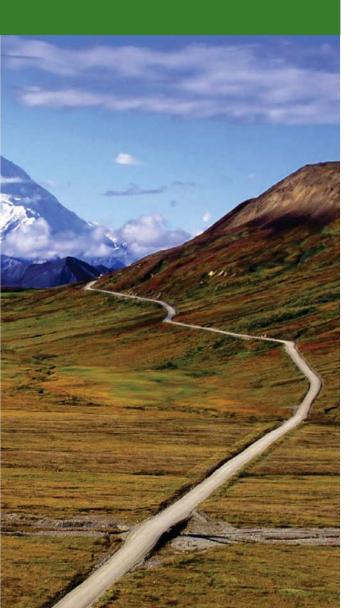
## Natural Paving -The Midwest Road-Bldr® System



## Design Strong Earth-Friendly Secondary Roads

Potholes, ruts, uneven surfaces, dust. These conditions, often found on unpaved roads, are hard on vehicles and people and can also be harsh on the environment

Midwest's Road-Bldr construction and maintenance Process creates road surfaces that perform as well as conventional asphalt at a lower cost-per-mile. We use in-place soils in conjunction with our green products to stabilize a roadway's sub-base and then provide a chip-sealed running surface without relying on any asphaltic products. The result is a natural looking, dust-free roadway.

The Eco-Pave<sup>™</sup> family of products, the foundation of Midwest's Road-Bldr system, is formulated to be as gentle on the environment as it is effective on the roadway. Like all Midwest products and services, Eco-Pave is reliably consistent and consistently reliable month to month, season to season, and year to year.

#### The Road-Bldr Program at a glance

- Improves long-term performance of un-surfaced and surfaced roads
- Uses native in-place soils wherever possible
- Increases structural integrity and CBR
- Creates or restores a smooth, skid-resistant surface
- Offers a cost-effective alternative to asphalt

The Road-Bldr system optimizes unpaved secondary roads, rural dirt and gravel roads, military roads and training areas, and forest and park roads.



#### Road-Bldr, a superior process

Road-Bldr is a single or two-part process that dramatically improves secondary roadways via stabilization alone or stabilization followed by a chip-seal surface treatment.

**Stabilization.** Midwest blends Eco-Pave Base, its proprietary polymer-enhanced, resin-based organic emulsion, into the existing base of native soils, gravel roads, or recycled roadway surface materials to create a superior structure that maximizes potential road strength and extends the useful life of a roadbed. The process eliminates the need to import costly base or aggregate materials to build a sub-base for subsequent paving or chip sealing.

Midwest's stabilization process will:

- Increase loading capacity (CBR)
- Create a barrier to reduce harmful moisture penetration
- Deliver a stronger, longer-lasting road surface at a lower cost than conventional road design

**Chip sealing.** For those who desire a chip-sealed road surface, Eco-Pave Chip – a powerful binder covered with an aggregate – delivers a natural, warm, visually-pleasing running surface.

Midwest's chip-sealing process:

- Results in surfaces with excellent skid resistance
- Creates or restores a smooth running surface on newly-built or deteriorated roadways
- Can be installed over a wider range of temperatures compared to asphalt chip

Conventional chip seal binders are made of liquid asphalt, which must be heated during application and turns into a black heat-absorbing road surface. The necessary surface sweeping results in the loss of up to 20 percent of the chips installed. The Eco-Pave-based Road-Bldr system, which uses no asphaltic products and requires no heating, creates a superior running surface, and requires no postinstallation sweeping.

The Road-Bldr system delivers stronger, longerlasting roads at lower costs than conventional road designs without taxing the environment.



Road-Bldr Compared to Other Surfacing Methods				
Criteria	Road-Bldr	Conventional Chip Seal	Conventional Asphalt	Aggregate Sub-Base
Natural green products	•			•
Utilizes in-place soils	•			
Increases CBR and loading strength	•		•	•
Superior traction	•	•		
Heat reflective	•			N/A
Installation below 50° F	•			•
Will not harm vegetation	•			•
Does not require washed aggregate	•			N/A
Does not require post-installation sweeping	•		•	N/A
Creates smooth running surface	•	•	•	
Creates dust-free surface	•	•	•	

An easy choice:
Make an objective
comparison between
Midwest's EcoPave and
conventional asphalt
approaches, and the
benefits of Road-Bldr
will become clear.

#### **Green is Midwest's Primary Color**

With chemists in our lab and experts at our customers' worksites, Midwest has the home-grown ability to manufacture products that will not harm the environment and in many instances will help it. Our chemists think green from source materials to formulation and from production to application. The Road-Bldr system's stabilization and dust-elimination process:

- Produces lighter surfaces that do not absorb heat
- Uses materials that are non-hazardous, non-flammable, non-corrosive, and non-toxic
- Employs natural products harvested on a sustainable basis
- Will not harm vegetation or wildlife



#### If the shoe doesn't fit . . .

One size fits all does not always make for a good fit; unique problems require unique solutions. Midwest is a particle-control pioneer, not a me-too company. Our product development begins with a challenge and ends when we produce a solution that proves its worth in the field. Off the shelf is fine when it works, but when it does not, Midwest has the capability and tenacity to customize a formula for your specific needs.



#### More reasons to choose Midwest

Midwest is the word leader in environmentally sound dust control, erosion control, and soil stabilization technology. We bring our customers more solutions, documentation and support than any other manufacturer. On a daily basis, we challenge ourselves to become even more accessible problem solvers so we can set a new industry standard for proactive and responsive service. Pushing the envelope is part of our corporate DNA, and we strive, always, to develop cutting-edge processes, products and services; stay on top of the learning curve, and educate our customers for our mutual success.



# Natural Paving for a Natural Look



The Santa Barbara Botanic Garden is one of the country's most esteemed living museums, and visited by nature lovers around the world. But this nearly century-old institution had some infrastructure that needed updating, including its pavestone pathways. The SBBG called Midwest Industrial Supply, and we provided them with a pavestone alternative in the form of a natural, permeable paving solution: Porous Pave™.

Porous Pave blends Midwest's powerful binding systems with small aggregate spread two to six inches thick, creating a permeable system. This porous surface allows potentially toxic residuals from tire tracks, fertilizers, and other pollutants to be absorbed by the pavement and consumed by microorganisms living below.

The project was implemented as an entirely self-contained, turnkey solution. That meant that there was no heavy construction and long workdays to interrupt the Garden's daily activities -- after less than two days of work, the entire scope of the initiative was completed. Porous Pave results in a surface with more traction than pavestone, even when slick or wet. And like all of Midwest's road and pathway solutions, Porous Pave surfaces increase in strength over time.

Contact us for more information.



midwestind.com

## Santa Barbara Botanic Garden Unveils Beautiful Naturally Paved Walkways from Midwest Industrial Supply, Inc.

Santa Barbara, CA – April 29, 2016 – The world-renowned Botanic Garden in Santa Barbara, California, has embraced a more natural approach to their paved walkways with the introduction of Porous Pave™ from Midwest.

The Santa Barbara Botanic Garden, one of the nation's most esteemed living museums, has chosen a paving method more naturally suited to its conservationist goals. The SBBG has introduced Porous Pave, a permeable pavement solution from Midwest, to the miles-long pathways that connect much of the 78-acre garden.

An institution with roots that stretch back to the late 1920s, the Botanic Garden was petitioning the National Historical Society for recognition as a historical landmark. To get that recognition, the Garden's administrators decided they needed a pathway system that was more organically constructed, aesthetically pleasing, and environmentally friendly. That's when the SBBG contacted Midwest to seek out the industrial supply company's natural paving solutions.

#### **Porous Pave**

After much deliberation, the two entities decided on a combination of two pavement methods that would create pathways eligible for the Garden Landmark status. While some of the grounds were paved with a mixture of decomposed granite and GreenPave natural paving, the rest of the pathway system made use of Midwest's new Porous Pave system.

Porous Pave blends Midwest's powerful binding agents with small aggregate spread between 2 and 6 inches thick, creating a permeable system. This porous surface allows potentially toxic residuals from tire tracks, fertilizers, and other pollutants to be absorbed by the pavement and consumed by microorganisms living below.

Perhaps the greatest advantage of the permeable pavement solution is that the resulting material doesn't resemble asphalt, and can be made to have whatever color or shade best fits the surrounding area. This was especially important to the Garden's administrators, who wanted a natural-looking walkway surface that wouldn't disrupt the aesthetic that had characterized the SBBG for decades

#### The Benefits

Midwest was able to provide the SBBG with multiple samples that the Garden could then submit for NHS review. Despite its high standards for landmark applications, the Society was impressed with the aesthetic and biological properties that Midwest offered.

Once the material was approved, the pathway building project could be planned out and implemented in earnest. The project was entirely self-contained, meaning that the new system could be installed with little to no interruption of the Garden's daily activities. After less than two days of work, the entire scope of the initiative had been completed.

The Garden hosts an open house each year in which new landscaping ideas and innovations are demonstrated. This year, the open house is touting an 1,800-foot stretch of Porous Pave pathway that is available for public viewing. SBBG officials say they plan to implement Porous Pave throughout the entirety of its pathway system.

The Santa Barbara Botanic Garden pathway system now not only has less impact on its living displays, but more stability and traction, even when the surface is wet or slick. The success of Midwest's Porous Pave at such a cornerstone of American conservationism should do much to advance the status of permeable pavement as a viable, environmentally conscious, and cost effective alternative to traditional paving methods.

Midwest is the world leader in environmentally sound dust control, erosion control, and soil stabilization technology. We bring our customers more solutions, documentation and support than any other manufacturer. On a daily basis, we challenge ourselves to become even more accessible problem solvers so we can set a new industry standard for proactive and responsive service. Pushing the envelope is part of our corporate DNA, and we strive, always, to develop cutting-edge processes, products and services; stay on top of the learning curve, and educate our customers for our mutual success. Stop by the Garden's Open House May 1 for more information.

# **Eco-Pave®**Natural Paving and Road Stabilization



# Pave Your Roads the Natural Way

In the absence of effective road stabilization, driving on a secondary road is a teeth-jangling experience that isn't good for drivers, passengers, or the vehicles transporting them.

If you need to build, stabilize, or maintain an unpaved secondary road, Midwest's Eco-Pave® family of products will produce a natural-looking, high-performance surface or, if you prefer, a warm and inviting chip-sealed surface. Engineered in our own labs to be as gentle on the environment as it is effective on the roadway, Eco-Pave gets the job done right using in-place soils.

Use Eco-Pave to optimize surfaces including unpaved secondary roads, rural dirt and gravel roads, military roads and training areas, and forest and park roads.

#### **Vital statistics**

- Improves long-term performance of unpaved and surfaced roads
- Increases structural integrity and loading capacity (CBR)
- Creates or restores a smooth, skid-resistant running surface
- Reduces harmful moisture penetration
- Eliminates potholing
- Can be installed over a wider range of temperatures than asphalt chip
- Uses native or in-place soils
- Reduces maintenance costs
- More durable and weather resilient than asphalt



#### A single- or two-part process

The Eco-Pave family of products is the foundation of Midwest's Road-Bldr Program, a single stabilization process to create secondary roads or a two-part process which then incorporates an environmentally-safe chip seal to the stabilized base.

**Eco-Pave Base®**, a polymer-enhanced, resin-based organic emulsion, is blended into existing native soils, gravel roads or recycled roadway surface materials to create a superior sub-base. It is not necessary to import costly base or aggregate materials.

**Eco-Pave Chip®**, a powerful binder covered with an aggregate – produces a natural, warm, visually-pleasing chip-sealed running surface.



Eco-Pave Chip is available in a variety of natural colors.

#### Easy to be green

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#### If the shoe doesn't fit . . .

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ARTPAVE is a poured-in-place, regionally-sourced stone that is bonded with a proprietary polymer enhanced resin binding agent. End result: an aesthetically pleasing porous paving surface that is as versatile and durable as it is beautiful.

### **About ArtPave**

- Created with regionally sourced stone and aggregate
- Available in 10 natural colors
- LEED credits for Cool Pavement Technologyenables evaporation at surface, creating a lower surface temperature
- LEED credits for Storm Water Management effectiveness - 2 times more porous than other systems
- Durable to harsh weather due to advanced, flexible binder system
- Poured in place for optimal design flexibility
- O Solves the runoff problem at the source
- Lighter colors offer high reflectivity
- Naturally replenishes aquifers



the next step in sustainable, low impact design ...





#### PERMEABLE PAVING SOLUTION

ARTPAVE is eco-friendly, cost effective, and a natural looking alternative to traditional paving methods like asphalt or concrete. The pavements provide architectural enhancements, design flexibility, and environmental benefits while maintaining simplicity and ease of installation. The ARTPAVE surface is an array of colors of natural stone bonded with a high strength resin that is modified with polymer for weatherability and high porosity. It is available in 10 colors, allowing creative landscape design to take center stage.

#### PERFECT APPLICATION FOR

Parking Areas

Sidewalks & Drives

Golf Cart Paths

Trails & Walkways

Pedestrian Patios

Pool Pads



#### **HIGH POROSITY**

ArtPave paving system is twice as porous as other porous pavements, results are greater reduction of stormwater run-off.

#### LOW ENVIRONMENTAL IMPACT

The highly permeable surface is a natural low-impact BMP for developments looking to reduce stormwater runoff, keep the stormwater on-site and reduce the requirements and cost for stormwater collection basins.

#### **COLOR OPTIONS**

Complement, contrast and enhance your building or landscape designs with natural colors to suit any environment and architectural design.



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