TENCATE

Mirafi® H_2Ri

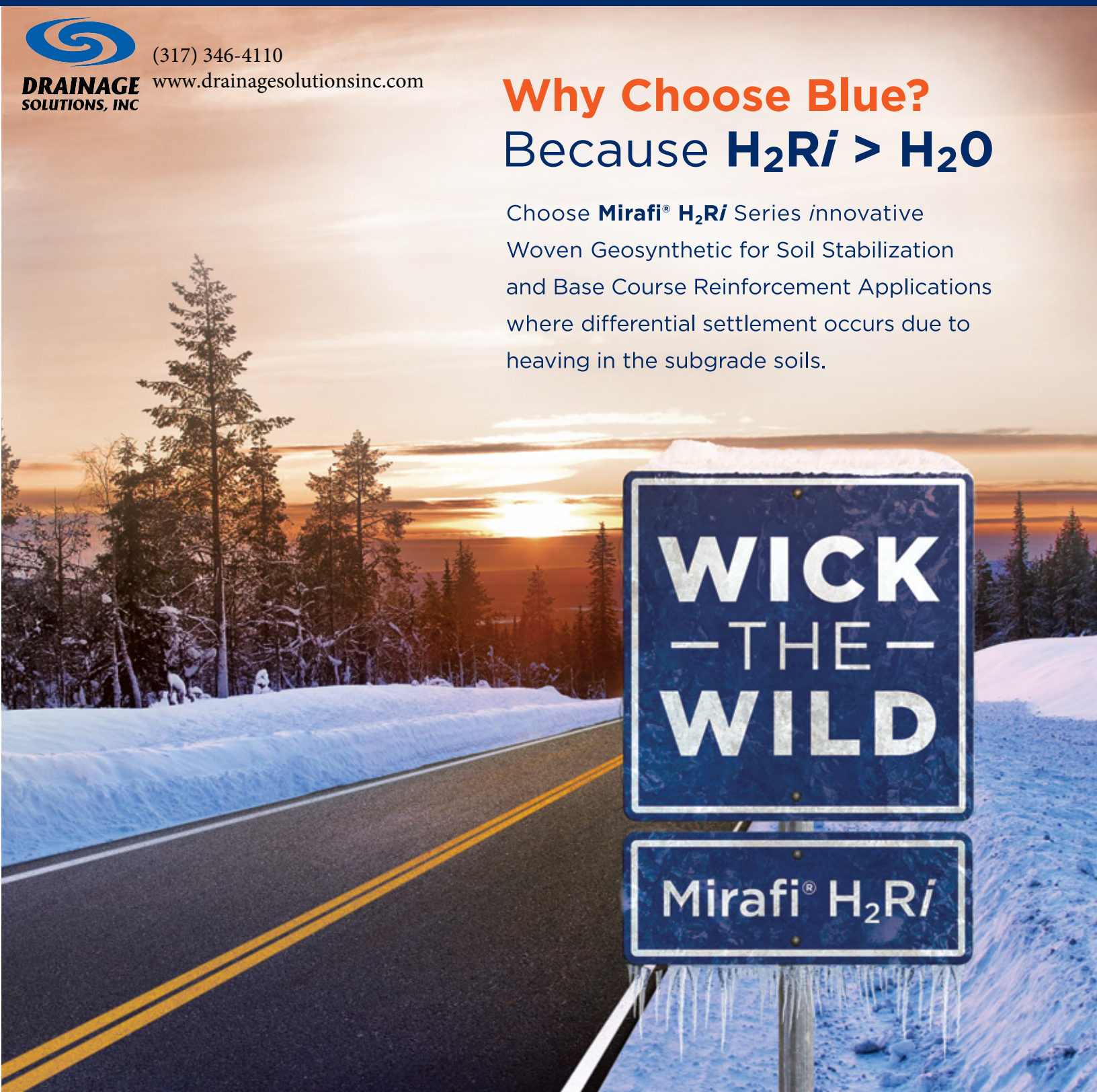
GEOSYNTHETICS

DRAINAGE SOLUTIONS, INC
(317) 346-4110
www.drainagesolutionsinc.com

Why Choose Blue?

Because H_2Ri > H_2O

Choose **Mirafi® H_2Ri** Series *i*nnovative Woven Geosynthetic for Soil Stabilization and Base Course Reinforcement Applications where differential settlement occurs due to heaving in the subgrade soils.



Mirafi® H_2Ri is a highly engineered geosynthetic incorporating a unique water-wicking component. This innovative product offers the **ultimate integrated geosynthetic** for roadway subgrade stability in subsoil environments with high moisture content.

APPLICATIONS

When superior performance, flexibility and versatility are necessary, Mirafi® H_2Ri makes the difference for varying application needs including: base course reinforcement and subgrade stabilization for road, runway and railway construction; embankment stabilization on soft foundations; reinforcement for mechanically stabilized earth (MSE) structures; liner support, voids bridging, reinforcement over soft hazardous pond closures and other environmental market applications.

CASE STUDY:

CHALLENGE: The Dalton Highway which runs from the Elliot Highway just North of Fairbanks to Deadhorse, AK which is just a few miles South of the Arctic Ocean is one of the most isolated roads in North America. However, it carries a substantial amount of truck traffic due to the fact that it is the only route for ground transportation to and from the oil fields at Prudhoe Bay. Due to the extremely cold temperatures along the Dalton Highway, costly road damage occurs every year due to frost boils. One problem section is known as Beaver Slide located at mile 110. The Beaver Slide section is on a downhill gradient of 11% with a high water table and the **frost boils have resulted in unsafe driving conditions and frequent accidents.** In the past, expensive repair efforts have shown that the conventional methods do not work.

SOLUTION: To solve the problems at Beaver Slide, **Mirafi® H_2Ri** was installed under the pavement. Sensors were also installed to measure the moisture content and temperature along the roadway during freeze thaw cycles. Continuous monitoring of the sensors has indicated that the Mirafi® H_2Ri is **transporting moisture through the road section without allowing it to boil to the surface and cause soft spots.** In fact, follow up site visits have shown the section where the Mirafi® H_2Ri was installed to be performing extremely well, while surrounding areas of roadway have at times been nearly impassable. With the success of Mirafi® H_2Ri on the Beaver Slide project, Mirafi® H_2Ri provided an **economical solution to combat frost boils** for the Alaska Department of Transportation.

Why Choose Blue? Because $H_2Ri > H_2O$

WICKING CAPABILITY

Special hydrophilic and hygroscopic 4g yarn that provides wicking action through the plane of the H_2Ri Geosynthetic.

REINFORCEMENT STRENGTH[1]

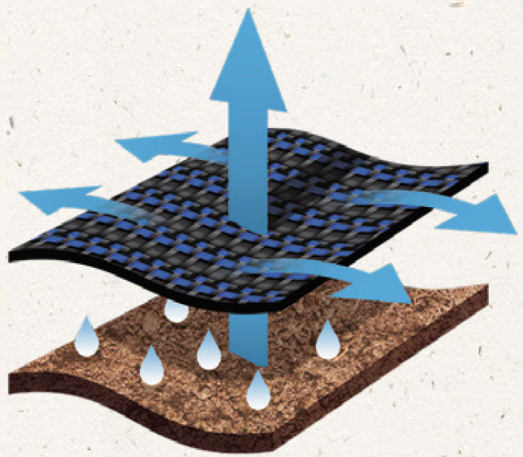
Higher tensile modulus properties than the leading stabilization products.

SOIL AND BASE COURSE INTERACTION

Excellent soil and base course confinement resulting in greater load distribution.

ROLL SIZES

Mirafi® H_2Ri comes in several roll sizes to fit project requirements.



Mirafi® H_2Ri's unique blue material wicks water away from subsoil areas, improving road durability.

DURABILITY[2]

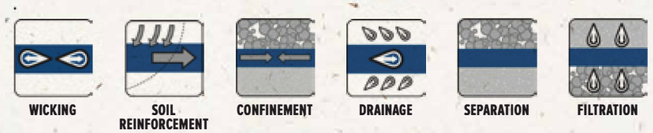
Durable under moderate to severe stress installers.

SEAMS

Panels can be seamed in the factory or field, providing cross-roll direction strength to facilitate efficient installation.

SEPARATION AND FILTRATION

Unique double layer construction provides an excellent separation factor with superior filtration and drainage. Uniform openings provide consistent filtration and low characteristics of a fine to coarse sand layer.



[1] Based on a comparison of published test results by respective manufacturers in 2011 using ASTM D4595.
[2] When tested pursuant to ASTM D5818.

2011 WINNER IFF AWARD FOR INNOVATION

TENCATE
materials that make a difference

Patent # 7,874,767

★PATENTED★

TenCate® develops and produces materials that increase performance, reduce costs and enable people to achieve what was once unachievable. **Our goal is to contribute significantly to progress in the industries in which we work.**

TENCATE
materials that make a difference

QUALITY ASSURANCE
GAI-LAP
ACCREDITED LABORATORY

BSI
ISO 9001
FM 61026

GMA
Geosynthetic Materials Association