Traffic Frequency

Grass as a surface material can withstand from two to six (varies with grass species and environmental conditions) trips daily over the same spot. This suggests that most parking applications we pave with asphalt today could be paved with Grasspave[2] instead. Vehicles can remain parked on grass for extended periods of time, provided some relief can be given for a few days for the grass to recover.

Lifespan

Grasspave[2] has a projected lifespan of 60 years. Compared to asphalt with a lifespan of 15 years; and concrete with a lifespan of 25 years, Grasspave[2] will save you money on replacement costs.

Irrigation

Grass needs water and you may need to have irrigation installed. Grasspave[2] has a sand based root zone which usually requires slightly more water than a normal topsoil or organic root zone. If golf courses in your area use irrigation systems, you probably should in your Grassapave[2] installation.

Standard colors include:
Tan, Black, Pewter Grey, Terra Cotta.

Gravelpave[2] Characteristics

Fabric, Ring and Grid

When we developed Gravelpave[2] in 1993, our goal was to provide designers a second option for a porous pavement that can tolerate high frequency and low-speed traffic. By molding our ring and grid structure onto a non-woven polyester filter fabric, we were able to create a new product that contains gravel and prevents particle migration and rutting.

Invisible Structures—Standard Product Roll Sizes											
	Width		Length		Diameter		Area		Weight	
Model	m	ft	m	ft	m	ft	m²	ft²	kg	lbs
1010	1	3.3	10	32.8	0.5	1.7	10	108	22	48
1020	1	3.3	20	65.6	0.8	2.7	20	215	44	96
1520	1.5	4.9	20	65.6	0.8	2.7	30	323	65	144
2020	2	6.6	20	65.6	0.8	2.7	40	430	87	192
2520	2.5	8.2	20	65.6	0.8	2.7	50	538	109	240

Rolls can be installed manually (2 people advised). Rolls apply to Grasspave[2], Gravelpave[2], Draincore[2], and Slopetame[2].

Gravelpave[2] is the only system specifically designed for aggregate containment porous paving. The cylinders displace the load onto an engineered base course and hold the decorative gravel in place. The fabric keeps the top-dress gravel from compacting into the road base, acts as a weed and vegetation barrier, and suppresses dust.

Traditional pavements, including gravel roads, are designed to shed water and keep it away from the pavement's cross-section. Gravelpave[2] is designed to do the opposite—welcoming water down through the system. Plus, Gravelpave[2] will not rut, washboard, or puddle like traditional gravel roads.

Snap-Fit Fasteners

Designed into Gravelpave[2] is a snap-fit fastener, a two-pronged arrow that fits into a rectangular slot. Simply push the slot over the prongs to easily snap together panels of Grasspave[2]. To take them apart, just squeeze the prongs together and lift off the slot.

Should the fasteners of one mat not align over the distance of another mat, then anchor pins (or eight inch ring shank nails and large washers) can be used to secure the mats along the seam. Forcing the alignment can cause the mats to ripple and not lay down evenly.

Traffic Frequency

Gravelpave[2] has no limits on frequency or duration of traffic on the system. Park or drive as often as you like on Gravelpave[2]. However, speeds should be kept at or below about 20 mph (30 km/h).

Durability

Grasspave[2] and Gravelpave[2] are made from flexible High Density Polyethylene (HDPE) plastic with UV inhibitors, which withstands repeated freeze-thaw cycles and continuous subzero temperatures without cracking. HDPE resists aggressive chemicals such as road salts, motor oils and fuels. HDPE is highly abrasion-resistant and is unaffected by extremes in pH. A well-maintained Gravelpave[2] installation will last 25 years in most climates.

Aesthetics

Part of what draws many designers to use Gravelpave[2] is the ability to have an area maintain a natural look. Many times native soils or gravel can be used as fill material, complementing surrounding areas. Gravelpave[2] is available in four standard colors—black, tan, gray, and terra cotta (custom colors are available at additional cost). Ring colors are intended to blend with the gravel color so they will be less visible should some portion of the rings show. A small amount of excess stone fill should be left above the top of the rings to provide visual cover and additional UV protection. This excess will migrate, but usually not very far.

Size and Shape Requirements for Gravel Fill

You will need one and a quarter inch (3.2 cm) of gravel fill, before compaction. After compaction the gravel should be only be slightly higher than the rings (⅛ inch, 3 mm above). The following criteria for gravel fill will make the most of the systems performance:
- Hard—resistant to breaking, crushing or crumbling
- Sharp and angular (do not use rounded pea gravel)
- Clean, washed (free of fines)
- Size ³⁄₁₆ to ⅜ inch (5 mm to 1 cm)

Other fill material may be used in certain situations, but may be considered use-specific or experimental. Please consult with our technical support staff regarding fill material not meeting the above criteria or for installations requiring "binders."
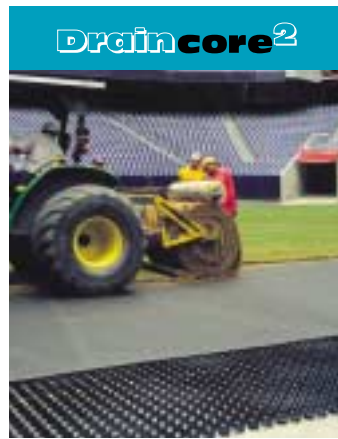
Beachrings²

Beachrings², a portable and re-usable plastic boardwalk system, provides an attractive, comfortable, and slip resistant surface for equal access to beaches. Beachrings² also works well for temporary vehicle access over mud and sand.

Draincore²

Draincore² conveyance layer is used for advanced subsurface and green-roof applications. A replacement for antiquated French drains, Draincore² can maximize drainage (58 gpm per foot width) and minimize costs.

Rainstore³

Rainstore³ is the new standard in efficient sub-surface stormwater storage. Rainstore³ is modular and stackable for versatile site design. Rainstore³ is 94% void space and can be designed for detention, retention, or water harvesting for re-use.

Slopetame²

Slopetame²—much more than an erosion control blanket or mat—a completely integrated system of rings, grid, fabric, anchors, and vegetation to control erosion on some of the toughest slopes, channels, swales and more.

Quick Reference Guide for Grasspave² and Gravelpave²

	Grasspave²	Gravelpave²
Description	Connectable ring and grid system	Connectable ring, grid, and integrated fabric
Also Included	Hydrogrow polymer—exclusively for Grasspave²	Geotextile fabric molded to grid (exclusive to Gravelpave²) and anchors
Available in Large, Flexible Rolls	Yes, various sizes—see roll chart page 14	Yes, various sizes—see roll chart page 14
Colors	Black	Black, gray, tan, terra cotta, custom colors extra
Components Needed for System	Base course, sand, labor, sod or seed (irrigation is recommended)	Base course, 1¼″ (3.2cm) of ³⁄₁₆″ to ³⁄₈″ decorative gravel, and labor
Traffic	Low speed, intermittent to moderate use	Low speed, unlimited use
Compressive System Strength	Filled: 5,721 psi (39,273 kPa); Empty: 2,100 psi (14,470 kPa)	Filled: to 5,721 psi (39,273 kPa) Empty: 2,100 psi (14,470 kPa)
Life Span	60 years	25 years
Recommended Maximum Slope	5% fire lanes, 8% car/light truck, 15-20% golf carts, pedestrian use, and trails	5% fire lanes, 8% car/light truck, 15-20% golf carts, pedestrian use, and trails
Stormwater Storage	Yes	Yes
Clean Pollutants through Bioremediation	Excellent	Good
Air-Conditioning Effect	Yes	No
Heat Island Mitigation	Yes—thermal conductivity, heat storage capacity, density, albedo (.40) and emissivity	Yes–thermal conductivity, heat storage capacity, density, albedo (varies) and emissivity
Reduces Runoff and Non-Point Source Pollution	Yes	Yes
Recycled Content	100% recycled HDPE plastic	100% recycled HDPE plastic, remnant fabric
Erosion Control	Yes	Yes
Airborne Dust Capture and Retention	Excellent	Good
Promotes and Retains Tree Growth	Yes	Yes
Recharges Groundwater	Yes	Yes