



Document Title:

Fully Threaded Rod 1/2" Hot Dip Galvanized

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Specification

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Material Specification

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Department
Distribution

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Related/Referenced Documents

N/A

Version History

Version	Date	Revision Comments
1	Dic. 07, 2021	Initial Release
2	May. 23, 2022	Sections 3, 4, and 7 modified. TOC Added
3	Jan. 05, 2023	Cover Page added
4	Oct. 05, 2023	General format, Description Section, and TOC modifications.



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Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-82933	82933	4	10/05/2023



1. Introduction

This is a general specification that covers the minimum requirements for hot dip galvanized 1/2" diameter threaded rod to be used in the distribution system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site specific conditions, quantity, and other requirements. This document includes the general mechanical characteristics of the equipment/material.

2. Special Requirements

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this equipment/material to LUMA on previous orders, will not have to furnish samples at bid opening. The equipment/material will be received at the LUMA's general warehouse (011) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

3. Literature

Descriptive and technical literature must be supplied by the vendor at time of bidding. This literature may include, but is not limited to details of material, drawings, documented testing, and instructions for use and installation. Failure to submit documents on time will cause bidder disqualification. Evidence of LUMA Energy's approval of the equipment/material shall be supplied by the vendor if requested by LUMA Energy.

4. Markings

- 4.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 4.2. Packaging labels and tags shall be waterproof.

5. Compatible with

- 5.1. For compatible supplier and model see Table 1.
- 5.2. These models are examples of the equipment/material described in this document and do not represent a preference. LUMA will evaluate equally any model not listed here during any acquisition event.

6. Packaging

All equipment/material shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.

7. Number Per Package (Logistics)

6' (1.83 m) rods sell as individual items or boxes of twelve (12) units or as requested by LUMA.

8. Acceptance Criteria

8.1. Test required: certified by external laboratories.

8.2. Latest applicable codes, standards, and other regulations:

- a. ASME B18.31.3: Standard for general and dimensional data for inch series threaded rods.
- b. ASTM A307: Standard specification for carbon steel bolts, studs, and threaded rod 60,000 PSI tensile strength.
- c. ASTM A153/A153M or ASTM F2329/F2329M: Standard specification for zinc coating (hot dip) on iron and steel hardware.

9. Description

9.1. Used to attach strut channel on riser support assembly.

9.2. The material shall be low carbon steel, grade A.

9.3. Shall be hot dip galvanized as per ASTM A153 or F2329.

9.4. The rod shall be fully threaded.

9.5. Dimensions: 6' long X 1/2" diameter (1.83 m X 12.7 mm), 13 thread per inch (TPI).

9.6. Must have a minimum tensile strength of 60,000 PSI as per ASTM A307.

9.7. Rod cuts must be protected against corrosion with zinc rich paint.

9.8. Approximate weight for each rod: 3.19 lbs. (1.45 kg).

10. Inspection

The acceptance of any equipment/material shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it would not prevent subsequent rejection if such equipment/material were found later to be defective.



11. Proposal Information

11.1. Submitted proposals must include:

- a. Technical information
- b. Table of Compliance completed by the bidder with reference (see Appendix 1).

12. Table 1: Warehouse and Asset Suite Identification Number

Warehouse Catalog #	Asset Suite #	Compatible Manufacturer & Model
002-82933	82933	Fastenal (47620) Grainger (4FHD4)

— End of Specification —



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Appendix



Appendix 1: Table of Compliance

Line	Criteria	Description	Pass/Fail (P/F)	Comments
1	Specification	The Proponent complies with the specification document 4350.107.		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document (ASTM, ASME).		
3	Type	Fully Threaded Rod		
4	Material	Low Carbon Steel, Grade A, HDG		
5	Dimensions	6' x 1/2"-13 (TPI)		
6	Tensile Strength	60,000 PSI minimum		











4350.107 Threaded Rod 1-2in HDG (10-5-23)

Final Audit Report

2023-10-05

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