

# UL-Listed Galvan Gold Series Galvanized Ground Rods

## *Cost Savings and Code Compliance Since 2004*

Since Galvan Industries brought the first UL-Listed galvanized ground rod to market in 2004, electrical contractors and inspectors now think differently about ground rods.



Today's contractors see listed galvanized ground rods as a cost-saving, easier-driving alternative to full-size rods. A listed galvanized rod also gives contractors the flexibility to choose a safe, code-compliant product with either copper-coated or galvanized corrosion protection, depending on their needs.

Many inspectors now ask contractors to leave a shovel-full of dirt away from the top of the rod for inspections. When the listing symbol is visible on any ground rod, they know it meets code. When there is no visible listing mark, it is impossible to know if a driven rod meets NEC requirements, especially for length.

## *First in Compliance, First in Quality*

Galvan's Gold Series UL-Listed galvanized ground rods are manufactured in the USA with distinct advantages over ordinary galvanized rods.

- Identical steel core to UL-listed copper rods
- UL stamp assures quality and compliance
- Chamfer eliminates mushrooming on drive end
- No sharp edges on safe conical point
- Conical point and chamfer ensure easy, secure coupling
- Hot dip galvanized to ASTM A123
- SAE 1035 steel core for increased hardness, tensile strength and straightness
- "Green" manufacturing with "closed loop" systems that completely eliminate hazardous wastes from the manufacturing process

For more information or to place an order, contact your local Galvan distributor or Galvan Industries today.



**Galvan Industries, Inc.**  
800-277-5678, [www.galvanelectrical.com](http://www.galvanelectrical.com)

# What The Experts Say About UL-Listed Galvanized Ground Rods

NEC 250.52.A.5 (b) Rod type electrodes of stainless steel and copper or zinc coated steel shall be at least 15.87 mm (5/8 in.) in diameter, **unless listed.**

**NFPA 70, National Electrical Code 2011 and 2014**

**Question: How can UL listed galvanized ground rods with a nominal thickness of less than 5/8 inch in diameter still comply with 250.52.A.5 of NFPA 70 (NEC)?**

**Answer:** Rod electrodes are just one of the many types of grounding electrodes permitted in the National Electrical Code (NEC). Rod electrodes are required to be at least **5/8 inch in diameter unless Listed, in which case they are permitted to be not less than 1/2 inch in diameter.**

Ground rods less than 5/8 inch but not less than 1/2 inch in diameter are listed using **ANSI/UL 467, Standard for Safety for Grounding and Bonding Equipment.** They have been subjected to the equivalent performance criteria as a copper-clad (nonferrous) steel ground rod. In addition, they comply with the construction requirements specified in **ANSI/NEMA GR1, Grounding Rod Electrodes and Grounding Rod Couplings.**

The steel cores of **galvanized steel rods and copper-clad rods have the same tensile strength and Rockwell hardness.** The differences are in the minimum copper cladding thickness vs. the minimum zinc deposit thickness. These vary due to the differences in their respective protection scheme as well as the manufacturing process. The copper cladding protects the steel much like shrink tubing, whereas the zinc Galvanizing forms a metallurgical bond with the iron. This bond is hardest at the ferris surface. Consequently, the zinc galvanizing can be applied at a lesser thickness than the copper cladding.

**Jake Killinger, Underwriters Laborites, Inc.  
Authority Electrical Connections, May 2005**

*"Until Galvan introduced the listed galvanized ground rod, no zinc coated rod met the strictest interpretation of this code by complying with the requirement of being "larger than 0.500 inches in diameter and listed."*

**IAEI News, Nov./Dec. 2003, Page 26 IAEA  
International Association of Electrical Inspectors**



## Galvan UL-Listed Galvanized Ground Rods

| Catalog Number | Nominal Diameter & Length | Sub & Master Bundle | Weight per 100 | NAED UPC No. 632591 |
|----------------|---------------------------|---------------------|----------------|---------------------|
| GR6258         | 5/8" x 8'                 | 5/100               | 640            | 70702-2             |
| GR6250         | 5/8" x 10'                | 5/100               | 941            | 70703-9             |

NOTE: Galvan also manufactures full-size (.625") listed galvanized ground rods for utilities, co-ops and others. For full size rods, specify GR6258F.

Galvan Gold Series ground rods are used in construction, cable TV, lightning protection, power generation, telecommunications and manufacturing applications and stocked by better distributors everywhere

