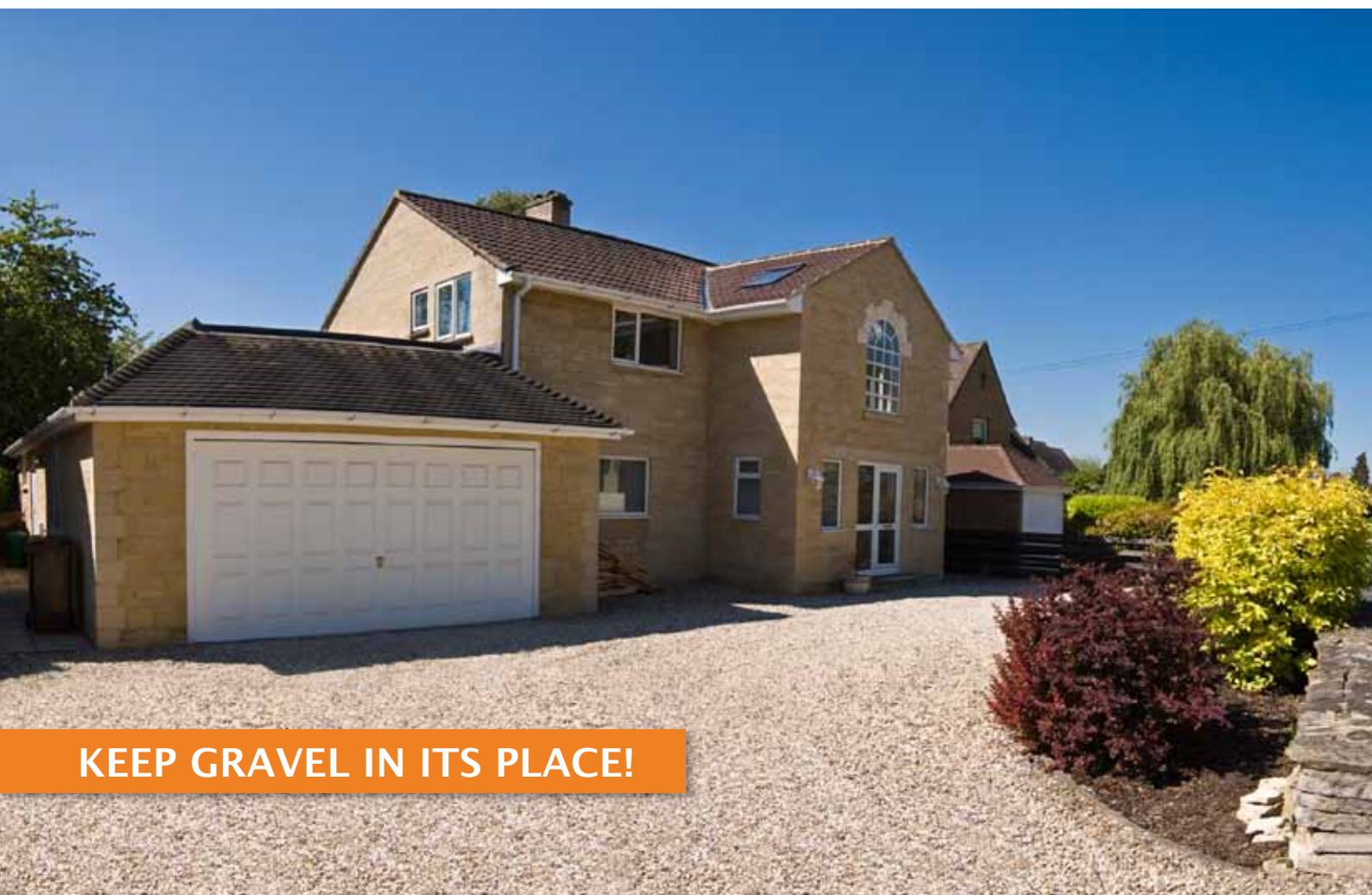


***CORE**gravel[®]*



KEEP GRAVEL IN ITS PLACE!



COREgravel[®]

Gravel is one of the most attractive, economical and versatile surfaces on earth. But without help, it's inclined to move around, creating ridges and ending up where it shouldn't.

COREgravel is the solution. It creates a naturally porous stabilising base into which the gravel sits – and STAYS! It's easy to lay, inexpensive and very, very effective.

COREgravel gravel stabiliser panels are ideal for use in hardscapes, waterscapes and various landscaping projects using gravel or other aggregates.

COREgravel is ideal for many commercial and residential applications utilised by pedestrians, cars, trucks and even HGV's!

KEEP GRAVEL IN ITS PLACE WITH COREGRAVEL





Top 5 Benefits

1. Gravel stays put; no ruts, no sinking, no problems
2. Environmentally Friendly
3. It's Beautiful
4. Low Cost
5. Easy to install

Solid Features

- Super strong. Enhanced load bearing causes no rutting, separating or sliding with vehicle traffic
- Address a wide range of erosion control, earth retention, slope protection, and stability issues
- Keep costs low with easy maintenance and use less gravel, as it is kept in place
- Used in DDA-compliant surfaces for pedestrians, bicycles and wheelchair traffic
- Geotextile backing underneath prevents weed growth and adds to stability
- When filled, the product is practically invisible
- Easily add parking lines and edge indicators with COREmarker and COREglow
- Used in SUDS and LEED compliant paving installations



COREGRAVEL POROUS PAVING

Porous paving systems reduce the need for traditional stormwater infrastructure; therefore reducing overall project costs associated with installation and maintenance. In turn, creating a surface that is superior to other types of pavement, with a lower life-cycle cost.

Even on sloping ground, the long lasting stabilisation grid will prevent loose aggregates from slipping and washing away, reducing the need for frequent maintenance and rejuvenation of your gravel surface.

A COREgravel surface requires less maintenance than it's alternatives such as asphalt or concrete with the added benefits of an entirely porous surface that is amazingly stable.

The honeycomb construction provides tightly packed pockets of loose gravel which create a completely porous hard standing, allowing extreme pressure to be applied without the aggregate displacing making it more practical and versatile than other more costly options.

Loose aggregates are extremely easy to recycle once they have reached the end of their life-cycle. COREgravel is widely recognised as the lowest cost option available for a SUDS compliant surface that is a genuine alternative to traditional paving methods.

You won't believe you have a gravel surface underfoot as you experience no difficulty crossing with wheelchairs, bicycles, pushchairs or high heels.

Cost Comparison

When compared with concrete or asphalt, COREgravel is significantly less expensive to install. In addition, ongoing maintenance costs are lower throughout the life of the product.

	Concrete	Asphalt	COREgravel
Installation per m ²	£120	£60	£25 with gravel ¹ ✓
Maintenance	Prone to cracking and requires periodic patching and filling of cracks.	Prone to surface wear and requires periodic patching. Resurfacing is recommended every 15 years.	Occasional ✓ smoothing with rake and a small addition of aggregate every few years.
Strength	Over 200 tons	Over 200 tons	Over 300 tons
Traffic Supported	Heavy	Moderate	Light to heavy ²
Lifespan	20-40 years	10-15 years	Over 20 years ✓

¹ Gravel prices vary, this is an average complete installation with gravel price included.

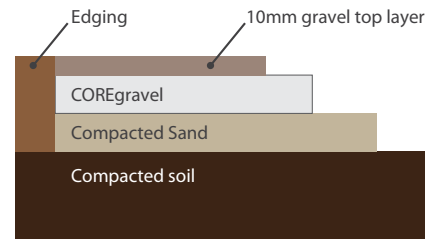
² Dependent on size and specification

COREGRAVEL INSTALLATION INSTRUCTIONS



1. Base Preparation

For base preparation, level and clear the area, then excavate and compact allowing for grid thickness and an additional 10mm surface dressing of aggregate. Level over the surface with 10-20mm of sharp sand to ensure a smooth base.



2. Place The Panels

Position the panels on the prepared base with geotextile face down. Cut to shape with pruning shears or a utility knife. Use protective gloves to avoid abrasions. Top of hexagon cell panels should be 10mm below adjacent hard surfaced pavements or final grade.

Place first row of panels against a stationary edge if possible. Stagger panels in a bricklayer pattern. The panels have interlocking connectors, however most installations do not require them to be used. Only in areas with greater traffic or steeper grade are they used to lock one direction or both directions.



3. Fill The Cells

Infill gravel or aggregate into the hexagon cells by hand, or directly from a truck. Trucks should be careful to avoid sharp turns on unfilled panels.

Preferably the truck should dump gravel first on the edge of the

installation area, then work inward, therefore only driving on filled cells.

Gravel can be spread by hand with flat shovels, asphalt or tarmac rakes, blades, or stiff brooms.



4. Smooth Surface

Level gravel or aggregate to cover COREgravel gravel stabiliser panels by 1 cm (0.4 inches) so the panels are just out of sight. This allows for aesthetics, stability and protection. Optionally, a vibratory plate, compactor, or roller can be used to set the gravel into the cells.

ADDITIONAL INSTALLATION INFORMATION

The installation method and correct specification of COREgravel is dependent on its intended use and likely traffic loads.

For pedestrian and light vehicular traffic on well compacted solid ground, the cellular sheets can be laid directly over the existing surface to form a continuous matrix. We recommend a sand blinding over the surface to even out deformities, then lay and interlock the COREgravel with its built in Geotextile membrane and simply overfill the cells by approximately 10mm with your chosen gravel.

If the ground conditions are unsatisfactory or there is an increased traffic load the following broad parameters could apply:

- Pedestrian/Cycle use:
75-150 mm base depth
- Light Vehicles:
100-350 mm base depth
- HGV's:
150-475 mm base depth
- Verge reinforcement:
150-475 mm base depth

Compact well with a vibratory plate or roller. Overlay the sub-base with a bedding Layer of 20-30mm of sharp sand and compact. Once the sheets are interlocked and the matrix has been formed, apply the infill material (Natural or artificial aggregate) and overfill each cell by approximately 10mm. An edging must be created to retain the matrix and prevent any movement or displacement of the system.

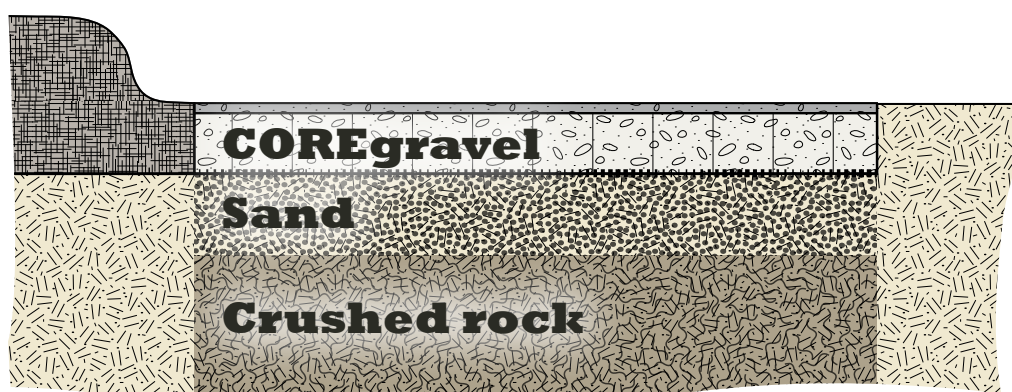
Angular gravel works best as it helps to aid the compaction process and prevent the aggregate from leaving the matrix. We would recommend up to 15mm aggregate for the 38mm cell width, and 16mm to 24mm aggregate for the 50mm cell width. COREgravel also works extremely well with artificial aggregates, luminous gravel, glass beads or recycled glass.

Edging/curbing

Many options will work well with COREgravel including plastic, metal, wood, or concrete curbing both in-ground and above ground, as well as vegetation, or parking bumpers. Typically, edge restraint is dependent on ground condition and intended traffic load. Any edging that is suitably installed to maintain the COREgravel matrix in the specific ground conditions can be considered fit for the purpose.

Slopes and grades greater than 30° (1:3.3)

Install as directed for installation, however after Step 2, install anchors. This will keep the COREgravel panels in place in areas where there is a slope greater than 30° or 1:3.3.



COREPATH AND CORE PAVER

COREpath™

COREpath gravel stabiliser panels are perfect for smaller surface areas that require the natural beauty of gravel with the stability of the COREgravel system.

No more raking, no more muddy feet - COREpath provides a firm, sturdy surface that requires minimal maintenance whatever the weather.

COREpath is suitable for; wheely bins, wheel barrows, pedestrians, bicycles and much, much more.

Specifically designed for self installation

COREpath comes in a handy install pack with 6 sheets. Each sheet is 600mm x 400mm with a grid thickness of 18mm, making COREpath ideal for garden paths, patios, disabled access, greenhouse floors, allotments... In fact, simply anywhere requiring a firm yet completely porous, non slip surface.

It's easy to lay, inexpensive and very, very effective.



COREpaver™

COREpaver paving tiles are made from 95% recycled material using tyres and recycled plastic. Engineered for all-season durability, architects and engineers find COREpaver's to be an ideal permeable surface for parking lots, entryways, walkways, patios and other commercial landscape applications.

Fully Permeable Surface

COREpaver's fully permeable surface facilitates precipitation flow in all applications. Its unique base design allows for horizontal and vertical waterflow whilst detention chambers in the base help to regulate the rate and quantity of water runoff.

Eco Friendly Recycled Design

COREpaver composite masonry is made almost entirely of recycled materials with the physical strength, durability and natural appearance to replace concrete. Composite masonry utilises up to 95% post-consumer recycled materials (scrap tyres and plastics), requires 82% less energy and releases 89% less carbon dioxide than the manufacture of concrete.



COREGLOW AND COREMARKER

COREglow™

COREglow, glow in the dark pebbles are the bright choice for eco-friendly lighting that requires no electricity and no power. Saving our natural resources is important to us, so a renewable light source like glow pebbles that have no carbon emissions will not only save money, but save the environment around us.

This unique product incorporates amazing technology to keep your glow gravel radiant for many hours.

The brightness and duration of the luminescent material we use is more than 10 times brighter than the traditional ZnS (zinc sulfide) luminous materials.

COREglow is waterproof and not harmful, so can also be used for aquatic purposes.

Simply expose to daylight or lamp light and watch the pebbles glow for hours.



COREmarker™

The ONLY real solution for marking gravel: COREmarker. No more problems defining parking spaces or pathways in a natural gravel or aggregate surface.

Delineation

Lines, shapes, even messages can be set in gravel driveways, car parks or roads. Paint, chalk, or timbers are a hassle and require constant maintenance, however COREmarker Line Markers are easy to use and made to withstand all types of traffic and weather conditions.

Safety is an integral part of surface design for drivers or pedestrians. The easily visible, yet unobtrusive COREmarker fits snugly into the COREgravel gravel stabiliser panels.

Glowing caps for power-free luminescence

What about at night? We went a step further and created a glow-in-the-dark COREmarker that lights up at night without power, electricity or wires. Providing safety and cost savings COREmarker will keep your project ahead of the rest.

COREmarker is available in phosphorescent glow-in-the-dark and non-luminescent styles. These markers are sure to make your gravel project beautiful and functional.

One big limitation to gravel car parks used to be line marking, but with COREmarker you can have a gravel driveway and car park AND have lines too!



COREBOND, COREGRASS AND COREWATER

COREbond™

COREbond resin bound gravel and aggregate paving tiles give you all the beauty and benefit of natural porous paving, combined with the durability and ease-of-use that you get with tiles or stone pavers.

COREbond's unique 2-layer design consists of a plastic honeycomb base that provides strength and durability, topped with your choice of natural stone, tinted glass, colored quartz, porcelain or rubber bound together with a flexible epoxy resin.

Installing COREbond is quick and easy due to the interlocking base panel design – simply clip the tiles together to create a porous, SUDS compliant surface that is perfect for:

- Patios
- Pathways
- Pool surrounds
- Decorative landscaping
- Golf cart paths, and more!

COREgrass™

COREgrass grass reinforcement provides amazing stability, grass protection, and sustainable drainage, whilst providing the desirable visual and natural effect of grass paving.

COREgrass is environmentally friendly in design, function and material. Unlike other plastic grass grids, COREgrass has the necessary strength to withstand high levels of traffic.

COREgrass is available in sheet sizes of 1000mm x 1150mm with a 60-40 cell size making it suitable for use on hardscapes or landscapes.

COREgrass is suitable for:

- Grass car parks
- Driveways
- Caravan parks
- Cycle paths
- Foot paths
- Temporary car parks

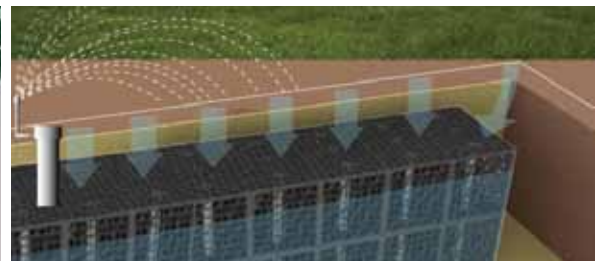
COREwater™

COREwater soak away boxes alleviate flooding as part of the COREgravel water management and recycling range. It can be used for water infiltration or attenuation when wrapped in plastic or other permeable materials

This robust water management system provides solutions for orderly drainage, water retention and water recycling. With our honeycomb water storage basins you will save every precious drop of water that would otherwise flood, pool, or drain away.

COREwater is available in various strengths, suitable for installation under vehicular or pedestrian traffic making it ideal for:

- Storm water / rain water management
- Water harvesting for irrigation



SUSTAINABLE URBAN DRAINAGE SYSTEMS (SUDS)

SUDS are physical structures built to receive surface water runoff, located as close as possible to where rainwater falls, providing the options of:

- **Infiltration** - Utilised whenever possible, subject to appropriate soil conditions and environmental considerations.
- **Attenuation** - Utilised when direct infiltration is not appropriate and when water storage is required.

They also provide treatment for surface water using the natural processes of sedimentation, filtration, absorption and bio-degradation.

Recent research shows that typically up to 80% of sediment, 60% of phosphorous and 80% of nitrogen can be removed from rainwater through porous paving, together with substantial levels of heavy metals and hydrocarbons.

This natural treatment provides the ideal opportunity for rainwater conservation and re-use for a variety of non-portable applications e.g. toilet/urinal flushing, irrigation, laundry, vehicle washing, refrigeration etc.

Such source control principles and techniques are now inherent within best practice and are increasingly becoming the norm within development projects.

Learn more here:
www.environment-agency.gov.uk

LEED

LEED® (Leadership in Energy and Environmental Design) is a national "Green" building assessment system developed by the United States Green Building Council (USGBC) to encourage and accelerate global adoption of sustainable green building and development practices.

Developments incorporating LID practices, including porous pavements, earn points toward this rating system and support the principles of a "Green Infrastructure" through the EPA. The higher the rating, the greater the impact on our ecology and future as whole.

LEED evaluates and rates the environmental performance of new and existing commercial, retail, institutional, educational and high-rise residential buildings over a project's life-cycle.

Learn more here:
www.usgbc.org/LEED

Technical Certifications

Our high standards produce products that are certified by independent and respected organisations.

- AFNOR - verify the products have been tested by a quality laboratory, and found complied with the requirements of NF EN ISO 844:2009
- SGS - Compression Test Standard :ATSM D1621-04a
Compressive strength per m2 = 9960N/1016 kg
1016 kg/0.0175 m2 = 58,057 kg = 58.057 Tons
- OHIM - the official trade marks and designs registration office of the EU. Registered Design No. 001599572-0001



PRODUCT SPECIFICATIONS

COREgravel	38-25 HD/HDR	38-40	50-40	50-35 HDR
Cell Diameter	38 mm	38 mm	50 mm	50 mm
Cell Depth	25 mm	40 mm	40 mm	35 mm
Cell Wall Thickness	2.0 mm	0.8 mm	0.8 mm	2.0 mm
Max weight (filled)	Over 280 tons	Over 250 tons	Over 250 tons	Over 350 tons
Max weight (empty)	90 tons	62 tons	62 tons	150 tons
Geotextile membrane	50 g/m ²	50 g/m ²	50 g/m ²	50 g/m ²
Recommended Duty	Medium - Heavy	Medium	Medium	Medium - Heavy
General Use	Car/Truck	Car/Truck	Car/Truck	Car/Truck/HGV
Small sheet size	800 x 1160 mm	800 x 1200 mm	800 x 1200 mm	800 x 1200 mm
Small sheet area	0.928 m ²	0.96 m ²	0.96 m ²	0.96 m ²
Large sheet size	1200 x 2320 mm	1200 x 2400 mm	1200 x 2400 mm	1200 x 2400 mm
Large sheet area	2.784 m ²	2.88 m ²	2.88 m ²	2.88 m ²

	COREgrass 60-40 HD	COREpath 38-18 HDR
Cell Diameter	60 mm	38 mm
Cell Depth	40 mm	18 mm
Cell Wall Thickness	3.0 mm	2.0 mm
Max weight (filler)	Over 400 tons	Over 140 tons
Max weight (empty)	150 tons	40 tons
Recommended Duty	Heavy	Light
General Use	Car/Truck/HGV	Pedestrian
Sheet size	1000 x 1150 mm	400 x 600 mm
Sheet area	1.15 m ²	0.24 m ²

HD - Heavy Duty

HDR - Heavy Duty Recycled

Call us - 0800 118 2278

For more information or to discuss your specific project requirements, contact us and we will be happy to show you how COREgravel's products can help you.

Visit us - www.coregravel.co.uk

For more information about our range of products including current pricing, please visit our website.

COREgravel[®]

About COREgravel UK Ltd

COREgravel UK Ltd manufacture, supply and install eco-friendly solutions for ground stabilisation, safety marking, decorative landscaping and water recycling throughout the United Kingdom.

Our products include: COREgravel™, COREmarker™, COREglow™, COREgrass™, COREwater™, COREpath™ and COREpaver™

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