



Document Title:
Steel Anchor Rod for Aluminum Tower Foundation

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Specification

Engineering Type
Material Specification

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Author

Guillermo J. Nieves Díaz
Technical Specialist 1, Transmission Lines Engineering Design & Standards

Guillermo Nieves (Dec 6, 2024 15:56 AST)

Reviewer 1

Leonardo Montes Sánchez
Engineer 2, Transmission Lines Engineering Design & Standards

Leonardo Montes Sanchez (Dec 9, 2024 15:25 AST)

Reviewer 2

Juan C. Miranda Rivera
Manager, Transmission Lines Engineering Design

Juan Carlos Miranda (Dec 9, 2024 15:36 AST)

Approver

Yamil I. Rivera Hernández
Section Manager, Transmission Lines Engineering Design

Yamil Rivera (Dec 9, 2024 16:20 AST)

Management Approval (If apply)

Approver

N/A
N/A

Signature and Date

Version History

Version	Date	Revision
00	Feb 09, 2022	First Issue.
01	April 25, 2022	General revision for final approval
02	Dec 9, 2024	Changed cover page and document to new format. Modified sections 4 and 7. Added a table of compliance. Equal or approved to changed to Compatible with and modified.

1. General

1.1. Purpose

- 1.1.1. This specification describes the minimum requirements of the steel anchor rod for concrete foundation in aluminum lattice towers.

2. Applicable Guidelines, Codes and Standards Specific Requirements

2.1. Testing

- 2.2. The anchor rod shall be designed, rated, manufactured, and tested in accordance with the latest applicable IEEE, NEMA, ANSI, ASTM, RUS, and NEC Standards. If the Vendor does not demonstrate its compliance with the applicable standards, these specification requirements and supply the requested documents, the bid may be rejected.

- 2.2.1. Test required: Certification by qualified external laboratories.

2.3. Codes, Standards, and Regulations

- 2.3.1. Latest applicable codes, standards, and other regulations: ANSI/ASTM, IEEE.

3. Specific Name

- 3.1. Steel Anchor Rod for Aluminum Tower Concrete Foundation.

4. Specific Requirements

- 4.1. Samples shall be furnished to LUMA for approval.
- 4.2. LUMA requires one (1) unit properly labeled for testing and analysis.
- 4.3. Descriptive and technical literature shall be supplied to LUMA.
- 4.4. With respect to products described in this specification as requiring qualification, awards will be made only for such products that, prior to the time act for opening of bids, have been tested and/or approved by LUMA.
- 4.5. They shall be required to show evidence of LUMA's approval of the equipment.
- 4.6. This model is an example 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.
- 4.7. The Vendor shall provide LUMA Energy with a list of recommended spare parts, tools, and service equipment, including prices.

5. Basic Use

- 5.1. Mechanical support of aluminum tower structure to concrete foundation.

6. Description

- 6.1. The galvanized steel anchor rod (mast base) consists of a length 241/2 in. (622.3 mm.) and diameter of 13/8 in. (34.93 mm.).
- 6.2. Steel shall be as per ASTM F1554, Grade 55.
- 6.3. Hot-dip Galvanized steel anchor rod as per ANSI/ASTM A153.
- 6.4. The steel anchor rod (mast base) shall be furnished with one (1) bolt 1/2" in. diameter x 13/4" in. long ASTM F1554 and one (1) washer 1/2" in. inner diameter x 3" in outer diameter ASTM F436. The bolt and washer shall be assembled with the steel anchor rod; suitable means shall be provided for preventing loss of parts in transit. The bolt and washer shall be galvanized as per ANSI/ASTM A153.

7. Marking and Packaging

- 7.1. Bundles/ Crates shall be marked outside with LUMA's purchase order number and code number.
- 7.2. Pallet Quantity: TBD. Standard Package: TBD.
- 7.3. Vendor shall prepare material and equipment for shipment in such a manner as to facilitate handling and protection from damage.
- 7.4. All material shall be packaged and marked in such a way that the receiving warehouse can readily identify and send in one (1) complete unit to a field location without opening crates or boxes to sort it them and/or parts.
- 7.5. Each unit shall be clearly marked with the installation tool to be used, either with a color coding or numbering.

8. Compatible with:

- 8.1. TBD, Catalog number – TBD
- 8.2. These models are an example 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.

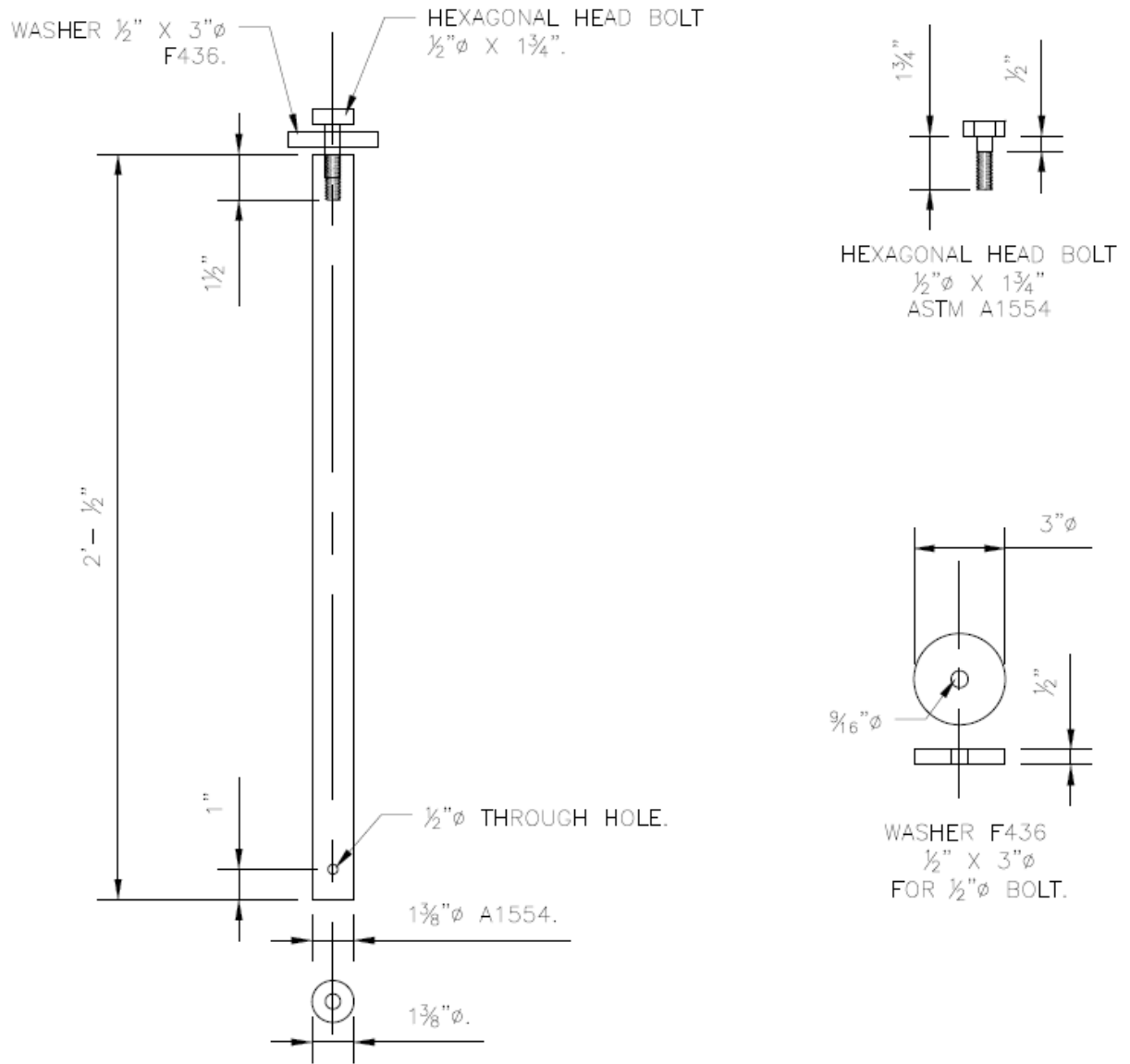
9. Proposal Information

- 9.1. Submitted proposals must include:
 - a. Technical Information
 - b. Table of Compliance completed by the bidder with reference

10. Inspection

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

11. Drawings



Length	24 1/2 in
Diameter	1 3/8 in
Weight	10.3 lb

Warehouse ID	002-82847
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— End of Specification —

Appendix

Appendix 1. Table of Compliance

Line	Criteria	Description	Pass/Fail (P / F)	Comments
1	Specification	The Proponent complies with the corresponding specification document (4752.255)		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document (IEEE, NEMA, ANSI, ASTM, RUS, and NEC Standards).		
3	Material	Steel Anchor Rod for Aluminum Tower Concrete Foundation: <ul style="list-style-type: none"> Steel shall be as per ASTM F1554, Grade 55 Hot-dip Galvanized steel anchor rod as per ANSI/ASTM A153 		
4	Dimensions	Length: 241/2 in.		
		Diameter: 13/8 in.		
		Weight: 10.3 lb.		
5	Requirements	<ul style="list-style-type: none"> Samples shall be furnished to LUMA. LUMA requires one (1) unit properly labeled for testing and analysis. Descriptive and technical literature shall be supplied if requested by LUMA. Vendors that have supplied this material to PREPA in previous orders, will not have to furnish samples at bid opening. They shall be required to show evidence of LUMA's approval of the equipment. 		











4752.255 Steel Anchor Rod for Aluminum Tower Concrete Foundation

Final Audit Report

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