



Document Title:

Grating Panel

Document Type:

Material Specifications

Document No.:

4350.275

Department:

Distribution Standards & Materials

Issue Date:

October 5, 2022

Effective Date:

Oct 6, 2022

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Oct 6, 2022

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Oct 6, 2022

Version History

Date	Revision Comments
Oct. 5, 2022	Initial Release.

Warehouse Catalog	Item Version	Date
038-83047	1	10/05/2022



Equipment Specification

Document No.: 4350.275

Item No.: 038-83047

Asset Suite: 83047

Originating Department: Distribution Engineering



Grating Panel

1. Introduction

This is a general specification that covers the minimum requirements for the grating panel to be used in the distribution system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement regarding on site specific conditions, quantity, and other requirements. 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. The 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. 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 item number.
- 4.2. Packaging labels and tags shall be waterproof.

5. Equal or Approved Equal to

American Grating, catalog number: T20-50

6. Packaging

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.



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7. Number Per Package (Logistics)

One per package or as requested by LUMA Energy

8. Acceptance Criteria

- 8.1. Test required: certified by external laboratories.
- 8.2. Shall comply with the latest applicable codes, standards, and other regulations.

9. Description

- 9.1. Fiber reinforced polymer grating panel to be used for manhole covers.
- 9.2. Material shall be pultruded fiber reinforced polymer.
- 9.3. Shall be of a 50% open T-bar configuration.
- 9.4. The panel size shall be 4 feet wide by 20 feet long. The depth of the panel shall be 2 inches.
- 9.5. The panel shall be manufactured with 6 crossbars, each spaced 6 inches apart.
- 9.6. The panel shall have the following strength characteristics per foot of width:
 - a. Tensile strength: 1.98 in³
 - b. Breaking strength: 1.32 in³
- 9.7. Color shall be yellow. Other colors will be evaluated.

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

— End of Specification —



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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 (4350.275).		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document.		
3	Material	Pultruded fiber reinforced polymer Color: Yellow		
4	Dimensions	<ul style="list-style-type: none">• Width: 4 feet• Length: 20 feet• Depth: 2 inches• Crossbars: 6 @ 6 inches apart		
5	Strength	<ul style="list-style-type: none">• Tensile strength: 1.98 in3• Breaking strength: 1.32 in3		











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Final Audit Report

2022-10-06

Created:	2022-10-06
By:	Rodolfo Flores (rodolfo.floresortiz@lumapr.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAA6wOTpZidodHrjOnxocTcnQOtxInFPg5Q

"4350.275 - Grating Panel (10-05-2022)" History

-  Document created by Rodolfo Flores (rodolfo.floresortiz@lumapr.com)
2022-10-06 - 1:05:57 PM GMT
-  Document e-signed by Rodolfo Flores (rodolfo.floresortiz@lumapr.com)
Signature Date: 2022-10-06 - 1:07:44 PM GMT - Time Source: server
-  Document emailed to Rafael Torres-Martinez (rafael.torresm@lumapr.com) for signature
2022-10-06 - 1:07:45 PM GMT
-  Email viewed by Rafael Torres-Martinez (rafael.torresm@lumapr.com)
2022-10-06 - 2:04:49 PM GMT
-  Document e-signed by Rafael Torres-Martinez (rafael.torresm@lumapr.com)
Signature Date: 2022-10-06 - 2:04:59 PM GMT - Time Source: server
-  Document emailed to ricardo.castro@lumapr.com for signature
2022-10-06 - 2:05:00 PM GMT
-  Email viewed by ricardo.castro@lumapr.com
2022-10-06 - 5:23:03 PM GMT
-  Signer ricardo.castro@lumapr.com entered name at signing as Ricardo Castro Gómez
2022-10-06 - 5:24:36 PM GMT
-  Document e-signed by Ricardo Castro Gómez (ricardo.castro@lumapr.com)
Signature Date: 2022-10-06 - 5:24:38 PM GMT - Time Source: server
-  Agreement completed.
2022-10-06 - 5:24:38 PM GMT