



North Carolina Department of Transportation
Materials and Tests Unit – Product Evaluation Program
Innovative Technologies and Products Awareness Report
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PRODUCT HIGHLIGHT – MST-BAR®



MST-BAR® that has been manufactured into different bent shapes – image from TUF-N-LITE website

MST-BAR® is manufactured by TUF-N-LITE, LLC. out of Middletown, Ohio. It is currently under evaluation and listed on the Approved Products List (APL) as NP21-8939. MST-BAR® is a high modulus, glass fiber reinforced polymer (GFRP) rebar made from Boron-free e-glass corrosion resistant fibers in a Vinyl Ester Resin matrix. The MST-BAR® comes in both round and square versions that can be bent to produce any 2-D or 3-D bended shape. These shapes are available in bar sizes #3 through #6, with a minimum bend radius of 5.5 times the diameter of the bar. The standard pricing for MST-BAR® is per LF regardless of the bent shape, which makes estimating project costs much easier. For more information, please visit: <https://www.tufnlite.com/mst-bar/>



Pictures of MST-BAR® being used on a seawall project in Florida – images from TUF-N-LITE website

PRODUCT INNOVATION – Work Zone Presence Light (PPL-1000)



Work Zone Presence Light (Model PPL-1000) – image from Ver-Mac website

The Work Zone Presence Light (Model PPL-1000) is manufactured by Ver-Mac out of Quebec City, Canada. It is currently approved for use and listed on the APL as NP21-8975. The Work Zone Presence Light is a battery-operated portable work zone presence light. This is a “balloon” style lighting product that is mounted on a hand-truck/dolly. These devices are used in the advance warning area of work zones to enhance the presence of the work zone for approaching drivers, providing an important visual cue to attract the attention of the driver, and to assist with slowing down their vehicle speed before entering the work zone. The primary targeted audience are the inattentive/drowsy/distracted drivers. These devices increase the likelihood these drivers will detect, and alert themselves to the lighting and bring their attention to the work zone and subsequently their driving behavior closer in line with the requirements of the work zone lane closure and/or speed limit reduction. The work zone presence light can also increase illumination of work zones for construction workers as well. For more information, please visit: <https://www.ver-mac.com/en/products>