

application for
CERTIFICATE OF APPROPRIATENESS
in
Savannah's Downtown Historic District:
Solar Panels on Roof

PROPERTY / PROJECT DESCRIPTION:

PIN: 2-0044-08-016 // Stephens Ward, Contributing structure #1631, built in 1899
ZONING: D-R

SCOPE OF WORK:

Solar Contractor: Jack Miller with Zero Grid Power Solutions

Proposed product: **Aptos 460 watt panels**

- Dimensions: 75.1 x 44.6 x 1.3"
- thin, low-profile panels that are all black with no reflective surfaces, designed to be the least noticeable in all environments
- face of panel 1.3" above roof
- meet all wind-load requirements for coastal locations (Miami-Dade approved)

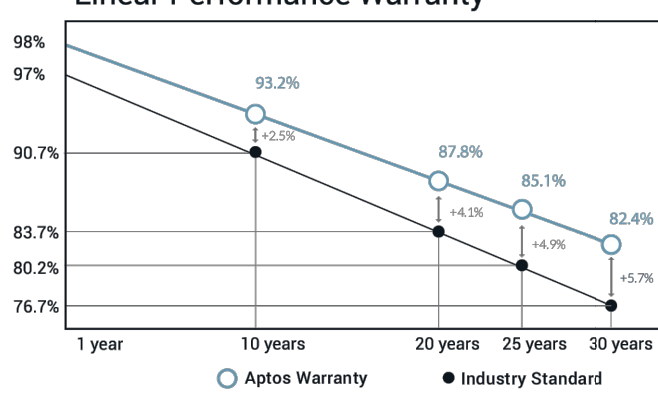
SOLAR PANEL SPECIFICATION



DN4-120-MF10-460W
Residential | Commercial

Our DNA Split Cell Series uses advanced selective emitter PERC technology with thin film layers to improve heat tolerance, maximize energy harvest, minimize resistive loss, and use 5% more of the available active area for optimal power performance.

Linear Performance Warranty



Key Features

- Advanced Technology: Patented DNATM technology boosts power performance & module efficiency.
- Miami-Dade Approved: Maximum Durability LEVEL 6 SALT MIST Tested, 5400 Pa Wind Load Certified Panels
- Bankable Investment: Comprehensive warranty that covers both 30-year product and 30-year power performance.

DN4™ 120-Monofacial
Solar for Innovators

Industry Leading 30 Years Product and Performance Warranty

445W | 450W | 455W | **460W**



Designed & Engineered in Silicon Valley

Awards
Winners of the Leadership in Solar Energy award for three consecutive years and listed as one of the Top Solar Products from 2021-2022.

Aesthetics
All black design with advanced split cell technology features 10 ultra-thin busbars that allow for less resistance and greater energy harvest.

Electrical Specifications

	DN4-120-MF10-445W	DN4-120-MF10-450W	DN4-120-MF10-455W	DN4-120-MF10-460W
STC Rated Output P _{max} (W)	445W	450W	455W	460W
Open Circuit Voltage V _{oc} (V)	41.15	39.31	41.26	39.50
Short Circuit Current I _{sc} (A)	13.77	11.96	13.85	11.99
Rated Voltage V _m (V)	33.72	32.02	33.88	32.39
Rated Current I _m (A)	13.21	10.34	13.29	10.40
Module Efficiency	20.57%	20.79%	21.03%	21.26%

Temperature Coefficients

	DN4-120-MF10-445W	DN4-120-MF10-450W	DN4-120-MF10-455W	DN4-120-MF10-460W
Temperature Coefficients P _{max}	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C
Temperature Coefficients I _{sc}	+0.054%/°C	+0.054%/°C	+0.054%/°C	+0.054%/°C
Temperature Coefficients V _{oc}	-0.27%/°C	-0.27%/°C	-0.27%/°C	-0.27%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C	45±2°C	45±2°C	45±2°C

Test Operating Conditions

	DN4-120-MF10-445W	DN4-120-MF10-450W	DN4-120-MF10-455W	DN4-120-MF10-460W
Maximum Series Fuse	25A	25A	25A	25A
Maximum System Voltage	1,500 VDC (UL6169)	1,500 VDC (UL6169)	1,500 VDC (UL6169)	1,500 VDC (UL6169)
Maximum Load Capacity (Per UL 1703)	5400 PA Snow Load / 5400 PA Wind Load	5400 PA Snow Load / 5400 PA Wind Load	5400 PA Snow Load / 5400 PA Wind Load	5400 PA Snow Load / 5400 PA Wind Load
Fire Performance Type	Type 1	Type 1	Type 1	Type 1

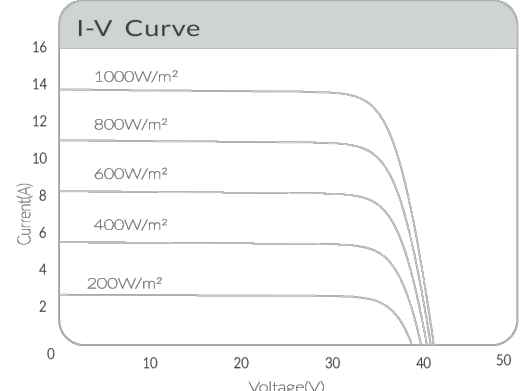
Packaging Configuration

	DN4-120-MF10-445W	DN4-120-MF10-450W	DN4-120-MF10-455W	DN4-120-MF10-460W
Number of Modules per Pallet	31	31	31	31
Number of Pallets per 40ft. Container	24	24	24	24
Pallet Dimensions	76.29 X 44.48 X 49.76 in, 1938 X 1130 X 1264 mm	76.29 X 44.48 X 49.76 in, 1938 X 1130 X 1264 mm	76.29 X 44.48 X 49.76 in, 1938 X 1130 X 1264 mm	76.29 X 44.48 X 49.76 in, 1938 X 1130 X 1264 mm
Pallet Weight (lbs)	1640	1640	1640	1640
Module per 40ft. Container	744	744	744	744

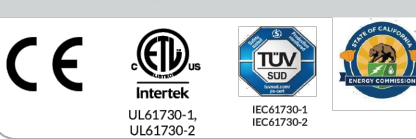
Mechanical Properties

	DN4-120-MF10-445W	DN4-120-MF10-450W	DN4-120-MF10-455W	DN4-120-MF10-460W
Cell Type	SE-PERC	SE-PERC	SE-PERC	SE-PERC
Glass	3.2mm, anti-reflection coating, high transmission, low iron, tempered glass	3.2mm, anti-reflection coating, high transmission, low iron, tempered glass	3.2mm, anti-reflection coating, high transmission, low iron, tempered glass	3.2mm, anti-reflection coating, high transmission, low iron, tempered glass
Frame	Anodized Aluminum Alloy	Anodized Aluminum Alloy	Anodized Aluminum Alloy	Anodized Aluminum Alloy
Junction Box	IP68	IP68	IP68	IP68
Dimensions	75.1 X 44.6 X 1.3 in, 1908 X 1134 X 35 mm	75.1 X 44.6 X 1.3 in, 1908 X 1134 X 35 mm	75.1 X 44.6 X 1.3 in, 1908 X 1134 X 35 mm	75.1 X 44.6 X 1.3 in, 1908 X 1134 X 35 mm
Weight	52.9lbs (24.2kg)	52.9lbs (24.2kg)	52.9lbs (24.2kg)	52.9lbs (24.2kg)
Output Cable	4mm2 (EU)12AWG, 39.37in (1,009mm)	4mm2 (EU)12AWG, 39.37in (1,009mm)	4mm2 (EU)12AWG, 39.37in (1,009mm)	4mm2 (EU)12AWG, 39.37in (1,009mm)
Cable Length	47.2 in	47.2 in	47.2 in	47.2 in
Encapsulant	POE	POE	POE	POE
Connector Type	Stabil-EW22	Stabil-EW22	Stabil-EW22	Stabil-EW22

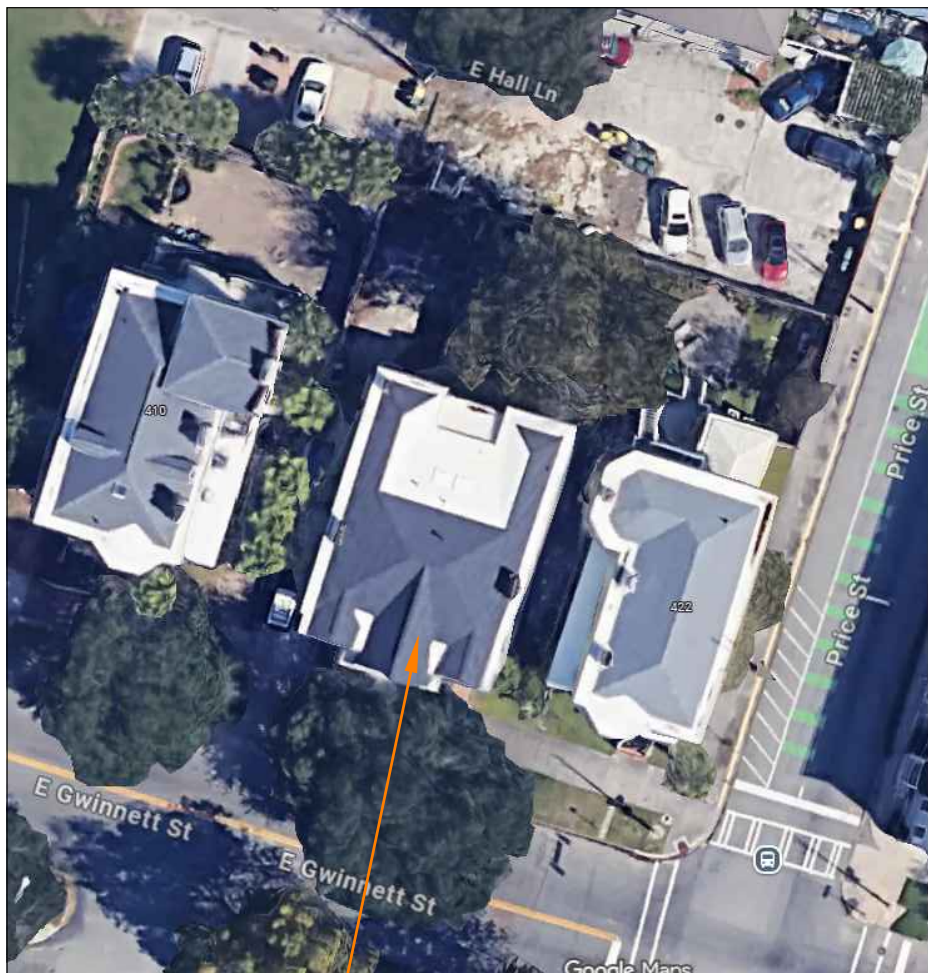
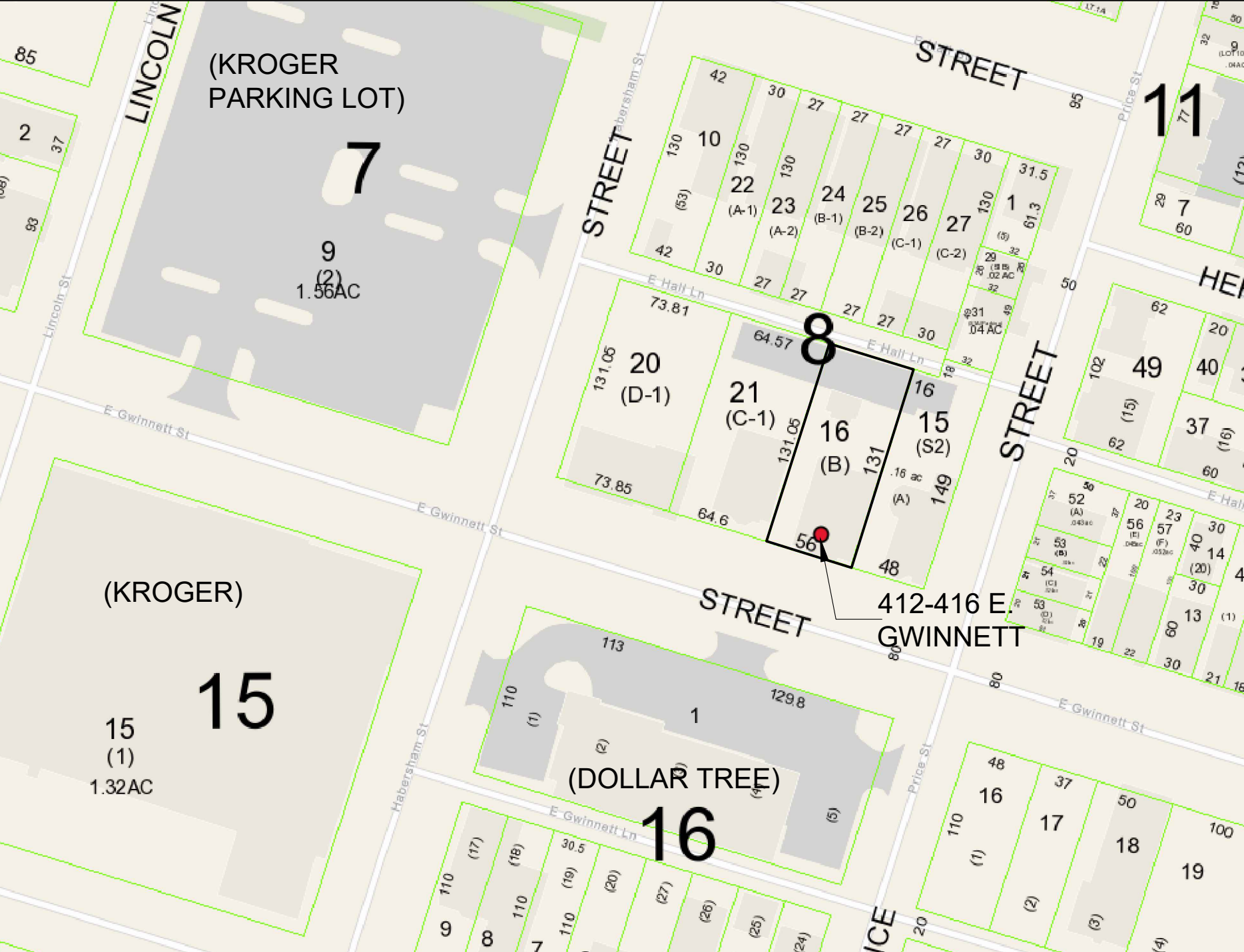
I-V Curve



Certifications



VICINITY MAP:



412-416 E.
GWINNETT

SITE PHOTOS:



FRONT OF HOUSE FROM STREET CURB,
LOOKING EAST



FRONT OF HOUSE FROM STREET CURB,
LOOKING WEST

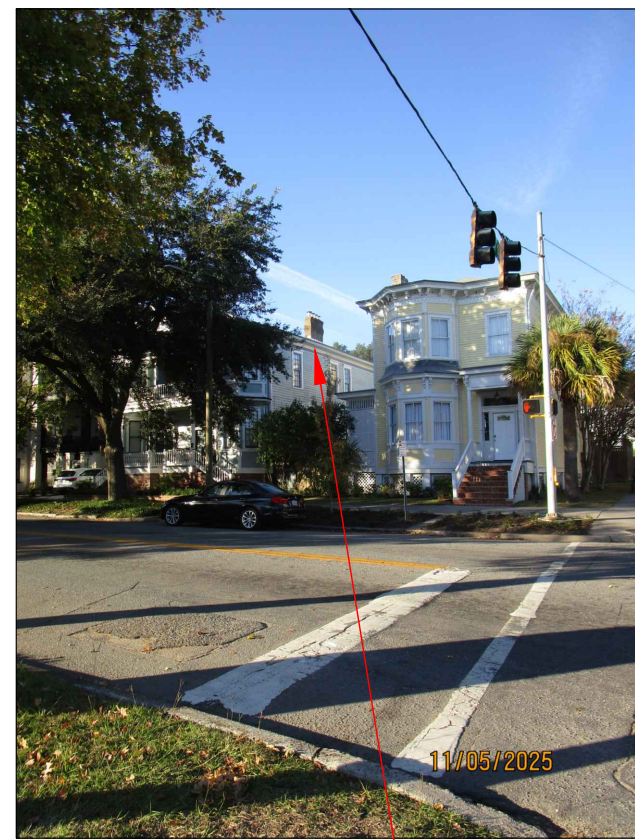


REAR OF HOUSE FROM E. HALL LANE

no visibility from lane



REAR OF HOUSE FROM E. HALL LANE,
LOOKING EAST



no visibility from
price-gwinnett intersection



FRONT OF HOUSE FROM PRICE-GWINNETT INTERSECTION,
LOOKING WEST

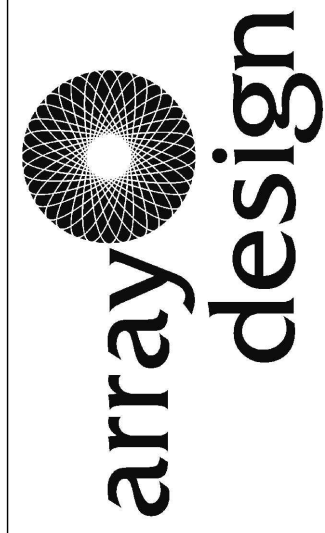
ORIGINAL 24-PANEL LAYOUT:



REVISED 18-PANEL LAYOUT:



seal



shauna kucera,
registered architect

912.228.9088

Eazzetta Residence
414 - 416 E. Gwinnett Street
Savannah, GA 31401

revisions

3 JANUARY 2026

date: 10 NOVEMBER 2025

title:

PROJECT DESCRIPTION,
SITE PHOTOS,
VICINITY MAP

drawing number

A-0.0

RELEASED FOR CONSTRUCTION