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**Version History**

| Version | Date          | Revision Comments            |
|---------|---------------|------------------------------|
| 01      | March 7, 2023 | Initial Release              |
| 02      | Nov. 13, 2024 | General format modifications |



## Item Version History

| Warehouse Catalog # | Asset Suite # | Version | Date       |
|---------------------|---------------|---------|------------|
| 002-84370           | 84370         | 02      | 11/13/2024 |
| 002-84371           | 84371         | 02      | 11/13/2024 |
| 002-84372           | 84372         | 02      | 11/13/2024 |
| 002-53608           | 53608         | 02      | 11/13/2024 |
| 002-84373           | 84373         | 02      | 11/13/2024 |
| 002-84374           | 84374         | 02      | 11/13/2024 |



## 1. Introduction

This is a general specification that covers the minimum requirements for the Welded Wire Mesh Reinforcement 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 electrical and 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 LUMA's general warehouse (011) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

## 3. Literature

- 3.1. 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. **The literature must be an official document from, and certified by, the manufacturer.** Failure to submit documents on time and duly certified by the manufacturer will cause bidder disqualification.
- 3.2. If required by LUMA, final drawings and documentation shall be submitted by the vendor before the manufacturing and shipping process for approval.

## 4. Markings

- 4.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 4.2. Package(s) to be delivered to the warehouse shall be clearly marked with manufacturer and item information (part number, serial number, quantity, etc.).
- 4.3. Packaging labels and tags shall be waterproof.

## 5. 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.

## 6. Number Per Package (Logistics)

Standard Package: One (1) unit per box or as requested by LUMA.

## 7. Acceptance Criteria

- 7.1. Test required: certified by external qualified laboratories.
- 7.2. Product shall be manufactured in accordance with the latest issue below (section 8.3). When conflicts occur between purchaser's specifications and the latest issue below, the purchaser's specification shall prevail.
- 7.3. Latest applicable codes, standards, and other regulations:
  - a. ASTM A185: covers welded wire reinforcement to be used for the reinforcement of concrete.
  - b. ASTM A1064: covers the material, dimensional and mechanical property requirements for plain and deformed steel wire and welded wire reinforcements produced from hot-rolled rods that are to be used for the reinforcement of concrete.
- 7.4. If any other standards different from the ones indicated in this document are used, the supplier must provide information showing compatibility with the required ones.

## 8. Description

- 8.1. Welded wire mesh reinforcement is a prefabricated reinforcement consisting of high strength, cold-drawn or cold-rolled wire welded together in square or rectangular grids. It provides uniform stress distribution and more effective crack control in slabs and walls, while reducing the number and size of cracks in the concrete.
- 8.2. The wire mesh shall be made of steel.
- 8.3. The wire mesh rolls/sheets shall come in the following styles (wire spacing/sizes):
  - a. 4x4: W1.4/W1.4
  - b. 4x4: W1.7/W1.7
  - c. 4x4: W2.1/W2.1
  - d. 6x6: W1.4/W1.4
  - e. 6x6: W2.1/W2.1
  - f. 6x6: W2.9/W2.9

## 9. 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/materials were found later to be defective.

## 10. Proposal Information

10.1. Submitted proposals must include:

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

## 11. Table 1: Warehouse and Asset Suite Identification Number

| Warehouse # | Asset Suite # | Wire Spacing | Wire Size |
|-------------|---------------|--------------|-----------|
| 002-84370   | 84370         | 4x4          | W1.4/W1.4 |
| 002-84371   | 84371         | 4x4          | W1.7/W1.7 |
| 002-84372   | 84372         | 4x4          | W2.1/W2.1 |
| 002-53608   | 53608         | 6x6          | W1.4/W1.4 |
| 002-84373   | 84373         | 6x6          | W2.1/W2.1 |
| 002-84374   | 84374         | 6x6          | W2.9/W2.9 |

— End of Specification —



## Appendix



## Appendix 1: Table of Compliance

| Criteria                 | Description  | Pass/Fail (P / F) | Comments |
|--------------------------|--|-------------------|----------|
| Industry Standards       | Complies with ASTM A-185 / A1064   |                   |          |
| Item                     | Wire mesh consisting of high strength, cold-drawn or cold-rolled wire welded together in square or rectangular grids |                   |          |
| Material                 | Steel  |                   |          |
| Roll/Sheets Spacing/Size | 4x4: W1.4/W1.4   |                   |          |
|                          | 4x4: W1.7/W1.7   |                   |          |
|                          | 4x4: W2.1/W2.1   |                   |          |
|                          | 6x6: W1.4/W1.4   |                   |          |
|                          | 6x6: W2.1/W2.1   |                   |          |
|                          | 6x6: W2.9/W2.9   |                   |          |

**NOTE:** This table is only a checklist for reference. The compliance shall be with the complete document. Filling out the table with "PASS" won't be accepted as compliance without the technical information required to certify it.












# 4350.266 Welded Wire Mesh Reinforcement

Final Audit Report

2024-11-13

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