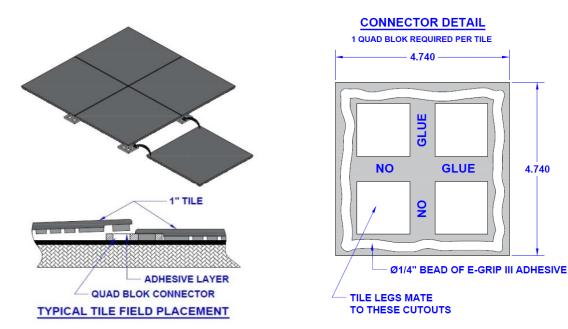
1" INTERIOR INSTALLATION

III. 1" QUAD BLOK INSTALLATION (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 perimeter tiles

- E. Complete the other three quadrants in a similar fashion.
- F. Depending on manpower availability, one or more quadrants can be worked on simultaneously using the above method.
- 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 4.74" x 4.74" Quad Blocks.



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



1" INTERIOR INSTALLATION

IV. FITTING THE OUTER COURSE TILE

- A. In most wall-to-wall installations, the tile in the outer course will have to be cut to fit. Tile may be cut using a heavy-duty utility or carpet knife and a straight edge. A saber saw utilizing a 7-10 TPI wood cutting blade also works well. A saw with a 3-3.5 amp rated motor having a 1" stroke with variable orbital settings will produce the best results. A cutting table used to support the work is required during cutting. A standard shipping pallet works well for this purpose for in-field use.
- B. If 1" ECOmax is being installed wall-to-wall, the tile may be held together with Quad Bloks, with the walls serving to contain the outer rows of tile. Tiles that are not contained by walls, either at openings in the wall (i.e. doorways) or freestanding, should be contained by adhering the outer tiles and 1" ECOmax ramps around the outer perimeter. The adhered ramps provide a transition from the 1" thick tile to the original floor level. The perimeter tiles and ramps must be adhered using Ecore's E-Grip III adhesive with a 1/8" square-notched trowel indoors over substrate.

V. CUTTING 1" TILES AND RAMPS

- A. 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.
- B. The most accurate cuts in tiles are made using a heavy-duty utility or carpet knife and a straight edge. A saber saw utilizing a 7-10 TPI wood cutting blade also does an acceptable job, especially for radius or freeform cuts. A saw with a 3-3.5 amp rated motor having a 1" stroke with variable orbital setting will produce the best results. A cutting table used to support the work is required during cutting. A standard shipping pallet works well for infield use.

VI. PREPARATION FOR INSTALLATION OF ADA RAMPS

- A. 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.
- B. 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.
 - **Note:** The toe edge of the ramp contains a wire reinforcement material. Take care not to bend the edges as it will be difficult to get ramps with bent reinforcement to lay flat.
- C. When the ECOmax installation is complete clean and prepare the remaining area for full adhesion of the ramps.

VII. ADHERING THE OUTER COURSE AND RAMPS

- A. If required, ramps can be cut in the same manner as tiles. If ramps are used at a corner, each ramp should be miter cut at a 45 degree angle.
- B. After ramps have been properly cut, ramps and outer tile, 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 indoors over substrate. Set tiles and ramps in the adhesive bed. Tiles being set in the adhesive bed should be connected to the next inner course of tiles, but need not be connected to each other.
- C. Once tiles are laid into the wet adhesive, roll the floor with a 75-100 pound flooring roller. Adhesive should be allowed to cure for 24 hours before walking on the tile.

1" ADA Ramp Installation

VIII. INSTALLATION OF ADA RAMP

- A. Cut away any protruding Quad Blok material
- B. Sweep area clear and vacuum up all dust.
- C. Dry lay ramps and make appropriate cuts before opening the adhesive.
- D. To cut the ramps, use a band saw or a saber saw with 7-10 TPI wood cutting blade.

 Note: The toe edge of the ramp contains a wire reinforcement material. Take care not to bend the edges as it will be difficult to get ramps with bent reinforcement to lay flat.
- E. Mark the areas where adhesive is to be applied and temporarily remove the ramps. Spread the recommended E-Grip III urethane adhesive using a 1/8" square notch trowel. Do not spread more adhesive than can be covered in 30 minutes.
- F. 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 or roll with a 75-100 pound three sectional flooring roller.
- G. Use weight to evenly hold down the toe edge of the ramps. The entire toe edge should be weighted, and the weight should be heavy enough to prevent the edge of the ramps from lifting out of the adhesive. Once the adhesive cures the ramp will not move.

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

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



1" FULL GLUE DOWN INSTALLATION

I. FULLY ADHERED INSTALLATION

A. Follow the site layout instructions on page 6 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.

NOTE: Dimensional tolerance for tiles is +/- 1/8" in thickness and +/- 1/8" in width. From time to time during installation, it may be necessary to measure and hand select tiles to ensure that course lines remain straight. Additionally, color tone and shading may vary to the extent that some hand selection is required to maintain maximum uniformity throughout the 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 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.

NOTE: Use a 1/8" square notch trowel. Coverage rates for the E-Grip III adhesive are approximately 60 square foot per gallon using a 1/8" square notch trowel.

- B. If outside, moisture must be measured using the RH Relative Humidity test method per ASTM F2170 standard. Moisture content should not exceed 85% RH. If the levels exceed the limitations, the installation should not proceed until the situation has been corrected.
- C. 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.
- D. 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.
- E. 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.
- F. Quad Bloks must be used; see Quad Blok installation section above.
- G. 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.
- H. After placing tiles into adhesive bed, roll the tiles with a 75 pound three section flooring roller to ensure adhesive transfer to the back of the tile feet.
- I. 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 ½" plywood sheeting with a fully sanded face against the surface of the tiles.
- J. 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.
- K. Ramp installation, see pages 8-9.

2-1/2" INTERIOR & EXTERIOR INSTALLATION

I. GENERAL INFORMATION

A. 2-1/2" ECOmax may be installed using a variety of installation methods. The most common is using Quad Bloks, with full-spread adhesion of the accessories to the substrates using E-Grip III.

NOTE: Dimensional tolerance for tiles is +/- 1/8" in thickness and +/- 1/8" in width. From time to time during installation, it may be necessary to measure and hand select tiles to ensure course lines remain straight. Additionally, color tone and shading may vary to the extent that some hand selection is required to maintain maximum uniformity throughout the site.

NOTE: For 2-1/2" ECOmax rooftop and specialty applications, Ecore recommends the Quad Bloks 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.

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. For irregular site configurations, the best starting point is often in the center. This will ensure a symmetrical finish for tiles that require trimming along the perimeter. Other installations are best started in the corner or along one edge that represents the length or width dimension of the site.
- C. Mark two points on the base surface at an equal distance from the edge of the installation. These points should be located near the opposite ends of the site in the length-wise direction.
- D. Snap a chalk line through the established points. When installing 2-1/2" ECOmax over a geo-textile fabric, string lines must be used in place of chalk lines.
- E. Measure the length of the site along the chalk line. Mark a point at half the distance of the site.
- F. Using the 3-4-5 right triangle method, snap a chalk line to form a 90° angle to the previously established length-wise chalk line. These perpendicular reference lines will serve as a guide for laying the first course of tile.



2-1/2" EXTERIOR INSTALLATION

III. 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.

NOTE: Coverage rates for the E-Grip III adhesive are approximately 60 sq. ft. /gal. on concrete and 50 sq. ft. /gal. on asphalt using a 1/8" square notch trowel. E-Grip III is available in 2 and 4-gallon pails.

- B. Using a **1/8**" square-notched trowel apply the E-Grip III adhesive out slightly wider than the tile being placed.
- C. 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 <u>while still wet</u>. 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.

D. Adhesive should be allowed to cure for 24 hours before the tiles are used.

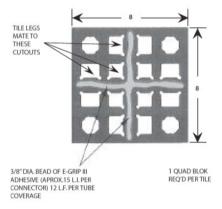
NOTE: Although ECOmax tiles contain UV-resistant EPDM, an initial ambering of this product in outdoor environments is normal. Tile color will stabilize within 2-3 weeks.

IV. 2 ½" QUAD BLOK INSTALLATION

NOTE: Installation by means of the Quad Blok system is only recommended for 2-1/2" ECOmax tiles.

- 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 (see figure 2).

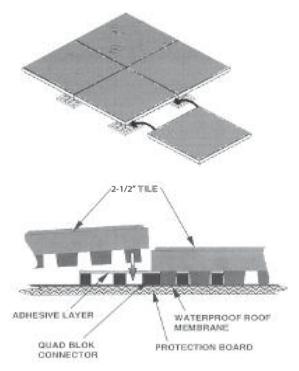
Figure 2. Connector detail



2-1/2" EXTERIOR INSTALLATION

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 (see figure 1).





NOTE: In the field, cut the Quad Blok connectors in half to properly secure tile around the perimeter edge of surface area. The most accurate cuts are made using a utility knife and straightedge.

- E. Complete the other three quadrants of the roof deck in a similar fashion.
- F. Depending on manpower availability, one or more quadrants can be worked on simultaneously using the above method.
- G. Allow 24 hours for adhesive to cure before opening area for use.

V. CUTTING 2-1/2" ECOmax TILE AND RAMPS

A. Avoid leaving a cut edge of a tile exposed to eyesight. To guarantee a finished appearance, any tile that has its factory molded, radiused edge removed for any reason should be backed along that edge using a 2-1/2" ECOmax transition ramp, masonry, or timber edging unless that edge is to be placed against a wall or other vertical member.

2-1/2" EXTERIOR INSTALLATION

- B. The most accurate cuts in tiles are made using a heavy-duty utility or carpet knife and straightedge. A saber saw utilizing a 7-10 TPI wood cutting blade also does an acceptable job, especially for radiused or free-form cuts. A saw with 3-3.5 amps rated motor having a 1" stroke with variable orbital settings will produce the best results. A cutting table used to support the work is required during cutting. A standard shipping pallet works well for infield use.
- C. Tile cuts are normally laid out by referencing dimensions from the edges of tiles already in position. These dimensions are then transferred to and laid out on the tile to be cut.
- D. Layout lines are best made using a Sharpie® permanent marking pen, silver grease pencil, paint type marking pen, or carpenter's pencil.
- E. A lead-in cutting line is extended from the tile edge to the portion to be cut. The lead-in cutting line chosen usually represents the shortest distance from the cutout area to an edge of the tile, or the one that is least noticeable.
- F. Ramps installed at corners should be miter cut to allow ramps to fit together correctly, or use factory molded corner pieces available for 2-1/2" thick ECOmax.



MAINTENANCE

IMPORTANT INFORMATION FOR THE INSTALLER

Ecore recommends our Environmentally Friendly Line of Maintenance Products and Procedures for ECOsurfaces.

Proper protection and maintenance of ECOsurfaces post-installation should be specified by the architect/designer. ECOmax 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.

PRODUCTS AVAILABLE FOR PURCHASE

Ecore accessories cleaning and maintenance products available from Ecore Call 1-800-322-1923 or visit www.ecoreintl.com.



MAINTENANCE

Step	Green Product	Dilution Rate	Brush / Pad	
Initial Cleaning	Ecore's E-Cleaner	10 oz. / gal. water	Soft nylon brush or 3M White 4100 or Beige 4200 pad, or equivalent	
Daily Cleaning	Ecore's E-Cleaner	2-4 oz. / gal. water	Soft nylon brush or 3M White 4100 or Beige 4200 pad, or equivalent	
Heavy Soil and Restorative Cleaning	Ecore's E-Strip	10 oz. / gal. water	Soft Nylon Brush or 3M Blue 5300, Brown 7100, or Black 7200 pad as required.	

I. INDOOR MAINTENANCE

A. Initial Cleaning

- 1. Remove all surface soil, debris, sand and grit by sweeping, dust mopping, or vacuuming with a high CFM vacuum. For large areas, use auto scrubbers to clean floors.
- 2. Scrub floor with Ecore's recommended E-Cleaner, using a buffer or auto scrubber with a soft nylon brush or pad per table above. Avoid flooding the floor.
- 3. Pick up solution with a wet vacuum, rinse with clean water, picking up the rinse water with a wet vacuum, and allow to dry thoroughly (6-8 hours).

B. Daily/Regular Cleaning

- 1. Sweep, dust mop, or vacuum floor to remove surface soil, debris, sand, and grit.
- 2. Damp mop with a microfiber mop or auto-scrub using Ecore's E-Cleaner and pad per table above.

C. Restorative Maintenance

- 1. Sweep and dry vacuum floor thoroughly.
- 2. Heavy scrub floor with Ecore's E-Strip. This cleaning may be performed with an auto-scrubber or rotary scrubber and pad per table above.
- 3. Vacuum soiled solution with a wet/dry vacuum.
- 4. Rinse with clean water.
- 5. Pick up solution with wet vacuum.
- 6. Allow floor to dry thoroughly (6-8 hours).

D. Heavy Soil

- 7. Remove as much surface soil, debris, sand, and grit as possible by sweeping, dust mopping or vacuuming.
- 8. Scrub floor with Ecore's recommended E Cleaner, using a buffer or auto scrubber with pad per table above.
- 9. Pick up solution with a wet vacuum, rinse with clean water and allow to dry thoroughly (6-8 hours).



MAINTENANCE

II. OUTDOOR MAINTENANCE

A. Initial Cleaning

- 1. Tile should be swept thoroughly or dry vacuumed using a heavy-duty shop vacuum.
- 2. As an alternative, some outdoor sites may be blown clean with a gas powered leaf blower.
- 3. Aggressively scrub the floor with a pH neutral detergent and a cold water pressure washing unit.
- 4. Vacuum soiled solution with a wet/dry vacuum or use a squeegee to remove surface water.
- 5. Allow site to dry thoroughly.

B. Daily/Regular Cleaning

- 1. Sweep, dust mop, or vacuum floor to remove surface soil and debris.
- 2. Hose down the tiles with clean water.
- 3. Allow to dry.

C. Interim Maintenance

- 1. Sweep, dry vacuum, or blow the site clean.
- 2. Aggressively scrub the floor with a pH neutral detergent and a cold water pressure washing unit.
- 3. Vacuum soiled solution with a wet/dry vacuum or use a squeegee to remove surface water.
- 4. Allow site to dry thoroughly.
- 5. Repeat if necessary.

Power Scrubber	17" rotary floor buffer with circular brush / pad attachment	
Auto Scrubber	Unit with clear rinse feature and wet vacuum with wand pickup nozzle	
Cold Water Pressure Washing Unit	 Keep tip 18" from tile surface. Recommended 40° wash nozzle. Extensions for trigger gun and quick disconnect fittings 	
Wet/Dry Shop Vacuum Unit	 Tank Capacity: 10-25 gallon, lined stainless steel or polypropylene. Accessories: Extension wand with a 6 to 12" pickup nozzle, crevice tool and heavy-duty extension cord. 	
Detergent	Ecore's E-Cleaner	



WARRANTY

All Ecore International rubber flooring is guaranteed by Ecore International to be free from manufacturing defects on both material and workmanship. If such a defect is discovered, the customer must notify Ecore either through the contracting installer, distributor, or directly. If found to be defective within five 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 seller's option, credit may be issued 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 Ecore, 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 or rubber backed mats.
- 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.