# ENVIRONMENTAL STEWARDSHIP

SITE & ACCESS SOLUTIONS



Proceed with Confidence



# A **WORD** FROM THE CEO



Newpark Mats & Integrated Services (NMIS) Customers,

For years NMIS has set the standard for delivering superior performance with our products and services while minimizing environmental impact. We continually strive to lead the industry with innovative solutions and next generation technologies that work in harmony with the environment and leave a positive impression on our communities.

DURA-BASE® Advanced Composite Matting System™ was introduced over 20 years ago, as the market's first engineered thermoplastic worksite access solution.

Today, DURA-BASE continues to set the standard for

"We continually strive to lead the industry with innovative solutions and next generation technologies that work in harmony with the environment and leave a positive impression on our communities."

safe, cost-effective, and environmentally friendly performance. Through its patented design, sealed construction and material composition, DURA-BASE has proven invaluable in diverse applications across numerous industries, including environmentally sensitive areas and extreme environments. DURA-BASE mats are non-absorbent, minimizing environmental risk from cross-contamination, especially from invasive species, unlike wood alternatives.

We are the only composite mat manufacturer with a fully developed recycling program, minimizing the toll taken on our natural resources. Unlike wood alternatives, the use of HDPE as the backbone of DURA-BASE mats eliminates the need to harvest timber as a raw material, along with associated destruction of natural habitats. As HDPE is 100% recyclable, it also means our mats do not require landfill disposal or incineration, placing less stress on the environment in which we live.

DURA-BASE is a robust temporary access solution, yet up to three times lighter weight compared to wood alternatives, increasing the number of mats able to be transported on a single load, and reducing the number of trucks required per project. Fewer trucks on the road mean less harmful CO<sub>2</sub> emissions and other pollutants in the air. It also equates to safer communities – fewer accidents and disruptions, less dust, debris, noise, damage, and pollution.

In closing, when you are considering worksite and access needs for your next project, understand that our solution is designed to work in harmony with the environment and the communities we operate in. Our customers rely on us to help them meet or exceed their environmental stewardship goals. You can count on us 24/7 to be your trusted partner for access and site solutions.

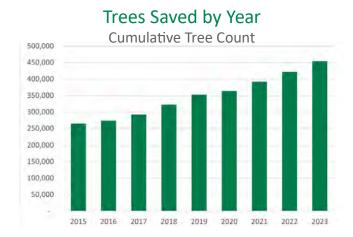
Sincerely,

Matthew Lanigan
Chief Executive Officer
Newpark Resources

# TREES **SAVED**



The Newpark Mats & Integrated Services' fully recyclable DURA-BASE Advanced Composite Matting System allows customers to eliminate tree harvesting needed to construct alternative wood mat products. 455,000+ trees and counting have been saved through our manufacturing and recycling of DURA-BASE\*.



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According to the Texas Forestry Commission, it takes 60 years to grow a milling size tree for a wood mat that is typically incinerated or disposed of in landfills after an average life of 3 years. DURA-BASE mats are made from

high-density polyethylene (HDPE) resin, which can be cleaned, reused, and 100% recycled – reducing the need to cut any trees. The average life of a new DURA-BASE mat is 12 years, but this life could be considered infinite since the mat is 100% recyclable. There is zero degradation in any product characteristics during the recycling process, meaning your damaged and used DURA-BASE mats can be made new again. Additionally, any excess, shavings, or other raw material waste used in the manufacturing process is reintroduced into production.



## Did you know?

The loss of trees and other vegetation can cause desertification, soil erosion, flooding, reduction in water quality, increased greenhouse gases in the atmosphere, and a loss in biodiversity.

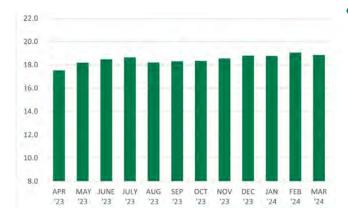
NMIS can also help effectively plan customer projects. Not only will you save trees by using DURA-BASE mats, but our team of experts will help you to design your access to minimize impact. For example, on a recent project calling for an entire area of forest to be cleared before access could be installed, upon consultation, NMIS suggested an alternative single path of DURA-BASE mats be laid directly through the forest, saving hundreds of trees, as well as costs associated with clearing and reclamation.

<sup>\*</sup>Based on internal estimates verified by Kambio Solutions, a third party firm specializing in corporate sustainability strategy

# CO, EMISSIONS SAVED

NMIS is continually developing new ways to help customers drive operating efficiencies, while working in harmony with the environment, and improving community relations. 18,800+ thousand tons of CO₂ has been saved trailing twelve months through transportation using DURA-BASE when compared to trucking usage of wood alternatives\*.

# CO<sub>2</sub> Emissions Billions of Grams Avoided TTM



**18,800+** tons of CO₂ has been saved trailing twelve months through transportation using DURA-BASE\* ...

DURA-BASE mats are up to three times lighter than alternative solutions, requiring fewer trucks to transport the same usable surface area, thereby saving CO<sub>2</sub> emissions with every load eliminated. Also, over time wood mats can retain moisture, which increases their weight and decreases mats per load, requiring even more trucks and increased overall transportation costs.

At 1,000 lbs per mat, DURA-BASE has a trucking capacity of up to 46 mats per load compared to wood mats which weigh between 1,500 - 2,800 lbs and only allow for 15 - 30 mats per load. For example, 1,500 DURA-BASE mats will require 36 truckloads, where the same number of heavier timber mats would need over 100 truckloads. At a trucking average of \$500 per load, the economic advantages of transporting DURA-BASE mats are clearly significant.



## Did you know?

Burning one gallon of gasoline creates about 20 pounds of  $CO_2$ —which means the average vehicle creates roughly 6 to 9 tons of  $CO_2$  each year. Cars and trucks produce half of all toxic air pollution emitted in the U.S.

In addition to requiring less trucks to transport them, DURA-BASE mats also require less equipment and install faster than wood alternatives. This equates to reduced machinery costs and emissions, crew costs and time on the right of way.



# MILES SAVED

At NMIS, we believe safety is central to everything we do. We believe in protecting each other like family while sustaining the environment in which we work. In addition to  $CO_2$  emissions saved, the reduced volume of trucks required when transporting DURA-BASE has avoided over 10.4 million miles driven trailing twelve months. Less trucks on the road and miles driven mean safer conditions and less nuisance for the community as whole.

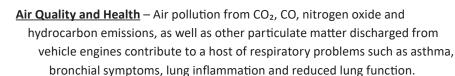
Milles Saved
Millions of Miles Avoided TTM



...transporting DURA-BASE has avoided over **10.4** million miles driven trailing twelve months.



<u>Public Safety</u> – According to the US Department of Transportation there are over
 38,000 fatalities per year from vehicle accidents, one of the leading causes of death in America.
 An additional 4.4 million people are injured seriously enough to require medical attention.

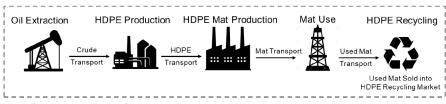


- Water and Land Pollution Vehicular toxins from exhaust, engine particulates, trash, and other debris get blown or washed into the right-of-way.
  - Noise, Dust and Disruption Traffic noise can interfere with sleep, conversations, and other activities. While dust can cover everything, effect vegetation and pollute our lungs.
    - Road Damage Community roads were not built to sustain the sheer mass of semi-trailers, the more rigs driving through means the more potential for damage and ultimately cost to the community.



# WATER **SAVED**

As part of our continued environmental stewardship, NMIS worked with a third party\* to conduct a Life Cycle Assessment (LCA) of DURA-BASE compared to product alternatives in efforts to guide future processes and product improvements. LCA is a transparent, science-based methodology for the holistic assessment of environmental impacts associated with a given product or process throughout its life cycle. This analysis complies with the International Standards Organization (ISO) standards 14040:2006 and 14044:2006.



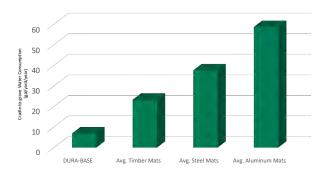
Manufacturing pathway for DURA-BASE

Manufacturing pathway for timber alternatives

The LCA analysis revealed that the life cycle of a DURA-BASE mat consumes at least 70% less water than the life cycle of a timber mat or other alternatives.

## Water Consumption

**DURA-BASE vs. Other Mats** 



...the life cycle of a DURA-BASE mat consumes at least **70%** less water then the life cycle of a timber mat or other alternatives.

**89%** Reduction in **Acidification Potential** using DURA-BASE

**86%** Reduction in **Eutrophication Potential** using DURA-BASE

Comparative results of timber and DURA-BASE

## Did you know?

The NMIS state-of-the-art manufacturing facility in Louisiana was engineered to utilize a closed loop system for all operations requiring water. This practice allows the plant to operate generating nearly no net waste water.

Logging practices associated with timber harvest can also affect water quality, not only impacting wildlife but human uses of water. Clearcutting can cause an increase in surface runoff leading to increased water flows, soil erosion, and turbidity. Upstream activities, such as clearcutting, can negatively impact downstream resources for miles, even across state lines. Established "buffer zones" along water sources don't always protect the water leading to reductions in water quality.

# **PROTECT** THE ENVIRONMENT

NMIS has a commitment to sustainability. We produce and deliver a product designed to work with the environment, and not against it. The National Oceanic and Atmospheric Association (the agency of the United States federal government responsible for monitoring our climate and environment, and taking steps to preserve them) estimates that the U.S. spends on average \$138 billion each year on major environmental damages, losses, and control measures for invasive species. Invasive species are defined as an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.

## Potential Effects of Invasive Species

ENVIRONMENTAL	ECONOMIC	HUMAN HEALTH
Displace native plant/animal communities	Cause reduced revenues to natural resource-based businesses	Carriers for human diseases
Disrupt the food chain	Affect boaters/fisherman by changing fish habitat and clogging waterways	Poisonous or caustic to humans
Cause extinction of native species	Host other damaging organisms in crops	
Increase soil erosion and fire hazard	Decrease quality and quantity of rangeland	
Degrade aquatic habitats	Decrease land value	
Clog waterways	Negative impact on tourism	
Facilitate spread of other invasive species		

Thanks to the patented design, sealed construction and material composition, DURA-BASE has shown itself to be invaluable in environmentally sensitive areas such as wetlands, swamps, muskeg, tundra, native prairie, and deserts. DURA-BASE mats are non-porous, thereby significantly reducing environmental risk from cross-contamination through absorption and carriage in the mat structure, especially from invasive species. Wood mats retain contaminants, as well as trap solids between boards and cannot be effectively cleaned, only burned or buried. The DURA-BASE mat design allows for complete cleaning and decontamination at the end of each project, which wood alternatives cannot claim due to their porous nature.

### Protecting the environment with DURA-BASE means:

- Environmental planning with in-house expertise
- Minimalization of post-job reclamation
- Contaminants not carried, impervious to liquids
- Minimization of invasive species transfer
- Superior load spreading to reduce soil compaction
- No nails or residual splinters left behind

Protect the environment you live in now and for the future with NMIS services and DURA-BASE access solutions.



270 days of DURA-BASE use - no treatment required after removal



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