CERTIFICATE OF APPROPRIATENESS

Application Date: June 25, 2014

Applicant: David Gill, Texas Solar Outfitters for Harry Tallichet, owner

Property: 802 Woodland St, lot 1, tract 2A, block 39, Woodland Heights Subdivision. The property includes a one-and-a-half story single-family residence and attaché two-story garage situated on a 7,500 square foot corner lot.

Significance: Noncontributing Queen Anne - style residence, constructed circa 1945, located in the Woodland Heights Historic District. A COA was issued in 2006 for an addition and attached garage.

Proposal: Alteration – Install 20, 65.5" tall by 39" wide solar panels to the south - facing roof of the noncontributing residence and garage located on a corner lot.

See enclosed application materials and detailed project description on p. 4-11 for further details.

Public Comment: No public comment received.

Civic Association: No comment received.

Recommendation: **Approval**

HAHC Action: **Approved**

CERTIFICATE OF APPROPRIATENESS

Basis for Issuance: HAHC Approval
Effective: July 17, 2014

PLANNING & DEVELOPMENT DEPARTMENT

COA valid for one year from effective date. COA is in addition to any other permits or approvals required by municipal, state and federal law. Permit plans must be stamped by Planning & Development Department for COA compliance prior to submitting for building or sign permits. Any revisions to the approved project scope may require a new COA.

Planning Official **Date**

APPROVAL CRITERIA

ALTERATIONS TO NONCONTRIBUTING STRUCTURES

Sec. 33-241(c): HAHC shall issue a certificate of appropriateness for the alteration, rehabilitation, restoration or addition of an exterior feature of any **noncontributing structure in an historic district** upon finding that the application satisfies the following criteria, as applicable:

S - satisfies D - does not satisfy NA - not applicable

S	D	NA		
☒	☐	☐	(1)	The proposed activity must recognize the building, structure, object or site as a product of its own time and avoid alterations that seek to create an earlier or later appearance
			(2)	For an addition to a noncontributing structure:
☐	☐	☒	(a)	The setback of the addition is no closer to the public right-of-way than the typical setback of existing contributing structures in the historic district;
☐	☐	☒	(b)	The height of the eaves of the addition to a noncontributing structure used or intended for use for residential purposes is not taller than the typical height of the eaves of existing contributing structures used for residential purposes in the historic district; and
☐	☐	☒	(c)	The height of an addition to a noncontributing structure used of intended for use for commercial purposes is not taller than the height of the existing structure.

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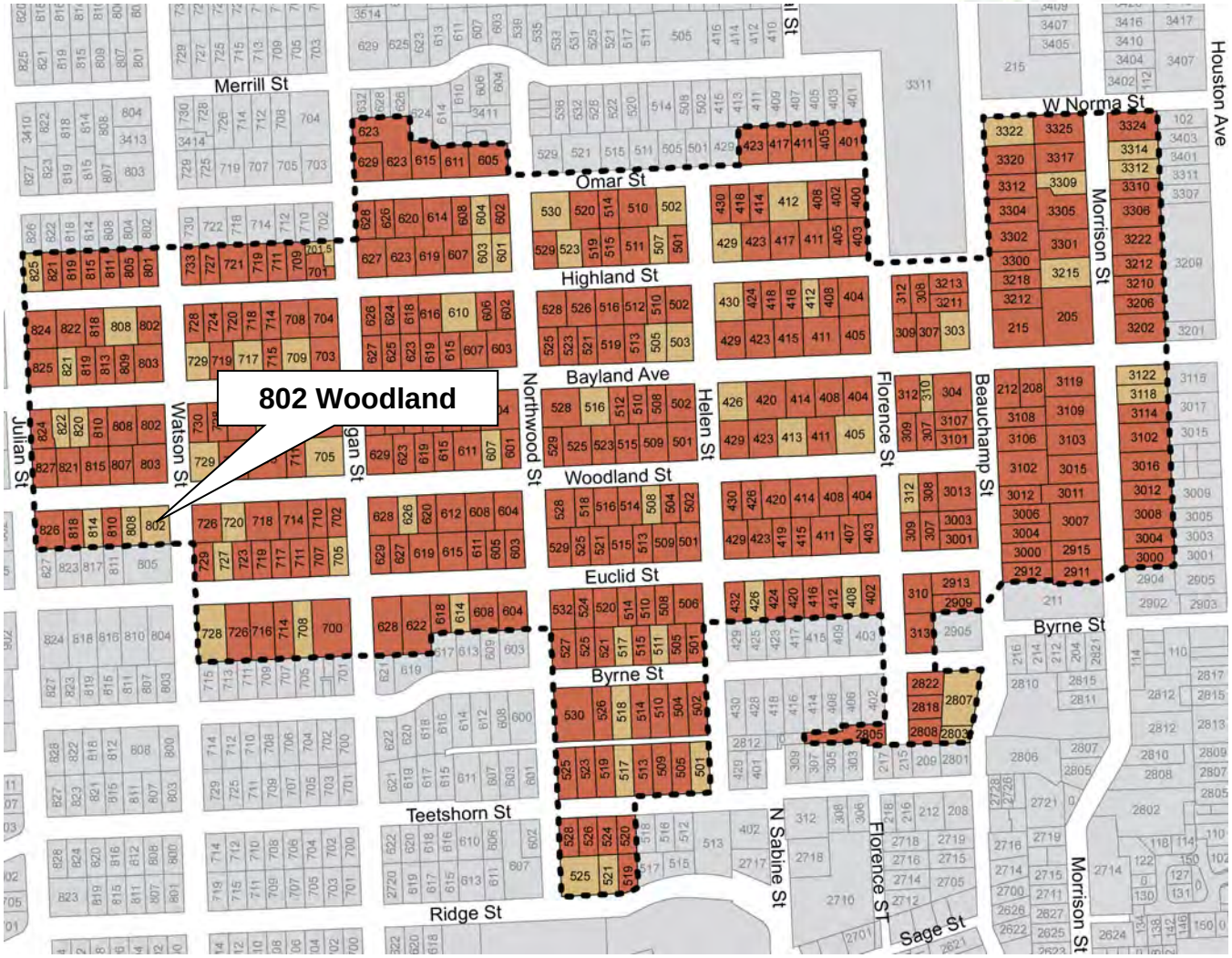
PROPERTY LOCATION

WOODLAND HEIGHTS HISTORIC DISTRICT

Building Classification
- Contributing
- Non-Contributing
- Park



INVENTORY PHOTO

NEIGHBORING PROPERTIES

808 Woodland – Noncontributing – 1920 (neighbor)

726 Woodland – Contributing – 1930 (neighbor)

729 Woodland– Noncontributing – 1912 (across street)

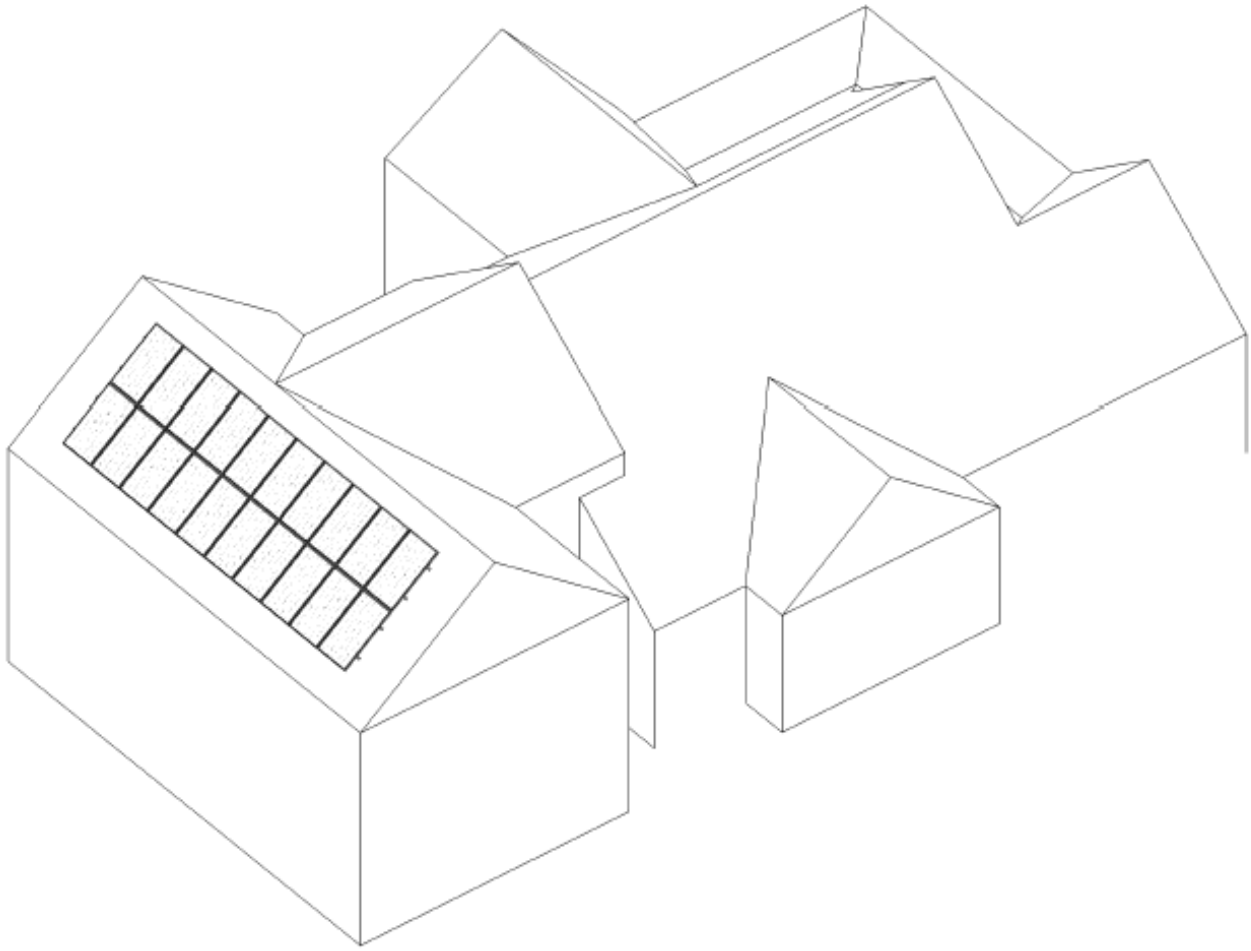
803 Woodland– Contributing – 1910 (across street)

807 Woodland– Contributing – 1912 (across street)

815 Woodland– Contributing – 1915 (across street)

3D RENDERING – SOUTH (REAR)

PROPOSED



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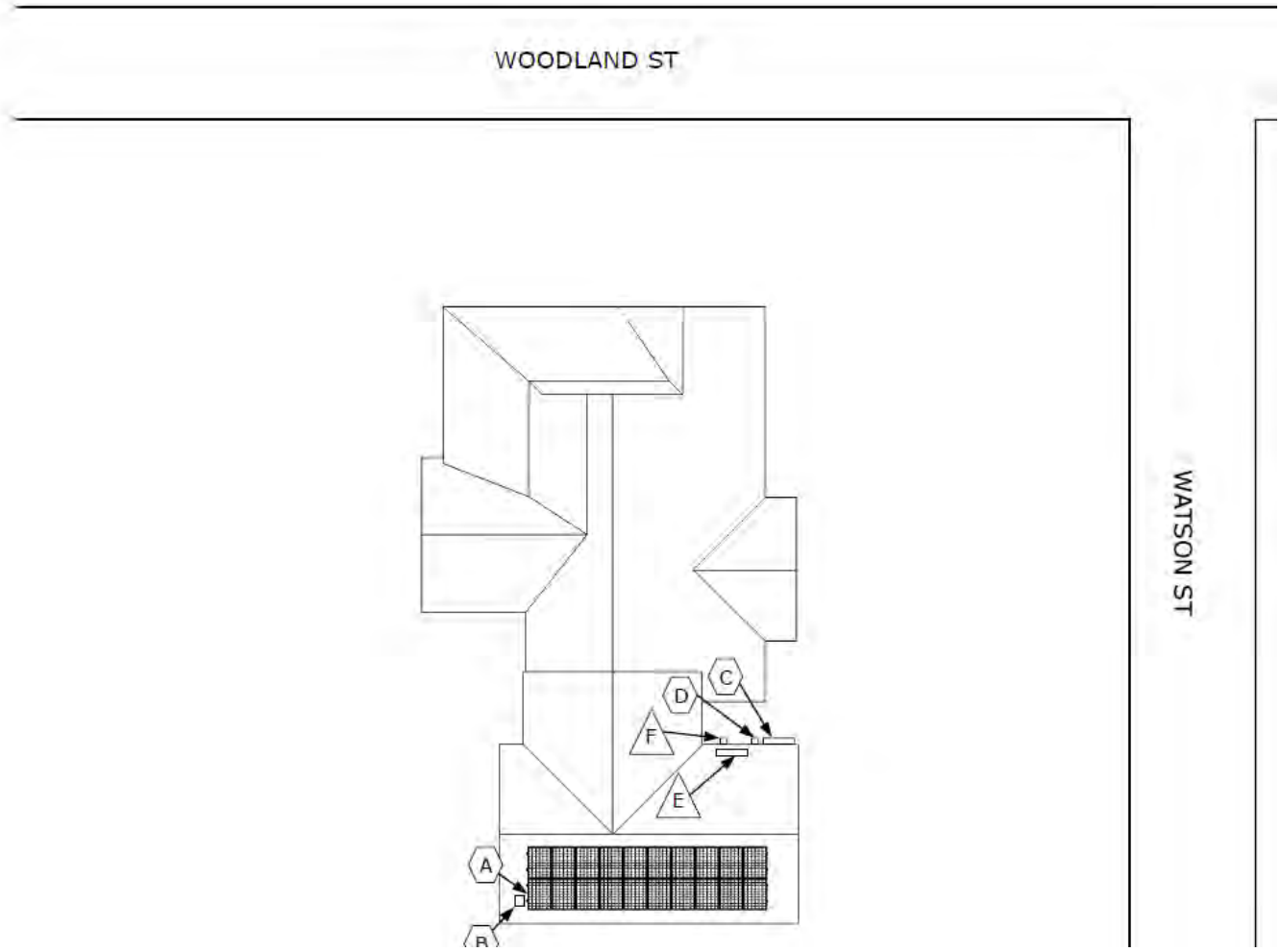
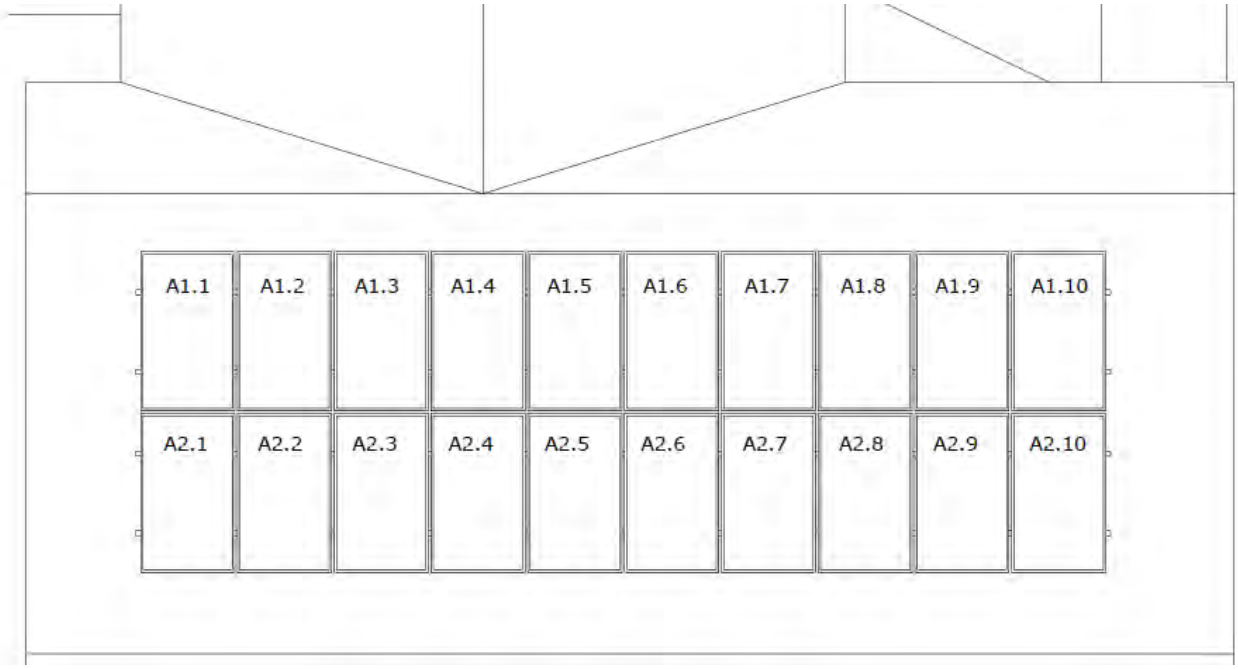
SITE PLAN

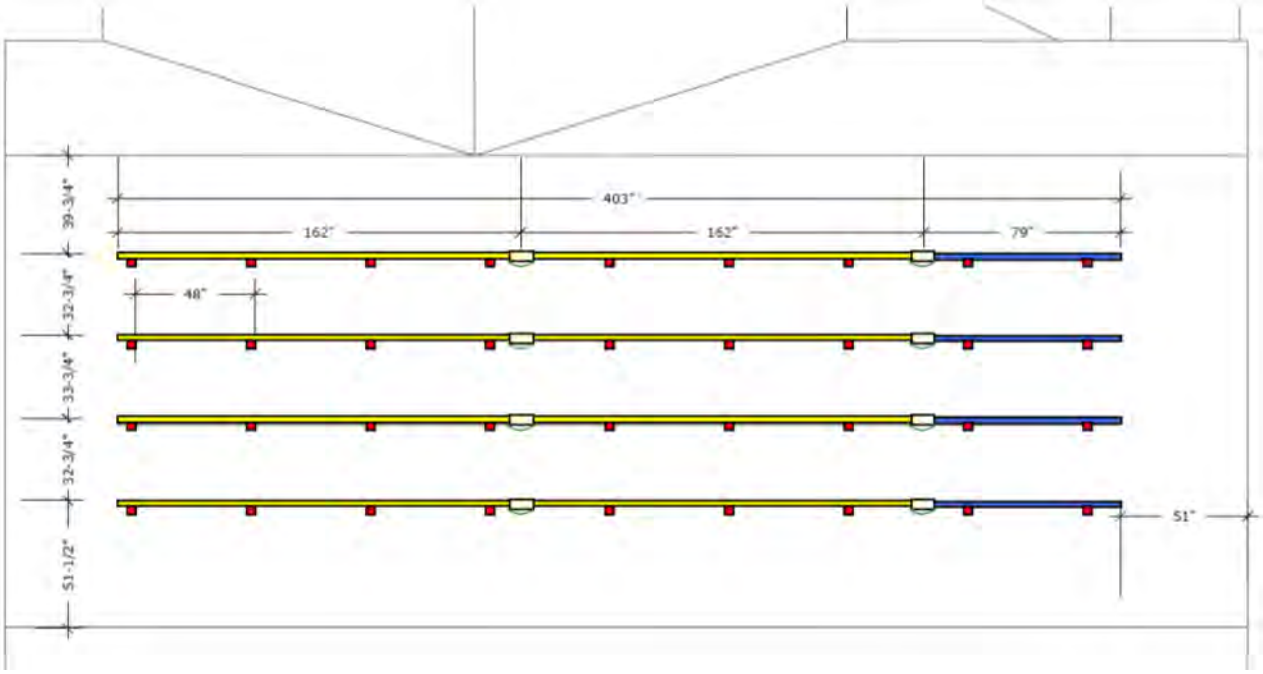
PROPOSED



SOUTH (REAR) ELEVATION

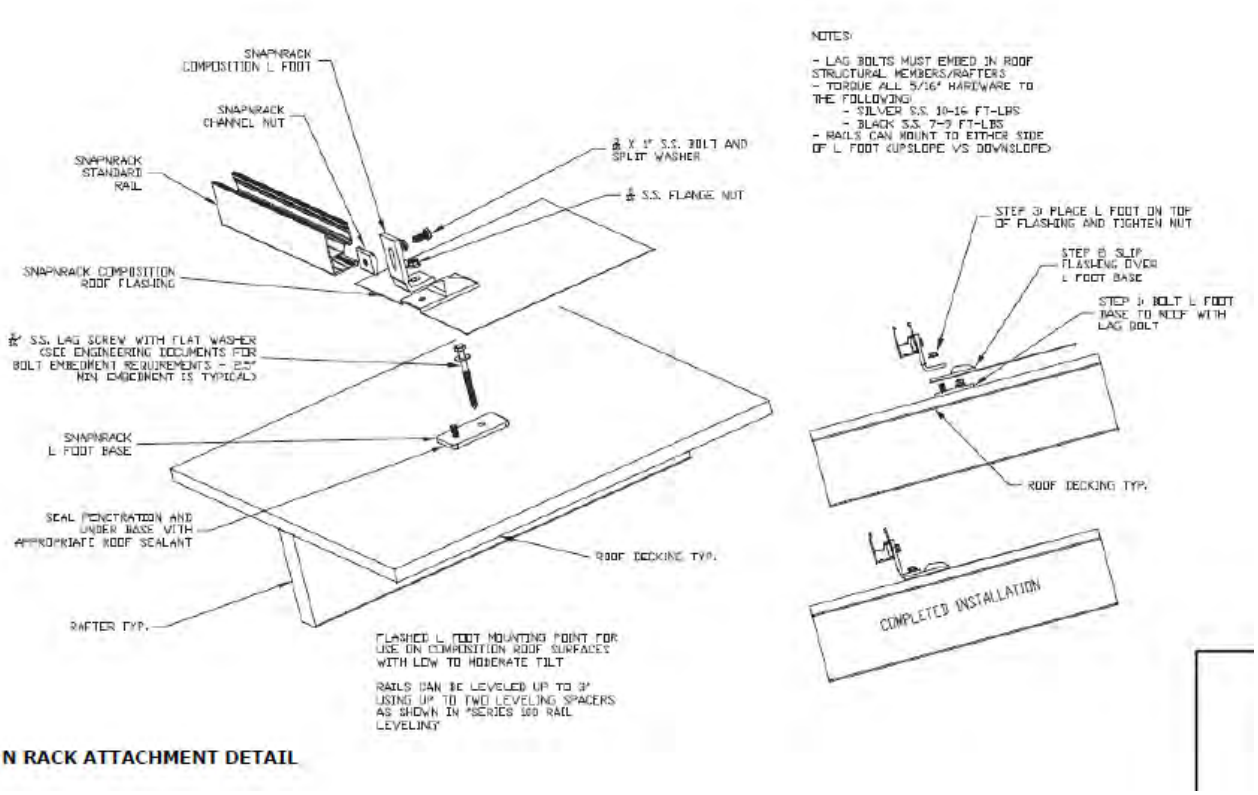
PANEL AND RAIL PLACEMENT





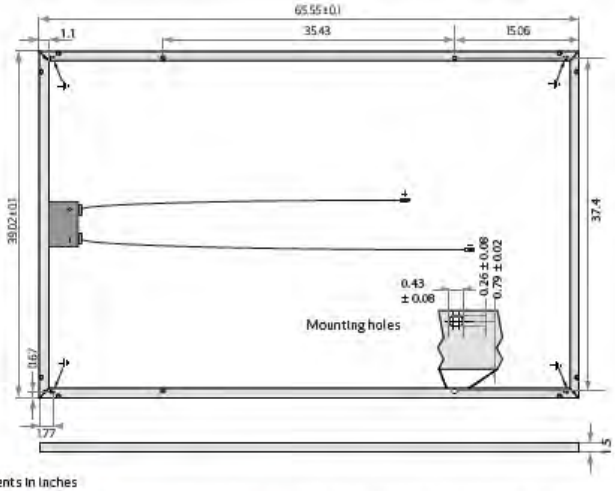
PANEL DETAILS

ATTACHMENT DETAILS



SNAP N RACK ATTACHMENT DETAIL

SPEC SHEET



All measurements in inches

16.1% EFFICIENCY

10 YEAR PRODUCT WARRANTY

25 YEAR LINEAR POWER OUTPUT WARRANTY

DUTY★FREE US IMPORT DUTY FREE

ELECTRICAL DATA @ STC	REC240PE	REC245PE	REC250PE	REC255PE	REC260PE	REC265PE
Nominal Power - P_{MPP} (Wp)	240	245	250	255	260	265
Watt Class Sorting - (W)	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Nominal Power Voltage - V_{MPP} (V)	29.7	30.1	30.2	30.5	30.7	30.9
Nominal Power Current - I_{MPP} (A)	8.17	8.23	8.30	8.42	8.50	8.58
Open Circuit Voltage - V_{OC} (V)	36.8	37.1	37.4	37.6	37.8	38.1
Short Circuit Current - I_{SC} (A)	8.75	8.80	8.86	8.95	9.01	9.08
Panel Efficiency (%)	14.5	14.8	15.1	15.5	15.8	16.1

Analysed data demonstrates that 99.7% of panels produced have current and voltage tolerance of ±3% from nominal values.
Values at standard test conditions STC (airmass AM 1.5, irradiance 1000 W/m², cell temperature 25°C).
At low irradiance of 200 W/m² (AM 1.5 and cell temperature 25°C) at least 97% of the STC panel efficiency will be achieved.

ELECTRICAL DATA @ NOCT	REC240PE	REC245PE	REC250PE	REC255PE	REC260PE	REC265PE
Nominal Power - P_{MPP} (Wp)	183	187	189	193	197	202
Nominal Power Voltage - V_{MPP} (V)	27.7	28.1	28.3	28.5	29.0	29.4
Nominal Power Current - I_{MPP} (A)	6.58	6.64	6.68	6.77	6.81	6.90
Open Circuit Voltage - V_{OC} (V)	34.4	34.7	35.0	35.3	35.7	36.0
Short Circuit Current - I_{SC} (A)	7.03	7.08	7.12	7.21	7.24	7.30

Nominal operating cell temperature NOCT (800 W/m², AM 1.5, wind speed 1 m/s, ambient temperature 20°C).

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	45.7°C (±2°C)
Temperature Coefficient of P_{MPP}	-0.40 %/°C
Temperature Coefficient of V_{OC}	-0.27 %/°C
Temperature Coefficient of I_{SC}	0.024 %/°C

GENERAL DATA

Cell Type:	60 REC PE multi-crystalline 3 strings of 20 cells with bypass diodes
Glass:	1/8" mm solar glass with anti-reflection surface treatment
Back Sheet:	Double layer highly resistant polyester
Frame:	Anodized aluminum (silver)
Junction Box:	IP67 rated
	4 mm² solar cable, 35" + 47"
Connectors:	Multi-Contact MC4 (4 mm²)
Origin:	Made in Singapore

MAXIMUM RATINGS

Operational Temperature:	-40 ... +85°C
Maximum System Voltage:	600 V
Design Load*:	75.2 lbs/ft² (3600 Pa) 33.4 lbs/ft² (1600 Pa) *Refer to installation manual
Max Series Fuse Rating:	15 A
Max Reverse Current:	15 A

CERTIFICATION

c UL us LISTED

UL 1703, IEC 62716 (ammonia resistance) & IEC 61701 (salt mist corrosion - severity level 6).

WARRANTY

10 year product warranty.
25 year linear power output warranty
(max. degression in performance of 0.7% p.a.).

MECHANICAL DATA

Dimensions:	65 1/2 x 39 x 1 1/2 in
Area:	17 3/4 ft²
Weight:	39 1/2 lbs

Note! All given specifications are provisional data only and

NE-09-15-07 R 1 2013

PROJECT DETAILS

- Each 65.5” tall by 39” wide solar panel will be installed on a system of four, 403” long rails. The rails will be spaced 32” apart vertically, and the L-foot bases and flashing will be spaced 48” apart horizontally. The rails will be set back from the east (Watson side) elevation 51”, and from the ridge 39 3/4”.
- The rails will be attached to the rafters with 10” lag screws, L-foot bases and flashing.