

INSTALLATION INSTRUCTIONS FOR:

EkoFlo



COVERAGE: up to
30-60 Ft²
Per Gallon

TYPICAL USES:

- Walkways & Patios
- Drainage Conductors
- Treewells
- Driveways & Parking Areas

I. BENEFITS & COVERAGE

1. EkoFlo is an easy to install, pour-in-place, permeable pavement system for patios, walkways and other solid surface applications. EkoFlo utilizes native aggregates creating a durable, long lasting surface.
 - Enhances the colors of the aggregate, keeping it firmly in place
 - Provides a solid, aesthetically pleasing, water permeable surface
 - Easy to apply using standard equipment
 - Resistant to UV degradation and freeze/thaw
 - Excellent for use in areas with poor drainage or runoff
 - Meets and exceeds LEED and municipal criteria for permeability
2. EkoFlo will cover approximately 30 - 60ft²/gallon at a recommended installation depth of 1.5", depending on aggregate size used.
 - See Section IV for more information

II. MATERIAL SELECTION RECOMMENDATIONS:

1. EkoFlo works best with pebbles or aggregates that have been screened, washed, and dried prior to packaging. Typically these types of aggregates can be found in pre-packaged bags, pails, or super sacks.

ACCEPTABLE PEBBLES:



- A washed aggregate will be free of stone dust or other impediments that could affect the bond strength and aesthetic of the surface.
 - EkoFlo is not recommended for use with bulk materials that may contain more sediment and moisture such as pea gravel and crushed stone mixes
3. Recommended aggregate, pebble or recycled glass size ranges suitable for
 - 1/8" - 1/4"
 - 1/4" - 3/8"
 - 1/2" - 5/8"
 - 3/4" - 1"

III. AGGREGATE WASHING INSTRUCTIONS:

1. If you need to wash and dry your own aggregate look for 1/4" - 3/8" screened aggregate or up to 1" inch diameter for landscaping applications.
2. Using a 1/4" diameter drill bit, drill 30 - 50 holes in the base of a plastic lined wheelbarrow, these holes will allow for dust, sediment and any other impediment to drain out.

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III. AGGREGATE WASHING INSTRUCTIONS:

3. Fill the wheelbarrow approximately 1/3 full of aggregates (two to three 5-gallon buckets). First, use a garden hose to wash over the aggregates. Secondly, agitates and mix the aggregate with a steel toothed rake. Repeat these two steps until aggregate is clean and clear of sediment, allowing for water to drain completely.
4. Pour the washed aggregate from the wheelbarrow onto a tarp in a sunny area to dry. Keep depth at approximately 2" or less to allow for a quicker drying time. Let stand until completely dry.
 - Cooler conditions, cloud cover and/or shade will slow the drying process.

IV. COVERAGE

1. Coverage rates are dependent on size and weight of aggregate used.

Aggregate Size Range:	Mix Ratio:	Recommended Installation Depth:	Coverage:
1/8" - 1/4"	40:1 40 pounds of aggregate to 16 ounces of EkoFlo	1.5"	30 ft ² per gallon
1/4" - 3/8"	60:1 60 pounds of aggregate to 16 ounces of EkoFlo	1.5"	40 ft ² per gallon
1/2" - 5/8"	75:1 75 pounds of aggregate to 16 ounces of EkoFlo	1.5"	50 ft ² per gallon
3/4" - 1"	90:1 90 pounds of aggregate to 16 ounces of EkoFlo	1.5"	60 ft ² per gallon

V. INSTALLATION RECOMMENDATIONS

1. Consider complimentary weather conditions before, during, and after any EkoFlo application.
 - Do not install EkoFlo less than 48 hours before or after rainfall
 - EkoFlo should be installed when the outside temperature is 55° F and rising
 - Avoid temperatures below 32° F or above 100° F for any phase of EkoFlo installation or storage
 - Cooler ambient temperatures may increase cure time, conversely warmer ambient temperatures may decrease cure time
2. If needed, aggregate should be washed and dried before installation to ensure maximum bond strength
3. Disable any irrigation systems in treated areas during application and curing phases
4. Mask all adjacent surfaces with tape and polyethylene film to protect surface materials from possible staining. (i.e. stone, pavers, concrete, etc.)
5. Tarp and protect areas where mixing of the aggregates with EkoFlo will take place. If a spill occurs or any EkoFlo binder gets on any solid surface, use acetone or paint thinner to remove as soon as possible.

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VI. SUBGRADE PREPARATION

- Excavate project area to an adequate depth to account for water percolation and drainage.
- It is recommended to use either permanent or temporary plastic, aluminum or masonry edging. If using a temporary edging, use vegetable oil on the inside edging to easily release the the EkoFlo treated surface. Remove any temporary edging 5 - 6 days after installation.
- After excavation, compact subgrade surface using 3 - 4 passes to assure maximum compaction with appropriate compaction device (roller, vibratory plate compactor, hand tamp, etc.)
- For foot traffic, a compacted subbase of 2" - 4" is recommended
- For lightweight vehicle traffic, a compacted subbase of 4" - 6" is recommended
- For heavy traffic, a compacted subbase of 6" - 8" is recommended

VII. SUBBASE CONSTRUCTION

- Load bearing qualifications for any standard surface should be considered when constructing subbase for EkoFlo. While certain applications will allow for better drainage, they may not be adequate for various traffic loads. Consider the traffic load before constructing subbase.
- For optimal water transfer permeability, a subbase comprised of compacted #57 (screened base rock) aggregate or equivalent is recommended.
- While a subbase construction consisting of a compacted crushed stone mix will provide for higher load bearing performance, it can greatly reduce the drainage performance.

VIII. APPLICATION GUIDELINES

1. Personal protective equipment (PPE) is recommended for mixing and application.
 - Gloves
 - Safety glasses
2. Add aggregates to mortar or cement mixer.
 - When using a cement mixer be sure the bucket is turned to 30° F in each direction to insure the all aggregates are fully coated with EkoFlo.
 - For smaller areas, a hand drill with a paddle mixer and a 5-gallon bucket can be used. Use mixing equipment that is free from concrete residue or other sediment.
3. Add EkoFlo binder with the aggregate in the mixer. Refer to Section III to determine the proper EkoFlo to aggregate mix ratio.
4. Mix for 2 - 3 minutes to ensure the aggregates are evenly coated.
5. Pour blended aggregate directly onto the prepared surface area. EkoFlo treated aggregates should be installed within 15 minutes of mixing.
6. Use a masonry trowel, rake, and/or screed board to level and compact the aggregate mixture to desired grade.
 - Roll with a sod/drum roller to attain a smooth surface, as needed
 - Make sure that all aggregates are flush and smooth at the surface level.
7. Completely clean tools and equipment with EkoFlush™, acetone, or paint thinner to remove any residue from hand tool by allowing them to soak for 1 - 2 minutes.

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VIII. APPLICATION GUIDELINES

1. Allow surface to cure for 24 - 72 hours depending on conditions. Material will begin to solidify within 4 - 12 hours.
 - In temperatures between 65 - 85° F curing will take place within 12 - 24 hours.
 - In cooler conditions the curing process can take 48 - 72 hours.
2. Avoid unnecessary foot traffic, water infiltration, or otherwise on treated areas until fully cured (usually 24 - 72 hours)

IX. STORAGE

1. Store EkoFlo out of direct sunlight in areas with a temperature range above freezing and below 100° F.

X. MAINTENANCE

1. Treated areas should withstand normal conditions for 24-60 months before a maintenance coat may be needed.
2. If a maintenance coat is needed, apply at a rate of approximately 150ft²/gallon using a paint roller.

XI. WARRANTY

TechniSoil Global, Inc. warrants this product to be free from defects. Where permitted by law, TechniSoil makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose. The purchaser shall be responsible to orchestrate their own tests to determine the suitability of this product for their particular purpose. TechniSoil's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which product proven to be defective has been applied. Acceptance and use of this product absolves TechniSoil from any other liability, from any and all sources, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of TechniSoil, its distributors or dealers, independent contractors, clients or end-users of any kind.