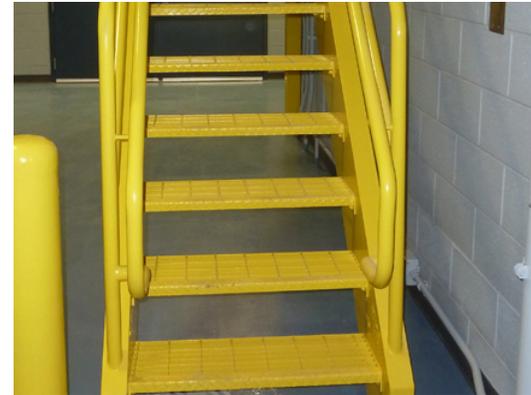


# U.S. ARMY ARSENAL

WARREN, MI

## *Slip Resistant Stair Treads for U.S. Army Garrison-Detroit Arsenal*



### THE SITUATION

The United States Army Garrison-Detroit Arsenal is located in Warren, MI. The military installation is home to the U.S. Army Tank-Automotive and Armaments Command (TACOM) and administration/research. The Arsenal also houses the Ground Systems Power and Energy Lab (GSPEL). The facility leads the Army to develop cutting edge technologies on creating safer, more efficient ground vehicles. The U.S. Army Garrison facility is the only facility in the nation that is capable of completing this advanced research.

The GSPEL consists of eight different labs, offering an unmatched variety of testing capabilities. This includes a Power and Energy Vehicle Lab, Air Filtration Lab, Calorimeter Lab, Thermal Management Lab, Power Lab, Fuel Cell Lab, Hybrid Electric Components Lab, and an Energy Storage Lab. GSPEL is capable of testing ground vehicles in extreme temperatures, various wind conditions, along with different humidity and solar conditions.

The facility was in need of a safety improvement in a high traffic area where workers access daily. GSPEL's building 212B has a mezzanine that workers used to access by a ships ladder to monitor various equipment. The steep ships ladder had smooth, narrow treads which are not a safe while accessing a mezzanine. Non slip grating treads were needed in this facility.

*SlipNOT*® Metal Safety Flooring works with architects and fabricators across the country regularly to create non slip solutions for government installations. One of the project managers working with Green Construction on this project previously worked with *SlipNOT*® on projects through Albert Kahn Architects.

Green Construction contacted *SlipNOT*® to provide them with non slip grating treads for the new staircase they were building for the Army Arsenal. Once installed, workers will be much safer each time they access the mezzanine, which can be 5 to 10 times a day.

### THE SOLUTION

The U.S. Army Garrison-Detroit Arsenal required that the new staircase meet certain safety standards. The grating treads had to have a coefficient of friction exceeding 0.8, both wet and dry, in accordance with ASTM F1679. *SlipNOT*® provided Green Construction with coefficient of friction information, proving *SlipNOT*® has been tested and meets these specific requirements.

The Grade 2 *SlipNOT*® steel Grip Grate® stair treads were 1-1/4" x 3/16" x 9-3/4" x 30" with checker plate nosings. *SlipNOT*® steel Grip Grate® was also used for two landings, 1-1/4" x 3/16" x 24" x 45" and 1-1/4" x 3/16" x 20-3/8" x 45". Green Construction fabricated the staircase, it was painted safety yellow, and then installed in Building 212B of the GSPEL facility. *SlipNOT*® non slip grating treads are available in mill finish, painted black or safety yellow, or galvanized. Safety yellow paint alerts workers that conditions may be dangerous.

### THE IMPACT

Lester Pfent, President at Green Construction U.S., said all went well with this project. The staircase is successfully installed for mezzanine access in Building 212B of the Ground Systems Power & Energy Laboratory. The safety yellow paint alerts workers the conditions may be dangerous and helps prevent corrosion. The Army replaced an old ships ladder with a new slip resistant staircase that will last for decades to come. The *SlipNOT*® stair treads are very durable, permanent, and the slip resistant surface will not flake or wear down over the years.