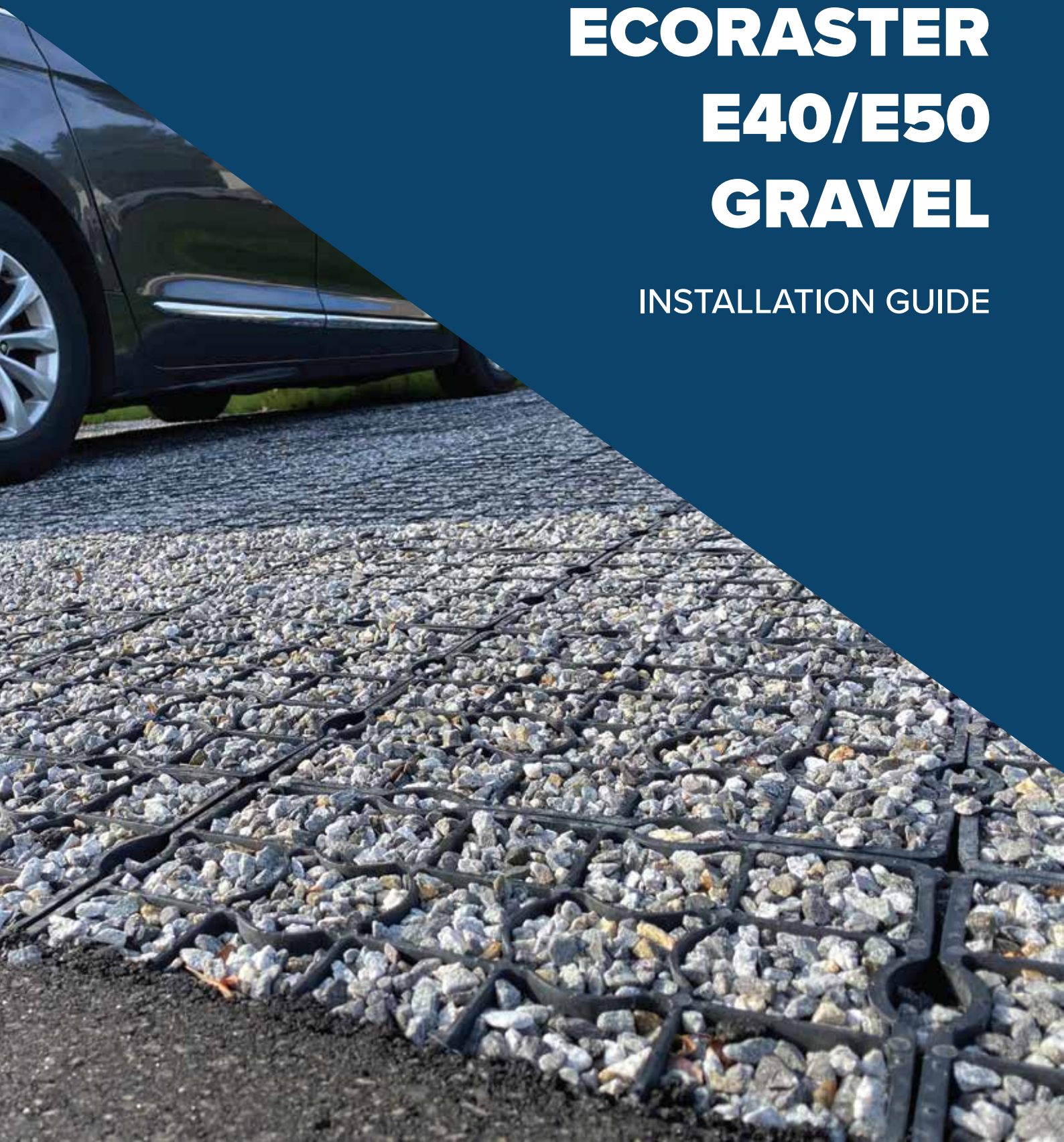
FERGUSON
WATERWORKS

ECORASTER E40/E50 GRAVEL

INSTALLATION GUIDE



ECORASTER GRAVEL

WHY ECORASTER?

Quick and easy to install (about 1,500 sq.ft. per person per hour) because it is lightweight (approx. 1-2 lb/sq.ft. depending on type)

Low transport and handling costs

High load capacity (Exceeds H20 and HL93, depending on fill/base materials utilized)

Surface reinforcement with natural drainage

Extremely versatile thanks to additional components like universal hinges, curve elements, and parking markers

Low maintenance, Non-slip, and crackproof

Weather resistant material that stands the test of time and is backed with a 20-year warranty

Meticulously engineered from 100% post-consumer and post-industrial recycled plastic

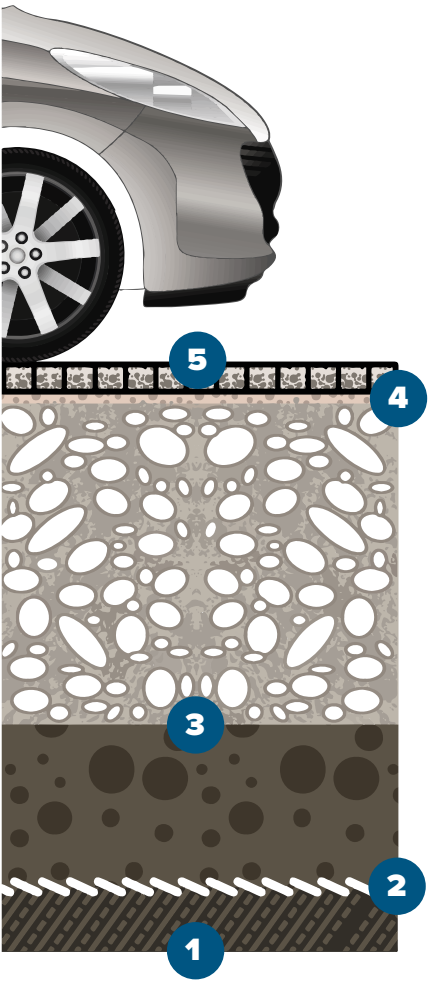
ACCESSORIES

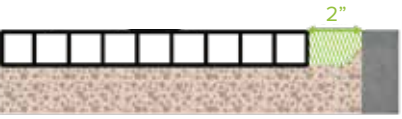
Parking Markers available in white, blue, and yellow

Universal Hinge for slope and embankment applications

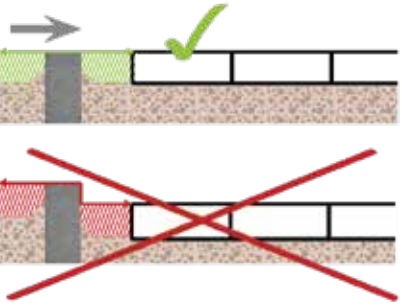
Curve Element for installation versatility

INSTALLATION

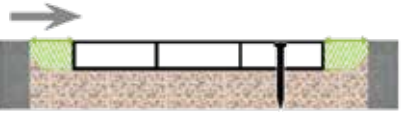




Consider a min. 2” gap around obstructions such as curbs or trees.



Install ECORASTER® so that the top of the system is flush to its surrounding edges.



ECORASTER® can be fixed with ground anchors at the rear end of the parking area to prevent surface distortion caused by vehicular traffic.

INSTALL ECORASTER GRAVEL IN FIVE SIMPLE STEPS

1 PREPARE YOUR SUBGRADE

Excavate the area to the depth recommended by the engineer’s design and specifications. Complete any over-excavation and re-compaction as required by the soils engineer. If permeability is critical, and the excavation is in native, strong soils, compaction may be limited. The subgrade should be free from debris, standing water, and large objects.

2 ROLL OUT YOUR GEOTEXTILE

In certain situations, a geotextile separation layer may be necessary between the subgrade and the base material. It is important to select the appropriate geotextile to avoid compromising permeability. The geotextile should be installed following the manufacturer’s guidelines, including proper overlapping.

3 INSTALL YOUR SUBBASE/BASE COURSE

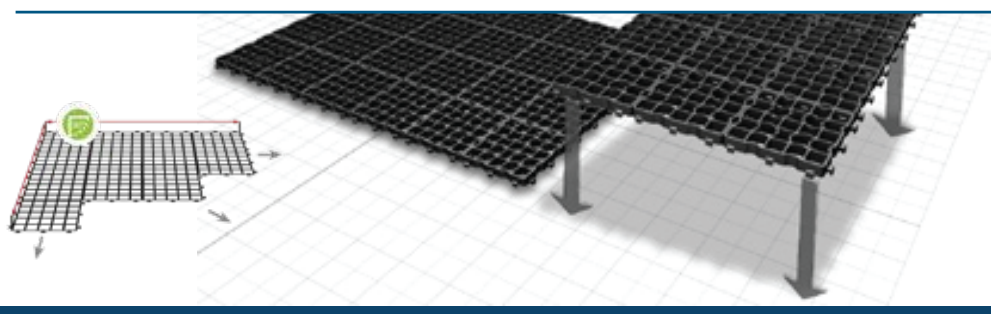
Backfill, level, and compact the approved open-graded crushed aggregate base, AASHTO #57 (particle sizes ranging from 0.375” to 1.0”) with a fines content of less than 5%, according to the engineer’s specifications. Ensure the surface is uniform after compaction, with no protrusions from larger particles, and that the edges are properly constrained. The subbase/base depths should be specified based on vehicle load and subgrade strength.

4 INSTALL YOUR LEVELING COURSE

Place a support layer, up to 2” thick, of angular gravel (AASHTO #78 or similar). Compact the support layer using a plate compactor or similar before installing the Ecoraster panels.

5 INSTALL YOUR ECORASTER

ECORASTER® is easy to install without the need for machinery. Delivered in preconnected units of 12 sections, the grids can be placed directly from the pallet. Begin installation in one corner, ensuring the lugs of the first row are aligned in the direction you are working. Subsequent rows should be pressed into the lugs of the laid surface. Using a plumb line is recommended for accurate alignment. If necessary, the preconnected sheets can be separated by placing them on another sheet and pressing down with your foot to release the tiles from the locking system. For cutting and fitting, a circular saw or cutting disk/grinder is recommended. Once all units are connected in place, infill the ECORASTER® cells with an open-graded crushed aggregate with particle sizes ranging from 0.375” to 0.5” and a fines content of less than 5%. Round stones are not suitable for this application. Overfilling can be considered if the desire is to keep the ECORASTER® out of direct sunlight or direct tire contact.



MAINTENANCE & TROUBLESHOOTING

SURFACE MAINTENANCE

After infilling the ECORASTER® grids, slight settling may occur over time. Regularly inspect the surface for signs of cell infill loss. If you notice any loss, promptly add additional aggregate material to maintain the surface integrity. This proactive maintenance will help extend the lifespan of the ECORASTER® system.

SNOW REMOVAL

For snow removal, keep a metal-edged plow blade at least 1” above the surface, or use a plow blade with a flexible rubber edge or skids to avoid contact with the ECORASTER® grids. During deep freezes, the system acts like hard pavement, but sharp blades can damage any sections that protrude.

CUTTING AND FITTING

When cutting ECORASTER® grids to size, a circular saw is the most effective tool for quick and clean cuts. For smaller or more precise cuts, a compass saw or strong pruning shears are recommended. Avoid cutting the grids in advance; instead, lay them over the borders and then make the necessary cuts. Using a small base, such as a slat or board, can help stabilize the grids and make cutting easier.

BASE LAYER COMPRESSION AND SETTLING

During installation, the vibration process may compress the ECORASTER® grids by approximately 0.2 inches relative to the base layer height. It is important to account for this compression when preparing the site and laying the grids to ensure a level and stable surface.

ECORASTER GRAVEL

For more information about permeable surfaces, contact us at **infogeo@ferguson.com** or visit us at **fergusongss.com**