



Performance Modzilla Technical Manual

Installation • Maintenance • Warranty

Manufactured in the U.S.A.

Revised on 06Jun2023
Supersedes all previous versions.
Check website for updates.

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Installation

I. JOB SITE CONDITIONS

1. Installation should not begin until after all other trades are finished in the area. Protect floor with an appropriate cover if job requires other trades to work in the area after the installation.
2. Areas to receive flooring (including substrate) 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: This product is intended for indoor, HVAC-controlled spaces only.

NOTE: The selected Portland-based patching and self-leveling materials must be moisture resistant and rated to withstand the RH moisture levels on the project.

II. SUBFLOORS

1. Approved substrates are concrete, Portland-based patching and leveling compounds, and wood.

NOTE: Gypsum-based patching and leveling compounds are not acceptable.

2. Wood substrates – double construct with a minimum thickness of one inch; must be rigid and free from movement with a minimum of 18" of well-ventilated air space below.
3. Underlayments – The preferred underlayment panel is American Plywood Association (APA) underlayment grade plywood, minimum thickness of 1/4-inch, with a fully sanded face.

NOTE: Particleboard, chipboard/OSB, Masonite and lauan are not considered to be suitable underlayments.

4. Concrete substrate must have a minimum compressive strength of 3000 psi. cured a minimum of 28 days, fully cured and meeting the relative humidity requirements per ASTM F2170.
5. Radiant Heat – Modzilla is not suitable for installation over radiant heat.

III. SUBFLOOR REQUIREMENTS AND PREPARATION

1. Substrates shall be dry, clean, smooth, level, and structurally sound. They should be free of dust, solvent, paint, wax, oil, grease, asphalt, sealers, curing and hardening compounds, alkaline salts, old adhesive residue, and other extraneous materials, according to ASTM F710.
2. Subfloors should be smooth to prevent irregularities, roughness, or other defects from telegraphing through the new flooring. The surface should be flat to 3/16" (4.8 mm) in 10' (3.0 m).
3. Mechanically remove all traces of old adhesives, paint, or other debris by scraping, sanding, or scarifying the substrate. Do not use solvents. All high spots shall be ground level and low spots filled with a Portland-based patching compound.
4. All saw cuts (control joints), cracks, indentations, and other non-moving joints in the concrete must be filled with a Portland-based patching compound.
5. Concrete expansion joints allow for expansion and contraction; do not install flooring over expansion joints. Use expansion joint covers designed for resilient flooring.
6. Patching materials must thoroughly dry; install per manufacturer's instructions.
7. 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 Ecore 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.

- a. E-Grip III – RH limit of 85% – normally selected
- b. E-Grip 95 – RH limit of 95% – higher RH applications
- c. E-Grip 99 – RH limit of 99% – highest RH applications

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

- 8. If a moisture mitigation system is required, it must conform to ASTM F3010 Standard Practice for Two-Component Resin Based Membrane Forming Moisture Mitigation Systems for use Under Resilient Floor Coverings.
- 9. For installations requiring adhesion to concrete, perform pH tests on all concrete floors per ASTM F3441 Testing Concrete pH for Resilient Flooring. If greater than the allowable limit of the selected Ecore adhesive, neutralize prior to installation.

HAZARDS:

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

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

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

IV. MATERIAL STORAGE AND HANDLING

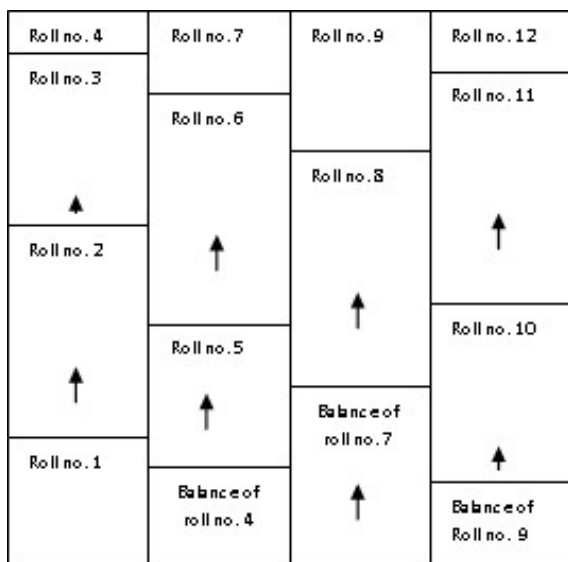
- 1. Material should be delivered to the job site in its original, unopened packaging with all labels intact.
- 2. **NOTE:** Shipping pallets, cradles, banding, etc. are not intended for storage. After 7 days, remove material from shipping pallets, cradles, etc. Rubber roll material should always be stored laying down; Storing rubber rolls on end will curl the edges resulting in permanent memory of the material. All edges with memory curl must be straight edge cut before installation.
- 3. Material should only be stored inside on a clean, dry, smooth surface. Rolls should be stored with the end of the roll on top, facing up. The end of the roll should not be positioned against an adjacent roll or surface, or welts may be created on that roll and the roll below.

4. Roll material is stretched slightly during the manufacturing process. At the job site, the installer should unroll all rolls and allow to relax overnight. A bare minimum of two hours is required. Shaking the material once it is unrolled can help it to relax.
5. **Inspect all materials for visual defects before beginning the installation. 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 claim will be honored on material installed with visual defects.**

NOTE: Ecore Performance Modzilla is manufactured from recycled materials and slight variance in shade and color chip dispersion is normal.

NOTE: Ecore cannot be responsible for any resulting shading issues in color series 504 through 511.

6. The tiles, rolls and adhesive must be acclimated at room temperature for a minimum of 48 hours before starting installation.
7. **All Performance Modzilla rolls must be unrolled and installed in roll number order and in the same direction. See diagram. Laying rolls in the opposite direction will cause color variations between the rolls.**

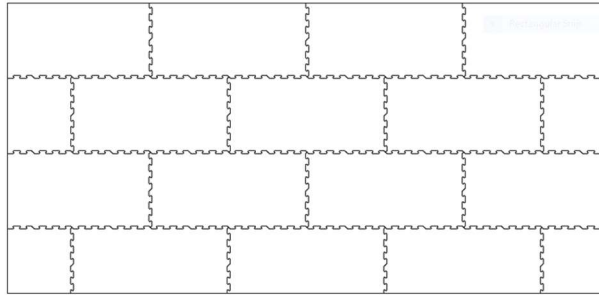



8. **Custom roll lengths eliminate the possibility of the rolls being manufactured and numbered in the customer's desired installation sequence, and Ecore cannot be responsible for any resulting shading issue.**
9. Rolls are labeled with batch numbers and roll numbers. Do not mix batch numbers together and install all rolls in consecutive roll number order.

V. FIRST – INSTALL THE MODZILLA INTERLOCKING TILE BASE LAYER (*Do not glue to subfloor*)

1. 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.
2. Start the installation where the two lines meet.
Hint: Adjust the starting point to have a balanced installation and not end up with small cuts of tile at the walls.

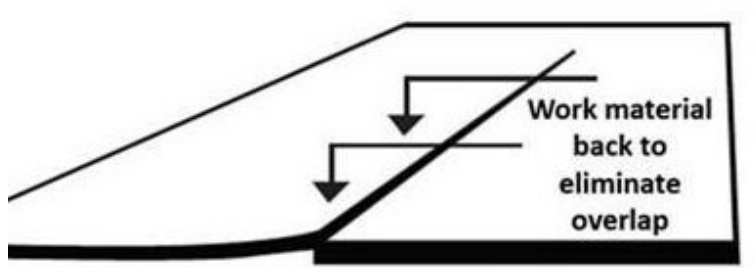
3. It is recommended to install the tiles in a half-tile “offset” in the 48” (long) direction (as shown below) rather than in a corner-to-corner configuration.



4. Place first tile with edges placed where chalk lines intersect.
5. If tiles have a curl, install tiles so the **center of each tile is higher than its ends**, like an upside-down “U.”  The tiles will lay flat when the Beast rolls are installed on top of the tiles.
6. Use rubber mallet to interlock tiles; follow with 75-100 floor roller. **Do not glue tiles to subfloor.**
7. Continue installation and complete each quadrant. Trim perimeter as necessary, leaving a ¼” gap at walls, columns, etc.

VI. **SECOND – LAY OUT THE BEAST ROLLS**

1. Assume that the walls you are butting against are not straight or square. Using a chalk line, make a starting point on top of the interlocking tiles for an edge of the rolls to follow.
2. Remove the rolls from the shrink-wrap and unroll onto installed interlocking tiles in a way that will use your cuts efficiently. Cut all rolls at the required length, including 3 inches to run up the wall and 6 inches to overlap at head seams.
3. Allow the material to acclimate and relax for a minimum of 2 hours but preferably overnight.
4. Place the edge of the first roll along the chalk line.
5. If necessary, straight cut the seam edge of first piece. Align the first edge to the chalk line; it is very important that the seam is perfectly straight. If necessary, straight edge seam edge of second lineal drop if the first roll does not extend the length or width of the room. If end seams are necessary, they should be staggered on the floor and overlapped approximately 6”.
6. Cut the Beast Performance rolls at a slight bevel so the bottom layer is slightly shorter than the top wear layer. If the bevel is cut in the wrong direction, seam gaps will be seen on the top of the finished surface.
7. Position the second row of the Beast rolls with no more than a 1/8” overlap over the first roll at the seam. After adhesive is applied to substrate, the material will be worked back to eliminate the overlap. This procedure will leave tight seams and eliminate any gaps.
8. **NOTE:** DO NOT over compress the seam. Over compressed seams will cause peaking and bond failure at seam edge.



9. **Caution:** Custom roll lengths eliminate the possibility of the rolls being manufactured and numbered in the customer's desired installation sequence, and Ecore cannot be responsible for any resulting shading issue.
10. Repeat for each consecutive roll necessary to complete the area or those rolls that will be installed that day.

VII. **THIRD** – ADHERING THE BEAST WEAR LAYER ROLLS

1. After performing the above procedures, begin the application of the adhesive. We recommend E-Grip III. DO NOT MIX the E-Grip III; use it right out of the pail.
2. Fold over the first drop along the wall (half the width of the roll).
3. Spread the adhesive using a 1/16" sq. notch trowel.

NOTE: Expect approx. a 60% adhesive yield when spreading onto Modzilla Shock Pad Interlocking Tiles. For example, a 1/16 sq. notch trowel yields approx. 55 sq ft / gallon of E-Grip III.

4. **Approximate coverage onto the Modzilla Shock Pad Interlocking Tiles is 55 square feet per gallon.** Take care not to spread more E-Grip III than can be covered with flooring within 30 minutes. The open time of the adhesive is 30–40 minutes at 70°F and 50% relative humidity.

NOTE: Temperature and humidity affect the open time of the adhesive. Temperatures above 70°F and/or relative humidity above 50% will cause the adhesive to set up more quickly. Temperatures below 70°F and/or relative humidity below 50% will cause the adhesive to set up more slowly. The installer should monitor the on-site conditions and adjust the open time accordingly.

5. Lay the flooring into the wet adhesive. Do not allow the material to "flop" into place; this may cause air entrapment and bubbles beneath the flooring.
6. Immediately roll the floor with a 100 lb. three section flooring roller to ensure proper adhesive transfer. Overlap each pass of the roller by 50% of the previous pass to ensure the floor is properly rolled. Roll the width first and then the length. Roll a second time within 60 minutes.
7. Fold over the second half of the first roll and half of the second roll. Spread the adhesive and insure full adhesive coverage across the seam. Roll the flooring with a 100-lb. roller.
8. If one side of the seam is slightly higher than the other, use a small J-type hand roller on the high side to level out.
9. Continue the process for each consecutive drop. Work at a pace to always be folding material back into wet adhesive. Never leave adhesive ridges or puddles. They will telegraph through the material.
10. **Do not allow adhesive to cure on your hands or the flooring. Cured adhesive is very difficult to remove and we strongly suggest wearing gloves. Immediately wipe off excess**

adhesive with a rag slightly dampened with mineral spirits or denatured alcohol. Follow the mineral spirits/ denatured alcohol with a rag dampened with water to remove the mineral spirits/denatured alcohol.

NOTE: Use mineral spirits / denatured alcohol sparingly. Saturating the rubber with them may darken the flooring and cause the adhesive to be pushed too deeply into the pores of the rubber.

11. If some seams are gapping, it is possible to hold them together temporarily with blue painter's tape. Tape MUST be removed within 2-3 hours when adhesive has developed a firm set. Allowing tape to remain longer than 2-3 hours or using aggressive tapes may result in adhesive residue. Ecore will not be responsible for residue left behind from tape of any kind.
12. Hand roll all seams after the entire floor has been rolled.
13. It may be necessary to weigh down / brick seams until the adhesive develops a firm set.
14. Keep traffic off the floor for a minimum of 24 hours. Floor should be free from rolling loads for a minimum of 72 hours. Foot traffic and rolling loads can cause permanent indentations or bond failure in the uncured adhesive.

Maintenance

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.

Ecore 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.

Steps	Cleaning Product	Mixture	Equipment
Initial Cleaning	E-Cleaner	10 oz./gal. water	Microfiber mop, Soft Nylon Brush, or 3M 5100 Red Pad or equal
Daily Cleaning	E-Cleaner	3 oz./gal. water	Microfiber Mop, Soft Nylon Brush, or 3M 5100 Red Pad or equal
Heavy Soil & Restorative Cleaning	E-Cleaner E-Strip	10 oz. / gal water 16 oz./gal. water	Brown 7100 or Black 7200 pad as req'd. (Do not use High Productivity Pad)

VIII. CLEANING PROCEDURES

1. Initial Cleaning

- a. Remove all surface soil and debris by sweeping, mopping, or vacuuming.
- b. Scrub floor with E-Cleaner (10 oz./gal. of water), using buffer or auto scrubber with a soft nylon brush or red pad. Avoid flooding the floor.
- c. Pick up solution with a wet vacuum, rinse with clean water, and allow to thoroughly dry (6-8 hrs).

2. Daily/Regular Cleaning

- a. Remove all surface soil and debris by sweeping, mopping, or vacuuming.
- b. Scrub with E-Cleaner & microfiber mop, buffer or auto scrubber using red pad or soft nylon brush.

3. Heavy Soil and Restorative Cleaning

- a. Remove all surface soil and debris by sweeping, mopping, or vacuuming.
- b. Aggressively scrub the floor with cleaner or stripper and brown or black pad, auto scrubber or rotary scrubber.
- c. Pick up solution with a wet vacuum, rinse with clean water, and allow to thoroughly dry (6-8 hours).
- d. Repeat as required.

Warranty

All Ecore Performance Mozilla flooring is guaranteed by Ecore 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 under normal non-abusive conditions, at the discretion of Ecore, 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 Ecore Warranty Guide for length specifics.

This 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 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 Ecore 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 Ecore 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 Ecore.
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 Ecore.
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. Ecore 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.ecoreintl.com



www.ecoreintl.com

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