



Low Impact Performance Paving Systems





Ecological Pavement at a Conventional Price

ECOMATTM is an asphaltic paving material which can be mixed and applied at temperatures 40° C lower than traditional asphalt mixes. Produced using leading industry state of the art technologies, ECOMATTM is a mix that is more workable, easier to use, and better for the environment. Lower working temperatures assists with equipment wear and tear, improving the service life and operational characteristics of the production equipment. ECOMATTM use also qualifies users for LEED credits as an added benefit.

Energy Savings

ECOMATTM's environmental advantages begin at the plant where the asphalt mix is produced. Conventional hot-mix asphalt requires that it be heated to higher temperatures, which consumes a significant amount of energy during the process. ECOMATTM's recommended temperature is approximately 10° C cooler than its hot-mix counterpart resulting in a 10-15% reduction in the energy needed to power the plant's burner (under normal circumstances). The reduction in the plant's energy consumption directly translates into environmental benefits such as a reduction in the plant's carbon footprint, as well as lower emissions.



Lower Plant Emissions

The lower temperatures used in ECOMAT™'s production process significantly improves upon an already an environmentally friendly and one of the world's largest recycled products. The ECOMAT™ production process reduces conventional process greenhouse gas emissions by an additional 10-15% and can lower Volatile Organic Contents (VOC's) by as much as 50%. By using cooler mixes, ECOMAT™ improves upon one of the best available paving materials.



Another advantage of ECOMAT™ is that its reduced temperatures further reduce emissions during the transportation of the product and in the construction process. For each 10° C reduction in temperature, emissions can be reduced by as much as a factor of 2. ECOMAT™ can lead to emission improvements by as much as 30-50% over those found when working at conventional temperatures. ECOMAT™'s cooler working temperatures improve air quality and offer an added benefit for workers providing a cleaner, healthier, and more comfortable working environment.



The special process used to produce ECOMATTM allows the asphalt mixes to maintain workability at temperatures lower than those of conventional hot-mix asphalt. These lower production temperatures produce mixes with binders which are less aged and less susceptible to low temperature cracking. Because ECOMATTM is less susceptible to low temperature cracking, pavements built with ECOMATTM asphalt will likely have longer average service lives and greater durability.





Longer Paving Season and Haul Distances

ECOMATTM's properties allow it to remain flexible for longer periods of time and make it less affected by cold weather. Because of these properties, ECOMATTM can be used on cooler days, when paving with hot-mix asphalt would be impossible. Also, ECOMATTM's flexibility allows it to be hauled longer distances, making paving possible at difficult to reach job sites.

Enhanced Recycled Content

The recent focus on sustainable development has made the use of recycled materials more important now than ever before. Because of the reduced binder aging during production, more recycled asphalt pavements (RAP) can be added into ECOMAT™ than in conventional hot-mix asphalt without any negative impacts on low temperature properties. Projects using ECOMAT™ with RAP are also eligible to earn the Leadership in Energy and Environmental Design (LEED) credits for Recycled Content.

Leed

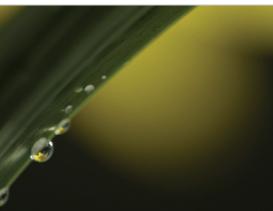
 $\mathsf{ECOMAT}^{\mathsf{TM}},$ as a warm surfacing product, has a direct positive impact on 8 LEED credits:

- AES 7.1
- AES 8
- MR 5.1
- MR 5.2
- MR 6IPD 1
- MR 4.1*
- MR 4.2*
- * For a complete roadway structure

High-performance

 $\mathsf{ECOMAT}^\mathsf{TM}$ is just as effective and has the same technical characteristics as traditional bituminous material.







ECOMAT™ allows rapid re-introduction of traffic thanks to its low setting and cooling times

- ECOMAT[™] produced asphalt performs equally to conventional asphalt mixes and does not affect the coating of aggregate, the potential for mix rutting, or the handling characteristics of the mix.
- ECOMATTM adapts to all configurations and all types of roadway: heavily urbanized roadways or rural routes.







Quality Adherence

The Colas quality system provides the tools by which we measure our performance, acting as a catalyst in promoting continuous improvement. It plays an integral part in all our day to day activities. ColasSolutions™ is committed to the provision of products and services that meet or exceed Colas and industry requirements. Through a structured program of quality improvement projects, specific initiatives, measurement of performance and encouragement of ideas, we aim to exceed our target of continuous improvement in the quality of every thing we do.



A world of innovation with a local presence

ColasSolutions[™] brings a world of innovations to you through the hands of our highly trained and experienced local contractors and representatives. We work with you to survey conditions and choose the right solution. Many times we already know the neighborhood, infrastructure and preservation needs because we also live there.

With ColasSolutions™, we don't just sell products and services. We believe in education and strive to help you understand how to choose the right systems, materials, and construction resources. We work with your staff to provide the technical assistance and construction services they may need to effectively design, build, maintain, and preserve your pavement and infrastructure investment network. We work with each of our customers with a high level of integrity and business ethics, cognizant of the fact that trust must be earned before it can be given. And when you choose ColasSolutions™, you'll know you're addressing it with products and services that respect and protect the environment as well as the safety of the communities we live in.



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