APPLICATION FOR BUILDING PERMIT

The Village of Irvington | 85 Main St | Irvington NY 10533

Application Number:	796	Date:	10/03/2022
Job Location:	13 N COTTENET ST	Parcel ID:	2.40-13-16
Property Owner:	Alayne Katz	Property Class:	TWO FAMILY RES
Occupancy:	One/ Two Family	Zoning:	
Common Name:			

Applicant	Contractor
Eric Eyges	Eric Eyges
Rivertown Solar LLC	Rivertown Solar LLC
64 Main St.Irvington NY 10533	64 Main St. Irvington NY 10533
914-325-2167	914-325-2167

Description of Work

Type of Work:	Solar Panels	Applicant is:	Contractor
Work Requested by:	The Owner	In association with:	
Cost of Work (Est.):	34944.00	Property Class:	TWO FAMILY RES

Description of Work

Installation of solar panels on rooftop.

Please Note: Completing the application does not constitute a permit to commence construction. To obtain your permit follow the instructions on the instruction page provided on page 3.

Job Location: 13 N COTTENET ST Parcel ld: 2.40-13-16

AFFIDAVIT OF APPLICANT

I Eric Eyges being duly sworn, depose and say Main St. Irvington NY 10533 and that s/he is:	ys: That s/he does busines	s as: Rivertown So	lar LLC with offices at: 64
The owner of the property described he	erein. of the New York Corpor	ation	with offices at:
	duly authorized	by resolution of the	Board of Directors, and that
said corporation is duly authorized by t	he owner to make this app	ication.	
A general partner of	orized by the owner to mak zed by the owner to make tl	e this application.	and that said
That the information contained in this application knowledge and belief. The undersigned he Uniform Fire Prevention and Building Code laws pertaining to same, in the construction	ereby agrees to comply with e, the Village of Irvington Bu	all the requirement ilding Code, Zoning	s of the New York State Ordinance and all other
Sworn to before me this d	ay ofof		
Notary Public / Commission of Deeds		Applicant's	Signature
OWNER'S AUTHORIZATION			
I Alayne Katz as the owner of the subject prenunder the subject application.	nises and have authorized i	he contractor name	d above to perform the work
Owner phone number	_ Owner email address		
to ensure that if the permit (if issued) refurther that if a Final Certificate of Approviolation may be placed on the property	eceives a Final Certificate o roval is not obtained upon o	f Approval from the ompletion of the cor	Building Department and
Sworn to before me this	day of	_ of	
Notary Public / Commission of Deeds		Applicant's	 Signature

INSTRUCTIONS

REQUIREMENTS FOR OBTAINING A PERMIT:

The following items must be submitted in order to obtain a Building Permit:

- 1. One (1) Building Permit application signed by the owner or a notarized Agent Letter.
- 2. One (1) property survey (signed and sealed), reflecting existing conditions.
- 3. Two (2) sets of construction drawings and specifications, including existing and proposed conditions, state design criteria, structural and architectural details, plans, and cross sections, mechanical, electrical, and plumbing drawings (signed and sealed by a likened professional).
- 4. One USB with all plans (with Licensed Professionals certification/stamp) and specifications in PDF (file size must be less than 25MB).
- 5. Copy of approved site plan from the Irvington Planning Board when applicable (required on all increases of FAR, footprint, coverage, driveways and increases of cubic content under a roof).
- 6. Approval by the Architectural Review Board (ARB) when applicable. An additional five (5) sets of construction drawings and specifications (please see ARB requirements (available on the village web site www.irvingtonny.gov) prior to submission).
- 7. Visit the Village of Irvington website www.irvingtonny.gov for additional check list for solar panels, generators, underground propane tanks, signs and awnings(found in forms and documents in the Building & Planning General Information folder).
- 8. Village Zoning Code is available on the Village website: www.irvingtonny.gov.
- 9. Provide evidence that the application meets the NYS Energy code as described by www.dos.state.ny.us/code/energycode/overview.htm

Contractor Requirements in order to obtain a Building Permit:

- 10. Contractor's Certificate of Liability listing the Village of Irvington as the Certificate Holder with no disclaimer in the description other than certificate holder is named additional insured (any additional comments will not be accepted).
- 11. Contractor's Workers Compensation C-105 form (or equivalent) listing the Village of Irvington as Certificate Holder.
- 12. Copy of Contractor's Westchester County Home Improvement License.
- 13. All information above uploaded into permit application with the contractor's contact information, including mailing address, phone number, and email address.
- 14. Contractor's signature on Affidavit of Contractor (required prior to issuance of the permit).

Please Note:

-State Law requires that the contractor submits a copy of Workman's Compensation as required by the New York State
Disability Insurance naming the Department of Buildings, Village of Irvington as certificate holder and showing coverage for general contacting and the locations covered by such insurance. If structure is to be demolished a copy of Liability Insurance must also be submitted.

- Please be advised under State and Municipal Laws, the Workman's Compensation and Disability benefits insurance must be submitted on separate state approved forms. The "Acord Form" is no longer acceptable as proof of Workman's Compensation coverage. Further information or questions may be answered by calling the NYS Bureau of Compliance at (518) 486-6307 or by visiting their website or by contacting your insurance provider.

FEES ASSOCIATED WITH BUILDING PERMIT APPLICATION(All fees must be paid at time of application):

Fee	SCh	ed	11	Р

Building Permit (Non-Refundable)

* Application fee \$85
* Permit fee \$17 per thousand dollars (\$1000) of estimated cost of construction, or fraction thereof

· Inspection Fees (as applicable)

Insulation: \$50

• Footing: \$50

Solid Fuel: \$50

• Preparation for concrete slabs and walls: \$50

• Foundation and footing drain: \$50

• Framing: \$50

Energy Code Compliance: \$50

• Building systems, including underground and rough-in: \$50

• Sediment and erosion control: \$50

• Fire resistant construction and penetrations: \$50

• Footing: \$50

• Final Inspection for C.O.: \$50

• Preparation for concrete slabs and walls: \$50

• State and local laws (per re-inspection): \$50

Total Inspections

- * Certificate of Occupancy Fees: One dollar (\$1.00) per thousand dollars of estimated cost. Minimum Fee \$25.00
- * Permit Revisions or Amendment: \$50.00 (plus \$17 per thousand (\$1000), of the estimated cost of construction and any additional inspections fees).
- * Re-inspection fee for work not ready at time of inspection or not in compliance: \$50
- * Applications for Undocumented Work/ Legalizing: Applications to legalize work done prior toapplying for and receiving a building permit shall pay double all applicable fees and inspections, including the cost of construction based on the cost of all proposed work being legalized at the time of application. Minimum fee \$500.00.

(To be collected at time of submission of application)Total

(Note: pursuant to 224-54A all permits are valid for one (1) year from date on permit Any permit that expires will be subject to additional fees.)

OP ID: LF

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 05/13/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed.

	nis certificate does not confer rights t			ficate holder in lieu of su -278-7070							
	DUCER han Insurance Agency	•	040	-276-7070	NAME:	CT Terence	reenan		EAY	045	070 0400
P.O.	. Box 870				PHONE (A/C, No, Ext): 845-278-7070 FAX (A/C, No): 845-276 E-MAIL ADDRESS: carolb@feehaninsurance.com						270-6436
	mel, NY 10512 ence Feehan				ADDRE	_{SS:} carolb@	reenaninsu	Irance.com			
	one i conun							RDING COVERAGE			NAIC#
					INSURE	RA: Evansto	on Insuranc	ce Co.			35378
INSU	JRED				INSURE	RB:					
	Rivertown Solar LLC				INSURE	RC:					
	64 Main Street				INSURE	RD:					
,	Irvington, NY 10533				INSURE	RE:					
					INSURE	RF:					
				NUMBER:	1000 - 2000 - 1000 -	pana workhooseose e e e e-cono		REVISION NU			
IN C	HIS IS TO CERTIFY THAT THE POLICIES NDICATED. NOTWITHSTANDING ANY RE ERTIFICATE MAY BE ISSUED OR MAY XCLUSIONS AND CONDITIONS OF SUCH	QUIRE PERTAI POLICII	IMEN IN, T IES. L	IT, TERM OR CONDITION THE INSURANCE AFFORD	OF AN ED BY	Y CONTRACT THE POLICIES REDUCED BY I	OR OTHER I S DESCRIBED PAID CLAIMS.	DOCUMENT WI	TH RESPE	CT TO	WHICH THIS
INSR LTR	TYPE OF INSURANCE	ADDL S INSD V	WVD	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)		LIMIT	s	
Α	X COMMERCIAL GENERAL LIABILITY							EACH OCCURRE		\$	1,000,000
	CLAIMS-MADE X OCCUR	Х	;	3FD4845		12/15/2021	12/15/2022	DAMAGE TO REN PREMISES (Ea o	NTED ccurrence)	\$	100,000
								MED EXP (Any or	e person)	\$	5,000
								PERSONAL & AD	V INJURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGR	EGATE	\$	2,000,000
	POLICY X PRO- JECT LOC							PRODUCTS - CO	MP/OP AGG	\$	2,000,000
	OTHER:									\$	
	AUTOMOBILE LIABILITY							COMBINED SING (Ea accident)	LE LIMIT	\$	
	ANY AUTO							BODILY INJURY (Per person)	\$	
	OWNED AUTOS ONLY SCHEDULED AUTOS							BODILY INJURY (\$	
	HIRED NON-OWNED AUTOS ONLY							PROPERTY DAM. (Per accident)	AGE	\$	
										\$	
	UMBRELLA LIAB OCCUR							EACH OCCURRE	NCE	\$	
	EXCESS LIAB CLAIMS-MADE							AGGREGATE		\$	
	DED RETENTION \$							DED	OTU	\$	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY							PER STATUTE	OTH- ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A						E.L. EACH ACCID	ENT	\$	
	(Mandatory in NH) If yes, describe under							E.L. DISEASE - E.	A EMPLOYEE	\$	
	DESCRIPTION OF OPERATIONS below							E.L. DISEASE - P	OLICY LIMIT	\$	
Villa	CRIPTION OF OPERATIONS / LOCATIONS / VEHICLE age of Irvington is included as an	additi	iona	al insured.	le, may b	e attached if more	e space is require	ed)			
LOC	eation of work: 23 Main Street, Irvi	ington	1, N	Y 10533							
CF	RTIFICATE HOLDER				CANO	CELLATION					
<u> </u>	MINIORIE HOLDEN			IRVIVI1							
				white the state of				ESCRIBED POL			
	Village of Irvington							EREOF, NOTIC CYPROVISIONS.		BE D	ELIVERED IN
	Building Department				^~~						
	85 Main Street				AUTHO	RIZED REPRESE	NTATIVE				
Irvington, NY 10533							=1				
	ii viligioli, it i 10000						25 1				

ACORD 25 (2016/03)

© 1988-2015 ACORD CORPORATION. All rights reserved.

GENERAL NOTES

- 1.1.2 THIS PHOTOVOLTAIC (PV) SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC) ARTICLE 690, ALL MANUFACTURERS'S LISTING AND INSTALLATION INSTRUCTIONS, AND THE RELEVANT CODES AS SPECIFIED BY THE AUTHORITY HAVING JURISDICTION'S (AHJ) APPLICABLE CODES.
- 1.1.3 THE UTILITY INTERCONNECTION APPLICATION MUST BE APPROVED AND PV SYSTEM INSPECTED PRIOR TO PARALLEL OPERATION
- 1.1.4 GROUND FAULT DETECTION AND INTERRUPTION (GFDI) DEVICE IS INTEGRATED WITH THE MICROINVERTER IN ACCORDANCE WITH NEC
- 1.1.5 ALL PV SYSTEM COMPONENTS; MODULES, UTILITY-INTERACTIVE INVERTERS. AND SOURCE CIRCUIT COMBINER BOXES ARE IDENTIFIED AND LISTED FOR USE IN PHOTOVOLTAIC SYSTEMS AS
 - PV MODULES: UL1703, IEC61730, AND IEC61215, AND NFPA 70 CLASS C FIRE
 - INVERTERS: UL 1741 CERTIFIED, IEEE 1547, 929, 519 COMBINER BOX(ES): UL 1703 OR UL 1741 ACCESSORY
- 1.1.6 MAX DC VOLTAGE CALCULATED USING MANUFACTURER PROVIDED TEMP COEFFICIENT FOR VOC. IF UNAVAILABLE, MAX DC VOLTAGE CALCULATED ACCORDING TO NEC 690.7.
- 1.1.7 ALL INVERTERS, PHOTOVOLTAIC MODULES, PHOTOVOLTAIC PANELS AND SOURCE CIRCUIT COMBINERS INTENDED FOR USE IN A PHOTOVOLTAIC POWER SYSTEM WILL BE IDENTIFIED AND LISTED FOR THE APPLICATION PER 690.4 (D). SHALL BE INSTALLED ACCORDING TO ANY INSTRUCTIONS FROM LISTING OR LABELING INEC 110.31.
- 1.1.8 ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE. IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANT. ALL PLAQUES AND SIGNAGE WILL BE INSTALLED AS REQUIRED BY THE NEC AND AHJ.

1.2.1 SCOPE OF WORK:

1.2.2 PRIME CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND SPECIFICATIONS OF THE GRID-TIED PHOTOVOLTAIC SYSTEM RETROFIT. PRIME CONTRACTOR WILL BE RESPONSIBLE FOR COLLECTING EXISTING ONSITE REQUIREMENTS TO DESIGN, SPECIFY, AND INSTALL THE EXTERIOR ROOF-MOUNTED PORTION OF THE PHOTOVOLTAIC SYSTEMS DETAILED IN THIS DOCUMENT.

1.3.1 WORK INCLUDES:

- 1.3.2 PV ROOF ATTACHMENTS ROOF TECH RT-MINI
- 1.3.3 PV RACKING SYSTEM INSTALLATION IRONRIDGE XR-100
- 1.3.4 PV MODULE AND INVERTER INSTALLATION HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 475 / ENPHASE IQ8A-72-2-US
- 1.3.5 PV EQUIPMENT GROUNDING
- 1.3.6 PV SYSTEM WIRING TO A ROOF-MOUNTED JUNCTION BOX
- 1.3.7 PV LOAD CENTERS (IF INCLUDED)
- 1.3.8 PV METERING/MONITORING (IF INCLUDED)
- 1.3.9 PV DISCONNECTS
- 1.3.10 PV GROUNDING ELECTRODE & BONDING TO (E) GEC
- 1.3.11 PV FINAL COMMISSIONING
- 1.3.12 (E) ELECTRICAL EQUIPMENT RETROFIT FOR PV
- 1.3.13 SIGNAGE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE

SYSTEM SIZE:

STC: 21 X 475W = 9.975KW PTC: 21 X 444.7W = 9.339KW

(21) HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 475

(21) ENPHASE IQ8A-72-2-US

ATTACHMENT TYPE: ROOF TECH RT-MINI

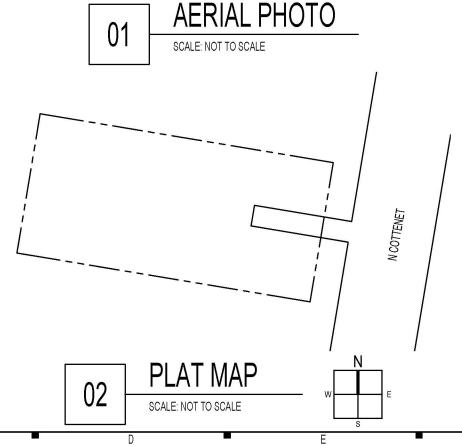
MSP UPGRADE: YES

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 ASSESSOR'S #: 2.40-13-16





SHEET LIST TABLE SHEET NUMBER SHEET TITLE **COVER PAGE** G-001 NOTES A-101 SITE PLAN A-102 ELECTRICAL PLAN A-103 SOLAR ATTACHMENT PLAN E-601 LINE DIAGRAM E-602 **DESIGN TABLES** E-603 **PLACARDS** S-501 ASSEMBLY DETAILS R-001 RESOURCE DOCUMENT R-002 RESOURCE DOCUMENT R-003 RESOURCE DOCUMENT R-004 RESOURCE DOCUMENT R-005 RESOURCE DOCUMENT R-006 RESOURCE DOCUMENT R-007 RESOURCE DOCUMENT

PROJECT INFORMATION

OWNER NAME:

ALAYNE KATZ

PROJECT MANAGER

ERIC EYGES PHONE: 914-325-2167

CONTRACTOR

NAME: RIVERTOWN SOLAR LLC PHONE: 914-325-2167

AUTHORITIES HAVING JURISDICTION

BUILDING: VILLAGE OF IRVINGTON VILLAGE OF IRVINGTON ZONING: UTILITY: CONSOLIDATED EDISON

DESIGN SPECIFICATIONS

OCCUPANCY:

SINGLE-FAMILY RESIDENTIAL GRID-TIED GROUND SNOW LOAD: 30 PSF

WIND EXPOSURE:

WIND SPEED: 115 MPH

APPLICABLE CODES & STANDARDS

BUILDING: NYSBC 2020, NYSRC 2020 ELECTRICAL: NEC 2017

NYSFC 2020

RIVERTOWN SOI AR

CONTRACTOR

RIVERTOWN SOLAR LLC

PHONE: 914-325-2167 ADDRESS: 64 MAIN STREET

IRVINGTON, NY10533 LIC. NO.: 52649

HIC. NO .: ELE. NO .:

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16



COVER PAGE

DATE: 09.16.2022 DESIGN BY: V.P.

CHECKED BY: M.M.

REVISIONS

T-001.00

		A	_	В	С	
	2.1.1	SITE NO	TES:			4.5.1 G
	2.1.2			E FOR INSPECTION	IN COMPLIANCE WITH OSHA	
		REGULA	TIONS.			А
1	2.1.3	THE PV	MODULES ARE CON	SIDERED NON-COMB	USTIBLE AND THIS SYSTEM IS	S
			Y INTERACTIVE SYS			2.5.3 P
	2.1.4				OBSTRUCT ANY PLUMBING,	M
			NICAL, OR BUILDING I			2.5.4 M
	2.1.5				E AROUND EXISTING AND	C
				QUIPMENT WILL BE	PROVIDED AS PER SECTION	2.5.5 E
	2.1.6	NEC 110		DE DECICNED INCT	ALLED, AND MAINTAINED IN	69 2.5.6 E
	2.1.0				PPROVED MANUFACTURER'S	2.3.0 L/
•					G SERVES TO PROTECT THE	N
2			G OR STRUCTURE.			TI
						IN
	2.2.1	EQUIPM	ENT LOCATIONS:			2.5.7 TI
	2.2.2			MEET MINIMUM SE	TBACKS AS REQUIRED BY	T
		NEC 110	·			С
	2.2.3				IGHT MUST BE RATED FOR	
					CIFIED BY NEC 690.31 (A),(C)	G 2.5.9 T
	2.2.4		C TABLES 310.15 (B)(2)(C). ALLED UNDER PV MODULES	2.5.9 TI
	Z.Z. 4		DING TO NEC 690.34.	.5 FERMITTED INST	ALLED UNDER FV WODULES	IN
	2.2.5			T(S) SHALL BE PROV	JIDED WHERE THE INVERTER	N
			WITHIN SIGHT OF THE			2.5.10 G
3	2.2.6	ALL EQU	JIPMENT SHALL BE IN	ISTALLED ACCESSIB	LE TO QUALIFIED PERSONNEL	R
			DING TO NEC APPLIC			
	2.2.7				PURPOSE AND RATED FOR	_
		OUTDO	OR USAGE WHEN API	PROPRIATE.		2.6.2 D
	224	CTRUCT	TIDAL NOTES			IS Ti
	2.3.1 2.3.2		URAL NOTES:	ADDAY WILL BE	INSTALLED ACCORDING TO	
	2.5.2				TOP CLAMPS REQUIRE A	2.0.5 D
					RAILS MUST ALSO EXTEND A	
					OF THE ARRAY/SUBARRAY,	R
		ACCOR	DING TO RAI MANUFA	CTURER'S INSTRUCT	FIONS.	R
	2.3.3				ACTURERS' SPECIFICATIONS.	2.6.5 A
,				E, IT SHALL BE FLA	SHED & SEALED PER LOCAL	Α
4	004		EMENTS.	50D DV D40514/40/	NAME OF COMPLETED AND	2.6.6 M
	2.3.4				WILL BE COMPLETED AND	G 2.6.7 IF
		CONTRA		IEMICAL SEALANT	PER CODE BY A LICENSED	2.0. <i>1</i> IF
	2.3.5			CHMENTS TO BE SPA	ACED NO GREATER THAN THE	Λ.
			ISTANCE SPECIFIED I			2.7.1 IN
	2.3.6	WHEN	POSSIBLE, ALL PV	RELATED RACKIN	G ATTACHMENTS WILL BE	2.7.2
		STAGGE	ERED AMONGST THE	ROOF FRAMING MEM	IBERS.	70
	0.44	Manie				2.7.3 T
	2.4.1 2.4.2		& CONDUIT NOTES:	DELICTED AND ADD	PROVED FOR THEIR PURPOSE.	2.7.4 T
	2.4.2				BASED ON MINIMUM CODE	2.7.4 C
			EMENTS AND ARE NO			В
5	2.4.3		CTORS SIZED ACCOR			B
	2.4.4	VOLTAG	SE DROP LIMITED TO	1.5%.		E
	2.4.5	DC WIR	RING LIMITED TO N	ODULE FOOTPRINT	. MICROINVERTER WIRING	2.7.5 A
				D AND SECURED UN	DER THE ARRAY W/ SUITABLE	R
	2.40	WIRING		OD MADKED 40 FOU	LOMO	В
	2.4.6		DUCTORS COLORED SE A OR L1- BLACK	OK MARKED AS FOL	LOM9;	2.7.6 FI
1			SE B OR L2- RED, OR	OTHER CONVENTION	NIF THREE PHASE	2.7.0 FI
					R OTHER CONVENTION	2.7.7 S
2007			TRAL- WHITE OR GRA			S
6					HASE WITH HIGHER VOLTAGE	
		TO BE N	IARKED ORANGE [NE	C 110.15].		FI

GROUNDING NOTES:

GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVICES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR SUCH USE

PV EQUIPMENT SHALL BE GROUNDED ACCORDING TO NEC 690.43 AND MINIMUM NEC TABLE 250.122.

METAL PARTS OF MODULE FRAMES, MODULE RACKING, AND ENCLOSURES CONSIDERED GROUNDED IN ACCORD WITH 250.134 AND 250.136(A).

EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC 690.45 AND MICROINVERTER MANUFACTURERS' INSTRUCTIONS.

EACH MODULE WILL BE GROUNDED USING WEEB GROUNDING CLIPS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ. IF WEEBS ARE NOT USED, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE SPECIFIED GROUNDING LUG HOLES PER THE MANUFACTURERS' INSTALLATION REQUIREMENTS.

THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.

GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER [NEC 250.119]

THE GROUNDING ELECTRODE SYSTEM COMPLIES WITH NEC 690.47 AND NEC 250.50 THROUGH 250.106. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, A GROUNDING ELECTRODE SYSTEM PROVIDED ACCORDING TO NEC 250, NEC 690.47 AND AHJ.

GROUND-FAULT DETECTION SHALL COMPLY WITH NEC 690.41(B)(1) AND (2) TO REDUCE FIRE HAZARDS

DISCONNECTION AND OVER-CURRENT PROTECTION NOTES:

DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS).

DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL BE

DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH

PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION TO REDUCE SHOCK HAZARD FOR EMERGENCY RESPONDERS IN ACCORDANCE WITH 690.12(A) THROUGH (D).

ALL OCPD RATINGS AND TYPES SPECIFIED ACCORDING TO NEC 690.8, 690.9, AND 240

MICROINVERTER BRANCHES CONNECTED TO A SINGLE BREAKER OR GROUPED FUSES IN ACCORDANCE WITH NEC 110.3(B).

IF REQUIRED BY AHJ, SYSTEM WILL INCLUDE ARC-FAULT CIRCUIT PROTECTION ACCORDING TO NEC 690.11 AND UL1699B.

INTERCONNECTION NOTES:

LOAD-SIDE INTERCONNECTION SHALL BE IN ACCORDANCE WITH [NEC 705.12 (B)]

THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS OUTPUT MAY NOT EXCEED 120% OF BUSBAR RATING [NEC 705.12(D)(2)(3)].

THE SUM OF 125 PERCENT OF THE POWER SOURCE(S) OUTPUT CIRCUIT CURRENT AND THE RATING OF THE OVERCURRENT DEVICE PROTECTING THE BUSBAR SHALL NOT EXCEED 120 PERCENT OF THE AMPACITY OF THE BUSBAR, PV DEDICATED BACKFEED BREAKERS MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD [NEC 705.12(B)(2)(3)].

AT MULTIPLE ELECTRIC POWER SOURCES OUTPUT COMBINER PANEL, TOTAL RATING OF ALL OVERCURRENT DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR. HOWEVER, THE COMBINED OVERCURRENT DEVICE MAY BE EXCLUDED ACCORDING TO NEC 705.12 (B)(2)(3)(C).

FEEDER TAP INTERCONNECTION (LOAD SIDE) ACCORDING TO NEC 705.12 (B)(2)(1)

SUPPLY SIDE TAP INTERCONNECTION ACCORDING TO NEC 705.12 (A) WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH NEC 230.42 BACKFEEDING BREAKER FOR ELECTRIC POWER SOURCES OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING [NEC 705.12 (B)(5)].

Page 6

RIVERTOWN SOLAR

CONTRACTOR

RIVERTOWN SOLAR LLC

PHONE: 914-325-2167 **ADDRESS**: 64 MAIN STREET

IRVINGTON, NY10533

LIC. NO.: 52649 HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS
DRAWING SET WITHOUT WRITTEN
PERMISSION FROM CONTRACTOR IS IN
VIOLATION OF U.S. COPYRIGHT LAWS
AND WILL BE SUBJECT TO CIVIL
DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16



NOTES

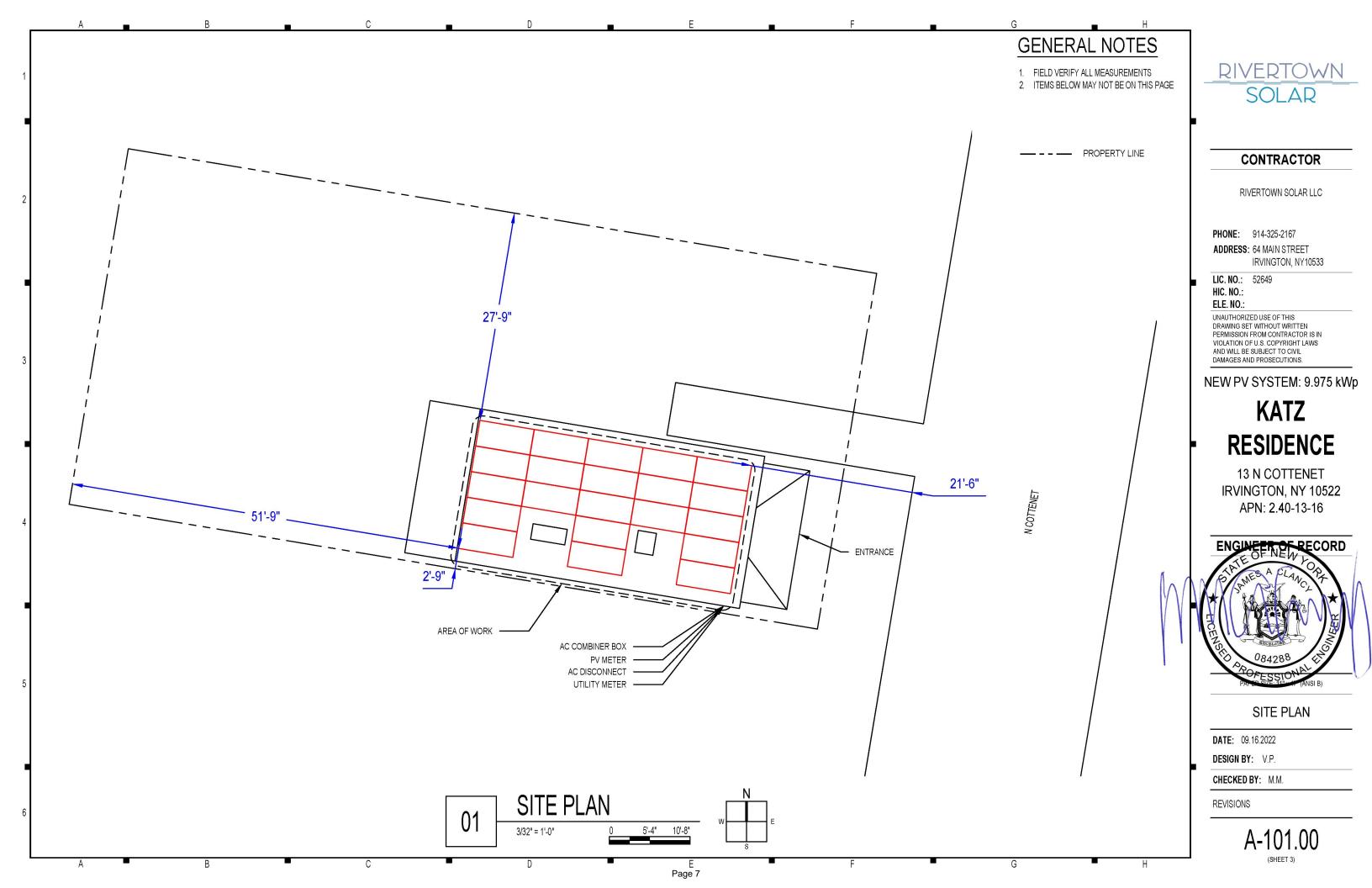
DATE: 09.16.2022 **DESIGN BY:** V.P.

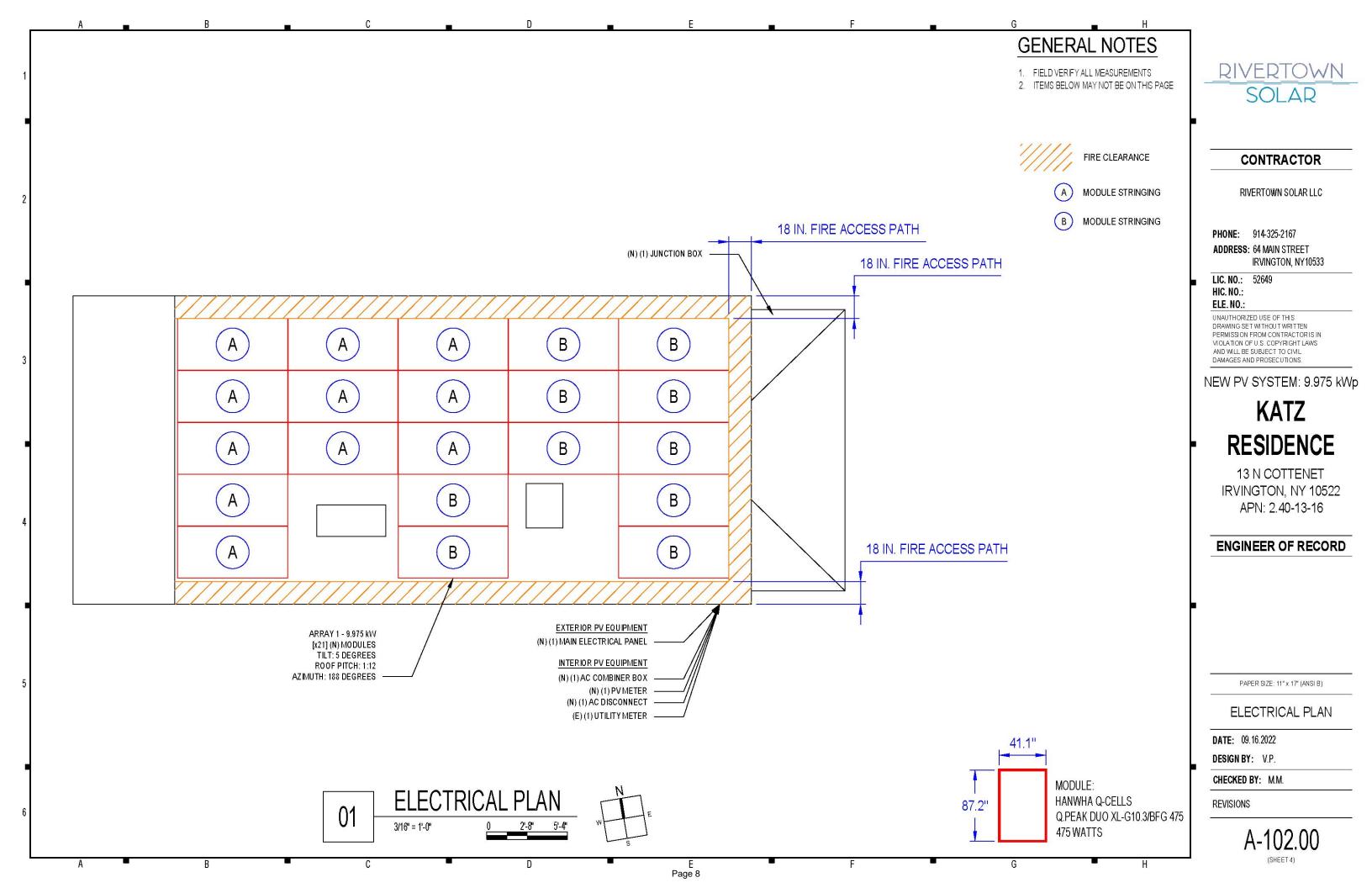
CHECKED BY: M.M.

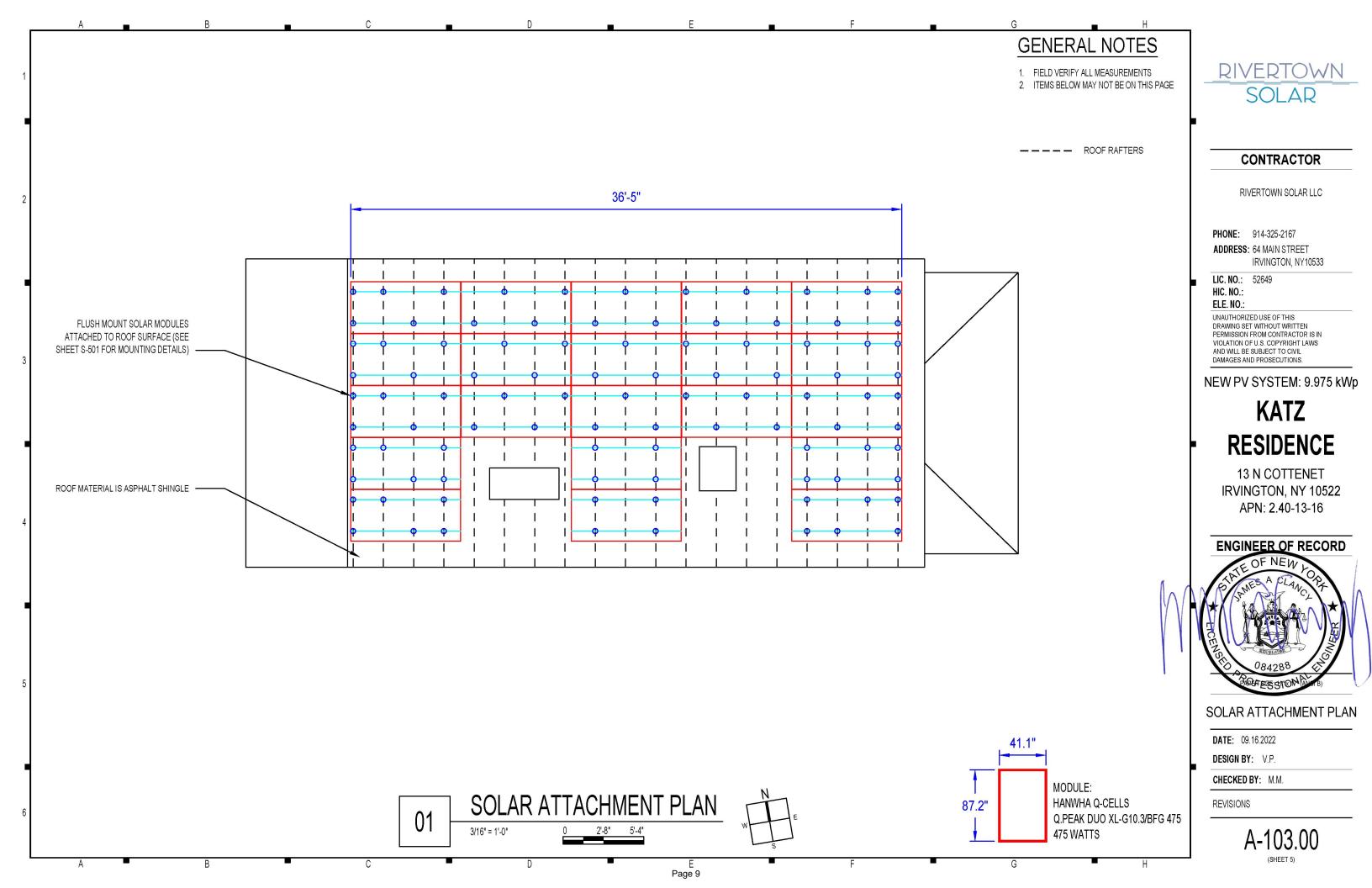
REVISIONS

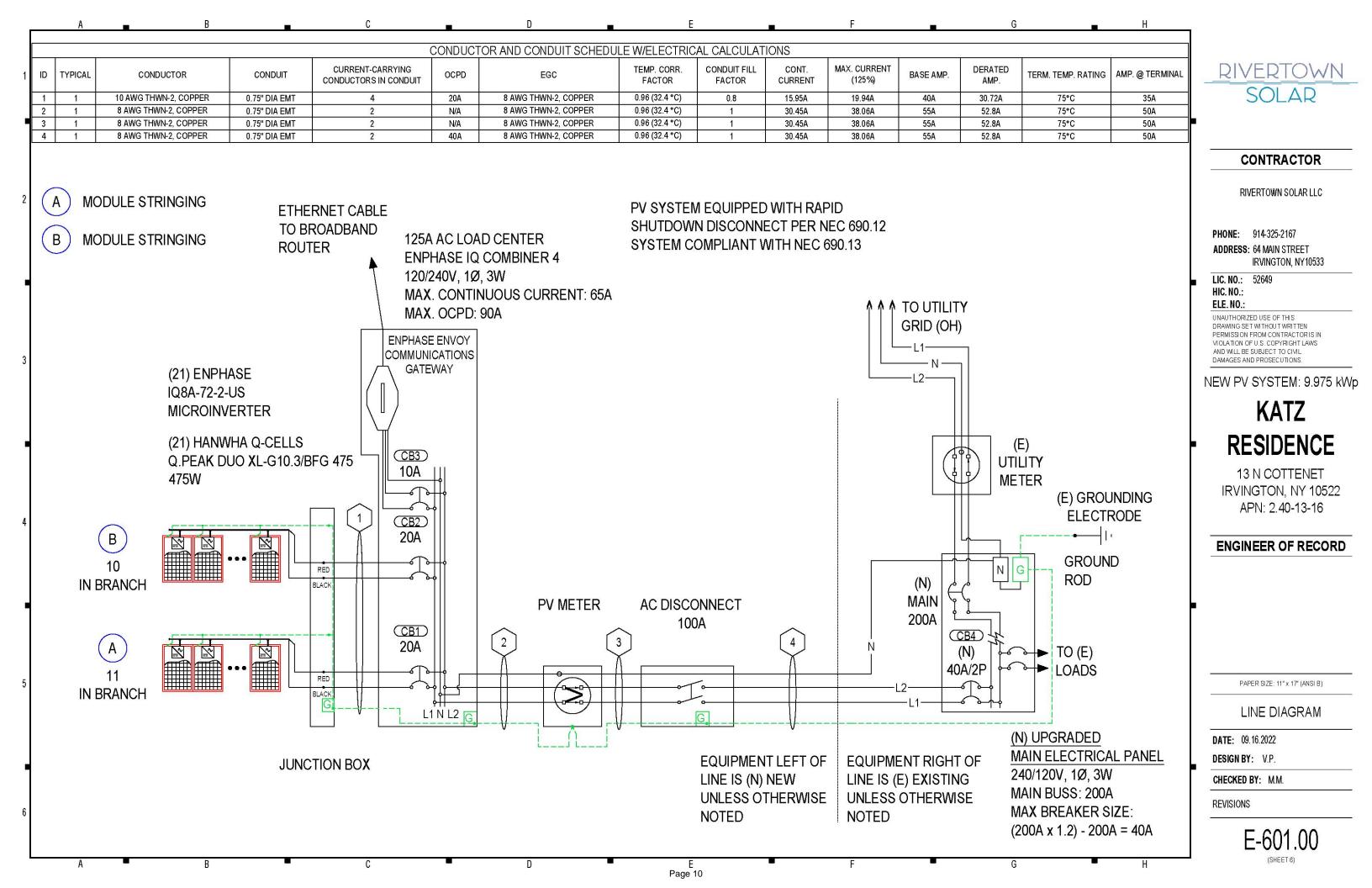
G-001.00

(SHEET 2)









SYSTEM SUMMARY								
	BRANCH#1 BRANCH#2							
INVERTERS PER BRANCH	11	10						
MAX AC CURRENT	15.95A	14.5A						
MAX AC OUTPUT POWER	4,026W	3,660W						
ARRAY STC POWER	9,97	75W						
ARRAY PTC POWER	9,33	39W						
MAX AC CURRENT	30.	45A						
MAX AC POWER	7,686W							
DERATED (CEC) AC POWER	7,68	86W						

	MODULES									
REF.	REF. QTY. MAKE AND MODEL PMAX PTC ISC IMP VOC VMP TEMP. COEFF. OF VOC FUSE RATING						FUSE RATING			
PM1-21	21	HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 475	475W	444.7W	11.08A	10.55A	53.15V	45.03V	-0.144V/°C (-0.27%/°C)	20A

	INVERTERS									
REF.	QTY.	MAKE AND MODEL	AC VOLTAGE	GROUND	OCPD RATING	RATED POWER	MAX OUTPUT CURRENT	MAX INPUT CURRENT	MAX INPUT VOLTAGE	CEC WEIGHTED EFFICIENCY
11-21	21	ENPHASE IQ8A-72-2-US	240V	FLOATING	20A	349W	1.45A	15A	60V	97.5%

DISCONNECTS					
REF.	QTY.	MAKE AND MODEL	RATED CURRENT	MAX RATED VOLTAGE	
SW1	1	SQUARE D DU323RB OR EQUIV.	100A	240VAC	

OCPDS								
REF.	QTY.	RATED CURRENT	MAX VOLTAGE					
CB1-2	2	20A	240VAC					
CB3	1	10A	240VAC					
CB4	1	40A	240VAC					

ASHRAE EXTREME LOW	-19.7°C (-3.5°F), SOURCE: WESTCHESTER CO (41.07°; -73.71°)
ASHRAE 2% HIGH	32.4°C (90.3°F), SOURCE: WESTCHESTER CO (41.07°; -73.71°)

			BI	LL OF MA	TERIALS		
CATEGORY	MAKE	MODEL NUMBER	REF	QTY	UNIT	QTY/UNIT	DESCRIPTION
MODULE	HANWHA Q-CELLS	Q.PEAK DUO XL-G10.3/BFG 475	PM1-21	21	PIECES	1	HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 475 475W
INVERTER	ENPHASE	IQ8A-72-2-US	I1-21	21	PIECES	1	ENPHASE IQ8A-72-2-US 349W INVERTER
DISCONNECT	SQUARE D	DU323RB	SW1	1	PIECE	1	SQUARE D DU323RB, NON FUSED, 2-POLE, 100A, 240VAC OR EQUIVALENT
PRODUCTION METER	GENERIC MANUFACTURER	GEN-METER-80A	M1	1	PIECE	1	ELECTRICAL METER, OWNER APPROVED
MISC ELECTRICAL EQUIPMENT		GEN-CABLE-CLIP	HDWR24-129	105	PIECES	1	GENERIC CABLE CLIP
AC COMBINER PANEL		ENPHASE-IQ4-PANEL	EP1	1	PIECE	1	ENPHASE IQ COMBINER 4 (X-IQ-AM1-240-4)
WIRING	ENPHASE	Q-12-20-200	EN1-21	21	PIECES	1	ENPHASE ENGAGE (TM) TRUNK CABLE
WIRING	ENPHASE	Q-TERM-10	EN22	1	BUNDLE	10	ENPHASE ENGAGE (TM) BRANCH TERMINATOR
WIRING	ENPHASE	Q-SEAL-10	EN23	1	BUNDLE	10	ENPHASE ENGAGE (TM) WATERTIGHT SEALING CAP
WIRING		GEN-10-AWG-THWN-2-CU-RD	WR1	90	FEET	1	10 AWG THWN-2, COPPER, RED (LINE 1)
WIRING		GEN-10-AWG-THWN-2-CU-BLK	WR1	90	FEET	1	10 AWG THWN-2, COPPER, BLACK (LINE 2)
WIRING		GEN-8-AWG-THWN-2-CU-RD	WR2-4	30	FEET	1	8 AWG THWN-2, COPPER, RED (LINE 1)
WIRING		GEN-8-AWG-THWN-2-CU-BLK	WR2-4	30	FEET	1	8 AWG THWN-2, COPPER, BLACK (LINE 2)
WIRING		GEN-8-AWG-THWN-2-CU-WH	WR2-4	30	FEET	1	8 AWG THWN-2, COPPER, WHITE (NEUTRAL)
WIRING		GEN-8-AWG-THWN-2-CU-GR	WR1-4	75	FEET	1	8 AWG THWN-2, COPPER, GREEN (GROUND)
WIREWAY	ENPHASE	ET-SPLK-05	EN5	1	BUNDLE	5	ENPHASE ENGAGE (TM) ENGAGE COUPLER
WIREWAY		GEN-EMT-0.75" DIA	WW1-4	75	FEET	1	EMT CONDUIT, 0.75" DIA
OCPD	GENERIC MANUFACTURER	GEN-CB-20A-240VAC	CB1-2	2	PIECES	1	CIRCUIT BREAKER, 20A, 240VAC
OCPD	GENERIC MANUFACTURER	GEN-CB-10A-240VAC	CB3	1	PIECE	1	CIRCUIT BREAKER, 10A, 240VAC
OCPD	GENERIC MANUFACTURER	GEN-CB-40A-240VAC	CB4	1	PIECE	1	CIRCUIT BREAKER, 40A, 240VAC
TRANSITION BOX	GENERIC MANUFACTURER	GEN-AWB-TB-4-4X	JB1	1	PIECE	1	TRANSITION/PASS-THROUGH BOX, WITH 4 TERMINAL BLOCKS

E Page 11

RIVERTOWN SOLAR

CONTRACTOR

RIVERTOWN SOLAR LLC

IRVINGTON, NY10533

PHONE: 914-325-2167

ADDRESS: 64 MAIN STREET

LIC. NO.: 52649 HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS
DRAWING SET WITHOUT WRITTEN
PERMISSION FROM CONTRACTOR IS IN
VIOLATION OF U.S. COPYRIGHT LAWS
AND WILL BE SUBJECT TO CIVIL
DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

DESIGN TABLES

DATE: 09.16.2022 **DESIGN BY:** V.P.

CHECKED BY: M.M.

REVISIONS

E-602.00

(SHEET 7)

LABELING NOTES
1.1 LABELING REQUIREMENTS BASED ON THE 2017 NATIONAL ELECTRICAL CODE, INTERNATIONAL FIRE CODE 605.11, OSHA STANDARD 1910.145, ANSI Z535

1.2 MATERIAL BASED ON THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.

1.3 LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.

1.4 LABELS TO BE A MINIMUM LETTER HEIGHT OF 3/8" AND PERMANENTLY AFFIXED.
1.5 ALERTING WORDS TO BE COLOR CODED. "DANGER" WILL HAVE RED
BACKGROUND; "WARNING" WILL HAVE ORANGE BACKGROUND; "CAUTION" WILL HAVE
YELLOW BACKGROUND. [ANSI Z535]

WARNING

ELECTRICAL SHOCK HAZARD

TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

LABEL 1

AT EACH DISCONNECTING MEANS FOR PHOTOVOLTAIC EQUIPMENT (2" X 4"). [NEC 690.13].

WARNING

POWER SOURCE OUTPUT CONNECTION DO NOT RELOCATE THIS OVERCURRENT DEVICE

LABEL 2

AT POINT OF INTERCONNECTION OVERCURRENT DEVICE (2" X 4"). [NEC 705.12(B)(2)(3)(B)].



RATED AC OUTPUT CURRENT 30.45 A NOMINAL OPERATING AC VOLTAGE 240 V

LABEL 3

AT POINT OF INTERCONNECTION, MARKED AT DISCONNECTING MEANS (4" X 2"). [NEC 690.54]

PHOTOVOLTAIC SOLAR AC DISCONNECT

LABEL 4

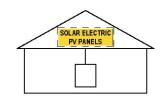
AT EACH AC DISCONNECTING MEANS (4" X 1").
[NEC 690.13(B)].

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

LABEL 5

AT RAPID SHUTDOWN DISCONNECT SWITCH (5 1/4" X 2"). INEC 690.56(C)(3)].

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN



TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN ARRAY

LABEL 6

AT RAPID SHUTDOWN SYSTEM (3 3/4" X 5 1/4"). [NEC 690.56(C)(1)(A)].

1 WARNING

DUAL POWER SUPPLY
SOURCES: UTILITY GRID
AND PV SOLAR
ELECTRIC SYSTEM

LABEL 7

AT POINT OF INTERCONNECTION (2 3/4" X 1 5/8"). [NEC 705.12(B)(3)]

I WARNING SOLAR ELECTRIC CIRCUIT BREAKER IS BACKFED

LABEL 8

AT POINT OF INTERCONNECTION (2" X 1").
[NEC 705.12(B)(3)]

INTERACTIVE PHOTOVOLTAIC SYSTEM CONNECTED PHOTOVOLTAIC SYSTEM DISCONNECT LOCATED SOUTH SIDE OF THE HOUSE

DIRECTORY

PERMANENT PLAQUE OR DIRECTORY PROVIDING THE LOCATION OF THE SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS IF NOT IN THE SAME LOCATION (5 3/4" X 1 1/8").

INEC 690.56(B)1

WHERE THE PV SYSTEMS ARE REMOTELY LOCATED FROM EACH OTHER, A DIRECTORY IN ACCORDANCE WITH 705.10 SHALL BE PROVIDED AT EACH PV SYSTEM DISCONNECTING MEANS.

PV SYSTEM EQUIPMENT AND DISCONNECTING MEANS SHALL NOT BE INSTALLED IN BATHROOMS

[NEC 690.4(D),(E)]

WARNING: PHOTOVOLTAIC POWER SOURCE

LABEL 9

AT EXPOSED RACEWAYS, CABLE TRAYS, AND OTHER WIRING METHODS; SPACED AT MAXIMUM 10 FT SECTION OR WHERE SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS (5 3/4" X 1 1/8").
[NEC 690.31(G)]

LETTERS AT LEAST 3/8 INCH; WHITE ON RED BACKGROUND; REFLECTIVE [IFC 605.11.1.1]

ACAUTION

SOLAR ELECTRIC SYSTEM CONNECTED

LABEL 10

AT UTILITY METER (5 3/4" X 1 1/8") [NEC 690.56(B)]

01 EQUIPMENT ELEVATION SCALE: NOT TO SCALE

NOT TO EXCEED

6'-7" FROM GRADE TO (N) MEP

(INSIDE)

!CAUTION!

POWER TO THIS BUILDING IS ALSO SUPPLIED FROM

ROOF MOUNTED SOLAR ARRAYS WITH SAFETY

DISCONNECTS AS SHOWN:

MAIN DISTRIBUTION

UTILITY DISCONNECT

PV ARRAY

BACK

TO PV ARRAY

(N) AC COMBINER BOX

(N) AC DISCONNECT

(N) PV METER

RIVERTOWN SOLAR

CONTRACTOR

RIVERTOWN SOLAR LLC

PHONE: 914-325-2167
ADDRESS: 64 MAIN STREET

IRVINGTON, NY10533
LIC. NO.: 52649
HIC. NO.:

FRONT

0

- TO UTILITY

— (E) METER

- TO UTILITY

GRADE

ELE. NO.:

UNAUTHORIZED USE OF THIS
DRAWING SET WITHOUT WRITTEN
PERMISSION FROM CONTRACTORIS IN
VIOLATION OF U.S. COPPRIGHT LAWS
AND WILL BE SUBJECT TO CIVIL
DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

PLACARDS

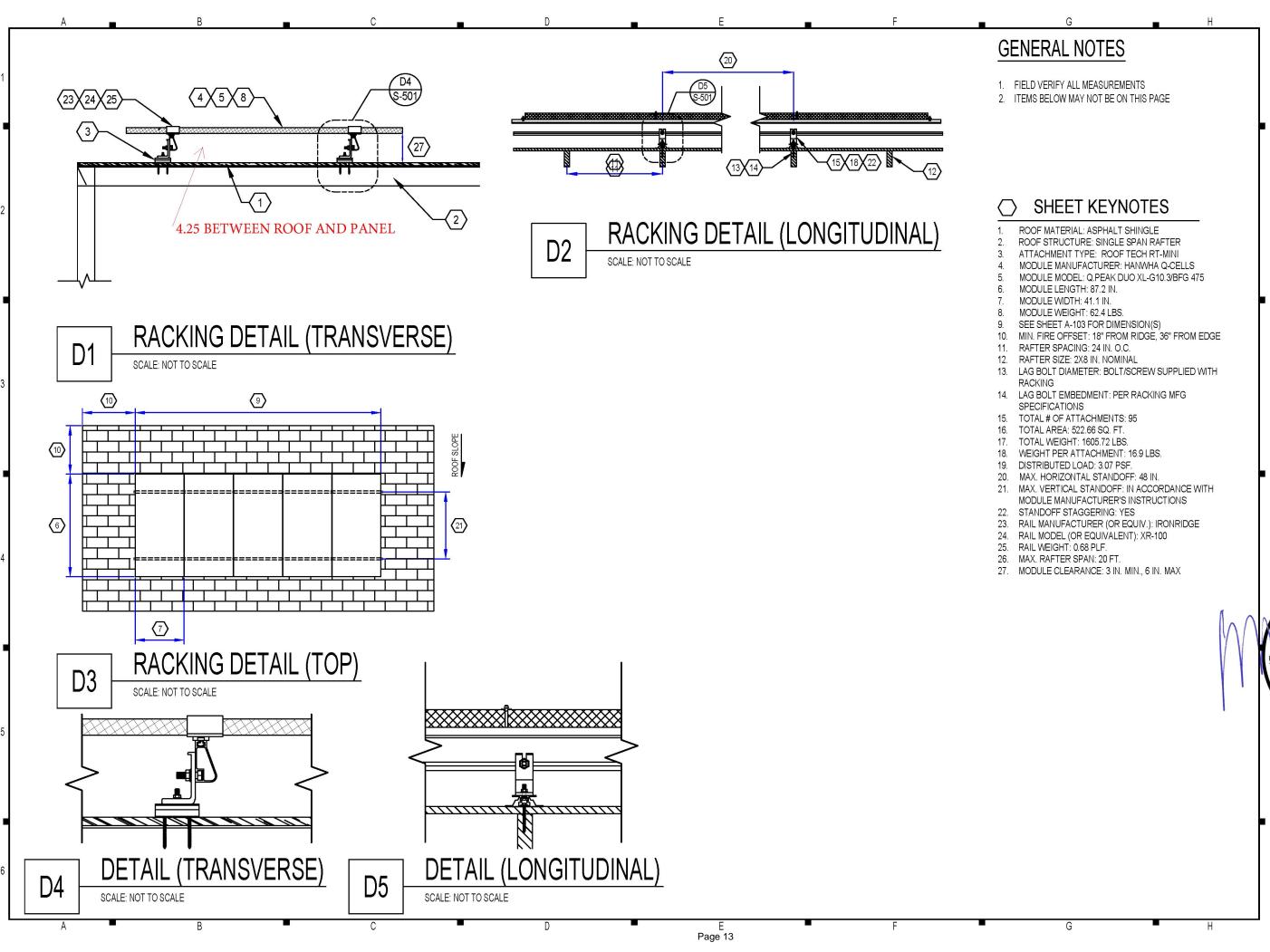
DATE: 09.16.2022 **DESIGN BY:** V.P.

CHECKED BY: M.M.

REVISIONS

E-603.0

C D E F G H Page 12



RIVERTOWN SOLAR

CONTRACTOR

RIVERTOWN SOLAR LLC

PHONE: 914-325-2167

ADDRESS: 64 MAIN STREET

IRVINGTON, NY10533

LIC. NO.: 52649 HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS
DRAWING SET WITHOUT WRITTEN
PERMISSION FROM CONTRACTOR IS IN
VIOLATION OF U.S. COPYRIGHT LAWS
AND WILL BE SUBJECT TO CIVIL
DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16



ASSEMBLY DETAILS

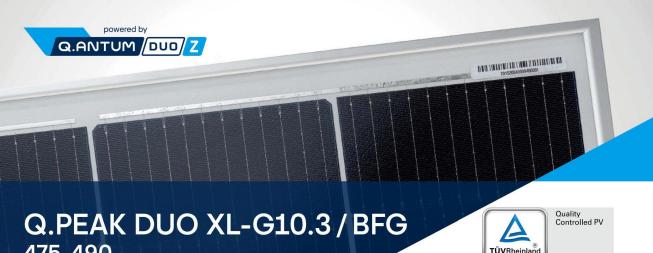
DATE: 09.16.2022 **DESIGN BY:** V.P.

CHECKED BY: M.M.

REVISIONS

S-501.00

SHEET 9)



475-490 **BIFACIAL DOUBLE GLASS MODULE**





BIFACIAL ENERGY YIELD GAIN OF UP TO 20%

Bifacial Q.ANTUM solar cells with zero gap cell layout make efficient use of light shining on the module rear-side for radically improved LCOE.

CERTIFIED

LOW ELECTRICITY GENERATION COSTS

Q.ANTUM DUO Z combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 21.4%.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID and Anti PID Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q™.



FRAME FOR VERSATILE MOUNTING OPTIONS

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (2400 Pa).



Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty².

 $^{\rm L}$ APT test conditions according to IEC/TS 62804-1:2015 method B (–1500 V, 168 h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)

THE IDEAL SOLUTION FOR:

WITH EXCELLENT RELIABILITY

AND ADDITIONAL YIELD

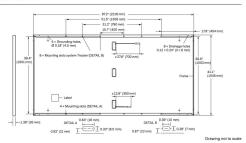


Engineered in Germany



MECHANICAL SPECIFICATION

Format	87.2 in \times 41.1 in \times 1.38 in (including frame) (2216 mm \times 1045 mm \times 35 mm)
Weight	64.2 lbs (29.1 kg)
Front Cover	0.08 in (2.0 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2.0 mm) semi-tempered glass
Frame	Anodized aluminum
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09 - 3.98 in \times 1.26 - 2.36 in \times 0.59 - 0.71 in (53- 101 mm \times 32 - 60 mm \times 15 - 18 mm), IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥27.6 in (700 mm), (-) ≥13.8 in (350 mm)
Connector	Stäubli MC4, Stäubli MC4-Evo2, Hanwha Q CELLS HQC4, IP68



ELECTRICAL CHARACTERISTICS

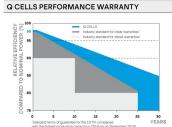
POV	WER CLASS			475		480		485		490	
MIN	IIMUM PERFORMANCE AT STANDARD T	EST CONDITIO	NS, STC ¹ A	ND BSTC1 (F	OWER TOL	ERANCE +5	W/-0W)				
					BSTC*		BSTC*		BSTC*		BSTC*
	Power at MPP ¹	P _{MPP}	[W]	475	519.6	480	525.0	485	530.5	490	536.0
	Short Circuit Current ¹	I _{sc}	[A]	11.08	12.12	11.12	12.17	11.16	12.21	11.20	12.26
mu.	Open Circuit Voltage ¹	Voc	[V]	53.15	53.34	53.39	53.58	53.63	53.82	53.86	54.06
il i	Current at MPP	I _{MPP}	[A]	10.55	11.54	10.59	11.58	10.63	11.63	10.67	11.67
2	Voltage at MPP	V _{MPP}	[V]	45.03	45.02	45.33	45.32	45.63	45.62	45.93	45.92
	Efficiency ¹	η	[%]	≥20.5	≥22.4	≥20.7	≥22.7	≥20.9	≥22.9	≥21.2	≥23.1

Bifaciality of P_{MPP} and I_{SC} 70% \pm 5% \bullet Bifaciality given for rear side irradiation on top of STC (front side) \bullet According to IEC 60904-1-2

1 Measurement tolerances P₁₀₀ ± 3%; |₂₀₀ V₂₀ ± 5% at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 70 % ± 5%, 25 ± 2°C. AM 1.5 according to IEC 60904-3

IVIIIV	IIMUM PERFORMANCE AT NORMAL OPERATI	NG CONL	JITIONS, I	VIVIO 12			
	Power at MPP	P _{MPP}	[W]	357.6	361.4	365.1	368.9
E	Short Circuit Current	I _{sc}	[A]	8.92	8.96	8.99	9.02
ij.	Open Circuit Voltage	Voc	[V]	50.27	50.49	50.72	50.95
Ē	Current at MPP	I _{MPP}	[A]	8.30	8.34	8.37	8.40
	Voltage at MPP	V _{MPP}	[V]	43.06	43.35	43.63	43.92

2800 W/m2, NMOT, spectrum AM 1.5



At least 98% of nominal powe during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 ears. At least 84.95% of nominal

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective

PERFORMANCE AT LOW IRRADIANCE

Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m²

IPERATURE COEFFICIENTS							
nperature Coefficient of I _{sc}	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
nperature Coefficient of Page	v	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	108±5.4 (42±3°C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1500	PV module classification	Class II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI/UL 61730	TYPE 29 ⁴
Max. Design Load, Push/Pull ³	[lbs/ft ²]	75 (3600 Pa) / 33 (1600 Pa)	Permitted Module Temperature	-40°F up to +185°F
Max. Test Load, Push/Pull ³	[lbs/ft ²]	113 (5400 Pa) / 50 (2400 Pa)	on Continuous Duty	(-40°C up to +85°C)

⁴New Type is similar to Type 3 but with metallic frame

QUALIFICATIONS AND CERTIFICATES

Quality Controlled PV UL 61730, CE-compliar IEC 61215:2016, IEC 61730:2016, U.S. Patent No. 9,893,215 (solar cells)







				lb lb	O-O	40 HC	
Horizontal packaging	89.4 in	43.1 in	47.6 in	1975 lbs	20	20	29
	2270 mm	1095 mm	1210 mm	896 kg	pallets	pallets	modules
Vertical packaging	90.8in	45.3 in	47.4 in	2013lbs	20	20	30
	2306mm	1150 mm	1205 mm	913kg	pallets	pallets	modules

PACKAGING INFORMATION

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use

400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.a-cells.us

RIVERTOWN

CONTRACTOR

RIVERTOWN SOLAR LLC

PHONE: 914-325-2167 **ADDRESS: 64 MAIN STREET**

IRVINGTON, NY10533 LIC. NO.: 52649

HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET **IRVINGTON, NY 10522** APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

RESOURCE DOCUMENT

DATE: 09.16.2022 DESIGN BY: V.P.

CHECKED BY: M.M.

REVISIONS

Page 14

See data sheet on rear for further information

B C D E F G H

⊖ ENPHASE.

DATA SHEET



IQ8 Series Microinverters

Our newest IQ8 Microinverters are the industry's first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC) which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the Enphase IQ Battery, Enphase IQ Gateway, and the Enphase Ann monitoring and analysis enfituers



of up to 25 years.

Connect PV modules quickly and easily to IQ8 Series Microinverters using the included Q-DCC-2 adapter cable with plug-n-play MC4 connectors

IQ8 Series Microinverters are UL Listed as PV Rapid Shut Down Equipment and conform with various regulations, when installed according to manufacturer's instructions.

IQ8 Series Microinverters redefine reliability

standards with more than one million

cumulative hours of power-on testing, enabling an industry-leading limited warranty

© 2021 Enphase Energy. All rights reserved. Enphase, the Enphase logo, IQ8 microinverters, and other names are trademarks of Enphase Energy, Inc. Data subject to change.

IQ8SE-DS-0001-01-EN-US-2021-10-19

Easy to install

- Lightweight and compact with plug-n-play connectors
- Power Line Communication (PLC) between components
- Faster installation with simple two-wire cabling

High productivity and reliability

- Produce power even when the grid is down
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest highpowered PV modules

Microgrid-forming

- Complies with the latest advanced grid support
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) requirements

IQ8 Series Microinverters

INPUT DATA (DC)		IQ8-60-2-US	IQ8PLUS-72-2-US	IQ8M-72-2-US	IQ8A-72-2-US	IQ8H-240-72-2-US	IQ8H-208-72-2-U
Commonly used module pairings ²	W	235 – 350	235 - 440	260 - 460	295 – 500	320 - 540+	295 - 500+
Module compatibility		60-cell/120 half-cell		60-cell/120	half-cell and 72-cell/	144 half-cell	
MPPT voltage range	٧	27 - 37	29 - 45	33 – 45	36 - 45	38 - 45	38 - 45
Operating range	٧	25 - 48			25 - 58		
Min/max start voltage	٧	30 / 48			30 / 58		
Max input DC voltage	٧	50			60		
Max DC current ³ [module lsc]	Α			1	5		
Overvoltage class DC port					II		
DC port backfeed current	mA				0		
PV array configuration		1x1 Ungrounded a	array; No additional Do	C side protection requ	ired; AC side protecti	on requires max 20A p	er branch circuit
OUTPUT DATA (AC)		108-60-2-US	IQ8PLUS-72-2-US	108M-72-2-US	IQ8A-72-2-US	IQ8H-240-72-2-US	IQ8H-208-72-2-U
Peak output power	VA	245	300	330	366	384	366
Max continuous output power	VA	240	290	325	349	380	360
Nominal (L-L) voltage/range⁴	٧			240 / 211 - 264			208 / 183 - 250
Max continuous output current	Α	1.0	1.21	1.35	1.45	1.58	1.73
Nominal frequency	Hz			6	60		
Extended frequency range	Hz			50	- 68		
Max units per 20 A (L-L) branch circuit⁵		16	13	11	11	10	9
Total harmonic distortion				</td <td>5%</td> <td></td> <td></td>	5%		
Overvoltage class AC port				1	II		
AC port backfeed current	mΑ			3	0		
Power factor setting				1	.0		
Grid-tied power factor (adjustable)				0.85 leading	- 0.85 lagging		
Peak efficiency	%	97.5	97.6	97.6	97.6	97.6	97.4
CEC weighted efficiency	%	97	97	97	97.5	97	97
Night-time power consumption	mW			6	0		
MECHANICAL DATA							
Ambient temperature range				-40°C to +60°C	(-40°F to +140°F)		
Relative humidity range				4% to 100%	(condensing)		
DC Connector type				М	C4		
Dimensions (HxWxD)			2	212 mm (8.3") x 175 mn	n (6.9") x 30.2 mm (1.2	")	
Weight				1.08 kg (2.38 lbs)		
Cooling				Natural conve	ction – no fans		
Approved for wet locations				Y	es		
Acoustic noise at 1 m				<60	dBA		
Pollution degree				P	03		
Enclosure			Class II dou	uble-insulated, corros	ion resistant polymeri	c enclosure	
Environ. category / UV exposure rating				NEMA Type	6 / outdoor		
COMPLIANCE							
		CA Rule 21 (UL 1741-5	SA), UL 62109-1, UL174	11/IEEE1547, FCC Part	15 Class B, ICES-000	3 Class B, CAN/CSA-0	C22.2 NO. 107.1-01
Certifications			18 Rule 64-218 Rapid			014, NEC 2017, and NE nductors, when install	

the compatibility calculator at https://link.enphase.com/module-compatibility (3) Maximum continuous input

DC current is 10.6A (4) Nominal voltage range can be extended beyond nominal if required by the utility. (5)

Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

RIVERTOWN SOLAD

CONTRACTOR

RIVERTOWN SOLAR LLC

IRVINGTON, NY10533

PHONE: 914-325-2167 **ADDRESS:** 64 MAIN STREET

LIC. NO.: 52649 HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS
DRAWING SET WITHOUT WRITTEN
PERMISSION FROM CONTRACTOR IS IN
VIOLATION OF U.S. COPYRIGHT LAWS
AND WILL BE SUBJECT TO CIVIL
DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

RESOURCE DOCUMENT

DATE: 09.16.2022 **DESIGN BY:** V.P.

CHECKED BY: M.M.

REVISIONS

IQ8SE-DS-0001-01-EN-US-2021-10-19

R-002.00

B C D E F G Page 15 B C D E F G H

Data Sheet **Enphase Networking**

Enphase IQ Combiner 4/4C

X-IQ-AM1-240-4 X-IQ-AM1-240-4C



The Enphase IQ Combiner 4/4C with Enphase IQ Gateway and integrated LTE-M1 cell modem (included only with IQ Combiner 4C) consolidates interconnection equipment into a single enclosure and streamlines IQ microinverters and storage installations by providing a consistent, pre-wired solution for residential applications. It offers up to four 2-pole input circuits and Eaton BR series busbar assembly.

Smart

- Includes IQ Gateway for communication and control
- Includes Enphase Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), included only with IQ
- Includes solar shield to match Enphase IQ Battery aesthetics and deflect heat
- Flexible networking supports Wi-Fi, Ethernet, or cellular
- Optional AC receptacle available for PLC bridge
- Provides production metering and consumption monitoring

Simple

- Centered mounting brackets support single stud mounting
- · Supports bottom, back and side conduit entry
- Up to four 2-pole branch circuits for 240 VAC plug-in breakers (not included)
- 80A total PV or storage branch circuits

Reliable

- Durable NRTL-certified NEMA type 3R enclosure
- Five-year limited warranty
- Two years labor reimbursement program coverage included for both the IQ Combiner SKU's
- UL listed



Enphase IQ Combiner 4/4C

MODEL NUMBER	
IQ Combiner 4 (X-IQ-AM1-240-4)	IQ Combiner 4 with Enphase IQ Gateway printed circuit board for integrated revenue grade PV production metering (ANS C12.20+/-0.5%) and consumption monitoring (+/-2.5%). Includes a silver solar shield to match the IQ Battery system an IQ System Controller 2 and to deflect heat.
IQ Combiner 4C (X-IQ-AM1-240-4C)	IQ Combiner 4C with Enphase IQ Gateway printed circuit board for integrated revenue grade PV production metering (ANSI C12.20 +/- 0.5%) and consumption monitoring (+/- 2.5%). Includes Enphase Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), a plug-and-play industrial-grade cell modem for systems up to 60 microinverters. (Available in the US, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.) Includes a silver solar shield to match the IQ Battery and IQ System Controller and to deflect hear
ACCESSORIES AND REPLACEMENT PARTS	(not included, order separately)
Ensemble Communications Kit COMMS-CELLMODEM-M1-06 CELLMODEM-M1-06-SP-05 CELLMODEM-M1-06-AT-05	- Includes COMMS-KIT-01 and CELLMODEM-M1-06-SP-05 with 5-year Sprint data plan for Ensemble sites - 4G based LTE-M1 cellular modem with 5-year Sprint data plan - 4G based LTE-M1 cellular modem with 5-year AT&T data plan
Circuit Breakers BRK-10A-2-240V BRK-15A-2-240V BRK-20A-2P-240V BRK-15A-2P-240V-B BRK-20A-2P-240V-B	Supports Eaton BR210, BR215, BR220, BR230, BR240, BR250, and BR260 circuit breakers. Circuit breaker, 2 pole, 10A, Eaton BR210 Circuit breaker, 2 pole, 15A, Eaton BR215 Circuit breaker, 2 pole, 20A, Eaton BR220 Circuit breaker, 2 pole, 15A, Eaton BR215B with hold down kit support Circuit breaker, 2 pole, 20A, Eaton BR220B with hold down kit support
EPLC-01	Power line carrier (communication bridge pair), quantity - one pair
XA-SOLARSHIELD-ES	Replacement solar shield for IQ Combiner 4/4C
XA-PLUG-120-3	Accessory receptacle for Power Line Carrier in IQ Combiner 4/4C (required for EPLC-01)
XA-ENV-PCBA-3	Replacement IQ Gateway printed circuit board (PCB) for Combiner 4/4C
X-IQ-NA-HD-125A	Hold down kit for Eaton circuit breaker with screws.
ELECTRICAL SPECIFICATIONS	
Rating	Continuous duty
System voltage	120/240 VAC, 60 Hz
Eaton BR series busbar rating	125 A
Max. continuous current rating	65 A
Max. continuous current rating (input from PV/storage)	64 A
Max. fuse/circuit rating (output)	90 A
Branch circuits (solar and/or storage)	Up to four 2-pole Eaton BR series Distributed Generation (DG) breakers only (not included)
Max. total branch circuit breaker rating (input)	80A of distributed generation / 95A with IQ Gateway breaker included
Envoy breaker	10A or 15A rating GE/Siemens/Eaton included
Production metering CT	200 A solid core pre-installed and wired to IQ Gateway
Consumption monitoring CT (CT-200-SPLIT)	A pair of 200 A split core current transformers
MECHANICAL DATA	
Dimensions (WxHxD)	37.5 x 49.5 x 16.8 cm (14.75" x 19.5" x 6.63"). Height is 21.06" (53.5 cm) with mounting brackets.
Weight	7.5 kg (16.5 lbs)
Ambient temperature range	-40° C to +46° C (-40° to 115° F)
Cooling	Natural convection, plus heat shield
Enclosure environmental rating	Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction
Wire sizes	20 A to 50 A breaker inputs: 14 to 4 AWG copper conductors 60 A breaker branch input: 4 to 1/0 AWG copper conductors Main lug combined output: 10 to 2/0 AWG copper conductors Neutral and ground: 14 to 1/0 copper conductors Always follow local code requirements for conductor sizing.
Altitude	To 2000 meters (6,560 feet)
INTERNET CONNECTION OPTIONS	
Integrated Wi-Fi	802.11b/g/n
Cellular	CELLMODEM-M1-06-SP-05, CELLMODEM-M1-06-AT-05 (4G based LTE-M1 cellular modem). Note that an Enphase Mobile Connect cellular modem is required for all Ensemble installations.
Ethernet	Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included)
COMPLIANCE	
Compliance, IQ Combiner	UL 1741, CAN/CSA C22.2 No. 107.1, 47 CFR, Part 15, Class B, ICES 003 Production metering: ANSI C12.20 accuracy class 0.5 (PV production) Consumption metering: accuracy class 2.5
Compliance, IQ Gateway	UL 60601-1/CANCSA 22.2 No. 61010-1

To learn more about Enphase offerings, visit enphase.com

© 2022 Enphase Energy. All rights reserved. Enphase, the Enphase logo, IQ Combiner 4/4C, and other names are trademarks of Enphase Energy, Inc. Data subject to change. 02-14-2022



CONTRACTOR

RIVERTOWN SOLAR LLC

IRVINGTON, NY10533

PHONE: 914-325-2167 **ADDRESS**: 64 MAIN STREET

LIC. NO.: 52649 HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS
DRAWING SET WITHOUT WRITTEN
PERMISSION FROM CONTRACTOR IS IN
VIOLATION OF U.S. COPYRIGHT LAWS
AND WILL BE SUBJECT TO CIVIL
DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

RESOURCE DOCUMENT

DATE: 09.16.2022 **DESIGN BY:** V.P.

ENPHASE.

CHECKED BY: M.M.

REVISIONS

R-003.00

B C D E F G Page 16

QIJW.E341165 - Photovoltaic Rapid Shutdown System Equipment | UL Product iQ

IQ8PV, Model(s): IQ8PLUS-72 may be f/b -2, -5, -E or -M, may be f/b -ACM, f/b -US, may be f/b -NM, may be f/b -RMA, may be f/b -&, where "&" designates additional characters.

Last Updated on 2021-11-10

Photovoltaic Rapid Shutdown System Equipment

QIJW.E341165 - Photovoltaic Rapid Shutdown System

Equipment

ENPHASE ENERGY INC E341165

1420 N McDowell Blvd

Petaluma, CA 94954-6515 United States

Model(s): C250IQ7-2LN, IIQ7PD-72-2-US, IQ6IQ7-US, IQ6PLUSIQ7-US, IQ7PD-84-2-US, M175IQ7-208, M175IQ7-240, M190-60, -72, M190IQ7-208, M190IQ7-240, M200IQ7-208, M200IQ7-240, M210-84, M210IQ7-208, M210IQ7-240, M215-60, M215IQ7-208, M215IQ7-240, M250-60, -72, M250IQ7-208, M250IQ7-240, S230IQ7-208, S230IQ7-240, S280IQ7-208, S280IQ7-240

Model(s): IQ6-60-ACM-US*(b) (b) - Where * may be any combination of letters or numbers or hyphen or none

Model(s): IQ6-60-X-US*(a)(b) (a) - Where x may be 2, 5, or B. (b) - Where * may be any combination of letters or numbers or

Model(s): <u>IQ6PLUS-72-ACM*(b)</u> (b) - Where * may be any combination of letters or numbers or hyphen or none

Model(s): IQ6PLUS-72-X-US*(a)(b) (a) - Where x may be 2, 5, or B. (b) - Where * may be any combination of letters or numbers or

Model(s): IQ7-60 (c) (c) - May be f/b -2, 5, -E, or -ACM, f/b US, may be f/b -NM, may be f/b -RMA&, where "&" may be optional alphanumeric characters.

Model(s): IQ7A, may be f/b S, may be f/b 66 or -72 (c) (c) - May be f/b -2, 5, -E, or -ACM, f/b US, may be f/b -NM, may be f/b -RMA&, where "&" may be optional alphanumeric characters.

Model(s): IQ7A-72 (c) (c) - May be f/b -2, 5, -E, or -ACM, f/b US, may be f/b -NM, may be f/b -RMA&, where "&" may be optional alphanumeric characters.

Model(s): IQ7PLUS-72 (c) (c) - May be f/b -2, 5, -E, or -ACM, f/b US, may be f/b -NM, may be f/b -RMA&, where "&" may be optional alphanumeric characters.

Model(s): IQ7X-96 (c) (c) - May be f/b -2, 5, -E, or -ACM, f/b US, may be f/b -NM, may be f/b -RMA&, where "&" may be optional alphanumeric characters.

Model(s): IQ7XS-96 (c) (c) - May be f/b -2, 5, -E, or -ACM, f/b US, may be f/b -NM, may be f/b -RMA&, where "&" may be optional alphanumeric characters.

IQ8PV, Model(s): IQ7GPLUS-72 may be f/b -2, -5, -E or -M, may be f/b -ACM, f/b -US, may be f/b -NM, may be f/b -RMA, may be f/b -&, where "&" designates additional characters.

IQ8PV, Model(s): <u>IQ8-60</u> may be f/b -2, -5, -E or -M, may be f/b -ACM, f/b -US, may be f/b -NM, may be f/b -RMA, may be f/b -&, where "&" designates additional characters.

IQ8PV, Model(s): IQ8A-72 may be f/b -2, -5, -E or -M, may be f/b -ACM, f/b -US, may be f/b -NM, may be f/b -RMA, may be f/b -&, where "&" designates additional characters.

IQ8PV, Model(s): IQ8H-208-72 may be f/b -2, -5, -E or -M, may be f/b -ACM, f/b -US, may be f/b -NM, may be f/b -RMA, may be f/b -&, where "&" designates additional characters.

IQ8PV, Model(s): <u>IQ8H-240-72</u> may be f/b -2, -5, -E or -M, may be f/b -ACM, f/b -US, may be f/b -NM, may be f/b -RMA, may be f/b -&, where "&" designates additional characters.

https://iq.ulprospector.com/en/profile?e=4180755

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a nonmisleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2022 UL LLC"

2/2

RIVERTOWN SOLAR LLC

CONTRACTOR

PHONE: 914-325-2167 ADDRESS: 64 MAIN STREET

IRVINGTON, NY10533 LIC. NO.: 52649

HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

RESOURCE DOCUMENT

DATE: 09.16.2022 DESIGN BY: V.P.

CHECKED BY: M.M.

REVISIONS

https://iq.ulprospector.com/en/profile?e=4180755

Page 17

01.02.2022, 17:19

Tech Brief



Tech Brief

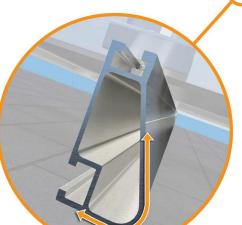


enough to buckle a panel frame.

XR Rail Family

Solar Is Not Always Sunny Over their lifetime, solar panels experience countless extreme weather events. Not just the worst storms in years, but the worst storms in 40 years. High winds capable of ripping panels from a roof, and snowfalls weighing

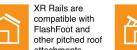
XR Rails are the structural backbone preventing these results. They resist uplift, protect against buckling and safely and efficiently transfer loads into the building structure. Their superior spanning capability requires fewer roof attachments, reducing the number of roof penetrations and the amount of installation time.



Force-Stabilizing Curve

Sloped roofs generate both vertical and lateral forces on mounting rails which can cause them to bend and twist. The curved shape of XR Rails is specially designed to increase strength in both directions while resisting the twisting. This unique feature ensures greater security during extreme weather and a longer system lifetime

Corrosion-Resistant Materials



Compatible with Flat & Pitched Roofs



IronRidge offers a range of tilt leg options for flat roof mounting

All XR Rails are made of marine-grade aluminum alloy, then protected with an anodized finish. Anodizing prevents surface and structural corrosion, while also providing a more attractive appearance.



XR Rail Family

The XR Rail Family offers the strength of a curved rail in three targeted sizes. Each size supports specific design loads, while minimizing material costs. Depending on your location, there is an XR Rail to match.



XR10

XR10 is a sleek, low-profile mounting rail, designed for regions with light or no snow. It achieves 6 foot spans, while remaining light and economical.

- · 6' spanning capability
- · Moderate load capability

Rail Selection

None

10-20

30

40

50-70

80-90

- · Clear anodized finish
- · Internal splices available

Load

Snow (PSF) | Wind (MPH)

100

120

140

160

100 120

140 160 100

160

100

160

160

160



XR100

Building Height of 30 ft. Visit IronRidge.com for detailed span tables and certifications.

XR10

XR100 is the ultimate residential mounting rail. It supports a range of wind and snow conditions, while also maximizing spans up to 8 feet.

- · 8' spanning capability
- · Heavy load capability

5' 4"

- · Clear & black anodized finish
- · Internal splices available

The following table was prepared in compliance with applicable engineering codes and standards. Values are based on the following criteria: ASCE 7-10, Roof Zone 1, Exposure B, Roof Slope of 7 to 27 degrees and Mean



XR1000 is a heavyweight among solar mounting rails. It's built to handle extreme climates and spans 12 feet or more for commercial applications

- · 12' spanning capability
- · Extreme load capability

XR1000

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

RIVERTOWN

CONTRACTOR

RIVERTOWN SOLAR LLC

IRVINGTON, NY10533

PHONE: 914-325-2167

UNAUTHORIZED USE OF THIS

DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN

VIOLATION OF U.S. COPYRIGHT LAWS

LIC. NO.: 52649

HIC. NO.:

ELE. NO.:

ADDRESS: 64 MAIN STREET

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

RESOURCE DOCUMENT

DATE: 09.16.2022 DESIGN BY: V.P.

CHECKED BY: M.M.

REVISIONS

Page 18

XR1000

Rail Span

XR100

- - · Clear anodized finish

AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS. · Internal splices available

RT-MINI

Self-flashing base for asphalt & metal roof-top PV mounting systems

RT-MINI is suitable for mounting any rail system with a conventional L-Foot.



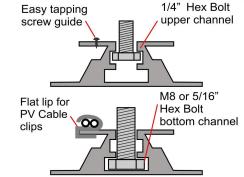
Dual bolt design: M8 or 5/16" for L-Foot & 1/4" for EMC



Installation Manual

ICC ESR 3575

Easy tapping screw guide Flat lip for PV Cable



www.roof-tech.us

RT-MINI

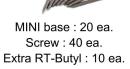
Flexible Flashing certified by the International Code Council (ICC)

Engineered to ASTM D 1761 (Standard Test Methods for Mechanical Fasteners in Wood)

Components

RT2-00-MINIBK





5 x 60mm Mounting screw (RT2-04-SD5-60): 100 ea./Bag 5/16" Hex bolt, washer & nut set (RT-04-BN30SL-US): 100 ea./Bag RT-Butyl (RT2-04-BUTYLT): 10 ea./Box

RT-Butyl is Roof Tech's flexible flashing used in one million residential PV systems for the last 26 years. It is the first PV mounting system with Flexible Flashing certified by the ICC. Engineered to withstand wind speeds up to 180 mph and ground snow up to 90 psf.

Metal Flashing Retrofit Flexible Flashing



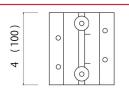


ICC ESR-3575 ASTM2140 testing UV testing (7500 hrs.)



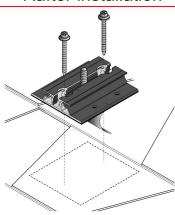


Dimensions in (mm)

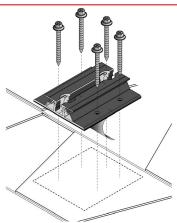


3 1/2 (90) 2 (50)

Rafter installation



Deck installation



P.E. Stamped Letters available at www.roof-tech.us/support TAS 100 A on metal and asphalt roof.

Roof Tech Inc. www.roof-tech.us info@roof-tech.us 10620 Treena Street, Suite 230, San Diego, CA 92131 858.935.6064

March 2020

RIVERTOWN SOLAR

CONTRACTOR

RIVERTOWN SOLAR LLC

IRVINGTON, NY10533

PHONE: 914-325-2167 ADDRESS: 64 MAIN STREET

LIC. NO.: 52649 HIC. NO.: ELE. NO.:

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 9.975 kWp

KATZ RESIDENCE

13 N COTTENET IRVINGTON, NY 10522 APN: 2.40-13-16

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

RESOURCE DOCUMENT

DATE: 09.16.2022 DESIGN BY: V.P.

CHECKED BY: M.M.

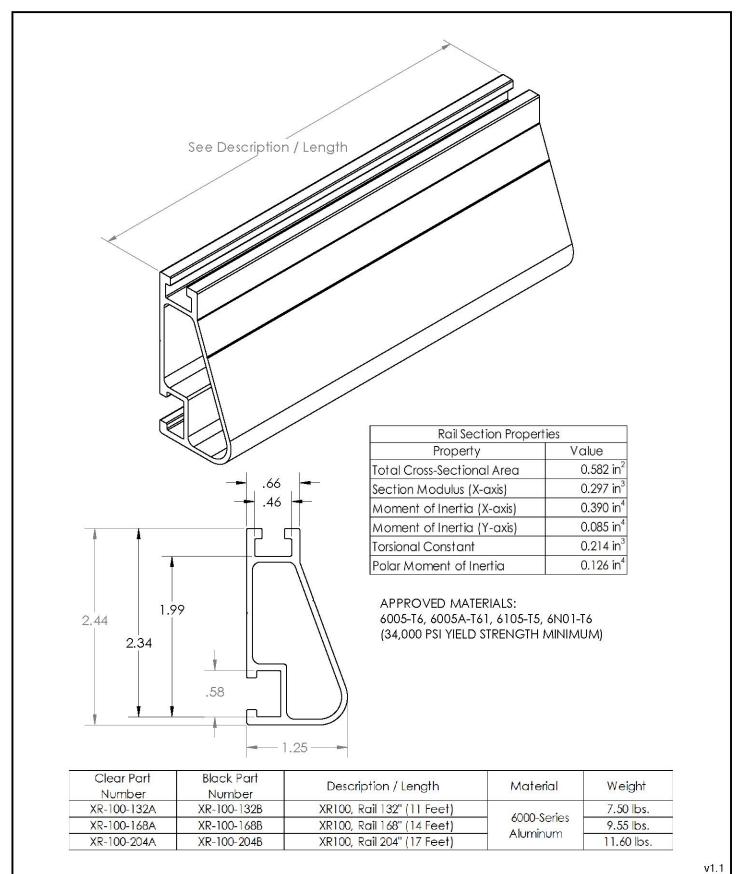
REVISIONS

R-006.00

Page 19



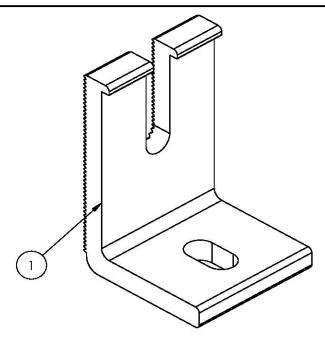




3. 50



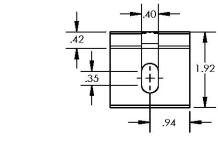
L-Foot

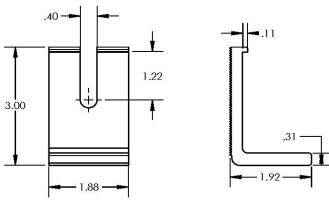


ITEM NO	A NO DESCRIPTION				
1	FOOT, EXTRUDED L - SLOTTED	4			

PART NUMBER	DESCRIPTION
FM-LFT-003	Kit, 4Pcs, Slotted L-Foot, Mill
FM-LFT-003-B	Kit, 4Pcs, Slotted L-Foot, Black

1) Foot, Extruded L - Slotted





v1.11





VILLAGE OF IRVINGTON

BUILDING DEPARTMENT

85 Main Street Irvington, New York 10533

Tel: (914) 591-8335 • Fax: (914) 591-5870



PHOTOVOLTAIC (PV SOLAR) RESIDENTIAL SYSTEMS PERMIT APPLICATION CHECK LIST

Revised June 7, 2017

It is suggested that all applicants applying for a permit read and understand the manufacture installation instructions prior to applying for a building permit and attached ARB guide lines and Village code for Solar Energy Equipment.

REC	QUIREMENTS TO APPLY FOR A PHOTOVOLTAIC (PV SOLAR) SYSTEM PERMIT				
V	1) Apply on line at www.irvingtonny.gov for a mechanical permit, under building permits and along with your				
-	application, submit to the building department the following;				
V					
V	3) Evidence of Workers Compensation Insurance (on a C-105 or equivalent)				
V	4) Evidence of Liability Insurance naming the Village of Irvington additional insured				
V	5) A copy of the contractors Westchester County Department of Consumer Protection License				
V	6) Pursuant to 9-12-A. provide evidence of notice to adjacent properties owners not less than 10 days prior to the meeting (see				
U.S.CY	attached code section for more details)				
V	_ 7) Submit permit fee: (all fees must be paid at time of submission)				
3000	\$85 application fee				
	\$200 for systems up to 5 kilowatts				
	\$450 for systems above 5 kilowatts and less than 10 kilowatts				
	\$700 for systems above 10 kilowatts and less than 20 kilowatts				
	\$700 plus \$250 per additional 10 kilowatts above 20 for systems above 20 kilowatts				
	\$75 Certificate of Completion inspection and fee				
✓	_ 8) An affidavit from a NYS licensed professional detailing and certifying that the existing structure meets or exceeds the				
	minimum load requirement's as per TABLE R301.2(1) for wind and load before and after installation of the proposed				
8	equipment or the proposed upgrades to the existing structure to accomplish the aforesaid.				
V	9) Drawings (signed and sealed by a NYS licensed professional) of the roof plan showing the following criteria;				
	a. ✓ Showing all proposed PV panels on all proposed roof surfaces.				
	b. Showing all equipment on all elevations including				
	c. Show / list all roof connectors and flashing details				
	d. Show compliance with section R902.4 (fire classification in accordance with UL1703 and 3' from any lot line)				
	e. Show compliance with sections R324.3.1 through R324.7.2.5 and NFPA 70 (installation)				
	f. Show compliance with section R324.7 (access and pathways) (see attachment)				
	g. Show compliance with section R324.7.2.1-6. (roof access points) (see attachment)				
	h. Show compliance with section R324.7.3 (ground access areas) (see attachment)				
	i. Show compliance with section R324.7.4 (single ridge roofs when applicable) (see attachment)				
	j. Show compliance with section R324.7.5 (hip roofs when applicable) (see attachment)				
	k. Show compliance with section R324.7.6 (roof with valleys when applicable) (see attachment)				
	1. Show compliance with section R324.7.7 (allowance for smoke ventilation operations) (see attachment)				
	m. \(\sum_{\text{Show a Fire Department AC disconnect, located outside by the Utility meter on all systems.} \)				
₹,	_ 10) Provide a drawing or manufactures cut sheets of array mounting hardware and interconnection diagram and specifications				
-	_ 11) Provide a drawing or manufactures cut sheets of the unit mount and roof penetration's flashing system.				
×,	_ 12) 3 wire diagram showing all proposed equipment as governed by the National Electrical Code (NEC)				
<u>v</u>	_ 13) Provide a diagram showing all proposed labels and labeling locations including; Solar AC Disconnect, Inverter Output, Connection Warning, Duel Power Source Warning, Solar AC Combiner Panel, Solar PV Circuits Only, Solar Production				
	meter. (see attachment)				
,	14) Provide snow guards on panels were snow has the potential of sliding of the panel into a neighbor's property				
/	14) Frovide show guards on pariets were show has the potential of shung of the pariet into a heighbor's property 15) Pictures of dwelling showing photo shopped arrays on the structure.				
/	15) Frottiles of dwelling showing photo shopped arrays of the subteture. 16) Provide a drawing or photo shop picture of all proposed equipment on all effected elevations (including FD emergency				
V	disconnect switch)				
V	17) A Fire Department AC disconnect, located outside by the Utility meter on all systems.				

VILLAGE OF IRVINGTON

BUILDING DEPARTMENT

85 MAIN STREET

IRVINGT ON, NEW YORK 10533

Tel: (914) 591-8335 • Fax: (914) 591-5870



 ✓ 18) Separate Electrical Permit applications insurances and the appropriate fee (n ✓ 19) Submit signed check list with subm ✓ 20) Applicant has provided seven copie 	nust be filed by the licensed connission and appropriate building	tractor, see village application permit fee.	for further details).
Applicant Affidavit: Applicants Name: Brandon Hall Applicants Address: 64 Main Street 10533			
Applicants Phone # 914-591-0100 Applicants Email brandon@conhudele	ectric.com		
Applicant Name: Brandon Hall attest to have read the attached Solar Energy Ed and that all information asked for above has been			By signing this affidavit I res installation instructions
General Contractor Affidavit: Contractors Name: Rivertown Solar LLC Contractors Address: 64 Main Street 10533			
Contractors Phone # 914-591-0100 Contractors Email brandon@conhudelectr	ic.com		
General Contractor Name: Brandon Hall affidavit I attest to being the general contractor same, and will maintain a valid Westchester Co and a General Liability Policy listing the Village I apply for and receive a Certificate of Complete	of record for this application and unty Department of Consumer P e of Irvington as Certificate Hold	rotection License, a valid for W	and direct supervision of orkers Compensation Policy
Electrical Contractors Name: Consolidated Hudson Electrical Contractors Address 4 Main St. Irvington	<u>n El</u> ectric , NY 10533		
Electrical Contractors Phone # 914-591-0100 Electrical Contractors Email info@conhudelectric	.com		
Electrical Contractor Name: Brandon Hall affidavit I attest to being the electrical contractor same, and will maintain a valid Westchester Corpolicy listing the Village of Irvington as Certifical Certificate of Completion.	unty Electrical License, a valid fo	nd will be responsible for oversi r Workers Compensation Polic	y and a General Liability
Note: Applications for all exterior elevation changand receive approval from the Village of Irvington			

Note: The following list above is given to assist in the application process. It is not intended to be a replacement for the Building or Zoning Code, County or State Regulations, or Consolidate Edison Requirements. Unique and Special projects may require additional information.

the second and fourth Mondays of the month, with a deadline for submissions one week prior to the meetings (see village web site for confirmation of meetings). Seven sets of copies of the entire application are required to be submitted at the deadline with appropriate fee at the time of submission.

*Hours of Construction: Monday-Friday 7AM-7PM; Saturday 9AM-5PM; Sunday and holiday's construction is prohibited

*Only completed applications will be accepted with attached insurance certificates and County license

VILLAGE OF IRVINGTON

BUILDING DEPARTMENT

85 MAIN ST REET IRVINGTON, NEW YORK 10533

TEL: (914) 591-8335 • FAX: (914) 591-5870

Web Site: www.Irvingtonny.gov



LICENSED PROFESSIONAL AFFIDAVIT for RESIDENTIAL SOLAR SYSTEMS

TO BE SUBMITTED AS PART OF THE PERMIT APPLICATION

AFFIDAVIT OF ARCHITECT OR ENGINEER

State of New York County of <u>Westche</u>	} ss.: ster_}				
I the undersigned, u	inder penalty of perjury, do hereby affirm:				
1.	am an the (architect)(engineer) duly licensed in the State of New York				
2.	I am the NYS licensed design professional named in the Application for which a Building Permit for a residential solar system located at, Irvington, New York 10533.				
3.	I have inspected the existing building and structure and find that the existing structure with the proposed solar panel installation and connections to the existing roof meet the minimum criteria set forth in; Applicable Codes: 2015 Residential Code of New York State Design Roof Load: 30 psf live load, 115 psf dead load, 45 psf total load Design Wind Load: 120 mph, 35psf OR have proposed additional measures to insure compliance with above.				
4.	I have reviewed the following submitted drawings and/or manufacture specifications as part of the submission List applicable plans with revision dates:				
5.	The plans, drawings and specifications which the Building Permit is requested and listed above, as submitted (a)-were prepared by me or under my supervision, and (b)-to the best of my knowledge comply with the requirements of the Residential Building Code of New York State as adopted by the Village of Irvington, applicable design loads and all other applicable laws, rules and regulations governing building construction. Signature (Architect) (Engineer)				
Swom to before me					
Notary Public					

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL							
Date of Mailing							
NOTICE: Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.							
Date of Meeting: Time of Meeting: Location of Meeting:	Meeting starts Trustees Meet 85 Main St. Irv	-					
Applicant Name Applicant Mailing Address Applicant Phone Number Applicant Email Address		Owners Name Owner Mailing Address Owners Phone Number Owners Email Address					
Address of Proposed So Street Address	olar Panels:						
To Adjacent Neighbors	of:						

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of **Solar Energy Equipment** to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

9-12. SolarEnergyEquipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL

Date of Mailing 10/03/2022

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting:

11/02/2022

Time of Meeting: Location of Meeting: Meeting starts at 8pm **Trustees Meeting Room**

85 Main St. Irvington, NY 10533

Applicant Name

BRANDON HALL

Owners Name

ALAYNE KATZ 13 N COTTENET ST

Applicant Mailing Address

64 MAIN ST Irvington, NY 10533 Owner Mailing Address

IRVINGTON NY 10533

Applicant Phone Number

914-591-0100

Owners Phone Number

914-841-4007

Applicant Email Address

eric@rivertownsolar.com

Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels: 13 N COTTENET ST Street Address

IRVINGTON NY 10533

To Adjacent Neighbors of:

180 EAST 94 LLC

35 MAIN ST IRVINGTON NY 10533

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of Solar Energy Equipment to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL

Date of Mailing 10/03/2022

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting:

11/02/2022

Time of Meeting:

Meeting starts at 8pm Trustees Meeting Room

Location of Meeting:

85 Main St. Irvington, NY 10533

Applicant Name **Applicant Mailing Address** BRANDON HALL

Owners Name

ALAYNE KATZ 13 N COTTENET ST

64 MAIN ST Irvington, NY 10533 Owner Mailing Address

IRVINGTON NY 10533

Applicant Phone Number

914-591-0100

Owners Phone Number

914-841-4007

Applicant Email Address

eric@rivertownsolar.com

Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels: 13 N COTTENET ST Street Address

IRVINGTON NY 10533

To Adjacent Neighbors of:

VINGSAN LIMITED PARTNERSHIP

45 MAIN ST IRVINGTON NY 10533

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of Solar Energy Equipment to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting:

11/02/2022

Time of Meeting: Location of Meeting:

Meeting starts at 8pm Trustees Meeting Room

85 Main St. Irvington, NY 10533

Applicant Name

BRANDON HALL

Owners Name

Applicant Mailing Address

64 MAIN ST Owner Mailing Address

ALAYNE KATZ 13 N COTTENET ST

Irvington, NY 10533

IRVINGTON NY 10533

Applicant Phone Number Applicant Email Address 914-591-0100 eric@rivertownsolar.com Owners Phone Number

914-841-4007

.pp.......

enconvertownsolar.co

Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels: Street Address 13 N COTTENET ST

IRVINGTON NY 10533

To Adjacent Neighbors of:

ESTATE RESTORATION INC

11 N DUTCHER ST IRVINGTON NY 10533

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of Solar Energy Equipment to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

9-12. Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review
Clerk's Office
Village of Irvington
Westchester County, New York

CERTIFIED MAIL

Date of Mailing <u>10/03/2022</u>

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting:

11/02/2022

Time of Meeting: Location of Meeting:

Meeting starts at 8pm Trustees Meeting Room

85 Main St. Irvington, NY 10533

Applicant Name

BRANDON HALL

Irvington, NY 10533

Owners Name

ALAYNE KATZ

Applicant Mailing Address

64 MAIN ST

Owner Mailing Address

13 N COTTENET ST IRVINGTON NY 10533

Applicant Phone Number

914-591-0100

Owners Phone Number

914-841-4007

Applicant Email Address

eric@rivertownsolar.com

Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels:

Street Address

13 N COTTENET ST

IRVINGTON NY 10533

To Adjacent Neighbors of:

SAMANTHA KEAT

12 N COTTENET ST IRVINGTON NY 10533

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of **Solar Energy Equipment** to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

9-12. Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL

Date of Mailing ______10/03/2022

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting:

11/02/2022

Time of Meeting: Location of Meeting:

Meeting starts at 8pm Trustees Meeting Room

85 Main St. Irvington, NY 10533

Applicant Name **Applicant Mailing Address** **BRANDON HALL**

Owners Name

Owner Mailing Address

ALAYNE KATZ 13 N COTTENET ST **IRVINGTON NY 10533**

Applicant Phone Number

914-591-0100

64 MAIN ST

Irvington, NY 10533

Owners Phone Number

914-841-4007

Applicant Email Address

eric@rivertownsolar.com

Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels:

Street Address

13 N COTTENET ST

IRVINGTON NY 10533

To Adjacent Neighbors of:

LEOLA SPECHT

14 N COTTENET ST IRVINGTON NY 10533

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of Solar Energy Equipment to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL

Date of Mailing 10/03/2022

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting:

11/02/2022

Time of Meeting: Location of Meeting: Meeting starts at 8pm Trustees Meeting Room

85 Main St. Irvington, NY 10533

Applicant Name

BRANDON HALL

Owners Name

ALAYNE KATZ

13 N COTTENET ST

Applicant Mailing Address

64 MAIN ST Irvington, NY 10533 Owner Mailing Address

13 N COTTENET ST IRVINGTON NY 10533

914-841-4007

Applicant Phone Number

914-591-0100

Owners Phone Number

Applicant Email Address

eric@rivertownsolar.com

Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels:

Street Address

13 N COTTENET ST

IRVINGTON NY 10533

To Adjacent Neighbors of:

JULIAN R VINCENT

15 N DUTCHER ST IRVINGTON NY 10533

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of **Solar Energy Equipment** to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

9-12. Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL

Date of Mailing 10/03/2022

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

11/02/2022 Date of Meeting: Meeting starts at 8pm Time of Meeting: Location of Meeting: **Trustees Meeting Room**

85 Main St. Irvington, NY 10533

Applicant Name **BRANDON HALL Applicant Mailing Address**

64 MAIN ST Irvington, NY 10533 Owners Name Owner Mailing Address

ALAYNE KATZ 13 N COTTENET ST **IRVINGTON NY 10533**

914-841-4007

Applicant Phone Number Applicant Email Address

914-591-0100 eric@rivertownsolar.com Owners Phone Number Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels: 13 N COTTENET ST Street Address **IRVINGTON NY 10533**

To Adjacent Neighbors of:

39 MAIN STREET REALTY

39 MAIN ST IRVINGTON NY 10533

Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of Solar Energy Equipment to the address listed above.

Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

Board of Architectural Review Clerk's Office Village of Irvington Westchester County, New York

CERTIFIED MAIL

Date of Mailing 10/03/2022

NOTICE:

Pursuant to 9-12 of the code of the Village of Irvington notice to adjacent neighbors (as defined below) is required 10 days prior a meeting where an application for Solar Panels to the Village of Irvington Architectural Board is asking to be heard.

Date of Meeting:

11/02/2022

Time of Meeting: Location of Meeting:

Meeting starts at 8pm Trustees Meeting Room

85 Main St. Irvington, NY 10533

Applicant Name

BRANDON HALL

Owners Name

ALAYNE KATZ

Applicant Mailing Address

64 MAIN ST Irvington, NY 10533 Owner Mailing Address

13 N COTTENET ST **IRVINGTON NY 10533**

Applicant Phone Number

914-591-0100

Owners Phone Number

914-841-4007

Applicant Email Address

eric@rivertownsolar.com

Owners Email Address

ALAYNE10533@GMAIL.COM

Address of Proposed Solar Panels:

Street Address 13 N COTTENET ST

IRVINGTON NY 10533

To Adjacent Neighbors of:

DANA BRENNEN

37 MAIN ST IRVINGTON NY 10533

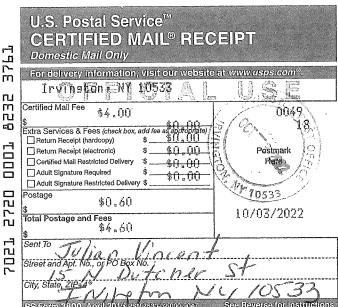
Please take notice that the applicant named above is requesting the Board of Architectural Review of the Village of Irvington to grant a permit for the installation of Solar Energy Equipment to the address listed above.

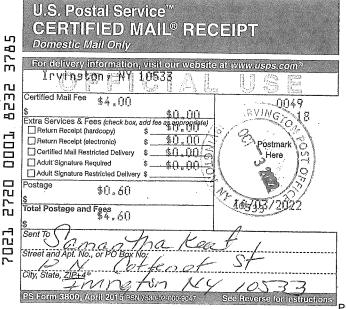
Plans of the proposed work are available in the office of the Irvington Building Department for public inspection during regular business hours 5 days prior to the scheduled meeting.

Solar Energy Equipment.

For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered. ("Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.)

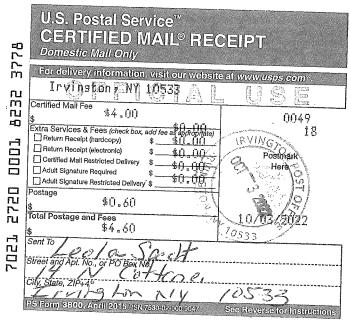












Page 36

U.S. Postal Service CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com®. Ir ving on NY 10533 Certified Mail Fee \$4,00 Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) Return Receipt (hardcopy) Return Receipt (electronic) Certified Mail Restricted Delivery \$ 100 Adult Signature Required \$ 10,00 Adult Signature Restricted Delivery \$ 20,00 Total Postage and Fees \$ 5 Sent To Street and Apt. No., or PO Box No. City, State, ZIP+4* City, State, ZIP+4* Sen Powers for Instructions

3808	U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com®.		
nu	Indipaton 11/1023	, USEL	
E E	Certified Mail Fee & 4 , ()()	0049_	
=0	\$ Extra Services & Fees (check box, add fee as appropriate)	RVING70	
1000	Return Receipt (hardcopy) \$ 311.101 Return Receipt (electronic) \$ \$ 11.101 Certified Mail Restricted Delivery \$ 11.101 Adult Signature Restricted Delivery \$ 10.101 Adult Signature Rest	Postmanko Here	
2720	Postage \$Û.ÓÜ \$ Total Postage and Fees \$4,6Ü	N 19/03/2077 10533	
7021	Street and Apt. No., of PO Box No.	Hed Partnersh	
	City, State, 219-49 PS Form 9800, April 2015 PSN 750002-000-8947	See Reverse for Instructions	

PHOTOVOLTAIC DC DISCONNECT

WARNING! ELECTRIC SHOCK HAZARD!

Voc	٧
Vmp	٧
Isc	A
lmp	A

Label Location: (DC), (INV) Per Code: CEC 690.53, NE

Solar Disconnect

WARNING - Electric Shock Hazard DO NOT TOUCH TERMINALS Terminals on both line and Load sides may be energized in the Open Position Label Location: (AC), (LC) Per Code:

CEC 690.17, NEC 690.14 (4)

WARNING - Dual Power Sources
Second source is photovoltaic system

Label Location: (INV), (AC), (LC

DC DISCONNECT

WARNING - Electric Shock Hazard
DO NOT TOUCH TERMINALS
Terminals on both line and Load sides
may be energized in the Open Position
DC VOLTAGE IS ALWAYS PRESENT WHEN

Label Location: (DC), (INV)

WARNING - Electric Shock Hazard

No user serviceable parts inside

Contact authorized servicer for assistance

Label Location: (CB)

PHOTOVOLTAIC POINT OF INTERCONNECTION WARNING! ELECTRIC SHOCK HAZARD! DO NOT TOUGH TERMINALS TERMINALS ON BOTH THE

DO NOT TOUCH TERMINALS. TERMINALS ON BOTH THE LINE AND LOAD SIDE MAY BE ENERGIZED

PV POWER SOURCE		
MAXIMUM AC CIRCUIT OUTPUT OPERATING CURRENT	А	
OPERATING AC VOLTAGE	٧	

Label Location:

(POI)

WARNING!

SOLARMODULES ARE EXPOSED TO SUNLIGHT

INVERTER OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE.

Label Location: (POI)

PV COMBINER BOX
WARNING:
ELECTRIC SHOCK HAZARD

Label Location: (CB) PHOTOVOLTAIC AC DISCONNECT

WARNING! ELECTRIC SHOCK HAZARD!

OPERATING AC VOLTAGE	٧
MAXIMUM OPERATING CURRENT	A

Label Location: (AC), (D), (LC)

Per Code:

CEC 690.8.A.3 & CEC 690.54, NEC 690.14 (c)(2)

CAUTION: SOLAR CIRCUIT

Label Location: (C) (AC): AC Disconnect

(C): Conduit

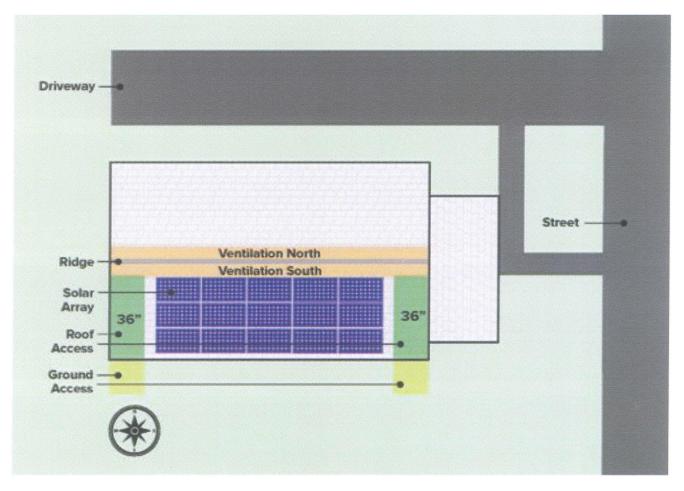
(CB): Combiner Box (D): Distribution Panel (DC): DC Disconnect (IC): Interior Run Conduit

(INV): Inverter With Integrated DC Disconnect

(LC): Load Center

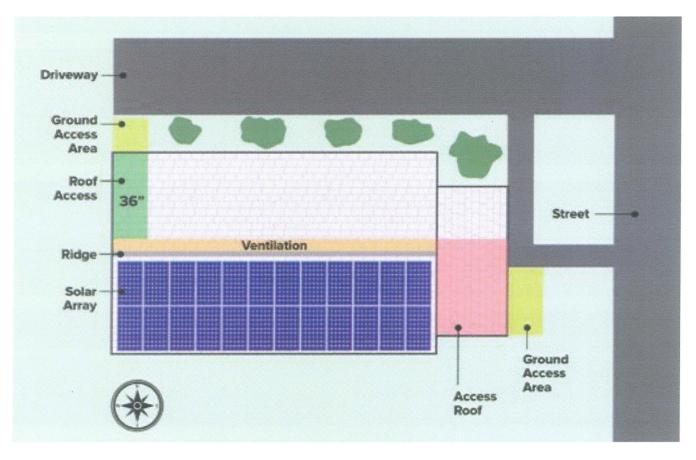
Single Ridge Roof with Two Pathways on Same Slope as Array

Two pathways are required for single ridge roofs. If both pathways are located on the same slope as the PV array, array space is limited. Exceptions to Section R324.7.4 may permit alternate access, pathways and venting locations.



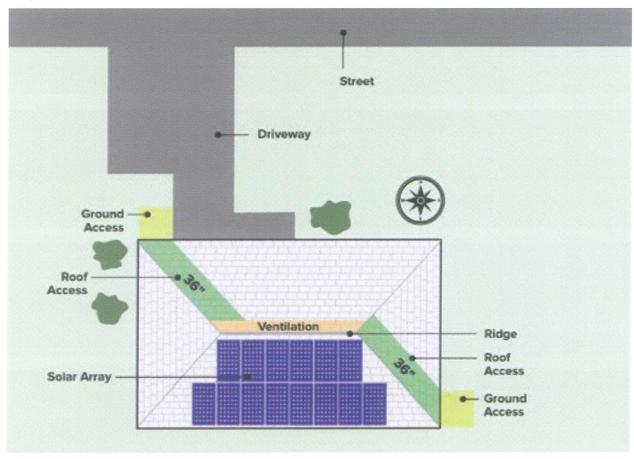
Single Ridge Roof with Alternate Access and Venting Locations

Alternate access, pathways and venting locations may be possible for single ridge roofs meeting exceptions to Section R324.7.4.



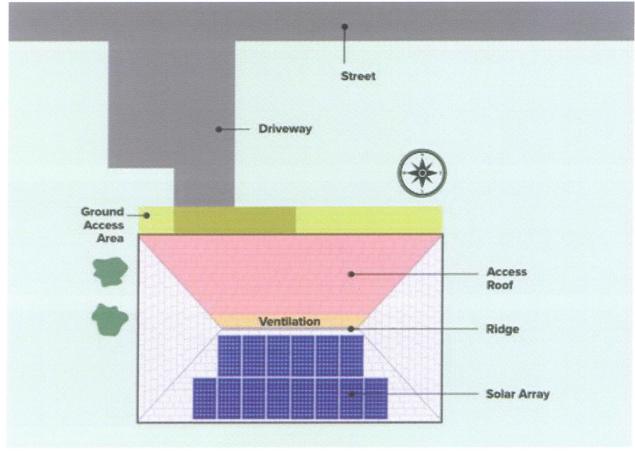
Hip Roof Installation with Alternate Venting and Pathway Locations

Alternate locations may be possible for venting and access pathways on hip roofs meeting exceptions to Section R324.7.5.



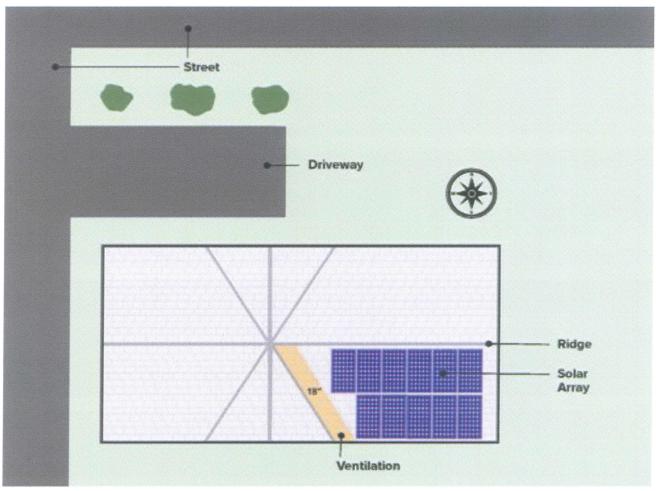
Hip Roof Installation Where an ACCESS ROOF Fronts a Street or Driveway

Section R324.7.5 Exception #2 generally applies to any residential structures where an ACCESS ROOF fronts a street, driveway, or other area readily accessible to emergency responders.



Roofs with Valleys

Section R324.7.6 requires any parts of PV arrays to be no closer than 18 inches from valleys.



Chapter 9:Board of Architectural Review

[HISTORY: Adopted by the Board of Trustees of the Village of Irvington 11-19-1962. Amendments noted where applicable.]

GENERAL REFERENCES

Building construction — See Ch. 95.

Zoning — See Ch. 224.

Chapter 9: Board of Architectural Review

- § 9-1Purpose.
- § 9-2Structural requirements.
- § 9-3Board created; membership and terms of office.
- § 9-4Meetings; powers.
- § 9-5Site development plan applications.
- § 9-6Building permit applications.
- § 9-7Disapproval of application.
- § 9-8Denial or issuance of building permit.
- § 9-9Appeals.
- § 9-10Conflicting laws suspended.
- § 9-11Demolition of buildings in Historic Overlay District.
- § 9-1Purpose.

[Amended 10-18-1965 by L.L. No. 2-1965; 10-17-1983 by L.L. No. 1-1983; 2-1-2010 by L.L. No. 1-2010; 4-6-2015 by L.L. No. 4-2015]

The Village Board hereby finds that in order to protect the property, safety and health of the inhabitants of the Village of Irvington, it is desirable to establish a Board of Architectural Review to pass on the exterior appearance of all buildings and other structures to be constructed, reconstructed or altered. In addition, in order to protect the historic and architectural character of the Irvington Historic District, it is desirable to have the Board of Architectural Review pass on applications to demolish architecturally and historically significant buildings in the Historic Overlay District. In particular, the purposes of this chapter are to:

- A. Improve the exterior appearance of buildings and other structures throughout the Village.
- **B.** Continue the harmonious development of the Village.
- C. Prevent the impairment of the property values of improved and unimproved property.
- <u>D.</u> Protect the historic character of the Village, including, in particular, the Irvington Historic District, which as of January 2014, is listed on the National Register of Historic Places.

§ 9-2Structural requirements.

[Added 10-18-1965 by L.L. No. 2-1965]

All residences to be constructed hereafter in the Village of Irvington shall conform to the following requirements:

<u>A.</u> Except for attached one-family dwellings, houses adjacent to each other in any direction shall not look alike. Minimum variety in appearance shall be achieved by changes in any two of the following factors when approved by the Board:

[Amended 10-19-2016 by L.L. No. 9-2016]

- (1) Exterior materials.
- (2) Fenestration, where changes are the result of omission, grouping or adding windows, including bay and full-height windows.
- (3) Geometry of the structure where this is the result of plan changes, roof slope changes exceeding 15°, roof ridge direction changes or ridge height different by at least five feet; the addition or deletion of breezeways, porches and similar features, of at

least 200 square feet in floor area; or the provision of dormers or mansard or hip roof configurations.

<u>B.</u> In approved subdivisions when building permits are applied for, location of all houses on the lots adjacent to and opposite the one being applied for shall also be shown.

<u>C.</u> Where three or more houses front on a straight or slightly curved street or road, they shall not be similarly oriented with equal front yard dimensions. In such cases one of each of three houses shall be located with either an increased front yard of at least 10 feet or oriented differently by at least 30°.

§ 9-3Board created; membership and terms of office.

There is hereby created a Board of Architectural Review which shall consist of five members, who shall serve without compensation. All members of the Board shall be residents of the Village of Irvington, and at least one member shall be a registered architect licensed by the State of New York. The members of the Board of Architectural Review shall be appointed by the Board of Trustees for a term of five years, and the Board of Trustees shall have authority to remove any member of such Board of Architectural Review for cause after public hearing. The Board of Trustees shall designate one member of the Board of Architectural Review to be Chairman, and the Board of Architectural Review shall designate one of the members as Acting Chairman and one as Secretary. The respective terms of the members first appointed shall be one, two, three, four and five years from and after their appointments. The term of all appointments shall expire at 12:00 noon on the first Monday of April. Vacancies shall be filled for the unexpired term of the members whose place has become vacant. The Village Clerk or Deputy Clerk shall act as the Clerk of the Board.

§ 9-4Meetings; powers.

[Amended 9-18-1967 by L.L. No. 1-1967]

Meetings of the Board of Architectural Review shall be held on the second and fourth Monday each month and at such other times as the Board shall determine. The Chairman, or in his absence the Acting Chairman, may administer oaths and compel the attendance of witnesses. A majority of said Board shall constitute a quorum for the transaction of business. The Board shall keep minutes of its proceedings showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact, and shall also keep copies of the examinations and other official actions. The Board shall have power from time to time to adopt, amend and repeal rules and regulations, not inconsistent with law or the provisions of this chapter, governing its procedure and the transaction of its business and for the purpose of carrying into effect the standards outlined in § 9-6 hereof.

§ 9-5Site development plan applications.

[Added 2-1-2010 by L.L. No. 1-2010¹¹]

Every application for site development plan approval for the construction, reconstruction or alteration of any building or structure shall be referred to the Board of Architectural Review for its recommendation and report to the Planning Board. This referral shall be in addition to the referral required by § 9-6.

§ 9-6Building permit applications.

[Amended 9-18-1967 by L.L. No. 1-1967; 10-17-1983 by L.L. No. 1-1983; 4-15-2003 by L.L. No. 5-2003]

Every application for a building permit for the construction, reconstruction or alteration of a one- or two-family dwelling or any other structure in excess of 2,000 cubic feet of cubical content, proposed for construction within a residence district or identified on the Building Zone Map, or for the construction, reconstruction or alteration of any structure in excess of 2,000 cubical contents proposed for construction within a business zone as identified on said map, or for a permit for the erection of signs, walls or fences, shall be filed with the Building Inspector at least 10 days prior to the next scheduled meeting of the Board of Architectural Review, and such application shall be approved or

disapproved by the Board of Architectural Review, provided that the Building Inspector has certified that the application is appropriate for review by the Board of Architectural Review.

§ 9-7Disapproval of application.

[Amended 2-1-2010 by L.L. No. 1-2010]

The Board of Architectural Review may disapprove any building permit referred to it, provided that such disapproval shall be by majority of all the members of the Board present at any meeting where said vote is taken, and provided that the Board finds that the construction, reconstruction or alteration for which the permit was applied would not be compatible with the purposes set forth in § 9-1 and thereby be detrimental to the desirability, property values or development of the surrounding area or not be in keeping with the harmonious development of the district in which the proposed structure is to be located. Any such finding shall not be based on personal preference by the members of the Board of Architectural Review as to taste or choice of architectural style, but shall be limited to the harmonious development of the district and the Village of Irvington.

§ 9-8Denial or issuance of building permit.

[Amended 9-18-1967 by L.L. No. 1-1967]

The Building Inspector shall refuse any building permit application disapproved as provided in § $\underline{9-6}$. If the Board of Architectural Review shall approve or fail to act on any building permit application referred to it under § $\underline{9-5}$ within 15 days of the date of the first scheduled meeting following the filing of the application of a building permit in accordance with § $\underline{9-5}$ hereof, the Building Inspector shall forthwith issue the permit as applied for.

§ 9-9Appeals.

[Amended 8-15-2016 by L.L. No. 7-2016]

A. Findings of fact. Any person aggrieved by the action of the Board of Architectural Review (ARB) in disapproving a building permit application may request the ARB to make formal findings of fact. Such request shall be filed in the office of the Village Clerk within 20 days after the date of such disapproval. If such a request is made, the ARB shall make findings of fact within 30 days after the request is filed, file them in the office of the Village Clerk, and send a copy of them to the requesting person.

B. Appeal to Zoning Board of Appeals. Within 20 days after the findings of fact are filed, the aggrieved person may take an appeal from the ARB's disapproval to the duly constituted Board of Zoning Appeals of the Village of Irvington in the same manner as is provided for zoning appeals. The standard of review shall be whether the decision of the Board of Architectural Review was arbitrary, capricious or unsupported by substantial evidence of record. The Board of Zoning Appeals may reverse or affirm the action of the Board of Architectural Review.

<u>C.</u> Remand to ARB. If the Board of Zoning Appeals reverses the action of the Board of Architectural Review, it shall remand the application to the Board of Architectural Review for approval and the imposition of reasonable conditions, or other further action, consistent with the decision of the Zoning Board of Appeals. Any such subsequent decision of the ARB shall be appealable to the Zoning Board of Appeals.

§ 9-10 Conflicting laws suspended.

This chapter shall supersede such provisions of the Building Code of the Village of Irvington¹¹ and applicable provisions of the laws of the State of New York to the extent that they conflict with or are contrary to the provisions of this chapter.

§ 9-11Demolition of buildings in Historic Overlay District.

[Added 4-6-2015 by L.L. No. 4-2015]

<u>A.</u> Approval required. Every application to demolish (Note: The term "demolish" is defined in the Zoning Code at § <u>224-197</u>.) a contributing building (Note: "Contributing buildings" in the Historic Overlay District are those identified in Appendix A to the Irvington Zoning Code.) in the Historic

Overlay District shall be referred by the Building Inspector to the Board of Architectural Review (ARB) for its approval or disapproval.

- **<u>B.</u>** Application. An applicant seeking to demolish such building shall provide the following information:
 - (1) Legal description, property address and age of building.
 - (2) Names, addresses, e-mail addresses, telephone numbers, and signatures of the applicant and the building owner.
 - (3) Detailed explanation of the reason demolition is requested.
 - (4) All appraisals obtained within the last two years by the owner or applicant in connection with the purchase, financing or ownership of the property, if any exist.
 - (5) Date the property was purchased and purchase price.
 - (6) Any listing of the property for sale or rent, price asked, and offers received, if any, within the previous two years, including testimony and relevant documents regarding:
 - (a) Any real estate broker or firm engaged to sell or lease the property;
 - (b) Reasonableness of the price or rent sought by the applicant; or
 - (c) Any advertisements placed for the sale or rent of the property.
 - (7) If the reason for demolition relates to the safety of the building, a report from a licensed engineer or architect with experience in rehabilitation as to the structural soundness of the building and its suitability for rehabilitation.
 - (8) If the reason for demolition relates to the safety of building, written detailed cost estimates to restore or repair the structure.
 - (9) Economic incentives and/or funding available to the applicant through federal, state, local government or private programs.
 - (10) Description of the proposed replacement project in sufficient detail to permit the ARB to visualize the proposed replacement.
- (11) Such other information as the ARB finds necessary to make its determination. **C.** Public hearing.
 - (1) The ARB shall hold a public hearing on the application for demolition.
 - (2) Notice of such hearing shall be given by publication in the official newspaper(s) of the Village at least 10 days before the date of the hearing.
 - (3) In addition, the applicant shall erect a sign facing each public street on which the property abuts, giving notice that an application for demolition has been made. The sign, on a placard to be provided by the Village, shall be posted not less than 15 days immediately preceding the hearing date and shall be displayed continuously until the application is decided. The sign shall be placed to assure visibility from the street. Prior to the public hearing, the applicant shall provide proof that the sign was posted as required by this subsection. The applicant shall remove the sign the day after the application is decided.
 - (4) A written record shall be made of the public hearing and the ARB's deliberations on the application.
 - (5) During the public hearing, the ARB may solicit expert testimony or opinion by an architect, real estate consultant, and/or other professional experienced in historic properties and rehabilitation, on any question relevant to its determination.
- <u>D.</u> Criteria for approval. The Board of Architectural Review shall not approve the application for demolition unless the applicant establishes all of the following:
 - (1) For buildings sought to be demolished for safety reasons:
 - (a) The building represents a hazard to the safety of the public or the applicant or owner.

- **(b)** The safety hazard cannot be corrected within economic means reasonably available to the applicant or owner.
- (c) Good faith efforts to find a purchaser interested in acquiring the property and preserving it have failed.
- (2) For buildings sought to be demolished for reasons other than safety:
 - (a) The property is incapable of earning a reasonable return on investment, regardless of whether that return represents the most profitable return possible.
 - **(b)** The property cannot be adapted for any other use, whether by the current owner or by a purchaser, that would result in a reasonable return.
 - (c) Good faith efforts to find a purchaser interested in acquiring the property and preserving it have failed.
- (3) In deciding the application for demolition, the ARB may consider whether the owner has created his/her own hardship through waste and neglect, thereby permitting the property to fall into a serious state of disrepair.
- (4) In determining whether to approve or disapprove an application for a demolition permit, the ARB shall consider only the exterior features of the building and shall have no jurisdiction to consider changes to interior walls or spaces that do not affect the exterior appearance of the building.
- <u>E.</u> Replacement plan. The ARB may not approve demolition until a proposal to replace the building to be demolished receives all required approvals from the Planning Board and ARB. In the event that the applicant intends to maintain the site of the demolished building as open space, the ARB must approve a landscape plan.
- <u>F.</u> Decision. The ARB may approve or disapprove the application for demolition. Its decision must be in writing and must state the reasons for approval or disapproval. The written decision must be provided promptly to the applicant and to the Building Inspector.
- <u>G.</u> Appeals. Any person aggrieved by the ARB's disapproval of an application for demolition, within 30 days of delivery of the decision to the applicant, may appeal the decision to the Board of Trustees by serving a written notice on the Village Clerk. The Board of Trustees shall review the record made before the Board of Architectural Review and may reverse or affirm its decision or remand it to the ARB for further findings.

LOCALLAW#1 OF2017

AMENDING THE IRVINGTON CODE WITH RESPECT TO SOLAR ENERGY EQUIPMENT

Be it enacted by the Board of Trustees of the Village of Irvington as follows:

Section 1: Section 9-6 of the Code of the Village of Irvington (Board of Architectural Review; Building permit applications) is hereby amended to read as follows (deleted language stricken; new language in *italics*):

Every application for a building permit for the construction, reconstruction or alteration of a one- or two-family dwelling or any other structure in excess of 2,000 cubic feet of cubical content, proposed for construction \Vi.thin a residence district or identified on the Building Zone Map, or for the construction.

reconstruction or alteration of any structure in excess of 2,000 cubical contents proposed for construction v:ithin a business zone as identified on said map, or for a permit for the erection of signs, solar energy equipment, walls or fences, shall be filed with the Building Inspector at least 10 days prior to the next scheduled meeting of the Board of Architectural Review, and such application shall be approved or disapproved by the Board of Architectural Review, provided that the Building Inspector has certified that the application is appropriate for review by the Board of Architectural Review.

Section 2: A new section is hereby added to Chapter 9 (Board of Architectural Review), to read as follows:

§ 9-12. Solar Energy Equipment.

A. For any application for a building permit for solar energy equipment, written notice of the application and the date, time and place of the meeting at which it will be considered must be given to all adjacent property* owners not less than 10 days prior to the meeting date. Notice shall be by a method of mail or a delivery service company providing proof of mailing or delivery or by personal service of such notice on the property owners, evidenced by their signature as acknowledgment of receipt of such notice on a form supplied or similar to one supplied by the Village Clerk. Proof of service of the notice shall be filed prior to or at the meeting at which the application is considered.

^{* &}quot;Adjacent property" refers to any neighbor that shares a property line with the subject property as well as neighbors across any street from the subject property.

- B. Inreviewing building permits for solar energy equipment, notwithstanding § 9-7, the Board of Architectural Review shall follow the Solar Energy Equipment Guidelines adopted by the Board of Trustees.
- C. The homeowner must demonstrate to the Board of Architectural Review that all reasonable options have been considered to achieve compliance with the Solar Energy Equipment Guidelines.
- Section 3: Section 224-3 of the Zoning Code (Definitions) is hereby am.ended by adding the following new definitions:

SOLAR ENERGY EQUIPMENT - Any cell, panel, or other device that converts, absorbs, or transforms solar energy, including equipment for photovoltaic and solar thermal systems, as well as any supply lines, return lines, control valves, wiring, meters, switches, modules, batteries, inverters or other devices and their cabinets associated with the installation or function of a solar energy system.

SOLAR ENERGY SYSTEM - A photovoltaic system, a solar thermal system or any other system by which solar energy is used to generate electricity or heat.

- Section 4: Section 224-3 of the Zoning Code (Definitions) is hereby am.ended by adding the following paragraph to the examples in the definition of "BUILDING":
 - J. Solar energy equipment.
- Section 5: Section 224-8.B of the Zoning Code (One-Family Residence Districts; Use regulations) is hereby amended by adding the following subsection to the list of permitted accessory uses:
 - (9) Solar energy equipment, provided it is used only to provide power for use by owners, lessees, tenants, residents or other occupants of the premises on which it is erected. Nothing contained in this provision shall be construed to prohibit the sale of excess power through a "net billing" or similar program in accordance with New York Public Service Law § 66-j or similar New York State or federal statute.
- Section 6: Section 224-8.B(9) is hereby designated § 224-8.B(1 0).
- Section 7: Subsection A of § 224-36 (Business District; Use regulations) is hereby amended by adding the following subsection to the list of permitted uses:

(17) Solar energy equipment, provided it is used only to provide power for use by owners, lessees, tenants, residents or other occupants of the premises on which it is erected. Nothing contained in this provision shall be construed to prohibit the sale of excess power through a "net billing" or similar program in accordance with New York Public Service Law § 66-j or similar New York State or federal statute.

Section 8: Section 224-46.B(l) (Railroad District; Use regulations) is hereby amended by adding the following subsection to the list of permitted uses:

(n) Solar energy equipment, provided it is used only to provide power for use by owners, lessees, tenants, residents or other occupants of the premises on which it is erected. Nothing contained in this provision shall be construed to prohibit the sale of excess power through a "net billing" or similar program in accordance with New York Public Service Law § 66-j or similar New York State or federal statute.

Section 9: Subsection C of § 224-47.2 (Recreation District; Use regulations) is hereby amended by adding the following subsection to the list of permitted accessory uses:

(6) Solar energy equipment, provided it is used only to provide power for use by owners, lessees, tenants, residents or other occupants of the premises on which it is erected. Nothing contained in this provision shall be construed to prohibit the sale of excess power through a "net billing" or similar program in accordance with New York Public Service Law § 66-j or similar New York State or federal statute.

Section 10: Section 114-1 (Schedule of Code fees and charges) is hereby amended by adding the new subsection to section number 95-13 (Building permit fees):

(4) Applications for solar PV installations and replacements

\$85 application fee, plus

\$200 for systems up to 5 kilowatts

\$450 for systems above 5 and less than 10 kilowatts

\$700 for systems above 10 and less than 20 kilowatts

\$700 + \$250 for each

additional 10 kilowatts above 20 for systems above 20 kilowatts

\$75 Certificate of Completion inspection

- Section 11: All ordinances, local laws, and parts thereof inconsistent with this local law are hereby repealed.
- Section 12: This local law shall take effect immediately upon filing in the office of the New York Secretary of State.

SOLAR ENERGY EQUIPMENT GUIDELINES

(February 6, 2017)

Statement of Purpose: Because it is in the public interest to provide for and encourage renewable energy systems and a sustainable quality of life, the purpose of these guidelines is to facilitate the development and operation of renewable energy systems based on slul.light. These guidelines are intended to balance the desirability and demand for alterriative energy systems with maintaining the aesthetics of the Village, to minimize the potential for any negative impact by these systems, and to protect the health, safety and welfare of the residents of the Village. The Board of Architectural Review, pursuant to Village Code § 9-12, is to follow these guidelines in reviewing building permits for solar energy equipment.

<u>Definitions</u>: As used in these guidelines, the following terms shall have the meanings indicated:

FREESTANDING OR GROUND-MOUNTED - Directly installed in or on the ground and not attached or affixed to an existing structure.

SOLAR ENERGY EQUIPMENT - Any cell, panel, or other device that converts, absorbs, or transforms solar energy, including equipment for photovoltaic and solar thermal systems, as well as any supply lines, return lines, control valves, wiring, meters, switches, modules, batteries, inverters or other devices and their cabinets associated with the installation or function of a solar energy system.

SOLAR ENERGY SYSTEM - A photovoltaic system, a solar thermal system or any other system by which solar energy is used to generate electricity or heat.

Guidelines

- 1. All measures should be taken to avoid or mitigate any glare onto neighboring residential property or public rights-of-way.
- 2. To the greatest extent practicable, equipment shall be installed in a manner that minimizes its visibility from surrounding properties and public rights-of-way while maintaining viability and functional integrity.
- 3. To the greatest extent practicable, solar energy equipment shall use materials, colors and textures designed to blend with the structure to which it is affixed.
- 4. Solar energy equipment may be mounted on any section of the roof of a building provided it meets these guidelines and complies with the following requirements:
 - (a) On a pitched roof facing a street or public way, the equipment must be mounted flush, with the plane of the system parallel with the roof surface, and shall be

- mounted as close to the roof surface as possible, but in no event may it be mounted more than 6 inches above the roof surface.
- (b) On a pitched roof the highest point of the equipment at full extension shall not extend beyond the highest point of the roof to which it is attached and must be set back in accordance with the current Uniform Fire and Building Code.
- (c) On a flat roof, the equipment shall not extend above any cornice or parapet.

 Where there is no cornice or parapet, the equipment shall be set back from the roof edges four feet for each foot of solar energy system height.
- (d) Solar collector units shall be consolidated to one area on the roof to the greatest extent possible, and shall not be scattered in multiple groups on the roof.
- (e) The equipment shall be installed so as to appear regular in shape and arranged in a pattern that conforms with the general shape and configuration of the roof upon which it is mounted. When the arrangement of equipment is broken up by a building feature, the equipment shall be arranged symmetrically.
- (±) The equipment and its installation shall not damage or obscure character-defining features, such as dormers, cornices, chimneys or roofline.
- 5. To the maximum extent possible, all solar energy equipment other than the collectors shall be located within the house or on the side or rear of the building.
- 6. Free standing and ground-mounted solar energy equipment shall comply with the following requirements:
 - (a) It shall be located in a side or rear yard only and shall comply with all setback requirements for a principal building.
 - (b) At full extension, it shall not exceed 6 Vi feet in height above the ground, as measured to the highest point on the equipment. If the ground level is raised or built up for the installation, this height will be measured from the preexisting ground level.
 - (c) It shall be fully screened from adjacent properties by fencing, a combination of evergreen and deciduous plantings which shall not be less than 6 Yi feet in height when installed, or, when possible and practicable, through the use of architectural features or screening that will harmonize with the character of the property and surrounding area.
 - (d) All exterior electrical lines must be buried below the surface of the ground where possible or be placed in a conduit.

LOCAL LAW #4 OF 2017

AMENDING THE IRVINGTON CODE WITH RESPECT TO SOLAR ENERGY EQUIPMENT AND SHARED SOLAR PROJECTS

Be it enacted by the Board of Trustees of the Village of Irvington as follows:

- Section 1: Subsection A(17) of § 224-36 (Business District; Use regulations) is hereby amended to read as follows (new language in *italics*):
 - (17) Solar energy equipment, provided it is used only to provide power for use by owners, lessees, tenants, residents or other occupants of the premises on which it is erected. Nothing contained in this provision shall be construed to prohibit: (a) the sale of excess power through a "net billing" or similar program in accordance with New York Public Service Law § 66-j or similar New York State or federal statute, or (b) a Community Distributed Generated (also called "Shared Solar") project approved by the New York State Energy Research and Development Authority (NYSERDA).
- Section 2: Subsection B(1)(n) of § 224-46 (Railroad District; Use regulations) is hereby amended to read as follows (new language in *italics*):
 - (n) Solar energy equipment, provided it is used only to provide power for use by owners, lessees, tenants, residents or other occupants of the premises on which it is erected. Nothing contained in this provision shall be construed to prohibit: (i) the sale of excess power through a "net billing" or similar program in accordance with New York Public Service Law § 66-j or similar New York State or federal statute, or (b) a Community Distributed Generated (also called "Shared Solar") project approved by the New York State Energy Research and Development Authority (NYSERDA).
- Section 3: All ordinances, local laws, and parts thereof inconsistent with this local law are hereby repealed.
- Section 4: This local law shall take effect immediately upon filing in the office of the New York Secretary of State.

