

BLOCK 1221

LOT 895

QUALIFICATION CODE

ADDRESS (SITE) 519 5th Ave, Brick, NJ, 08724

PERMIT NO.

15-1628



CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: 519 5th Ave, Brick, NJ, 08724

2. Name of Owner in Fee: Patrick H Leary

Tel. [redacted] e-mail dels7@comcast.net

Address 519 5th Ave Brick 08724

3. Ownership in Fee: Public Private ☒ 4.980 zip code

4. Principal Contractor: Roof Diagnostics Solar and Electric, LLC. Tel. 732.568.8521

Address 1917 Atlantic Ave. e-mail Manasquan, NJ, 08736

License No. OR, if new home, Builder Reg. No. Exp. Date

Home Improvement Contractor Registration No. or Exemption Reason 13VH06478300

Federal Emp. ID No. 452247975 FAX: (732) 782-0319

5. Architect or Engineer Tom Petersen Contact 732-730-1763

Address 6 Country Lane Howell, NJ, 07731 e-mail

Tel. 732-730-1763 FAX: 732-730-1783

6. Responsible Person in Charge once Work has Begun Joseph Doherty

Tel. 732.568.8521 FAX: (732) 749 1567

V. FEE SUMMARY (for office use only)

1. Building	\$ 135	Update	1A	Update
2. Electrical	\$ 765	100		
3. Plumbing				
4. Fire Protection				
5. Elevator Devices				
6. Subtotal				
7. Less 20% for State Plan Review	\$			
8. Subtotal	\$ 38-	1		
9. State Permit Surcharge Fee	\$			
10. Subtotal	\$			
11. Cert. of Occupancy				
12. Other	\$ 938	101		
13. TOTAL	\$			

VI. BUILDING/SITE CHARACTERISTICS

1. Number of Stories		(office use only)
2. Height of Structure	ft.	
3. Area — Largest Floor	sq. ft.	
4. New Building Area	sq. ft.	
5. Volume of New Structure	cu. ft.	
6. Max. Live Load		
7. Max. Occupancy Load		
8. If Industrialized Building: State Approved	HUD	
9. Total Land Area Disturbed	sq. ft.	
10. Flood Hazard Zone		
11. Base Flood Elevation	ft.	
12. Wetlands	yes no	

IIa. PROPOSED WORK

- ☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition
- ☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction
- ☐ Asbestos Abat. -Subch. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES

(Check all that apply)

- ☒ Building
- ☒ Electrical
- ☐ Plumbing
- ☐ Fire Protection
- ☐ Elevator

FOR OFFICE USE ONLY (Optional)

Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Rejection	Re-viewer
3000	5/11/15			5/22/15	1W			
17000	5/11/15			5/22/15	1W			

TOTAL COST 20,000

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use:
2. Use Group, Proposed:
3. Change in Use Group, Indicate Present:
4. No. of dwelling units: Total Units Income-restricted
- Gained, Sale
- Gained, Rental
- Lost, Sale
- Lost, Rental

B. NON-RESIDENTIAL (primary use)

1. State Specific Use:
2. Use Group, Proposed:
3. Change in Use Group, Indicate Present:

C. MIXED USE -List secondary use(s):

- D. Construct. Classification: Present Proposed

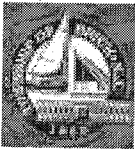
III. PLAN REVIEW (optional)

DO YOU WANT:

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/ Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers/Standpipes
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks
10. ☐ Swimming Pools, Spas and Hot Tubs
11. ☐ LPGas Tanks
12. ☐ Fire Alarm



Brick Township
401 Chambersbridge Rd
Brick, NJ 08723

Date Issued 10/20/2015
Control Number C-15-002200
Permit Number 15-1628
Permit Issue Date 5/29/2015
Certificate Number 15-1628

Certificate

Construction Code Division
(Certificate of Approval)

Identification

Work Site Location: 519 5TH AVE. Brick Township, NJ Block: 1221 Lot: 895 Qual: _____
Owner in Fee: LEARY, PATRICK H
Owner Address: 519 5TH AVE. BRICK NJ 08724
Telephone: [REDACTED]
Contractor Roof Diagnostics Solar and Electric LLC
Address 1917 ATLANTIC AVE MANASQUAN NJ 08736
Telephone: (732) 568-8521 Fax: (732) 749-1567
License Number or Builders Registration Number: 34EB01637800 Federal Emp. Number: 223324927
13VH06478300

Home Warranty Number: _____

Type of Warranty Plan: ☐ State ☐ Private

Use Group: R-5 Construction Classification: _____

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: SOLAR PANELS ...INSTALL 4.980 kw ROOF MOUNT PHOTOVOLTAIC SOLAR SYSTEM

Certificate Comments:

☐ **Certificate of Occupancy**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☒ **Certificate of Approval**

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ **Certificate of Continued Occupancy**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **Temporary Certificate of Compliance**

The following conditions must be met no later than or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:
Conditions to be met:

☐ **Certificate of Clearance - Lead Abatement 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

- ☐ Total removal of lead-based paint hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Clearance - Asbestos Abatement**

This serves notice that based on written certification, asbestos abatement was performed to the following extent.

- ☐ Total removal of asbestos hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Compliance**

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

☐ **Temporary Certificate of Occupancy**

The following conditions must be met no later than:
or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:
Conditions to be met:

Daniel Newman Jr

Construction Official

Fee: \$0.00

Check Number: _____

Collected By: _____

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(f)1.ix:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

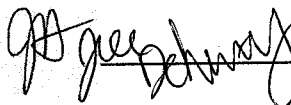
(X) Check if contractor.

Agent Name Roof Diagnostics Solar & Electric, LLC

Address 1917 Atlantic Ave., Manasquan NJ 08736

Telephone 732.568.8521

Signature _____



- III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.



APPLICATION FOR CERTIFICATE

Permit # 15-1628

Date Issued

- or -

Control #

Certificate Application Received:

Certificate Issued:

IDENTIFICATION

Work Site Location 519 5th Ave Block 1221 Lot 895 Qualification Code _____
 Contractor ROOF DIAGNOSTICS, INC.
 Owner in Fee Leary Address 2333 HIGHWAY 34
 Address Same Wall, NJ 08756
 Tel. _____ Tel. (732) 568-8509 Fax: (732) 782-0319
 License No. 13VH06478300
 Federal Employee No. 452 247975

ACTION

- ☐ CERTIFICATE OF OCCUPANCY
☐ CERTIFICATE OF CONTINUED OCCUPANCY
☐ LEAD HAZARD ABATEMENT CERTIFICATE OF CLEARANCE
☐ TEMPORARY CERTIFICATE OF OCCUPANCY
☒ CERTIFICATE OF APPROVAL

USE GROUP _____ Previous _____ Current _____

FINAL COST OF CONSTRUCTION: \$ _____

(Include value of any new structure, all on-site improvements, built-in furnishings and fixtures and all integral equipment exclusive of process or manufacturing equipment.)

Describe below any substantive deviation in dimension, lay out or appearance of the building or structure from the released plans and specifications filed with the construction permit application. Please note, a set of amended drawings may be required.

N/A

If you are requesting a Temporary Certificate of Occupancy, please explain why in the space below.

N/A

DESCRIPTION OF WORK/USE:

INSTALLATION OF UNI-RAC FLUSH ROOF MOUNT
SOLAR SYSTEM

I hereby attest that to the best of my knowledge, the completed project meets the conditions of the construction permit and all prior approvals, and all work has been completed substantially in accordance with the code and with those portions of the plans and specifications controlled by the code, with any substantial deviations noted. Incomplete items listed on a Temporary Certificate of Occupancy will be completed by the date on the Certificate.

SIGNED: _____

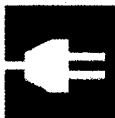
Casey Steets
OWNER/AGENT

☐ OWNER

☒ AGENT



ELECTRICAL SUBCODE TECHNICAL SECTION



A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1221 Lot 895 Qualification Code _____
Work Site Location 519 5th Ave, Brick, NJ, 08724

Owner in Fee: Patrick H Leary

Tel. _____ e-mail _____

Address 519 5th Ave Brick 08724

Contractor: Roof Diagnostics Solar & Electric, Tel. 732.568.8521

Address LLC. 1917 Atlantic Ave e-mail _____

Manasquan, NJ, 08736

Contractor License No. 16378A Exp. Date 03/2016

Home Improvement Contractor Registration No. or Exemption Reason 13VH06478300

Federal Emp. ID No. 452247975 FAX: (732) 782-0319

B. ELECTRICAL CHARACTERISTICS

Use Group Present _____ Proposed _____

[] Pole/Pad # _____ [] Temporary [] Other _____

Building Occupied as Residence Utility Co. Jersey Central PL

Est. Cost of Elec. Work \$ 17000

JOB SUMMARY (Office Use Only)

PLAN REVIEW

[] No Plans Required

[] Partial -Under-slab Utilities Approved

Date: _____ Approved by: _____

[] Electric Plans Approved

Date: 5/6/15 Approved by: [Signature]

Joint Plan Review Required:

[] Bldg. [] Plumb. [] Fire. [] Elev.

SUBCODE APPROVAL for PERMIT

Date: 5/20/15 Approved by: [Signature]

SUBCODE APPROVAL for CERTIFICATE

[] CO [] CCO [] CA

Date: 10/14/15 Approved by: [Signature]

INSPECTIONS

Type: _____ Failure _____ Approval _____ Initial _____

Rough _____

Barrier-Free _____

Trench _____

Temp. Serv. _____

Constr. Serv. _____

TCO _____

Other _____

Service _____

Final _____

Barrier-Free _____

Temp. Cut-in-Card Date Issued _____

Final Cut-in-Card Date Issued _____

Annual Pool Inspection _____

Date of Grounding and Bonding Certification _____

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant sign/Contractor

sign and seal here: _____

Print name here: Joseph Doherty

[X] Licensed Elec. Contractor [] Certif'd Landscape Irrigation Contr. [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK:

installation of unirac roof mount solar system

QTY.	SIZE	ITEMS	FEE (Office Use Only)
_____	_____	Lighting Fixtures	_____
_____	_____	Receptacles	_____
_____	_____	Switches	_____
_____	_____	Detectors	_____
_____	_____	Light Poles	_____
_____	_____	Motors—Fract. HP	_____
_____	_____	Emergency & Exit Lights	_____
_____	_____	Communications Points	_____
_____	_____	Alarm Devices/F.A.C. Panel	_____
_____	_____	<u>Solar</u>	_____
_____	_____	TOTAL NUMBERS	\$ _____
_____	_____	Pool Permit/with UW Lights	_____
_____	_____	Storable Pool/Spa/Hot Tub	_____
_____	_____	KW Elec. Range/Receptacle	_____
_____	_____	KW Oven/Surface Unit	_____
_____	_____	KW Elec. Water Heater	_____
_____	_____	KW Elec. Dryer/Receptacle	_____
1	200	A PV Meter	_____
_____	_____	HP Garbage Disposal	_____
_____	_____	KW Central A/C Unit	_____
_____	_____	HP/KW Space Heater/Air Handler	_____
_____	_____	KW Baseboard Heat	_____
_____	_____	HP Motors 1/+ HP	_____
20	_____	W Micro Inverters	_____
2	60	AMP Disconnect	_____
1	100	AMP Subpanels	_____
14	255	W Solar Panels	_____
6	235	W Solar Panels	_____
1	4.980	KW Solar System	_____

Administrative Surcharge \$ _____

Minimum Fee \$ _____

State Permit Surcharge Fee \$ _____

TOTAL FEE \$ _____



PERMIT UPDATE

9/30/15
Date Update Issued
Control # C-15-002200+A
Permit # 15-1628+A

IDENTIFICATION Block: 1221 Lot: 895 Qualifier
Work Site Location: 519 5TH AVE. Brick Township, NJ Contractor: Roof Diagnostics Solar and Electric LLC
Owner in Fee: LEARY, PATRICK H Address: 1917 ATLANTIC AVE. MANASQUAN NJ 08736
519 5TH AVE. BRICK NJ 08724 Telephone: (732) 568-8521
Telephone: [REDACTED] Lic. No. or Bldrs. Reg. No. 13VH06478300
Federal Employee No. 452247975

Is hereby granted permission to perform the following work:

- | | | |
|--|--|--|
| ☐ BUILDING | ☐ PLUMBING | ☐ LEAD HAZARD ABATEMENT |
| ☒ ELECTRICAL | ☐ FIRE PROTECTION | ☐ DEMOLITION |
| ☐ ELEVATOR DEVICES | ☐ ASBESTOS ABATEMENT
(Subchapter 8 only) | ☐ OTHER |

DESCRIPTION OF WORK:

UPDATE +A FOR 1 X 100AMP SERVICE UPGRADE

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$690

Construction Official

Date 9/28/15

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

PAYMENTS (Office Use Only)

Building	\$0
Electrical	\$100
Plumbing	\$0
Fire Protection	\$0
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$1
CO Fee	
Other	\$0
Total	\$101
Check No.	11495
Cash	\$0
Credit	\$0
Collected By	

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☒ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation, rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

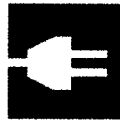
☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☐ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.



ELECTRICAL SUBCODE TECHNICAL SECTION



UPDATE
+A

Date Received
Control #

Date Issued 5/29/15
Permit # 15-1628 +A

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1221 Lot 895 Qualification Code _____
Work Site Location 519 5th Ave, Brick, NJ 08724

Owner in Fee: Patrick H Leary

Te _____ e-mail _____

Address -same-

Contractor: Roof Diagnostics Solar & Electric, LLC. Tel. (732) 568-8521

Address 1917 Atlantic Ave e-mail _____
Manasquan NJ 08736

Contractor License No. 16378A Exp. Date 03/2016

Home Improvement Contractor Registration No. or Exemption Reason 13VH06478300

Federal Emp. ID No. 452247975 FAX: (732) 749-1567

B. ELECTRICAL CHARACTERISTICS

Use Group Present _____ Proposed _____

[] Pole/Pad # _____ [] Temporary [] Other _____

Building Occupied as residence Utility Co. JCPL

Est. Cost of Elec. Work \$ 690

JOB SUMMARY (Office Use Only)

PLAN REVIEW		INSPECTIONS		Dates (Month/Day)	
☒ No Plans Required		Type:	Failure	Failure	Approval
☐ Partial -Underslab Utilities Approved		Rough			
Date: _____ Approved by: _____		Barrier-Free			
☐ Electric Plans Approved		Trench			
Date: _____ Approved by: _____		Temp. Serv.			
Joint Plan Review Required:		Constr. Serv.			
☐ Bldg. ☐ Plumb. ☐ Fire. ☐ Elev.		TCO			
SUBCODE APPROVAL for PERMIT		Other			
Date: <u>9/26/15</u>		Service			
Approved by: <u>[Signature]</u>		Final			
SUBCODE APPROVAL for CERTIFICATE		Barrier-Free			
☐ CO ☐ CCO ☒ CA		Temp. Cut-in-Card Date Issued			
Date: <u>10/14/15</u>		Final Cut-in-Card Date Issued			
Approved by: <u>[Signature]</u>		Annual Pool Inspection			
		Date of Grounding and Bonding Certification			

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application

Applicant sign/Contractor sign and seal here: _____

Print name here: Joseph Doherty

☒ Licensed Elec. Contractor [] Certifd Landscape Irrigation Contr [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK:

QTY.	SIZE	ITEMS	FEE (Office Use Only)
1	-	100 amp service upgrade	
		Lighting Fixtures	
		Receptacles	
		Switches	
		Detectors	
		Light Poles	
		Motors—Fract. HP	
		Emergency & Exit Lights	
		Communications Points	
		Alarm Devices/F.A.C. Panel	
		solar	
0		TOTAL NUMBERS	\$
		Pool Permit/with UW Lights	
		Storable Pool/Spa/Hot Tub	
		KW Elec. Range/Receptacle	
		KW Oven/Surface Unit	
		KW Elec. Water Heater	
		KW Elec. Dryer/Receptacle	
		A PV Meter	
		HP Garbage Disposal	
		KW Central A/C Unit	
		HP/KW Space Heater/Air Handler	
		KW Baseboard Heat	
		HP Motors 1/+ HP	
		W Micro Inverters	
		AMP Disconnect	
1	100	AMP Service Upgrade	
		AMP Motor Control Center	
		W Solar Panels	
		KW Solar System	

Administrative Surcharge \$ _____
Minimum Fee \$ _____
State Permit Surcharge Fee \$ _____
TOTAL FEE \$ _____



ELECTRICAL SUBCODE TECHNICAL SECTION



COPY

Date Received
Control #

9/30/15

Date Issued 5/29/15

Permit # 15-1628

4-A

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1221 Lot 895 Qualification Code _____

Work Site Location 519 5th Ave, Brick, NJ 08724

Owner in Fee: Patrick H Leary

Tel. _____ e-mail _____

Address -same-

Contractor: Roof Diagnostics Solar & Electric, LLC. Tel. (732) 568-8521

Address 1917 Atlantic Ave
Manasquan NJ 08736

Contractor License No. 16378A Exp. Date 03/2016

Home Improvement Contractor Registration No. or Exemption Reason 13VH06478300

Federal Emp. ID No. 452247975 FAX: (732) 749-1567

B. ELECTRICAL CHARACTERISTICS

Use Group Present _____ Proposed _____

[] Pole/Pad # _____ [] Temporary [] Other _____

Building Occupied as residence Utility Co. JCPL

Est. Cost of Elec. Work \$ 690

JOB SUMMARY (Office Use Only)

PLAN REVIEW		INSPECTIONS		Dates (Month/Day)			
[] No Plans Required		Type:	Failure	Failure	Approval	Initial	
[] Partial -Underslab Utilities Approved		Rough					
Date: _____ Approved by: _____		Barrier-Free					
[] Electric Plans Approved		Trench					
Date: _____ Approved by: _____		Temp. Serv.					
Joint Plan Review Required:		Constr. Serv.					
[] Bldg. [] Plumb. [] Fire. [] Elev.		TCO					
SUBCODE APPROVAL for PERMIT		Other					
Date: <u>9/26/15</u>		Service					
Approved by: _____		Final					
SUBCODE APPROVAL for CERTIFICATE		Barrier-Free					
[] CO [] CCO [] CA		Temp. Cut-in-Card Date Issued					
Date: _____		Final Cut-in-Card Date Issued					
Approved by: _____		Annual Pool Inspection					
		Date of Grounding and Bonding					
		Certification					

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant sign/Contractor
sign and seal here: _____

Print name here: Joseph Doherty

☒ Licensed Elec. Contractor [] Certif'd Landscape Irrigation Contr' [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK:

1 - 100 amp service upgrade

QTY.	SIZE	ITEMS	FEE (Office Use Only)
_____	_____	Lighting Fixtures	_____
_____	_____	Receptacles	_____
_____	_____	Switches	_____
_____	_____	Detectors	_____
_____	_____	Light Poles	_____
_____	_____	Motors—Fract. HP	_____
_____	_____	Emergency & Exit Lights	_____
_____	_____	Communications Points	_____
_____	_____	Alarm Devices/F.A.C. Panel	_____
_____	_____	<u>solar</u>	_____
<u>0</u>	_____	TOTAL NUMBERS	\$ _____
_____	_____	Pool Permit/with UW Lights	_____
_____	_____	Storable Pool/Spa/Hot Tub	_____
_____	_____	KW Elec. Range/Receptacle	_____
_____	_____	KW Oven/Surface Unit	_____
_____	_____	KW Elec. Water Heater	_____
_____	_____	KW Elec. Dryer/Receptacle	_____
_____	_____	A PV Meter	_____
_____	_____	HP Garbage Disposal	_____
_____	_____	KW Central A/C Unit	_____
_____	_____	HP/KW Space Heater/Air Handler	_____
_____	_____	KW Baseboard Heat	_____
_____	_____	HP Motors 1/+ HP	_____
_____	_____	W Micro Inverters	_____
_____	_____	AMP Disconnect	_____
<u>1</u>	<u>100</u>	AMP Service Upgrade	_____
_____	_____	AMP Motor Control Center	_____
_____	_____	W Solar Panels	_____
_____	_____	KW Solar System	_____

Administrative Surcharge \$ _____
Minimum Fee \$ _____
State Permit Surcharge Fee \$ _____
TOTAL FEE \$ _____



CONSTRUCTION PERMIT

Date Issued 5/29/15
Control # C-15-002200
Permit # 15-1628

IDENTIFICATION Block: 1221 Lot: 895 Qualifier _____
Work Site Location: 519 5TH AVE. Brick Township, NJ Contractor Roof Diagnostics Solar and Electric LLC
Owner in Fee LEARY, PATRICK H Address 1917 ATLANTIC AVE. MANASQUAN NJ 08736
519 5TH AVE. BRICK NJ 08724 Telephone: (732) 568-8521
Telephone: _____ Lic. No. or Bldrs. Reg. No. 13VH00092200
Federal Employee No. 223324927

Is hereby granted permission to perform the following work:

- ☒ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT
☒ ELECTRICAL ☐ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT (Subchapter 8 only) ☐ OTHER

DESCRIPTION OF WORK:

SOLAR PANELS...INSTALL 4.980 kw ROOF MOUNT PHOTOVOLTAIC SOLAR SYSTEM

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$20,000

PAYMENTS (Office Use Only)

Building	\$135
Electrical	\$765
Plumbing	\$0
Fire Protection	\$0
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$38
CO Fee	
Other	\$0
Total	\$938
Check No. <u>10318</u>	
Cash	\$0
Credit	\$0
Collected By	

50
988

Construction Official
Daniel Newman Jr
U.C.C. F170
equiv (rev. 1/04)

Date 5/26/15

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

- ☒ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

BUILDING \$135.00
ELECTRIC \$765.00
PLUMBING \$0.00
FIRE \$0.00
TOTAL \$900.00

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

- ☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

- ☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

- ☐ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.

Tom Petersen

Architects • Planners

Construction Official
Building Department for project at:
519 5th Avenue
Brick, NJ 08724

May 2, 2015

Re: Solar Panel Installation
Leary Residence
519 5th Avenue
Brick, NJ 08724

Dear Sirs,

I've reviewed the proposed solar panel installation at this location to evaluate the existing roof structure and the connection of the panels to the roof.

Criteria: Applicable codes: 2009 International Residential Code (New Jersey Edition)
2001 Wood Frame Construction Manual
Design roof load: 20 psf live load, 15 psf dead load, 35 psf total load
Design wind load: 120 mph, 35 psf; Exposure Category 'B'

My findings are as follows.

1. The new solar panels will imply an additional dead load of 3 psf. The existing roof structure (2x6 roof rafters @ 16" o.c., with 2x8 ridge, span = +/- 12'-5") is sufficient to bear this additional load.
2. The solar panels are attached to the roof with the SolarMount-1 rack system by UNIRAC. The rack system, roof connections and connection spacing are rated for 110 mph. This project requires the larger Solar Mount I-2.5 beam (2.5" high) and spacing of flange foot connection to roof at 48" o.c. maximum. Flange footing connections to the rail are not required to be staggered. The flange foot connections to the roof are 5/16" diameter x 4" long lag bolts.

Actual dead load implied by solar panels and rack system is 2.8 lbs. Based on maximum flange foot spacing of 4'-0" in each direction, contributory load area is: 16 sf @ interior flange feet (44 lbs); 8 sf @ edge flange feet (22 lbs) and 4 sf @ corner flange feet (11 lbs).

I therefore certify that this installation complies with the applicable codes and design loads mentioned above and is acceptable for approval. Please let me know if you have any questions on this information.
Thanks!

Sincerely yours,

Tom Petersen

08291
Co: Kelly Pegler, Roof Diagnostics

6 Country Lane • Howell, New Jersey 07731 • Telephone 732-730-1763, Fax 732-730-1783

FILE COPY

OFFICE SET
TOWNSHIP OF BRICK
5-22-15 MW
Building Subcode _____
Planning Subcode _____
Fire Subcode _____
Electrical Subcode _____
Plan Reviewer _____ To Studio
Plans Released _____
Construction Official _____

PROJECT DESCRIPTION:

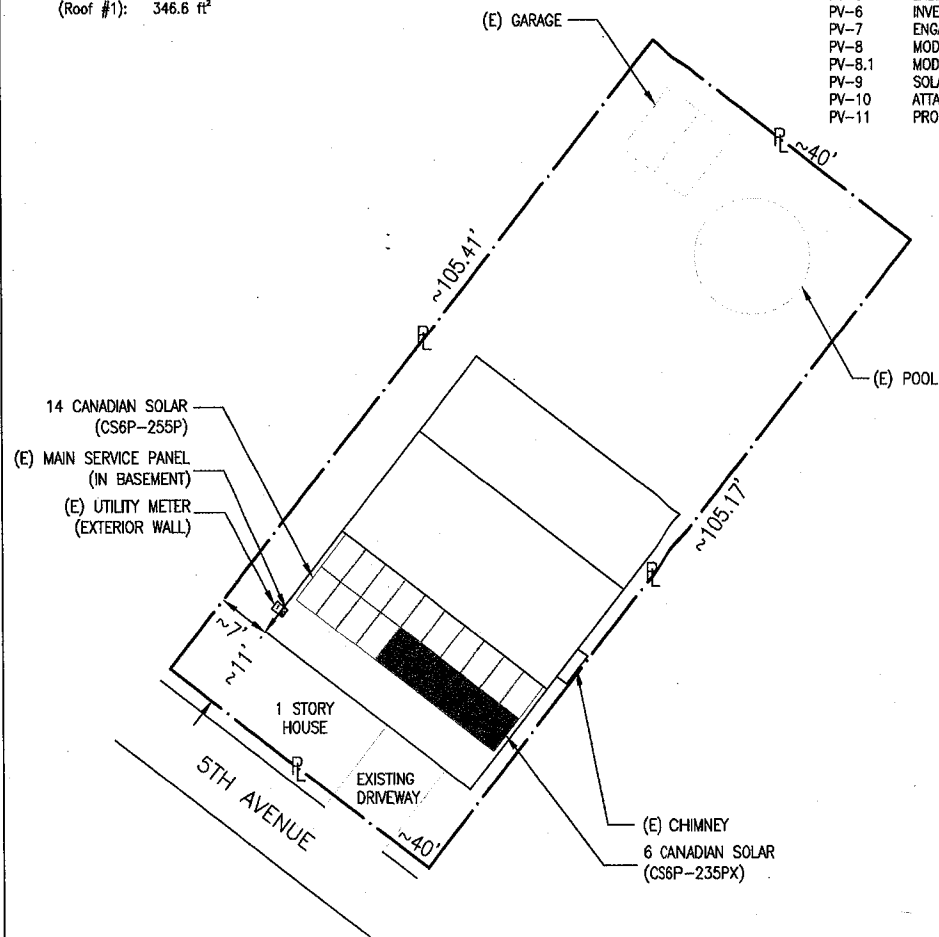
14x255W & 6x235W ROOF MOUNTED
SOLAR PHOTOVOLTAIC MODULES

SYSTEM SIZE: 4.98 kW DC STC

ARRAY AREA:
(Roof #1): 346.6 ft²

SHEET INDEX

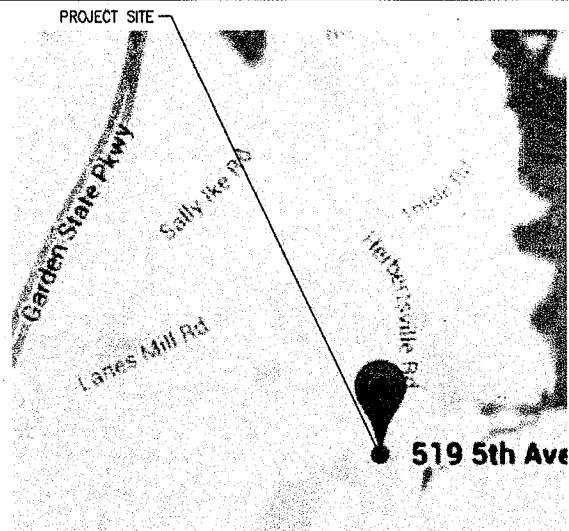
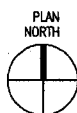
PV-1	SITE PLAN & VICINITY MAP
PV-2	ROOF PLAN & PANELS
PV-3	ROOF ATTACHMENT DETAILS
PV-3.1	ELEVATION
PV-4	ELECTRIC LINE DIAGRAM
PV-5	LABELING
PV-6	INVERTER CUT SHEET
PV-7	ENGAGE CABLE CUT SHEET
PV-8	MODULE CUT SHEET
PV-8.1	MODULE CUT SHEET
PV-9	SOLARMOUNT CUT SHEET
PV-10	ATTACHMENT PV-CUT SHEET
PV-11	PRODUCTION METER CUT SHEET



1 SITE PLAN WITH ROOF PLAN

PV-1

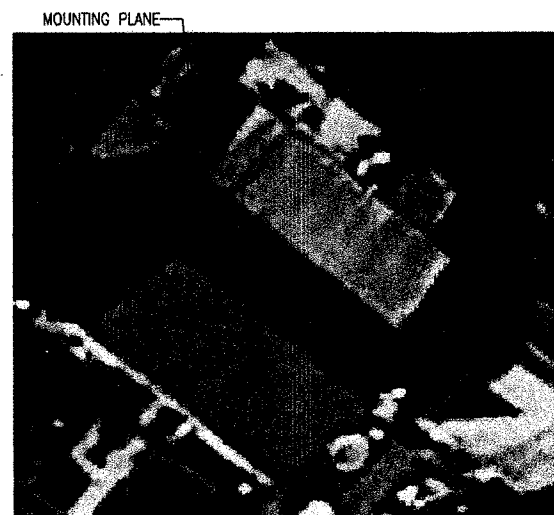
SCALE: 1/16"=1'-0"



2 VICINITY MAP

PV-1

SCALE: NTS



3 HOUSE PHOTO

PV-1

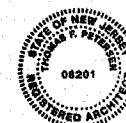
SCALE: NTS

nrg
Home
SOLAR

ROOF DIAGNOSTICS

SOLAR AND ELECTRIC, LLC
License No. -
34EB01637800

CONTRACTOR'S SIGN:



PROJECT ADDRESS:

LEARY RESIDENCE

519 5TH AVENUE,
BRICK, NJ 08724

TEL. No.: (732) 458-5366

APN No.: ****

Drawing, No.: 5366

Drawn By: MD

Rev. By: **

Date: 01 MAY 2015

SHEET SIZE:

ANSI B
11" x 17"

TITLE SHEET:

**SITE PLAN &
VICINITY MAP**

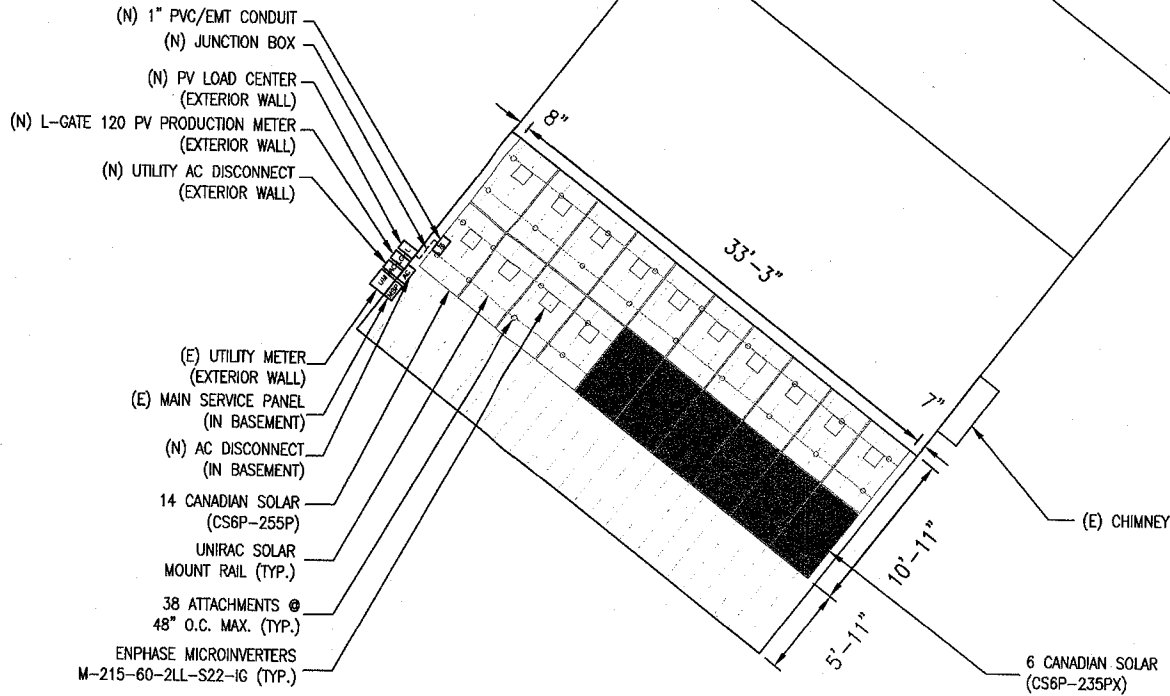
PV-1

ARRAY & ROOF AREA CALC'S #1

ARRAY AREA = 346.6 ft²
 ROOF FACE AREA = 580.75 ft²
 346.6/580.75 = 60% OF ROOF
 FACE AREA COVERED BY ARRAY

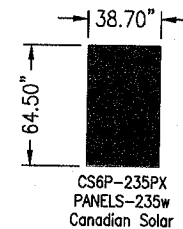
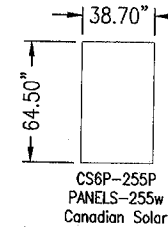
ROOF DESCRIPTION

COMP SHINGLE
 TILT (R1)- 40°
 AZIMUTH (R1)- 220°
 SHADING (R1)- 92%



LEGEND

- ENPHASE MICROINVERTERS
M-215-60-2LL-S22-IG
- ROOF ATTACHMENT
- RAFTERS
- CONDUIT
- ELECTRICAL EQUIPMENT

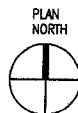


1

PV-2

SITE PLAN WITH ROOF PLAN

SCALE: 1/8"=1'-0"



nrg.
Home
SOLAR

ROOF DIAGNOSTICS

SOLAR AND ELECTRIC, LLC
 License No. -
 34EB01637800

CONTRACTOR'S SIGN:



PROJECT ADDRESS:
LEARY RESIDENCE
 519 5TH AVENUE,
 BRICK, NJ 08724
 TEL. No.: (732) 458-5366
 APN No.: ****

Drawing, No.: 5366

Drawn By: MD

Rev. By: **

Date: 01 MAY 2015

SHEET SIZE:

ANSI B
 11" x 17"

TITLE SHEET:

**ROOF PLAN &
 PANELS**

PV-2

**ROOF
DIAGNOSTICS**

SOLAR AND ELECTRIC, LLC
License No. -
34EB01637800

CONTRACTOR'S SIGN:



PROJECT ADDRESS:
LEARY RESIDENCE
519 5TH AVENUE,
BRICK, NJ 08724
TEL. No.: (732) 458-5366
APN No.: ****

Drawing. No.: 5366
Drawn By: MD
Rev. By: **
Date: 01 MAY 2015

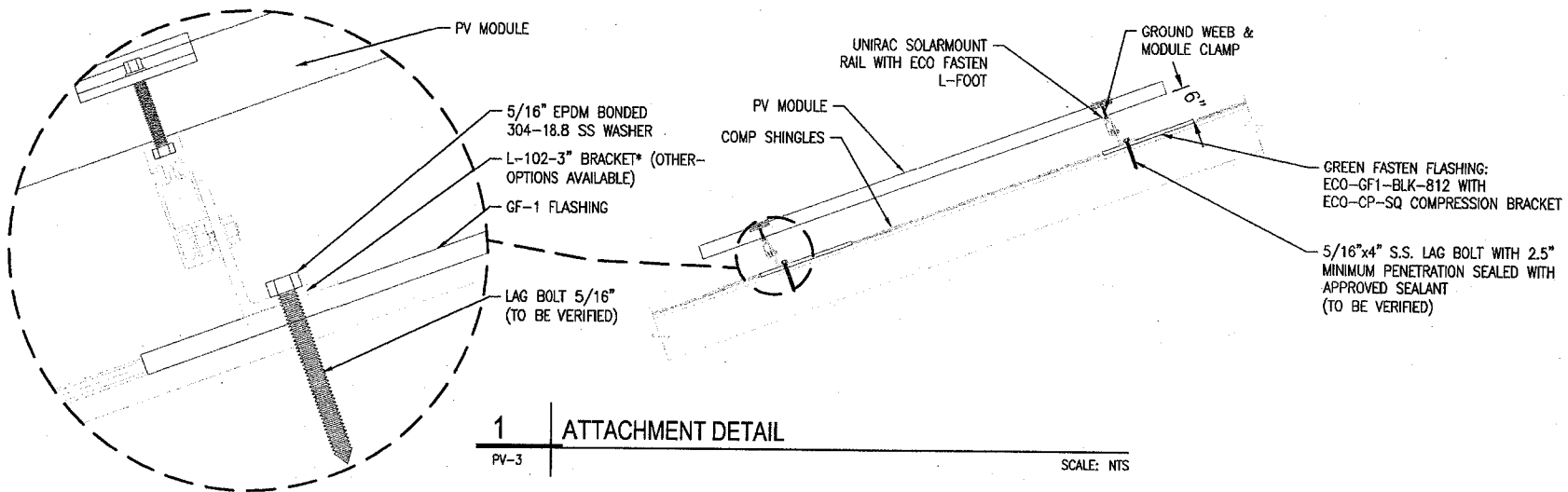
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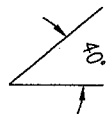
ANSI B
11" x 17"

TITLE SHEET:

ATTACHMENT

PV-3





(E) CHIMNEY

(N) PV MODULES
ROOF #1

(E) WINDOW (TYP.)
FROM UTILITY PROVIDER
(OVERHEAD)

(E) DOWNSPOUT

10'-7" GROUND TO
GUTTER EDGE

25'-2" GROUND TO RIDGE

GROUND LEVEL

FROM PV ARRAY
(N) JUNCTION BOX FOR ENVOY
(N) 100AMP PV LOAD CENTER
(EXTERIOR WALL)
(N) L-GATE 120PV PRODUCTION METER
(EXTERIOR WALL)

(E) UTILITY METER
(EXTERIOR WALL)
(E) TO MAIN SERVICE PANEL
(IN BASEMENT)
(N) UTILITY AC DISCONNECT
(EXTERIOR WALL)

2

ELEVATION DETAIL

PV-3.1

SCALE: 1/4" = 1'-0"

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SOLAR

ROOF
DIAGNOSTICS

SOLAR AND ELECTRIC, LLC
License No. -
34EB01637800

CONTRACTOR'S SIGN:



PROJECT ADDRESS:
LEARY RESIDENCE

519 5TH AVENUE,
BRICK, NJ 08724

TEL. No.: (732) 458-5366

APN No.: ****

Drawing No.: 5366

Drawn By: MD

Rev. By: **

Date: 01 MAY 2015

SHEET SIZE:

ANSI B
11" x 17"

TITLE SHEET:

ELEVATION

PV-3.1

SERVICE INFO	
UTILITY COMPANY:	JCPL
MAIN SERVICE VOLTAGE:	240V
MAIN PANEL BRAND:	G.E
MAIN SERVICE PANEL:	100A
MAIN CIRCUIT BREAKER RATING:	100A
MAIN SERVICE LOCATION:	IN BASEMENT
SERVICE FEED TYPE:	FROM UTILITY POLE
MAIN SERVICE PANEL GROUND:	EXISTING GEC ROD

UTILITY COMPANY: JCPL
MAIN SERVICE VOLTAGE: 240V
MAIN PANEL BRAND: G.E
MAIN SERVICE PANEL: 100A
MAIN CIRCUIT BREAKER RATING: 100A
MAIN SERVICE LOCATION: IN BASEMENT
SERVICE FEED TYPE: FROM UTILITY POLE
MAIN SERVICE PANEL GROUND: EXISTING GEC ROD

INVERTER SPECS	
INVERTER TYPE:	ENPHASE M215-60-2LL-S22-IG
QTY:	20
WATTAGE:	190-270W
SERVICE VOLTAGE:	240V
CEC EFFICIENCY:	96.5%

INVERTER TYPE: ENPHASE
M215-60-2LL-S22-IG
QTY: 20
WATTAGE: 190-270W
SERVICE VOLTAGE: 240V
CEC EFFICIENCY: 96.5%

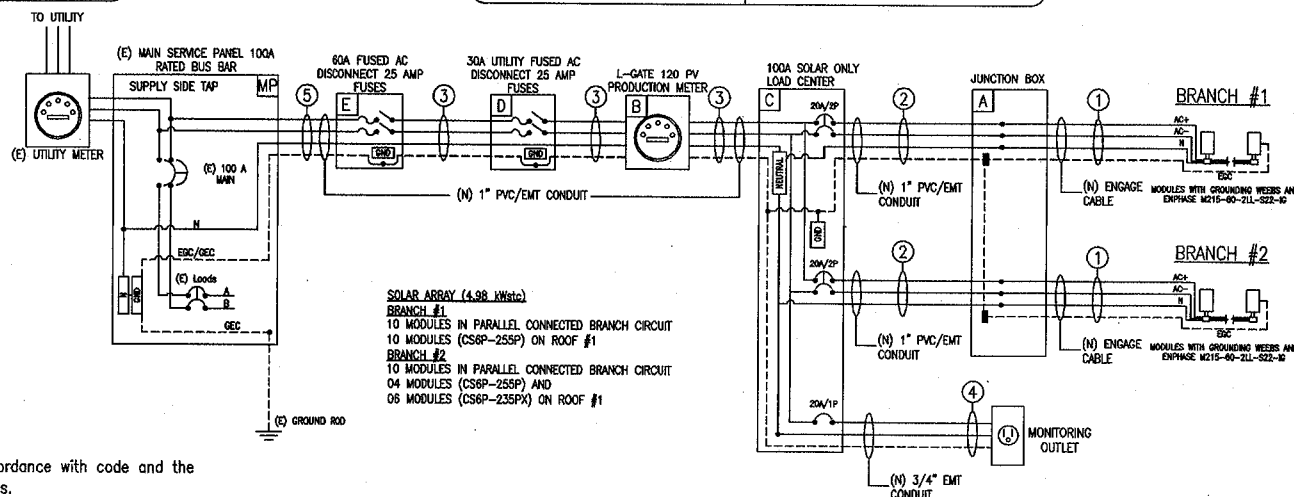
MODULES SPECS	
QTY: 14	QTY: 6
MODULE TYPE: CS6P-255P	MODULE TYPE: CS6P-235PX
WATTAGE: 255W	WATTAGE: 235W
NOCT WATTAGE: 185W	NOCT WATTAGE: 170W
FRAME THICKNESS: 40MM	FRAME THICKNESS: 40MM
FRAME COLOR: SILVER	FRAME COLOR: SILVER
Voc: 37.4	Voc: 36.9
Vpmax: 30.2	Vpmax: 29.8

QTY: 14	QTY: 6
MODULE TYPE: CS6P-255P	MODULE TYPE: CS6P-235PX
WATTAGE: 255W	WATTAGE: 235W
NOCT WATTAGE: 185W	NOCT WATTAGE: 170W
FRAME THICKNESS: 40MM	FRAME THICKNESS: 40MM
FRAME COLOR: SILVER	FRAME COLOR: SILVER
Voc: 37.4	Voc: 36.9
Vpmax: 30.2	Vpmax: 29.8

WEATHER STATION INFORMATION
BELMAR-FARMINGDALE
ASHRAE 2% AVG. 32 °C
13-90 MM ABOVE ROOF SURFACE TEMP 54 °C

BELMAR-FARMINGDALE
ASHRAE 2% AVG. 32 °C
13-90 MM ABOVE ROOF SURFACE TEMP 54 °C

- A 2- JUNCTION BOXES
- B 1 - L-GATE 120 PV
PRODUCTION METER
- C 1- 100 SOLAR ONLY LOAD CENTER
2- 20A/2P SOLAR BREAKER
1- 20A/1P MONITOR BREAKER
- D 1- 30A UTILITY (FUSED) AC DISCONNECT
- E 1- 60A (FUSED) AC DISCONNECT
- MP 1- 100A MAIN SERVICE PANEL
1- 3/4" GROUND ROD



- 1) All modules will be grounded in accordance with code and the manufacturer's installation instructions.
- 2) All pv equipment shall be listed by a recognized tested lab.
- 3) Notify serving utility before activation of pv system.
- 4) When a backfed breaker is the method of utility interconnection, breaker shall not read line and load.
- 5) When a backfed breaker is the method of utility interconnection, the breaker shall be installed at the opposite end of the bus bar of the Main Breaker.
- 6) Work clearances around electrical equipment will be maintained per NEC 110.26(a)(1), 110.26(a)(2) & 110.26(a)(3).
- 7) All exterior conduits, fittings and boxes shall be rain tight and approved for used in wet locations per NEC 314.15.
- 8) All metallic raceways and equipment shall be bonded and electrically continuous.

①
ENGAGE CABLE
OPEN AIR
3 #12 THWN-2
1 #8 BARE-2 EGC/GEC
Voc: 240VAC
Isc: 9.0AAC

②
1" EMT
3 #10 THWN-2
1 #8 THWN-2 EGC/GEC
Voc: 240VAC
Isc: 9.0AAC

③
1" EMT
3 #10 THWN-2
1 #6 THWN-2 EGC/GEC
Voc: 240VAC
Isc: 100A

④
3 #12 THWN-2
Voc: 240VAC

5
1" EMT
3 #8 THWN-2
1 #6 THWN-2 EGC/G
Voc: 240VAC

EMPHASE INVERTER BRANCH CALC	
QTY: 10 NOC: 0.9	MAX AC: 11.25A (QTY x NOC) x 1.25
WIRE GAUGE: #12	WIRE OCP: 23.5A
TEMP RATING: 75°C	AMP RATING x TEMP DE-RATE
AMP RATING: 25	CONDUCTORS ARE SUPPORTED ON PV RATED SYSTEM A MIN. OF 0.5" ABOVE ROOF SURFACE
TEMP DE-RATE: 0.94	

ENPHASE INVERTER BRANCH CALC	
QTY: 10 NOC: 0.9	MAX AC: 11.25A (QTY x NOC) x 1.25
WIRE GAUGE: #10	WIRE OCCT: 23.45A
TEMP RATING: 75°C	AMP RING x TEMP DE-RATE
AMP RATING: 35	CONDUCTORS ARE CONTAINED WITHIN A RACEWAY SUPPORTED AT MIN. OF 1" ABOVE ROOF SURFACE
TEMP DE-RATE: 0.67	

ENPHASE INVERTER		BRANCH CALCS	
QTY: 20		MAX AC: 22.5A	
NOC: 0.9		(QTY x NOC) x 1.25	
WIRE GAUGE: #10		WIRE OCP: 32.9A	
TEMP RATING: 75°C		AMP FACTS x TEMP DE-RATE	
AMP RATING: 35		CONDUCTORS ARE INSTALLED WITH A RACEWAY ATTACHED TO BUILDING STRUCTURE AND EXPOSED TO OUTSIDE AIR	
TEMP DE-RATE: 0.94			

ENPHASE INVERTER BRANCH CALCS	
QTY: 20 NOC: 0.9	MAX AC: 22.5A (QTY x NOC) x 1.25
WIRE GAUGE: #6	WIRE OCC: 61.1A AMP INSTN x TEMP DE-RATE
TEMP RATING: 75°C	
AMP RATING: 65	CONDUCTORS ARE INSTALLED WITH A RACEWAY ATTACHED TO BUILDING STRUCTURE AND EXPOSED TO SOLAR RADIATION
TEMP DE-RATE: 0.94	



nrg.[#]
Home
SOLAR

SOLAR AND ELECTRIC, LLC
License No. - 16378-A

CONTRACTOR'S SIGN:

PROJECT ADDRESS:
MARY RESIDENCE
519 5TH AVENUE,
BRICK, NJ 08724
TEL. No.: (732) 458-5386
APN No.: ****

Drawing. No.:	5366
Drawn By:	MD
Rev. By:	**
Date:	30 Apr 2015

SHEET SIZE:

ANSI B
11" x 17"

TITLE SHEET:
**ELECTRIC LINE
DIAGRAM**

PV-4

TO BE INSTALLED ON THE FACE OF THE
SERVICE METER PANEL PER NEC 2011 705.10

PHOTOVOLTAIC POWER
SOURCE BREAKERS ARE
BACKFEEDING
240 VOLTS
22.5 AMPS

DISCONNECTION MEANS; TO BE INSTALLED AT
ALL AC DISCONNECTS PER NEC 2011 690.14(C)(2)

SOLAR AC DISCONNECT

INVERTER OUTPUT CONNECTION; TO BE INSTALLED
AT MAIN SERVICE PANEL PER NEC 2011 690.64 (B)(7)

WARNING
INVERTER OUTPUT CONNECTION
DO NOT RELOCATE
THIS OVERCURRENT DEVICE

TO BE INSTALLED AT MAIN SERVICE PANEL AND UTILITY NET METER:

WARNING:
DUAL POWER SOURCES. SECOND SOURCE IS PV SYSTEM

DISCONNECTING MEANS MAY BE ENERGIZED IN THE
OPEN POSITION; TO BE INSTALLED AT
DISCONNECTING MEANS PER NEC 2011 690.17

WARNING
ELECTRIC SHOCK HAZARD.
DO NOT TOUCH TERMINALS.
TERMINALS ON BOTH THE LINE
AND LOAD SIDE MAY BE ENERGIZED
IN THE OPEN POSITION.

TO BE LOCATED AT MAIN SERVICE PANEL:

CAUTION:
SOLAR ELECTRIC SYSTEM CONNECTED

nrg.
Home
SOLAR

ROOF
DIAGNOSTICS

SOLAR AND ELECTRIC, LLC
License No. -
34EB01637800

CONTRACTOR'S SIGN:



PROJECT ADDRESS:
LEARY RESIDENCE
519 5TH AVENUE,
BRICK, NJ 08724
TEL. No.: (732) 458-5366
APN No.: ****

Drawing No.: 5366

Drawn By: MD

Rev. By: **

Date: 01 MAY 2015

SHEET SIZE:

ANSI B
11" x 17"

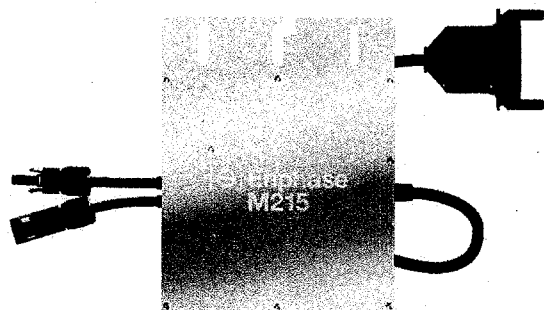
TITLE SHEET:

LABELING

PV-5

Enphase® Microinverters

Enphase® M215



The Enphase® M215 Microinverter with integrated ground delivers increased energy harvest and reduces design and installation complexity with its all-AC approach. With the advanced M215, the DC circuit is isolated and insulated from ground, so **no Ground Electro Conductor (GEC) is required for the microinverter**. This further simplifies installation, enhances safety, and saves on labor and materials costs.

The Enphase M215 integrates seamlessly with the Engage® Cable, the Envoy® Communications Gateway™, and Enlighten®, Enphase's monitoring and analysis software.

PRODUCTIVE

- Maximizes energy production
- Minimizes impact of shading, dust, and debris
- No single point of system failure

SIMPLE

- No GEC needed for microinverter
- No DC design or string calculation required
- Easy installation with Engage Cable

RELIABLE

- More than 1 million hours of testing and millions of units shipped
- Industry-leading warranty, up to 25 years

[e] enphase
ENERGY



Enphase® M215 Microinverter // DATA

INPUT DATA (DC)		M215-60-2LL-S22-IG / S23-IG / S24-IG
Recommended input power (STC)		190 - 270 W
Maximum input DC voltage		48 V
Peak power tracking voltage		27 V - 39 V
Operating range		16 V - 48 V
Min/Max start voltage		22 V / 48 V
Max DC short circuit current		15 A
Max input current		10 A
OUTPUT DATA (AC)		208 VAC @240 VAC
Peak output power		225 W
Rated (continuous) output power		215 W
Nominal output current		1.1 A (A rms at nominal duration) 0.9 A (A rms at nominal duration)
Nominal voltage/range		208 V / 183-229 V 240 V / 211-264 V
Nominal frequency/range		60.0 / 57-61 Hz 60.0 / 57-61 Hz
Extended frequency range*		57-62.5 Hz 57-62.5 Hz
Power factor		>0.95 >0.95
Maximum units per 20 A branch circuit		25 (three phase) 17 (single phase)
Maximum output fault current		850 mA rms for 6 cycles 850 mA rms for 6 cycles
EFFICIENCY		
CEC weighted efficiency, 240 VAC		96.5%
CEC weighted efficiency, 208 VAC		96.5%
Peak inverter efficiency		96.5%
Static MPPT efficiency (weighted, reference EN50530)		99.4 %
Night time power consumption		65 mW max
MECHANICAL DATA		
Ambient temperature range		-40°C to +65°C
Dimensions (WxHxD)		171 mm x 173 mm x 30 mm (without mounting bracket)
Weight		1.6 kg (3.4 lbs)
Cooling		Natural convection - No fans
Enclosure environmental rating		Outdoor - NEMA 6
FEATURES		
Compatibility		Compatible with 60-cell PV modules.
Communication		Power line
Integrated ground		The DC circuit meets the requirements for ungrounded PV arrays in NEC 690.35. Equipment ground is provided in the Engage Cable. No additional GEC or ground is required. Ground fault protection (GFP) is integrated into the microinverter.
Monitoring		Enlighten Manager and MyEnlighten monitoring options
Compliance		UL1741/IEEE1547, FCC Part 15 Class B, CAN/CSA-C22.2 NO. 0-M91, 0.4-04, and 107.1-01

FEATURES

Compatibility	Compatible with 60-cell PV modules.
Communication	Power line
Integrated ground	The DC circuit meets the requirements for ungrounded PV arrays in NEC 690.35. Equipment ground is provided in the Engage Cable. No additional GEC or ground is required. Ground fault protection (GFP) is integrated into the microinverter.
Monitoring	Enlighten Manager and MyEnlighten monitoring options
Compliance	UL1741/IEEE1547, FCC Part 15 Class B, CAN/CSA-C22.2 NO. 0-M91, 0.4-04, and 107.1-01

* Frequency ranges can be extended beyond nominal if required by the utility

To learn more about Enphase Microinverter technology, visit enphase.com

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BRICK, NJ 08724
TEL. No.: (732) 458-5366
APN No.: ****

Drawing. No.: 5366
Drawn By: MD
Rev. By: **
Date: 01 MAY 2015

SHEET SIZE:

ANSI B
11" x 17"

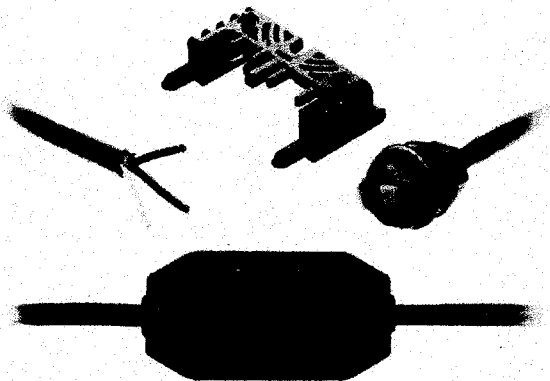
TITLE SHEET:

INVERTER CUT
SHEET

PV-6

Engage Cable System and Accessories

Enphase® Engage Cable



The **Engage™ Cable** is a continuous length of 12AWG cable with pre-installed connectors for Enphase Microinverters. The cable is handled like standard outdoor-rated electrical wire, allowing it to be cut, spliced and extended as needed.

The **Engage Accessories** complement the Engage Cable and give it the ability to adapt to any installation.

FAST

- Quick installation
- Large branch capacity

FLEXIBLE

- Simple design
- No additional cables

SAFE

- No high voltage DC
- Reduced fire risk



Enphase® Engage Cable System // DATA

CABLE TYPES / ORDERING OPTIONS

Voltage	Connector Spacing	PV Module Orientation	Model Number	#Connectors*	Weight**
240 VAC, 4 conductors	1.025 meter (40")	Portrait	ET10-240-40	40	40 lbs
240 VAC, 4 conductors	1.7 meter (67")	Landscape	ET17-240-40	40	45 lbs
208 VAC, 5 conductors	1.025 meter (40")	Portrait	ET10-208-30	30	30 lbs
208 VAC, 5 conductors	1.7 meter (67")	Landscape	ET17-208-30	30	35 lbs

*additional lengths available through Enphase authorized distributor. **weights are approximate

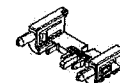
CABLE SPECIFICATIONS

Description	Rating
Cable temperature rating	90°C (194°F) wet/dry
Cable insulator rating	THWN-2
UV exposure rating	UL 746 C, F1
Conductor size	12AWG
Compliance	IEC 60529 IP67, CAN/CSA 22.2 No. 21, 182.3, UL 486A/B, 514C, 6703, and 9703
Cable rating	TC-ER
Cable Diameter	1.25 cm (0.49")
Minimum bend radius	12 cm (4.75")

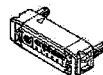
ENGAGE ACCESSORIES



Branch Terminator
One terminator needed per branch circuit
ET-TERM-10 (sold in packs of 10)



Disconnect Tool
Plan to use at least one per installation
ET-DISC-05 (sold in packs of 5)



Watertight Sealing Cap
One needed to cover each unused connector on the cabling
ET-SEAL-10 (sold in packs of 10)



Cable Clip
Many needed to fasten cabling to the racking or to secure looped cabling
ET-CLIP-100 (sold in packs of 100)



Engage Coupler
Used for splicing two power cables within an array
ET-SPLK-05 (sold in packs of 5)

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ENGAGE CABLE
CUT SHEET

PV-7

CanadianSolar

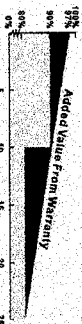
CS6P-235PX

On-grid Module

CS6P is a robust solar module with 60 solar cells. These modules can be used for on-grid solar applications. Our meticulous design and production techniques ensure a high-yield, long-term performance for every module produced. Our rigorous quality control and in-house testing facilities guarantee Canadian Solar's modules meet the highest quality standards possible.

Key Features

- Top ranked PVUSA (PTC) rating in California for higher energy production
- Industry first comprehensive warranty insurance by AIA Best rated leading insurance companies in the world
- Industry leading plus only power tolerance: 0 ~ +5W
- Strong framed module, passing mechanical load test of 5400Pa to withstand heavier snow load
- The 1st manufacturer in the PV industry certified for ISO/TS 16949 (The automotive quality management system) in module production since 2003
- ISO 17025 qualified manufacturer owned testing lab, fully complying to IEC, TUV, UL testing standards
- Backed By Our New 10/25 Linear Power Warranty Plus our added 25 year insurance coverage



- 10 year product warranty on materials and workmanship
- 25 year linear power output warranty

Applications

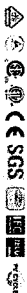
- On-grid residential roof-tops
- On-grid commercial/Industrial roof-tops
- Solar power stations
- Other on-grid applications

Quality Certificates

- IEC61215, IEC 61730, UL 1703, CEC listed, CE
- ISO9001: 2008, Standards for quality management systems
- ISO/TS 16949:2009, The automotive quality management system

Environmental Certificates

- ISO 14001:2004, Standard for Environmental management systems
- OQ080000 HSPM, The Certification for Hazardous Substances Regulations
- Reach Compliance



www.canadiansolar.com

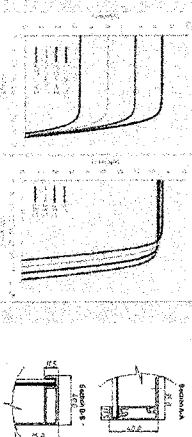
Electrical Data

STC	CS6P-235PX
Nominal Maximum Power (P _{max})	235W
Optimum Operating Voltage (V _{mp})	23.0V
Optimum Operating Current (I _{mp})	10.2A
Open Circuit Voltage (V _{oc})	36.2V
Short Circuit Current (I _{sc})	8.65A
Module Efficiency	16.61%
Operating Temperature	-40°C ~ +85°C
Maximum System Voltage	1000V (IEC/690V (UL))
Maximum Series Fuse Rating	15A
Application Classification	Class A
Power Tolerance	0 ~ +5W
Under Standard Test Condition (STC) of Irradiance of 1000W/m ² , spectrum AM1.5 and cell temperature at 25°C	
NOCT	CS6P-235PX
Nominal Maximum Power (P _{max})	170W
Optimum Operating Voltage (V _{mp})	22.7V
Optimum Operating Current (I _{mp})	6.27A
Open Circuit Voltage (V _{oc})	33.0V
Short Circuit Current (I _{sc})	8.85A

Mechanical Data

Cell Arrangement	Polycrystalline 156 × 156mm, 2 or 3 Bypassing
Dimensions	(60.6 × 10) / 200g (44.1 lbs)
Weight	16.83 ± 0.02 x 4.0mm (64.3 x 38.7 x 1.57mm)
Front Cover	3.2mm Tempered glass
Frame Material	Anodized aluminum alloy
J-BOX	IP65, 3 diodes
Cable	4mm ² (IEC)/12AWG (UL), 1100mm
Connectors	MCD or MCD Compatible
Standard Packaging (Modules per Pallet)	20pcs
Module Pitches per container (G.T. Container)	6720pcs (40'HQ)

I-V Curves (CS6P-235PX)



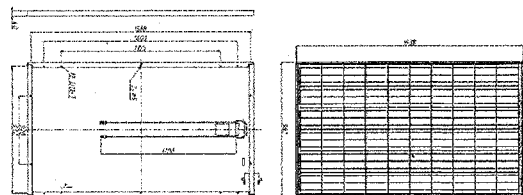
CS6P-235PX

Temperature Characteristics

Parameter	Value
Temperature Coefficient	P _{max} -0.43%/°C
	V _{oc} -0.34%/°C
	I _{sc} 0.055%/°C
Normal Operating Cell Temperature	45±2°C

Performance at Low Irradiance
Industry leading performance at low irradiance environment, +85.5% module efficiency from an irradiance of 1000W/m² to 200W/m² (AM 1.5, 25 °C)

Engineering Drawings



About Canadian Solar

Canadian Solar, Inc. is one of the world's largest solar module manufacturers. Headquartered in Toronto, Canada, Canadian Solar has manufacturing facilities in China, the United States, and Europe. Canadian Solar delivers solar power products of uncompromising quality to worldwide customers. Canadian Solar's world class team of professionals works closely with our customers to provide them with solutions for all their solar needs.

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Drawn By: MD

Rev. By: **

Date: 01 MAY 2015

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TITLE SHEET:

MODULE

CUT SHEET

PV-8

CS6P-250 | 255 | 260P

THE BEST IN CLASS

Canadian Solar's modules are the best in class in terms of power output and long term reliability. Our meticulous product design and stringent quality control ensure our modules deliver an exceptionally high PV energy yield in the PV system as well as in 1000h's system simulation. Our accredited in-house PV testing facilities guarantee all module component materials meet the highest quality standards possible.

PRODUCT WARRANTY & INSURANCE



25 Year Industry Leading Linear Power Output Warranty
10 Year Product Warranty on materials and workmanship
Canadian Solar provides 100% non-cancelable, irrevocable warranty insurance

PRODUCT & MANAGEMENT SYSTEM | CERTIFICATES

IEC 61215 / IEC 61730 VDE/CEC/UL/IEC/CSA/INMETRO/CQC/CSC
UL 1703 / IEC 61215 Performance-CEC Listed (US) / IEC 61730 (Canada)
UL 1703: CSA | IEC 61701 EOL VDE | IEC 61716 TUV | IEC 60088-2-48:365
PV CYCLE (EU) | UN93172 Reaction to Fire Class 1
ISO 9001:2008 1 Quality management system
ISO 14001:2004 1 Environmental management system
ISO 45001:2018 1 Occupational health and safety management system
OHSA 31801:2007 1 International standards for occupational health and safety

These product and site specifications for the above list of certificates applicable to your products.

CANADIAN SOLAR INC.

Founded in 2000 in Canada, Canadian Solar Inc. (NASDAQ: CSIQ) is the world's TOP 3 solar power company. As a leading manufacturer of solar modules and PV project developer with about 6 GW of premium quality modules deployed around the world, Canadian Solar has established a strong presence in the solar market across Europe, USA, Japan and China. Canadian Solar operates in six continents with customers in over 90 countries and regions. Canadian Solar is committed to providing high quality solar products, solar system solutions and services to customers around the world.



ELECTRICAL DATA | STC

Electrical Data	CS6P-250P	CS6P-255P	CS6P-260P
Nominal Maximum Power (P _{max})	250 W	255 W	260 W
Optimum Operating Voltage (V _{mp})	30.1 V	30.2 V	30.4 V
Optimum Operating Current (I _{mp})	8.30 A	8.44 A	8.57 A
Open Circuit Voltage (V _{oc})	37.2 V	37.4 V	37.6 V
Short Circuit Current (I _{sc})	8.87 A	9.00 A	9.12 A
Module Efficiency	15.54 %	15.85 %	16.18 %
Operating Temperature	-40°C ~ +85°C		
Maximum System Voltage	1000V (IEC) / 1000V (UL) / 600V (UL)		
Maximum Series Fuse Rating	15 A		
Application Classification	CLASS A		
Power Tolerance	0 ~ +5 W		
Power Tolerance (STC)	0 ~ +5 W		
Temperature Coefficient	-0.43 %/°C		

ELECTRICAL DATA | NOCT

Electrical Data	CS6P-250P	CS6P-255P	CS6P-260P
Nominal Maximum Power (P _{max})	181 W	185 W	189 W
Optimum Operating Voltage (V _{mp})	27.5 V	27.5 V	27.7 V
Optimum Operating Current (I _{mp})	6.60 A	6.71 A	6.80 A
Open Circuit Voltage (V _{oc})	34.2 V	34.4 V	34.5 V
Short Circuit Current (I _{sc})	7.19 A	7.29 A	7.38 A
Operating Temperature	-40°C ~ +85°C		
Maximum System Voltage	1000V (IEC) / 1000V (UL) / 600V (UL)		
Maximum Series Fuse Rating	15 A		
Application Classification	CLASS A		
Power Tolerance	0 ~ +5 W		
Power Tolerance (STC)	0 ~ +5 W		
Temperature Coefficient	-0.43 %/°C		

MODULE | MECHANICAL DATA

Specification	Data
Cell Type	Polycrystalline, 6inch
Cell Arrangement	60 (6x10)
Dimensions	1639 ± 0.635 ± 0.001 (64.53 ± 0.001) x 1379 (mm)
Weight	18.5 kg (40.8 lbs)
Front Cover	3.2mm tempered glass
Frame Material	3.2mm anodized aluminum alloy
Back Sheet	1.5mm Teflon FEP
Cable	4mm (16 AWG) 12/24AWG 1000V (UL1000V) / 12/24AWG 1000V (UL1000V) (500mm is optional)
Connectors	MC4 or MC4 compatible
Standard Packaging	24pcs / 50kg (quantity and weight per pallet)
Module Pieces Per Container	4720 (40' HQ)

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (P _{max})	-0.43 %/°C
Temperature Coefficient (V _{oc})	-0.34 %/°C
Temperature Coefficient (I _{sc})	0.065 %/°C
Normal Operating Cell Temperature	45 ± 2 °C

PERFORMANCE AT LOW IRRADIANCE

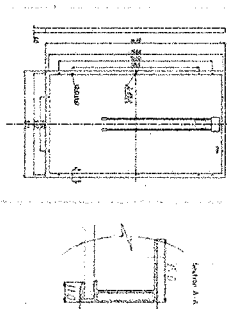
Industry leading performance at low irradiance, +96.5% module efficiency from an irradiance of 1000W/m² to 200W/m² (AM1.5, 25 °C)

As shown in the graph, Canadian Solar's modules maintain a higher efficiency at low irradiance compared to other products. The performance of the product is based on the standard test conditions (STC) and the performance at low irradiance is shown in the graph. The performance at low irradiance is shown in the graph. The performance at low irradiance is shown in the graph.

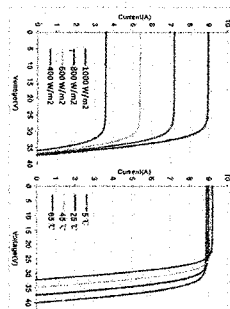
MODULE | ENGINEERING DRAWING

Rear View

Frame Cross Section



CS6P-255P | I-V CURVES



Partner Section

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Rev. By: **
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TITLE SHEET:
MODULE
CUT SHEET
PV-8.1

Part III. Installing SolarMount

The Unirac Code-Compliant Installation Instructions support applications for building permits for photovoltaic arrays using Unirac PV module mounting systems.

This manual, SolarMount Planning and Assembly, governs installations using the SolarMount and SolarMount HD (Heavy Duty) systems.

[3.1.] SolarMount rail components

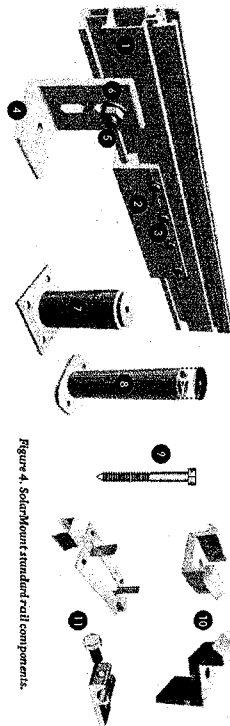


Figure 4. SolarMount standard rail components.

- 1 Rail - Supports PV modules. Use two per row of modules. Aluminum extrusion, anodized.
- 2 Rail splice - Joins and aligns rail sections into single length of rail. It can form either a rigid or thermal expansion joint. 8 inches long, predrilled. Aluminum extrusion, anodized.
- 3 Self-drilling screw - (No. 10 x 1/2") - Use 4 per rigid splice or 2 per expansion joint. Galvanized steel.
- 4 L-foot - Use to secure rails either through roofing material to building structure or standoffs. Refer to loading tables for spacing. Note: Please contact Unirac for use and specification of double L-foot.
- 5 L-foot bolt (3/8" x 1/2") - Use one per L-foot to secure rail to L-foot. Stainless steel.
- 6 Flange nut (3/8") - Use one per L-foot to secure rail to L-foot. Stainless steel.
- 7 Flatfoot standoff (optional) (3/8") - Use standoffs to increase the height of the array above the surface of the roof or to allow for the use of flashings. Use one per L-foot. One piece. Service Grade 4 (very severe) zinc-plated-welded steel. Includes 3/8" x 1/2" bolt with zinc-plated-welded steel.
- 8 Lock washer for attaching L-foot. Flashings: Use one per standoff. Unirac offers appropriate flashings for both standoff types.
Note: There is also a flange type standoff that does not require an L-foot.
- 9 Aluminum two-piece standoff (optional) (4" and 7") - Use one per L-foot. Two-piece. Aluminum extrusion. Includes 3/8" x 3/4" serrated flange bolt with EPDM washer for attaching L-foot, and two 5/16" lag bolts.
- 10 Lag screw for L-foot (5/16") - Attaches standoff to rafter.
- 11 Top Mounting Clamps
- 12 Top Mounting Grounding Clips and Lugs

Installer supplied materials:

- Lag screw for L-foot - Attaches L-foot or standoff to rafter. Determine the length and diameter based on pull-out values. If lag screw head is exposed to elements, use stainless steel. Under flashings, zinc plated hardware is adequate.
- Waterproof roofing sealant - Use a sealant appropriate to your roofing material. Consult with the company currently providing warranty of roofing.

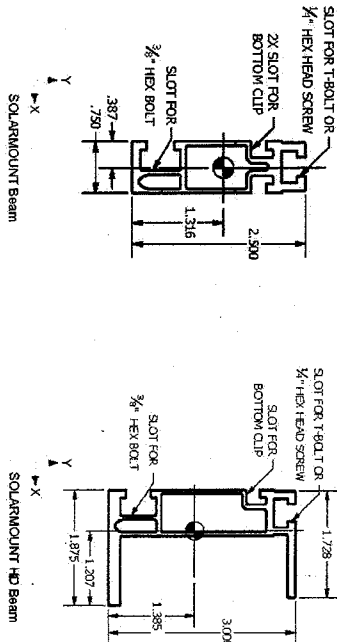
SOLARMOUNT Technical Datasheets

SOLARMOUNT Beams

Part No. 310132C, 310132C-B, 310168C, 310168C-B, 310168D, 310208C, 310208C-B, 310240C, 310240C-B, 310240D, 410144M, 410168M, 410204M, 410240M

Properties	Units	SOLARMOUNT	SOLARMOUNT HD
Beam Height	in	2.5	3.0
Approximate Weight (per linear ft)	plf	0.811	1.271
Total Cross Sectional Area	in ²	0.676	1.059
Section Modulus (X-Axis)	in ³	0.353	0.888
Section Modulus (Y-Axis)	in ³	0.113	0.221
Moment of Inertia (X-Axis)	in ⁴	0.464	1.450
Moment of Inertia (Y-Axis)	in ⁴	0.044	0.287
Radius of Gyration (X-Axis)	in	0.289	1.170
Radius of Gyration (Y-Axis)	in	0.254	0.502

*Rails are extruded using these aluminum alloys: 6005-T5, 6005-T6, 6061-T6



Dimensions specified in inches unless noted

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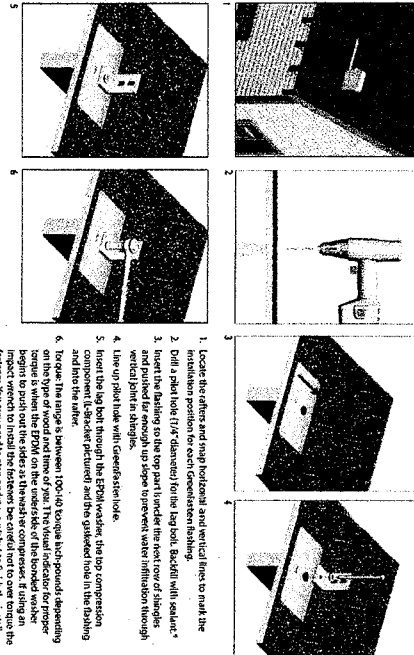
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Rev By: **
Date: 01 MAY 2015
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TITLE SHEET:
SOLARMOUNT
CUT SHEET
PV-9

EcoFasten Solar



Greenfasten® GFI - Product Guide

Installation Instructions with Compression Bracket



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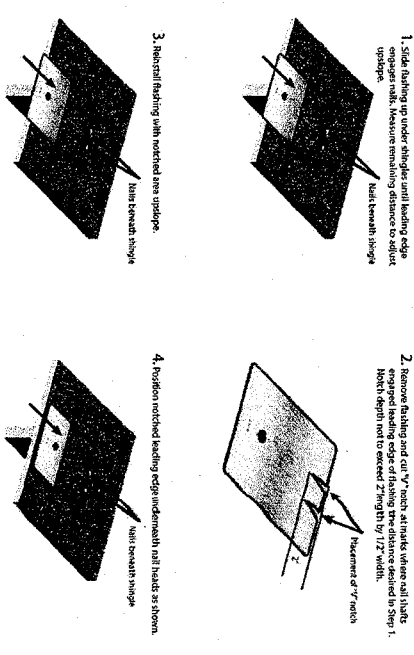
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EcoFasten Solar



Greenfasten® GFI - Product Guide

Installation Instructions



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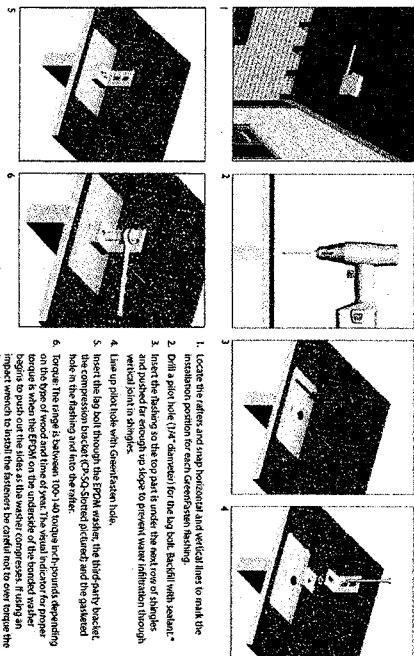
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EcoFasten Solar



Greenfasten® GFI - Product Guide

Installation Instructions with Compression Bracket Adaptor Plate



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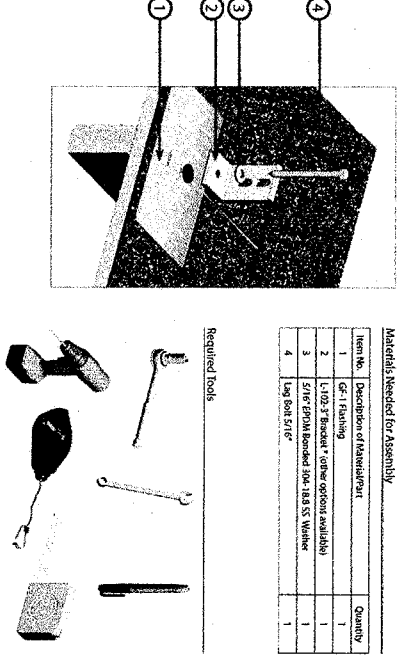
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EcoFasten Solar



Greenfasten® GFI - Product Guide

Exploded Product View, Bill of Materials



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Rev. By: **
Date: 01 MAY 2015
SHEET SIZE:
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TITLE SHEET:
ATTACHMENT
PV-CUT SHEET
PV-10

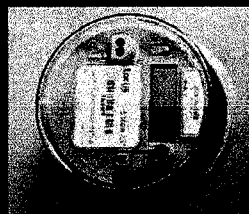


Product Datasheet

LGate 120

RESIDENTIAL SOLAR MONITORING SOLUTION

The LGate 120 is a powerful, easy-to-install, and easy-to-use monitoring solution for residential solar energy systems. It provides real-time monitoring of system performance, allowing homeowners to track energy production and identify potential issues before they become major problems. The LGate 120 is designed to be installed on a standard 120V AC outlet, making it a simple and cost-effective solution for monitoring your solar system.



The LGate 120 combines a powerful, easy-to-install, and easy-to-use monitoring solution for residential solar energy systems. It provides real-time monitoring of system performance, allowing homeowners to track energy production and identify potential issues before they become major problems. The LGate 120 is designed to be installed on a standard 120V AC outlet, making it a simple and cost-effective solution for monitoring your solar system.

DATA COLLECTION

All energy data is collected by the meter and passed to the communications module. Additional system performance data can be collected directly from individual inverters and standard two-wire meters via RS-485 or Modbus communication. All data is stored in the device's memory and then automatically uploaded to the Locus Energy cloud server at 15-minute intervals.

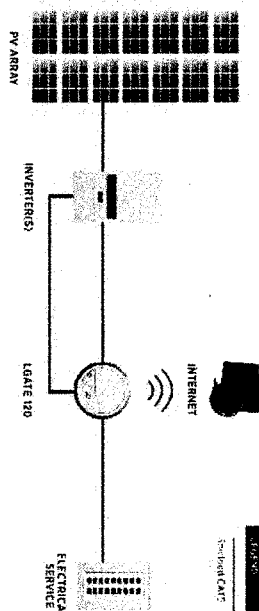
NETWORK CONNECTIVITY

The LGate 120 can connect to the Locus Energy cloud server via a standard Ethernet connection or a cellular connection. The LGate 120 is designed to be installed on a standard 120V AC outlet, making it a simple and cost-effective solution for monitoring your solar system.

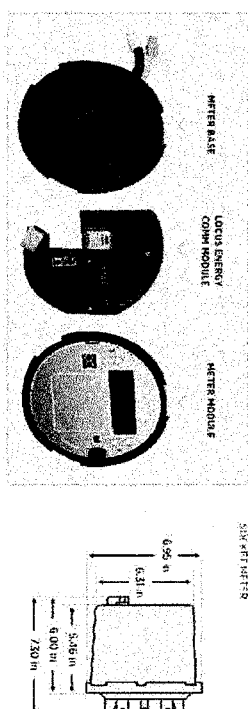
FEATURES

- ANSI C12.20 power meter
- RS-485 and 2-wire meters
- Easy installation
- Over the air firmware updates
- Low cost installation
- Easy to install and use
- Plug and play activation
- Creditable data with utility provider

DIAGRAM - TYPICAL CONFIGURATION



DIMENSIONS



SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	ANSI C12.20
Power	120V, 60Hz, 100W
Accuracy	±0.5% (0.5% typical, 1.0% max)
Resolution	0.01 kWh
Display	1.0" LCD
Operating temperature	-40°C to 60°C
Storage temperature	-40°C to 60°C
Humidity	5% to 95% RH
Weight	0.5 lbs
Dimensions	1.0" x 1.0" x 1.0"
Compliance	ANSI C12.20, UL 1004

PROJECT ADDRESS:

LEARY RESIDENCE

519 5TH AVENUE,
BRICK, NJ 08724

TEL No.: (732) 458-5366

APN No.: ****



Roof Home Solar
DIAGNOSTICS
SOLAR AND ELECTRIC, LLC
License No.:
34EB01637800
CONTRACTOR'S SIGN:

Drawing No.: 5366
Drawn By: MD
Rev By: **
Date: 01 MAY 2015
SHEET SIZE:
ANSI B
11" x 17"
TITLE SHEET:
PRODUCTION
METER
CUT SHEET
PV-11

RECEIVING CLERK 5-14-15
DATE REC'D 5-14-15

ZONING PERMIT APPLICATION

PERMIT # _____
DATE ISSUED _____

BLOCK: 1221 LOT: 895 QUALIFIER: _____ SITE ADDRESS: 519 5th Ave.

IDENTIFICATION:

1. NAME OF OWNER IN FEE: Patrick Leary
COMPLETE ADDRESS: 519 5th Ave
Brook, NJ 08724

PH EMAIL: _____

2. NAME OF APPLICANT: Roof Diagnostics Solar & Electric, LLC
APPLICANT ADDRESS: 1917 Atlantic Ave.
Manasquan, NJ 08736
PHONE # 732-508-8521 EMAIL: Lindsay.Fischer@roofdiagnostics.com

3. RESPONSIBLE PERSON FOR WORK: Joseph Deherthy
PHONE # 732-508-8521 FAX # 732-749-1567

4. SIGNATURE OF APPLICANT: Joe Deherthy

FEE SUMMARY:

FOR OFFICE USE ONLY

APPLICATION FEE: \$ 50
OTHER: \$ _____
TOTAL: \$ 50

REQUIRED BY APPLICANT

RESIDENTIAL: Single family
COMMERCIAL: _____
EXISTING USE: _____
PROPOSED USE: _____

BOARD APPROVAL: _____ PB _____ ZB _____
RESOLUTION#: _____
APPROVAL DATE: _____

PROJECT DESCRIPTION: (PLEASE CHECK APPLICABLE WORK & DESCRIBE)

*NEW BUILDING: _____ *ADDITION _____ *ALTERATION _____ *PORCH _____ *DECK _____

POOL: ABOVE GROUND _____ IN GROUND _____ FENCE: HEIGHT _____ TYPE _____ MATERIAL _____

HEIGHT: _____ (IF APPLICABLE)

OTHER _____

DESCRIPTION: installation of uniac roof mount solar system

ZONING REVIEW: _____ DATE REVIEWED: 5-14-15 DATE DENIED: _____ DATE APPROVED: 5-14-15 INTLS: (SEE BACK PAGE)

RECEIVED
MAY 14 2015

MAY 14 2015

ZONING

5/22

DATE REVIEWED: 07/14/10 DATE DENIED: — DATE APPROVED: 07/14/10 INTLS: MCZ

DATE REVIEWED: 5/14/10

DATE DENIED:

DATE APPROVED: 07/19/10

INTLS: 5/6/28

DATE: COMMENTS:

COMMENTS:

INITIALS:

5/14/10	SENT TO ECC FOR QR
---------	--------------------

5/8/28

LAND USE

245 Attachment 5

Township of Brick

SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS

Township of Brick

Ocean County, New Jersey

[Amended 6-26-1979 by Ord. No. 354-2B-79; 4-22-1980 by Ord. No. 354-2H-80; 10-14-1980 by Ord. No. 354-2N-80; 9-23-1980 by Ord. No. 354-1B-80; 8-25-83 by Ord. No. 354-2SS-83; 11-5-1984 by Ord. No. 354-3-AAA-84; 11-5-1984 by Ord. No. 354-2CCC-84; 6-24-1986 by Ord. No. 354-2WW-86; 9-13-1988 by Ord. No. 354-2TTTT-88; 9-27-1988 by Ord. No. 354-2XXXX-88; 9-12-2000 by Ord. No. 354-2EE-00; 5-9-2000 by Ord. No. 354-2Z-00; 3-26-2002 by Ord. No. 354-2C-02; 11-26-2002 by Ord. No. 354-2L-02; 3-25-2003 by Ord. No. 354-2D-03; 6-13-2006 by Ord. No. 19-06]

Zone	Minimum Lot Size						Minimum Required Yard Depth								Maximum Lot Coverage by Building	Maximum Building Height			Minimum Floor/ Building Area (square feet) 2 stories/1 story	Maximum Allowable Impervious Coverage	
	Interior Lots			Corner Lots			Principal Building				Accessory Building					Stories	Eaves (feet)	Ridge (feet)			
	Area (square feet)	Width (feet)	Depth (feet)	Area (square feet)	Width (feet)	Depth (feet)	Front Yard (feet)	Side Yard, Each (feet)	Both Sides Combined (feet)	Rear Yard (feet)	Side Yard (feet)	Rear Yard (feet)	Side Yard (feet)	Rear Yard (feet)							
R-R	40,000	150	150	40,000	150	150	50	25				50	25	25	25%	-	25			-	-
RR-2	See § 245-90.																				
RR-3	See § 245-103.																				
R-20	20,000	100	125	25,000	100	125	40	15	-			40	10	10	25%	-	25	35	38.5	-	-
R-15	15,000	100	115	17,250	100	115	35	12	-			35	10	10	25%	-	25	35	38.5	-	-
R-10	10,000	90	100	10,500	100	100	30	6	20			20	5	5	30%	-	25	35	38.5	-	-
R-7.5	7,500	75	90	9,000	75	90	25	6	15			15	5	5	30%	-	25	35	38.5	-	-
R-5	5,000	50	75	6,000	50	75	20	5	12			15	5	5	35%	-	25	35	38.5	-	-
O-P	15,000	100	150	15,000	100	150	50	10	-			50	20	50	35% ²	2	-	35	38.5	1,500	70%
B-1	10,000	100	90	12,500	100	125	30	10	-			20	10	20	30% ²	2	-	35	38.5	1,000	60%
B-2	20,000	125	125	20,000	125	125	50	10	-			50	10	50	30% ²	2	-	35	38.5	2,000	65%
B-3	2 acres	200	200	2 acres	200	200	75	30	-			50	20	50	25% ²	-	-	35	38.5	2,000	65%
B-4	5 acres	300	300	-	-	-	100	50(150)	-			100(150)	20	50	25%	3	-	35	38.5	30,000	70%
M-1	5 acres	300	300	5 acres	300	300	100	50	-			150	75	150	30% ²	-	-	35	38.5	5,000	65%
R-M	25 acres	350	200	-	-	-	50	50	-			30	30	30	20%	-	25	35	38.5	-	65%
O-P-T	40,000	150	150	40,000	150	150	50	20	-			50	20	50	25% ²	2	-	35	38.5	2,000	50%
H-S																-	-	-	-	-	70%

NOTES:

1. If adjacent to residential zone or use.
2. The maximum lot coverage shall refer only to that percentage of an affected lot which is suitable for building.
3. For rear yard setback requirements for accessory buildings on waterfront property, see § 245-10D.



Brick Township
401 Chambers Bridge Rd.

Brick, NJ 08723
(732) 262-1336

Date Issued:

Application Number: 5/29/15
ZA-15-00574

Application Date: 05/14/2015

Project Number:

Permit Number: 2P-15-00603

Fee:

\$50

Zoning Permit

Worksite **519 5TH AVE.**
Location: **Brick Township, NJ 08724**

Block: 1221

Lot: 895

Qualifier:

Zone: R-7.5

Owner: **LEARY, PATRICK H**
Address: **519 5TH AVE.**
BRICK, NJ 08724

Applicant: **Roof Diagnostics Solar and Electric LLC**
Address: **1917 Atlantic Ave.**
Manasquan, NJ 08736

Application Approved Date: 05/14/2015

This Certifies that an application for the issuance of a Zoning Permit has been examined.

Use is: Single-Family Residential

Nonconforming Use is: _____

Work Description:

Solar Energy System - Installation of a 4.980 KW solar panel system mounted on the roof fo the house.

Additional Zoning permit is required for additional work.

Upon review it was determined that the Zoning Permit:

- ☒ Permitted by Ordinance
- ☐ Permitted by Variance approved on: _____
- ☐ Valid Nonconforming Use is established by
 - ☐ Zoning Board of Adjustment
 - ☐ Zoning Officer

Christopher J. Romano, Office of Zoning

05/14/2015

Date

Sean Kinnevy, Zoning Officer

5-14-15

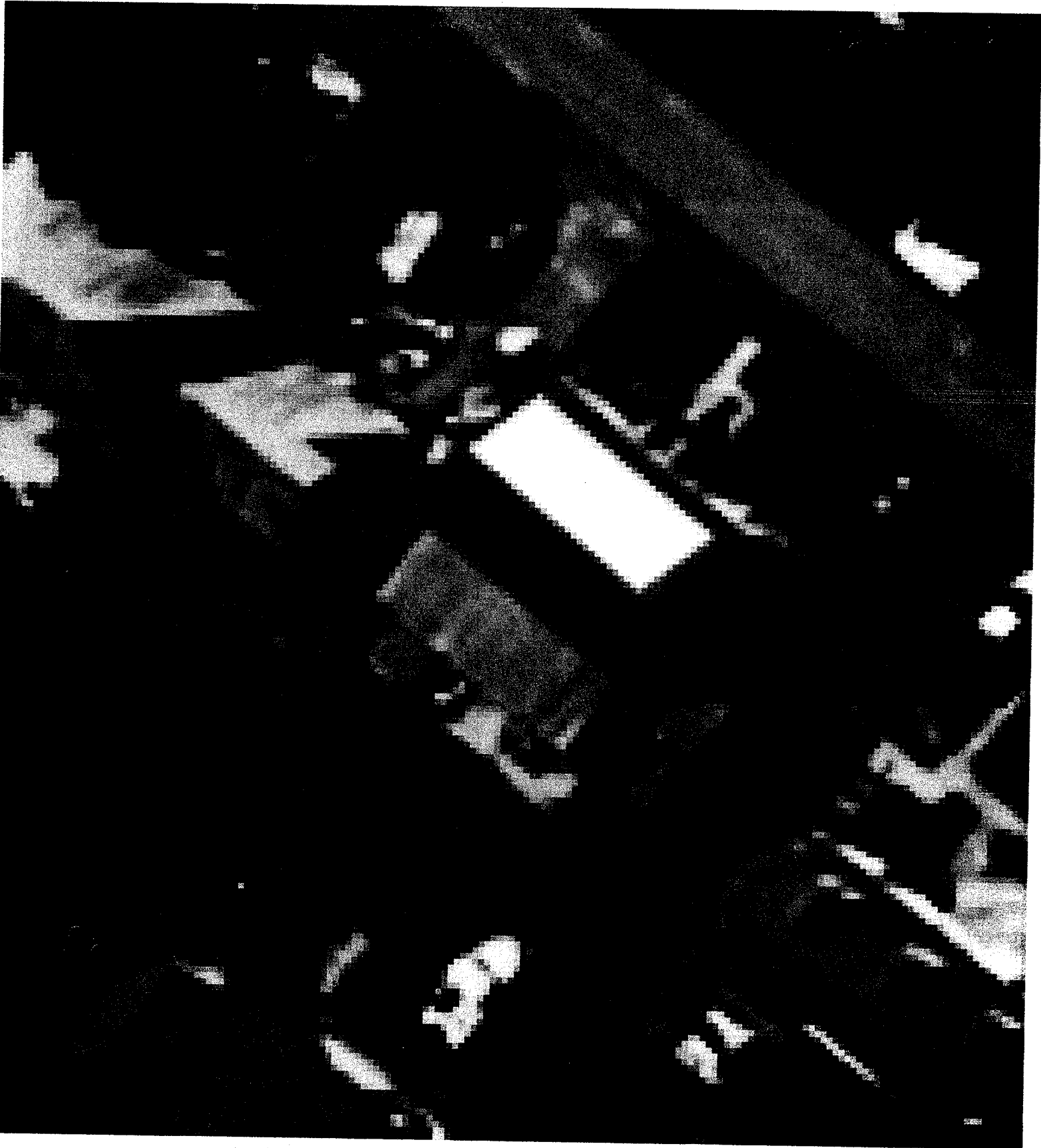
Date

Zoning Review

Approval

By:

Date: 5-14-15 Secur on 1007



ENGINEERING PERMIT APPLICATION

RECEIVING CLERK: _____
PERMIT #: _____

BLOCK: 1221 LOT: 895 ADDRESS: 519 5th Ave.

IDENTIFICATION:

1. WORK SITE ADDRESS: 519 5th Ave

2. NAME OF OWNER IN FEE: Patrick Lee

ADDRESS: 519 5th Ave PHONE: [REDACTED]

Brick, NJ 08724 FAX #: ()

3. PRINCIPAL CONTRACTOR: Roof Diagnostic Solder & Electric, LLC

ADDRESS: 1917 Atlantic Ave. PHONE #: (732) 508-8521

Mansquan, NJ 08730 FAX #: (732) 749-1507

4. ARCHITECT OR ENGINEER: Tom Petersen

ADDRESS: 1917 Atlantic Ave. PHONE: # (732) 730-1703

5. RESPONSIBLE PERSON FOR WORK: Joseph Doherty

ADDRESS: 1917 Atlantic Ave.

PHONE #: (732) 508-8521 FAX #: (732) 749-1507 E-MAIL: _____

PROJECT DESCRIPTION:

☐ GRADING/CLEARING ☐ ROAD OPENING

☐ SOIL REMOVAL/FILL ☐ RETAINING WALL ☐ POOL

☐ BULKHEAD/DOCK ☐ DWELLING ☐ TREE REMOVAL

☒ OTHER Installation of wire c roof mount solar system

LENGTH: _____ WIDTH: _____ HEIGHT: _____

ENGINEERING REVIEW:

DATE RECEIVED: _____ DATE REJECTED: _____ DATE APPROVED: _____ INITIALS: _____

FEE SUMMARY:

APPLICATION FEE: \$ _____

REVIEW FEE: \$ _____

INSPECTION FEE: \$ _____

OTHER: \$ _____

BONDS: \$ _____

TOTAL: \$ _____

SPECIAL CONDITIONS:

OCEAN COUNTY SOILS: _____

DRAINAGE EASEMENTS: _____

UTILITY EASEMENTS: _____

CONSERVATION EASEMENTS: _____

FEMA REQUIREMENTS: _____

D.E.P. PERMITS: _____

BOARD APPROVAL: ☐ PB ☐ ZB

APPLICATION NUMBER: _____

APPROVED DATE: _____