



Equipment Specification  
Document No.: 4350.027  
Item No.: 002-82035  
Asset Suite: 82035  
Originating Department: Distribution Engineering



## Distribution Tie Wire

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### 1. Introduction

This is a general specification that covers distribution tie wires to be used in the distribution system in Puerto Rico. Project 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 tie wire is to be used to secure conductors in the top groove of ANSI 55-5 pin-type insulators. This document includes the general electrical and mechanical characteristics of the material.

### 2. Special Requirements

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

### 3. Quantity/Literature

Descriptive and technical literature must be supplied by 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. For products described in this specification as requiring qualification, awards will be made only for such products that, prior to the time for opening of bids, had been tested and/or approved by LUMA. Evidence of PREPA's and/or LUMA Energy's approval of the equipment or material shall be supplied by vendor if requested by LUMA Energy.

### 4. Markings

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

### 5. Equal or Approved Equal to

Priority Wire & Cable, Inc., catalog number F4SOLSDALUM

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### 6. Packaging

- 6.1. All material and equipment 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)

One thousand, five hundred (1,500) per coil, 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: ASTM B609

### 9. Description

- 9.1. Aluminum tie wire used in overhead transmission line to mechanically secure components.  
9.2. Conductor material must be a solid soft drawn 1350 series aluminum.  
9.3. Conductor approximate dimensions:
- |                               |              |
|-------------------------------|--------------|
| a. Conductor size:            | 4 AWG        |
| b. Stranding:                 | Solid        |
| c. Diameter:                  | 204.3 mils   |
| d. Net weight:                | 38.4 lbs/kft |
| e. Minimum breaking strength: | 350 lbs      |

### 10. Inspection

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 would not prevent subsequent rejection if such materials were found later to be defective.

### 11. Proposal Information

- 11.1. Submitted proposals must include:
- Technical information
  - Table of Compliance completed by the bidder with reference. (See Appendix 1)

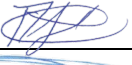
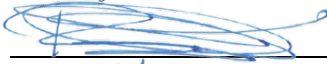

— End of Specification —

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### Document History

<b>Version</b>	2	
<b>Date</b>	04/12/2022	
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<b>Approver Manager</b>	Ricardo Castro	

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# **Appendix**

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### Appendix 1: Table of Compliance

Line	Criteria	Description	Pass/Fail (P/F)	Comments
1	Specification	The Proponent complies with the corresponding specification document. (4350.027)		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document. (ASTM)		
3	Conductor Size/Diameter	4 AWG / 204.3 mils (0.519 cm) approximately		
5	Material	Aluminum 1350 series, soft drawn		
6	Strands	Solid		
7	Minimum Breaking Strength	350 lbs		
8	Approximate Weight	38.4 lbs/kft		