

# ROADWAY DESIGN WORKSHOP



**Panama City, FL | December 1st, 2022**

## Design of Paved and Unpaved Roads Using Tensor Geogrids

Tensor International Corporation (Tensor) is pleased to host a seminar focusing on designing with Tensor geogrid for paved and unpaved roads, subgrade stabilization, and working platforms. Workshop content covers design methodologies, Tensor+ design software, specification guidance, and installation details associated with Tensor geogrids.

## Courtyard by Marriott Panama City

905 East 23rd Place  
Panama City, FL 32405  
(850) 763-6525

**Cost: Free of Charge**

*Attendees will receive 7 PDH credits.*

**Register Online at:**  
[www.TensorCorp.com/PanamaCity](http://www.TensorCorp.com/PanamaCity)

### Speakers



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### **Purpose & Background:**

With the present-day issues associated with infrastructure and private development funding, there exists a need to explore innovative methods for designing civil engineering applications including paved and unpaved roads, subgrade stabilization, and working platforms. Geogrid stabilization is a well-established solution for challenges associated with the construction of roads, particularly over soft soils. However, their consideration as a conventional means to design a flexible pavement has been somewhat limited due to lack of full-scale evidence and relatively simplistic empirical design approaches. With the advent of mechanistic-empirical design methods for pavements, Tensor devoted significant resources to understanding how their systems perform in full-scale such that design theory could be validated and translated into usable tools for the civil engineering public. The main goal of this workshop is to provide a better understanding to practicing pavement engineers of the design of paved and unpaved roadways using Tensor Geogrid and to equip them with these design tools.

### **Topics to be Discussed Include:**

1. Tensor geogrid manufacturing process
2. Geogrid mechanisms and their relevance to paved and unpaved soil support values
3. A definition of the components of the geogrid stabilization system
4. Research and design theory for paved and unpaved roadways and working platforms
5. Design methodologies for paved and unpaved roadways and working platforms, including practical design examples
6. Comprehensive demonstration of the Tensor+ design software
7. Installation details and cost considerations
8. A review of specification mechanisms – performance versus method

***Attendees will receive 7 PDH credits.***

### **Learning Outcomes:**

- Comprehend the basics of geogrid mechanisms as they relate to paved and unpaved roadway applications
- Understand the design theory and standard design methodologies for paved and unpaved roadways using geosynthetics
- Design and understand the cost significance of an unstabilized and a geogrid-stabilized unpaved roadway
- Design and understand the cost significance of an unstabilized and a geogrid-stabilized flexible pavement
- Appreciate the concept of composite, performance-based specifications in lieu of conventional method specifications when these design methodologies are employed

### **Who should Attend?**

Private and public civil, geotechnical, and pavement engineers who wish to have a better understanding of the design theory and engineering judgment employed in the Tensor Pavement Design Method for flexible pavements as well as the various methods for designing unpaved roads.

Emphasis will be placed on the practical application of each design method such that all in attendance will gain a better appreciation as to their relevance for various design conditions.

### **Registration:**

Seating is limited to approximately 30, and registrations will be taken in the order received.

Coffee, beverages, and lunch are provided. Dietary restrictions can be accommodated with advance notice.

Please bring a laptop computer able to connect to the internet with you to access Tensor+. Upon receiving your registration, you can expect to receive an email confirmation which will include additional details on how to access the design software.



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**Schedule:**

- 8:30 am: Check-In
- 9:00 am: Welcome & Introductions
- 9:20 am: Workshop Objectives
- 9:40 am: Tensor - A Brief History
- 10:00 am: Geogrid Improvement Mechanisms
- 10:30 am: Break
- 10:45 am: Design of Unpaved Roads
- 11:15 am: Tensor+ Introduction
- 11:35 am: Subgrade Stabilization Design Challenge
- 11:50 am: Proof Roll Design Challenge
- 12:05 pm: Design of Working Platforms

**Schedule (continued):**

- 12:20 pm: Working Platform Design Challenge
- 12:45 pm: Lunch
- 1:15 pm: Geogrid Performance Comparisons
- 1:30 pm: Pavement Design Methods
- 2:00 pm: Pavement Optimization
- 2:15 pm: Flexible Pavement Design Challenge
- 2:45 pm: Break
- 3:00 pm: Product Submittals/Specification Strategies
- 3:30 pm: Case Studies/Project Profiles
- 3:45 pm: Closing Comments
- 4:00 pm: Networking Reception

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