

SCOPE OF WORK:
TO INSTALL A ROOF MOUNTED SOLAR PHOTOVOLTAIC SYSTEM AT THE OWNER PROPERTY LOCATED AT
THE POWER GENERATED BY THE PV SYSTEM WILL BE INTERCONNECTED WITH THE UTILITY GRID THROUGH THE EXISTING ELECTRICAL SERVICE EQUIPMENT.
THE PV SYSTEM DOES NOT INCLUDE STORAGE BATTERIES

EQUIPMENT SUMMARY
199 AE SOLAR GMBH AE595CMD-144BDS 595W MODULES
01 SOLAREEDGE SE100KUS (480V) INVERTER
100 SOLAREEDGE POWER OPTIMIZER C652U

SYSTEM RATING
118.405 KWDC
100.00 KWAC

AUTHORITY HAVING JURISDICTION: : SAN LEANDRO CITY

GENERAL NOTES:

- THESE CONSTRUCTION DOCUMENTS HAVE BEEN BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS.
- ARCHITECT HAS NOT BEEN RETAINED TO SUPERVISE ANY CONSTRUCTION OR INSTALLATION OF ANY EQUIPMENT AT SITE.
- CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, OBTAINS ALL PERMITS, LICENSES AND PAY ALL REQUIRED FEES AND COMPLETE INSTALLATION.
- CONTRACTOR HAS THE FULL RESPONSIBILITY TO CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ANY WORK STARTED BEFORE CONSULTATION AND ACCEPTANCE BY THE ENGINEER SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECT TO CORRECTION BY THEM WITHOUT ADDITIONAL COMPENSATION.
- DAMAGE CAUSED TO THE EXISTING STRUCTURE, PIPES, DUCTS, WINDOWS, WALL, FLOORS, ETC. SHALL BE REPAIRED TO THE ORIGINAL CONDITION OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK WITH APPROVED MATERIALS.
- NO CHANGES ARE TO BE MADE WITHOUT THE CONSULTATION AND APPROVAL OF THE ARCHITECT.
- CONTRACTOR SHALL OBTAIN BULDING PERMIT. NO WORK TO START UNLESS BUILDING PERMIT IS PROPERLY DISPLAYED.
- ALL WORKMANSHIP AND MATERIALS SHALL BE OF FIRST QUALITY AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE CA BUILDING CODE, THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ALL PERTINENT AGENCIES.
- IT IS ESSENTIAL THAT ALL WORK PROCEED WITH THE MAXIMUM COOPERATION OF ALL PARTIES AND WITH MINIMUM INTERFERENCE TO THE OCCUPANTS WITHIN THE BUILDING. THE OWNER'S DIRECTIONS IN THIS REGARD SHALL BE FULLY COMPLIED WITH.
- ALL EXPOSED PLUMBING, HVAC, ELECTRICAL DUCTWORK, PIPING AND CONDUITS ARE TO BE PAINTED BY GENERAL CONTRACTOR.
- THE CONTRACTOR SHALL PERFORM THE WORK IN STRICT CONFORMANCE WITH THE LOCAL LAWS, REGULATIONS AND THE NATIONAL ELECTRIC CODE.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS, APPROVALS, AFFIDAVITS, CERTIFICATIONS, ETC. AND PAY ALL FEES AS REQUIRED BY THE LOCAL AUTHORITIES.
- CONTRACTORS SHALL OBTAIN FIRE CERTIF. UPON COMPLETION OF WORK.

ELECTRICAL NOTES:

- THE EQUIPMENT AND ALL ASSOCIATED WIRING AND INTERCONNECTION SHALL BE INSTALLED ONLY BY QUALIFIED PEOPLE. A QUALIFIED PERSON IS ONE WHO HAS SKILLS AND KNOWLEDGE RELATED TO THE CONSTRUCTION AND OPERATION OF THE ELECTRICAL EQUIPMENT AND INSTALLATIONS AND HAS RECEIVED SAFETY TRAINING TO RECOGNIZE AND AVOID THE HAZARDS INVOLVED. (NEC 690.4(E) AND 705.6)
- LOCAL UTILITY PROVIDER SHALL BE NOTIFIED PRIOR TO USE AND ACTIVATION OF ANY SOLAR PHOTOVOLTAIC INSTALLATION. FOR A LINE SIDE TAP CONNECTION, UTILITY NEEDS TO BE NOTIFIED WELL IN ADVANCE TO COORDINATE BUILDING ELECTRICAL SHUT OFF.
- NEW CONDUIT ROUTING SHOWN IS ESSENTIALLY SCHEMATIC. SUBCONTRACTOR SHALL LAY OUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES.
- ARRAY WIRING SHOULD NOT BE READILY ACCESSIBLE EXCEPT TO QUALIFIED PERSONNEL.
- ALL EXTERIOR CONDUIT, FITTINGS, AND BOXES SHALL BE WATERTIGHT AND APPROVED FOR USE IN WET LOCATIONS. (NEC 314.15A).
- WIRING METHODS FOR PV SYSTEM CONDUCTORS AREN'T PERMITTED WITHIN 10 IN. OF THE ROOF DECKING OR SHEATHING EXCEPT WHERE LOCATED DIRECTLY BELOW THE ROOF SURFACE THAT'S COVERED BY PV MODULES AND ASSOCIATED EQUIPMENT WIRING
- BACK-FED BREAKER MUST BE AT THE OPPOSITE END OF BUS BAR FROM THE MAIN BREAKER OR MAIN LUG SUPPLYING CURRENT FROM THE UTILITIES.
- ALL CONDUCTORS AND WIRE TIES EXPOSED TO SUNLIGHT ARE LISTED AS UV RESISTANT.
- CONTRACTOR SHALL FOLLOW ALL ELECTRICAL EQUIPMENT LABELING REQUIREMENTS IN NEC 690 AND IFC 2015
- PV SOURCE, OUTPUT AND INVERTER CIRCUITS SHALL BE IDENTIFIED AT ALL POINTS OF TERMINATION, CONNECTION, AND SPLICES. THE MEANS OF ID CAN BE SEPARATE COLOR CODING, MARKING TAPE, TAGGING ETC. (NEC 690.4).
- MEASURE THE LINE-TO-LINE AND LINE-TO-NEUTRAL VOLTAGE OF ALL SERVICE ENTRANCE CONDUCTORS PROIR TO INSTALLING ANY SOLAR EQUIPMENT. THE VOLTAGES FOR THE 480VAC RATED.

GOVERNING CODES

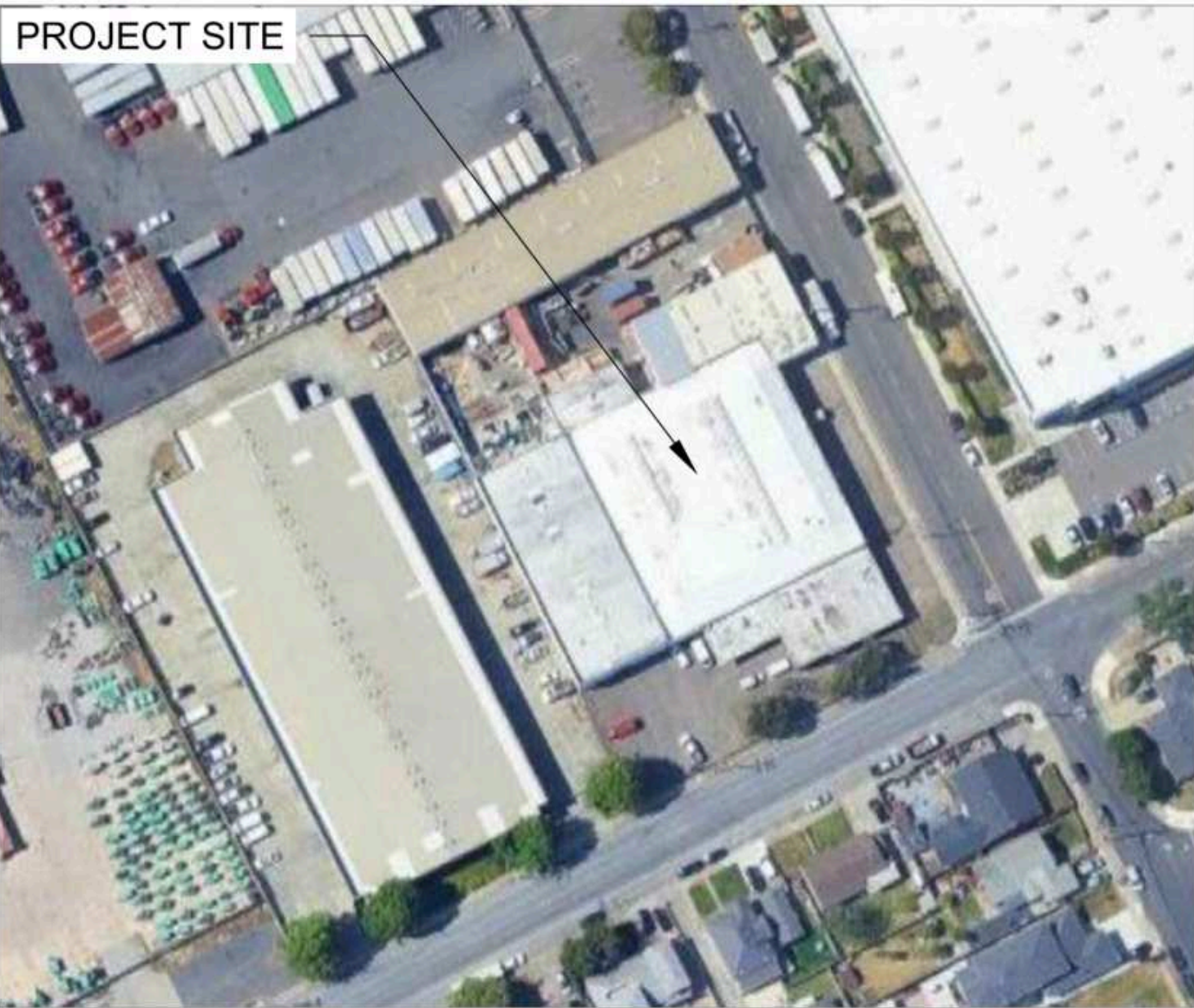
2019 CALIFORNIA ELECTRICAL CODE.
2019 CALIFORNIA RESIDENTIAL CODE.
2019 CALIFORNIA FIRE CODE.
2019 CALIFORNIA BUILDING CODE.
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE.
2019 CALIFORNIA ENERGY CODE.
2019 CALIFORNIA PLUMBING CODE.
2019 CALIFORNIA MECHANICAL CODE.
2017 NATIONAL ELECTRICAL CODE

SHEET INDEX

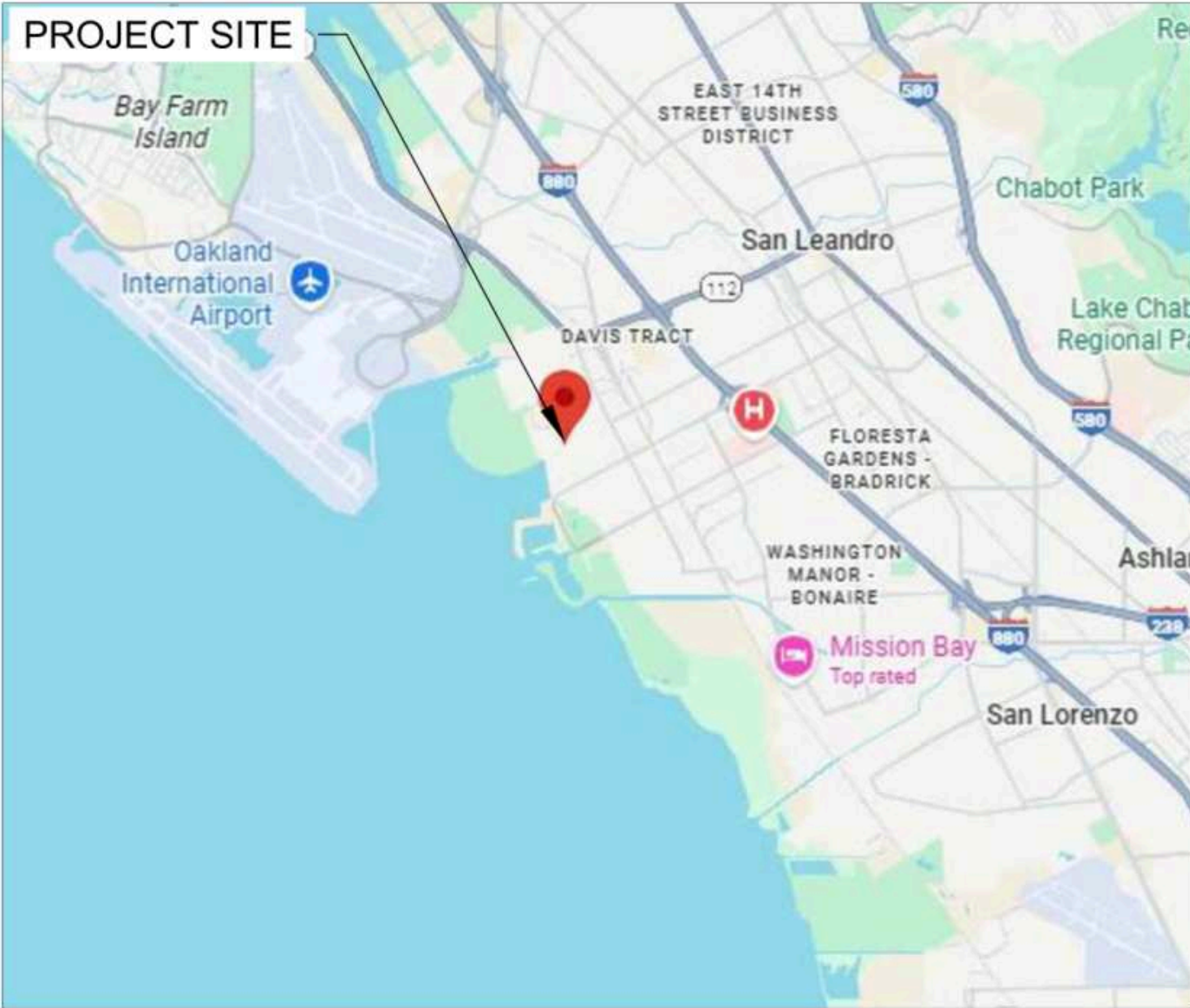
PV-0	COVER PAGE
PV-1	SITE PLAN
PV-2	ROOF PLAN & MODULES
PV-2A	STRING LAYOUT & BOM
PV-3 & 3A	ATTACHMENT DETAIL
PV-4	ELECTRICAL LINE CALCS.
PV-4A	CALCULATION, SPECIFICATIONS & NOTES
PV-5	SIGNAGE
PV-6+	EQUIPMENT SPECIFICATIONS

WIRING AND CONDUIT NOTES:

- ALL CONDUIT SIZES AND TYPES, SHALL BE LISTED FOR ITS PURPOSE AND APPROVED FOR THE SITE APPLICATIONS
- ALL PV CABLES AND HOMERUN WIRES BE #10AWG *USE-2, PV WIRE, OR PROPRIETARY SOLAR CABLING SPECIFIED BY MFR, OR EQUIVALENT; ROUTED TO SOURCE CIRCUIT COMBINER BOXES AS REQUIRED
- ALL CONDUCTORS AND OCPD SIZES AND TYPES SPECIFIED ACCORDING TO [NEC 690.8 (A)(1) & (B)(1)], [NEC 240] [NEC 690.7] FOR MULTIPLE CONDUCTORS
- ALL PV DC CONDUCTORS IN CONDUIT EXPOSED TO SUNLIGHT SHALL BE DERATED ACCORDING TO [NEC TABLE 310.15 (B)(2)(C)] BLACK ONLY**
- EXPOSED ROOF PV DC CONDUCTORS SHALL BE USE-2, 90°C RATED, WET AND UV RESISTANT, AND UL LISTED RATED FOR 600V, UV RATED SPIRAL WRAP SHALL BE USED TO PROTECT WIRE FROM SHARP EDGES
- PHASE AND NEUTRAL CONDUCTORS SHALL BE DUAL RATED THHN/THWN-2 INSULATED, 90°C RATED, WET AND UV RESISTANT, RATED FOR 600V PER NEC 2008 OR 1000V PER NEC 2014
- 4-WIRE DELTA CONNECTED SYSTEMS HAVE THE PHASE WITH THE HIGHER VOLTAGE TO GROUND MARKED ORANGE OR IDENTIFIED BY OTHER EFFECTIVE MEANS
- ALL SOURCE CIRCUITS SHALL HAVE INDIVIDUAL SOURCE CIRCUIT PROTECTION
- VOLTAGE DROP LIMITED TO 2%
- AC CONDUCTORS >4AWG COLOR CODED OR MARKED: PHASE A OR L1- BLACK, PHASE B OR L2- RED, PHASE C OR L3- BLUE, NEUTRAL- WHITE/GRAY



1
PV-0
HOUSE PHOTO
SCALE: NTS



2
PV-0
VICINITY MAP
SCALE: NTS

SYSTEM INFO.		
(199)AE SOLAR GMBH		
AE595CMD-144BDS 595W MODULE		
(01) SOLAREEDGE SE100KUS (480V) INVERTER		
DC SYSTEM SIZE: 118.405 KWDC		
AC SYSTEM SIZE: 100.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025

SHEET NAME

COVER PAGE

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-0

SITE NOTES

- A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.
- THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS AN UTILITY INTERACTIVE SYSTEM WITH NO STORAGE BATTERIES.
- THE SOLAR PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
- PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION [NEC 110.26]

LEGEND

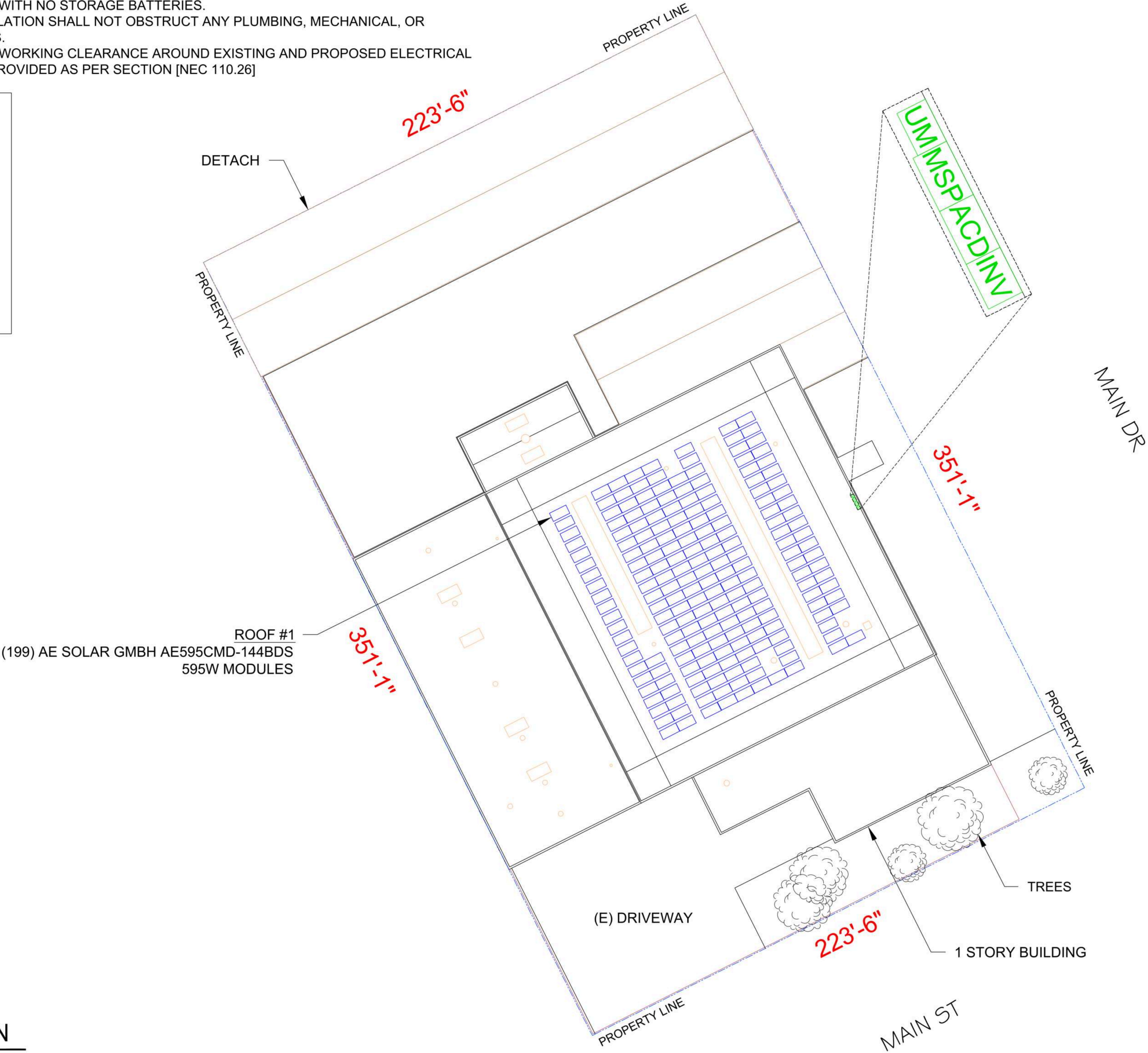
- UM

- UTILITY METER
- MSP

- MAIN SERVICE PANEL
- ACD

- AC DISCONNECT
- INV

- INVERTER
- CONDUIT
- (199) SOLAREEDGE POWER OPTIMIZER C652U
- (199)AE SOLAR GMBH AE595CMD-144BDS 595W MODULES
- VENTILATION, ATTIC FAN (ROOF OBSTRUCTION)



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DATE: 12/18/2025
SHEET NAME
SITE PLAN
SHEET SIZE
ANSI B 24" X 36"
SHEET NUMBER
PV-1

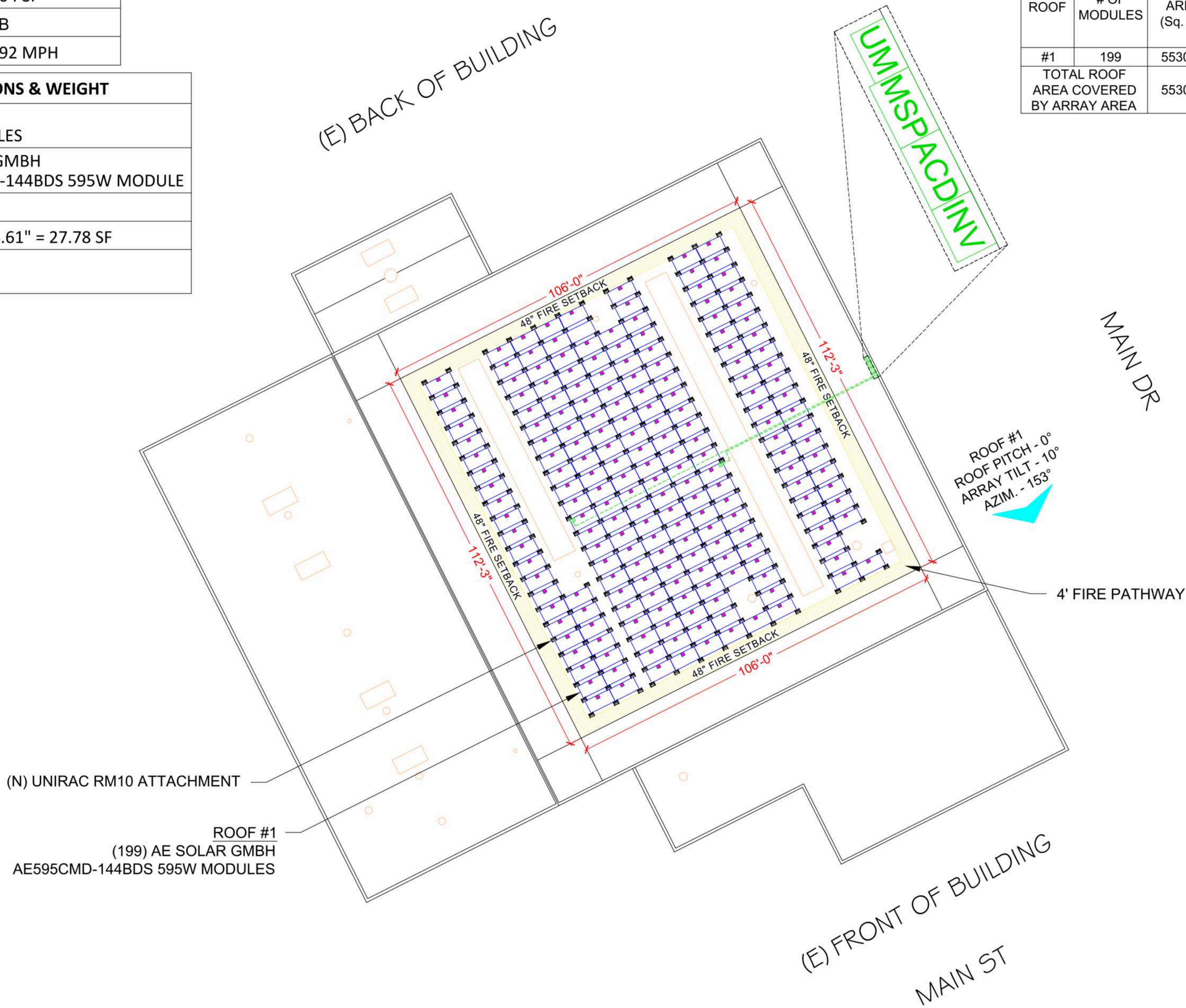
DESIGN SPECIFICATION	
RISK CATEGORY:	II
CONSTRUCTION:	COMMERCIAL
ZONING:	COMMERCIAL
SNOW LOAD (ASCE 7-16):	0 PSF
EXPOSURE CATEGORY:	B
WIND SPEED (ASCE 7-16):	92 MPH

MODULE TYPE, DIMENSIONS & WEIGHT	
NUMBER OF MODULES:	199 MODULES
MODULE TYPE:	AE SOLAR GMBH AE595CMD-144BDS 595W MODULE
MODULE WEIGHT:	68.34 LBS
MODULE DIMENSIONS:	89.69" X 44.61" = 27.78 SF
UNIT WEIGHT OF AREA:	2.46 PSF

LEGEND	
	- UTILITY METER
	- MAIN SERVICE PANEL
	- AC DISCONNECT
	- INVERTER
	- CONDUIT
	-(199) SOLAREDGE POWER OPTIMIZER C652U
	-(199)AE SOLAR GMBH AE595CMD-144BDS 595W MODULES
	- VENTILATION, ATTIC FAN (ROOF OBSTRUCTION)

ROOF DESCRIPTION						
ROOF	ROOF TILT	ARRAY TILT	AZIMUTH	TRUSS SIZE	TRUSS SPACING	ROOF MATERIAL
#1	0°	10°	153°	2"X10"	24" O.C.	TPO

ARRAY AREA & ROOF AREA CALC'S				
ROOF	# OF MODULES	ARRAY AREA (Sq. Ft.)	ROOF AREA (SQ. FT.)	ROOF AREA COVERED BY ARRAY (%)
#1	199	5530.21	11898.50	46
TOTAL ROOF AREA COVERED BY ARRAY AREA		5530.21	33194.00	17



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AC SYSTEM SIZE: 100.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025

SHEET NAME
ROOF PLAN & MODULES

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-2

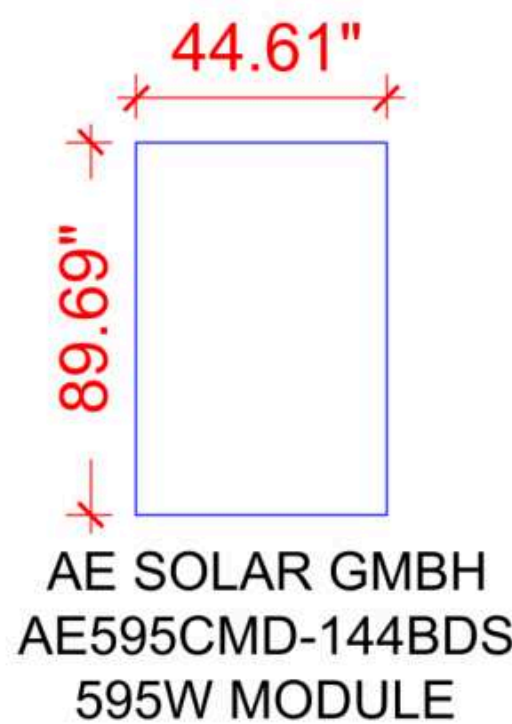


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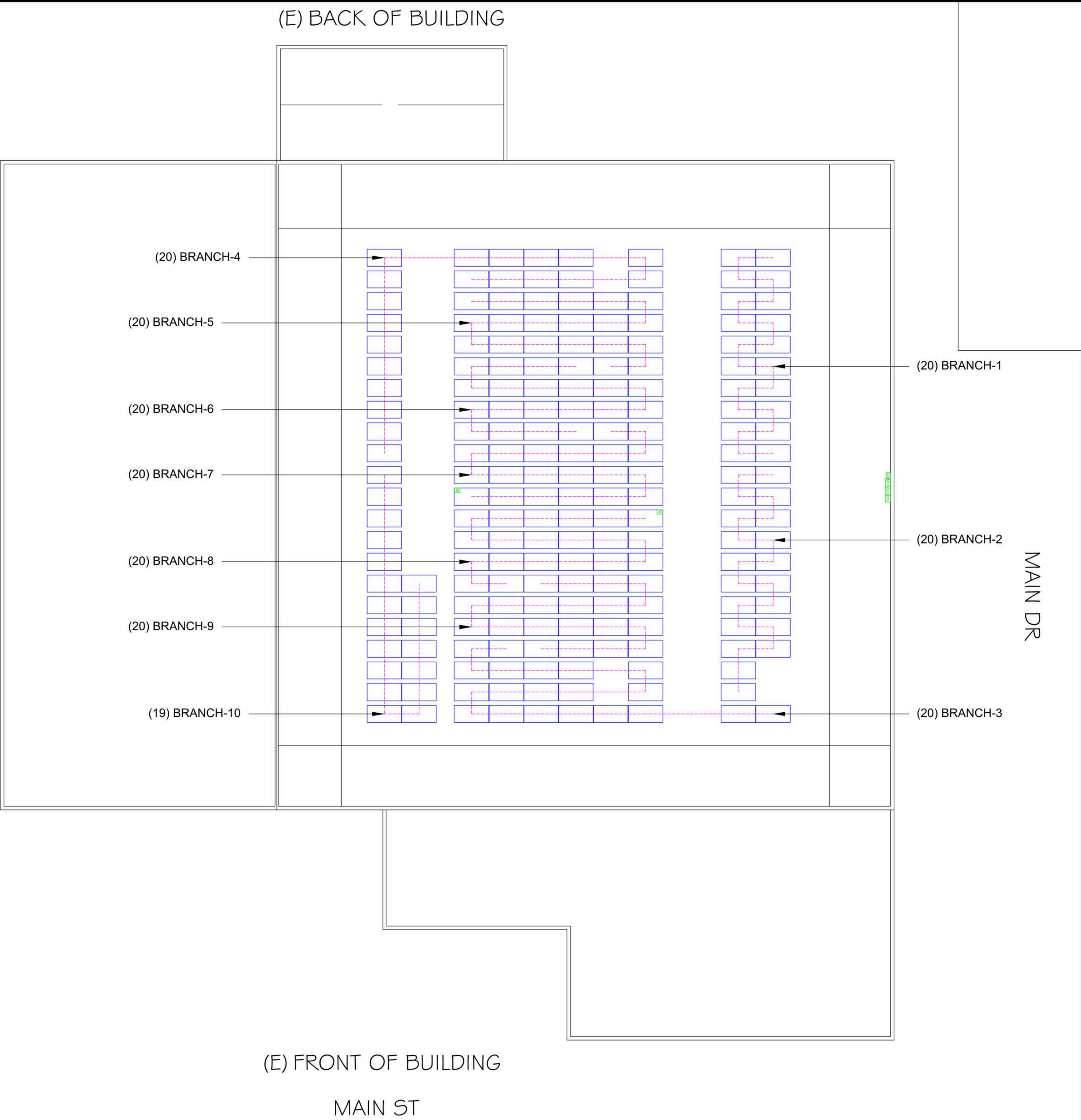
ROOF PLAN & MODULES

PV-2

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



BILL OF MATERIALS		
EQUIPMENT	QTY	DESCRIPTION
SOLAR PV MODULE	199	AE SOLAR GMBH AE595CMD-144BDS 595W
INVERTER	01	SOLAREEDGE SE100KUS (480V)
OPTIMIZER	100	SOLAREEDGE POWER OPTIMIZER C652U
AC DISCONNECT	1	200A NON FUSED AC DISCONNECT, 480V, NEMA 3R, UL LISTED
JUNCTION BOX	2	JUNCTION BOX, NEMB 3R, UL LISTED



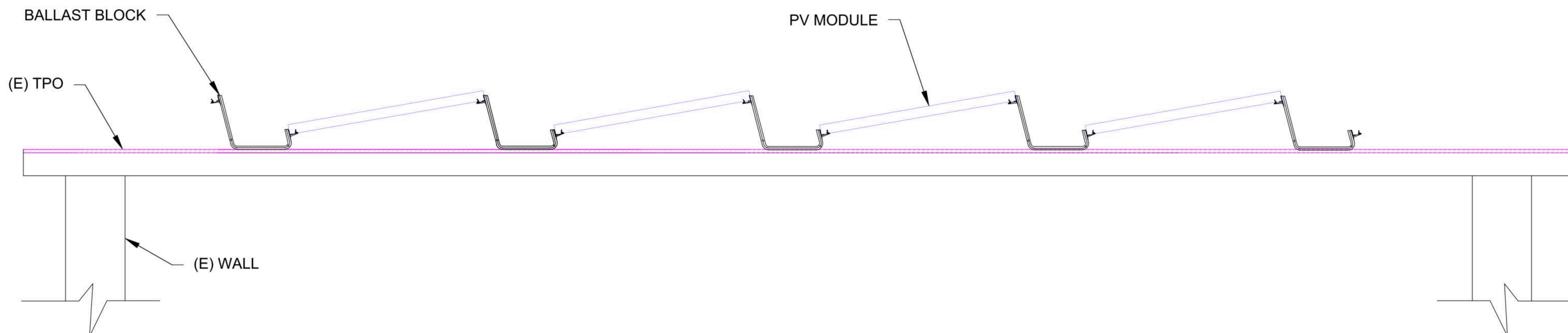
SYSTEM INFO.		
(199)AE SOLAR GMBH		
AE595CMD-144BDS 595W MODULE		
(01) SOLAREEDGE SE100KUS (480V)		
INVERTER		
DC SYSTEM SIZE: 118.405 KWDC		
AC SYSTEM SIZE: 100.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025
SHEET NAME STRING LAYOUT & BOM
SHEET SIZE ANSI B 24" X 36"
SHEET NUMBER PV-2A



SYSTEM INFO.		
(199)AE SOLAR GMBH		
AE595CMD-144BDS 595W MODULE		
(01) SOLAREEDGE SE100KUS (480V) INVERTER		
DC SYSTEM SIZE: 118.405 KWDC		
AC SYSTEM SIZE: 100.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025

SHEET NAME
**ATTACHMENT
DETAILS**

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-3

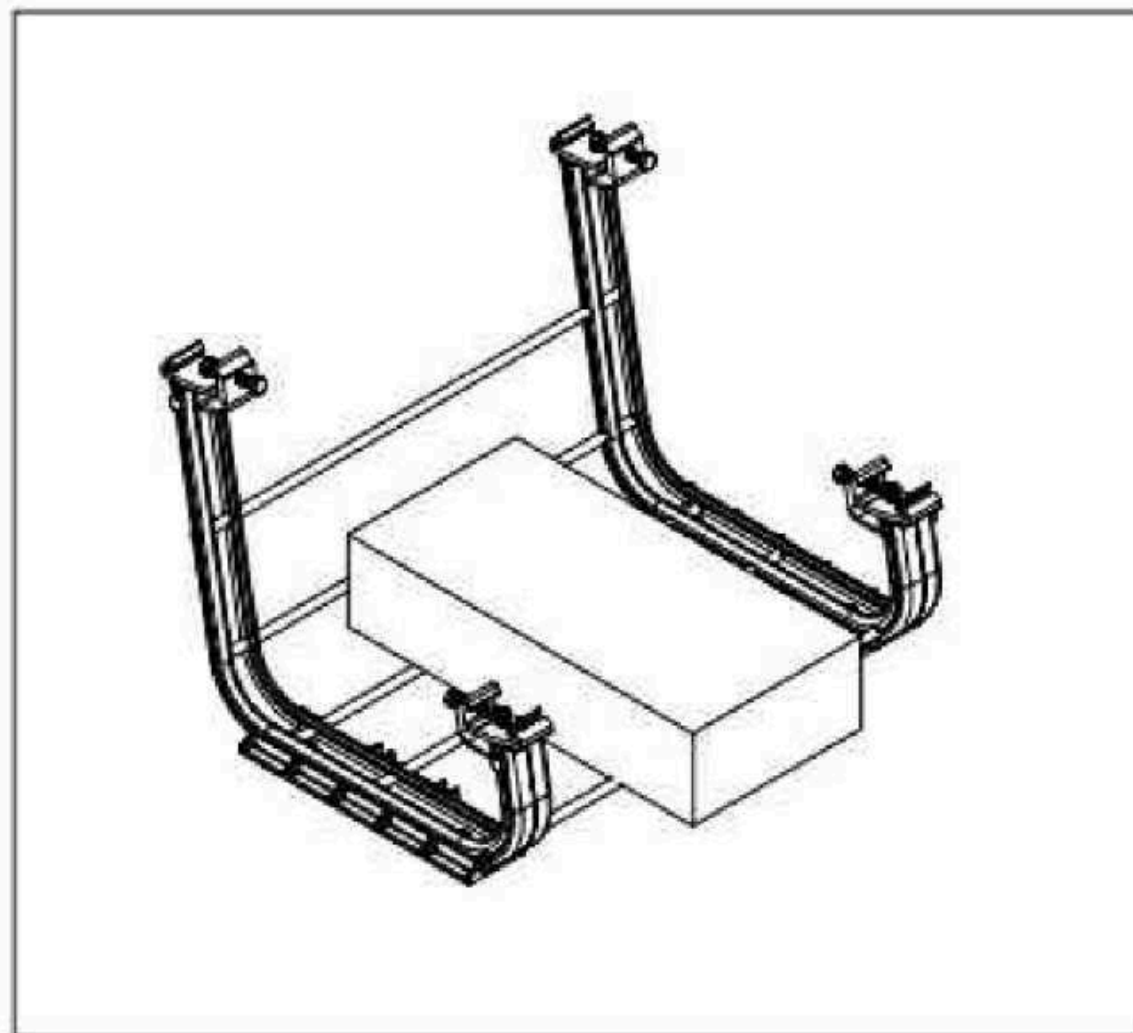


RM10 EVO

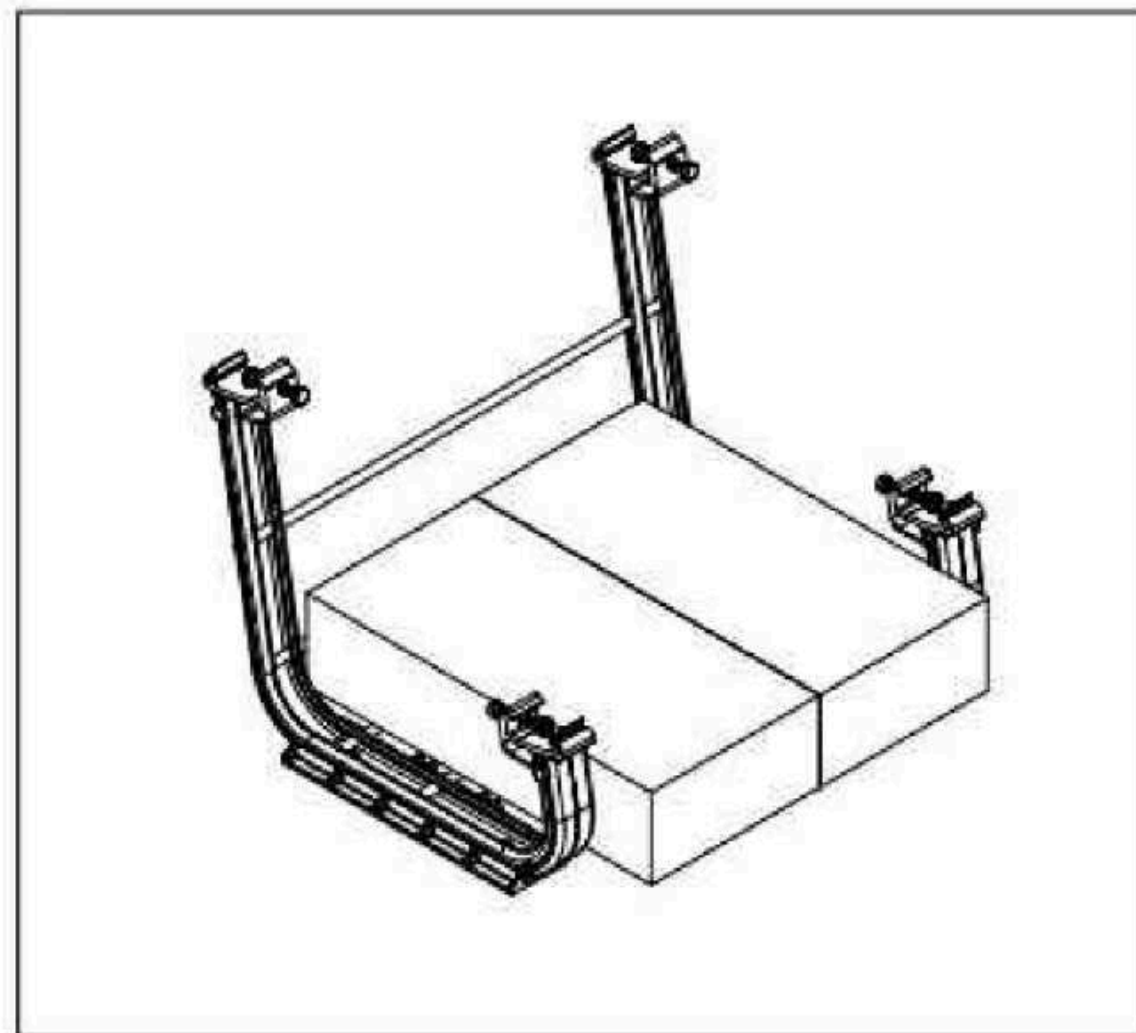
COMPLETE BALLAST PLACEMENT : 5

INSTALLATION GUIDE : PAGE

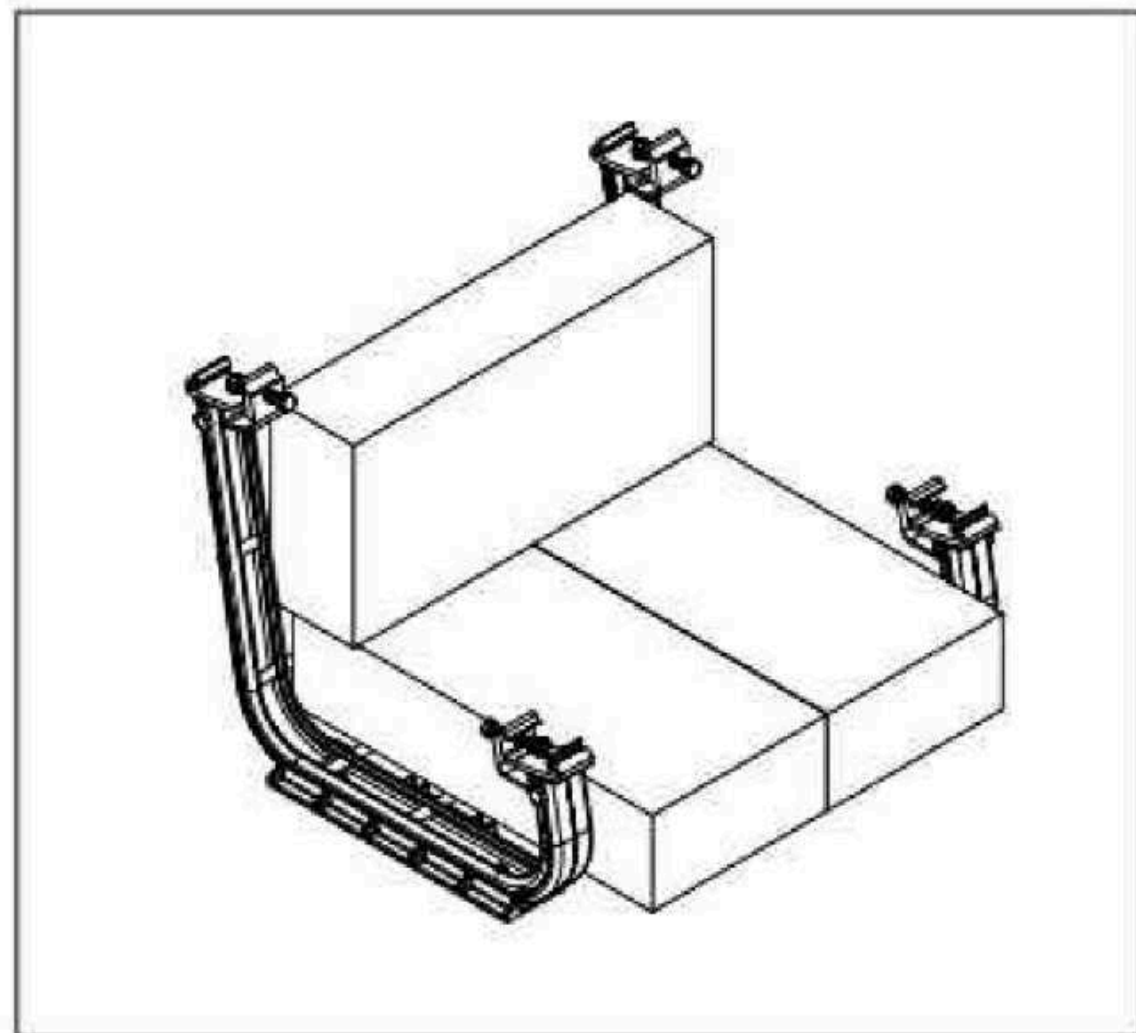
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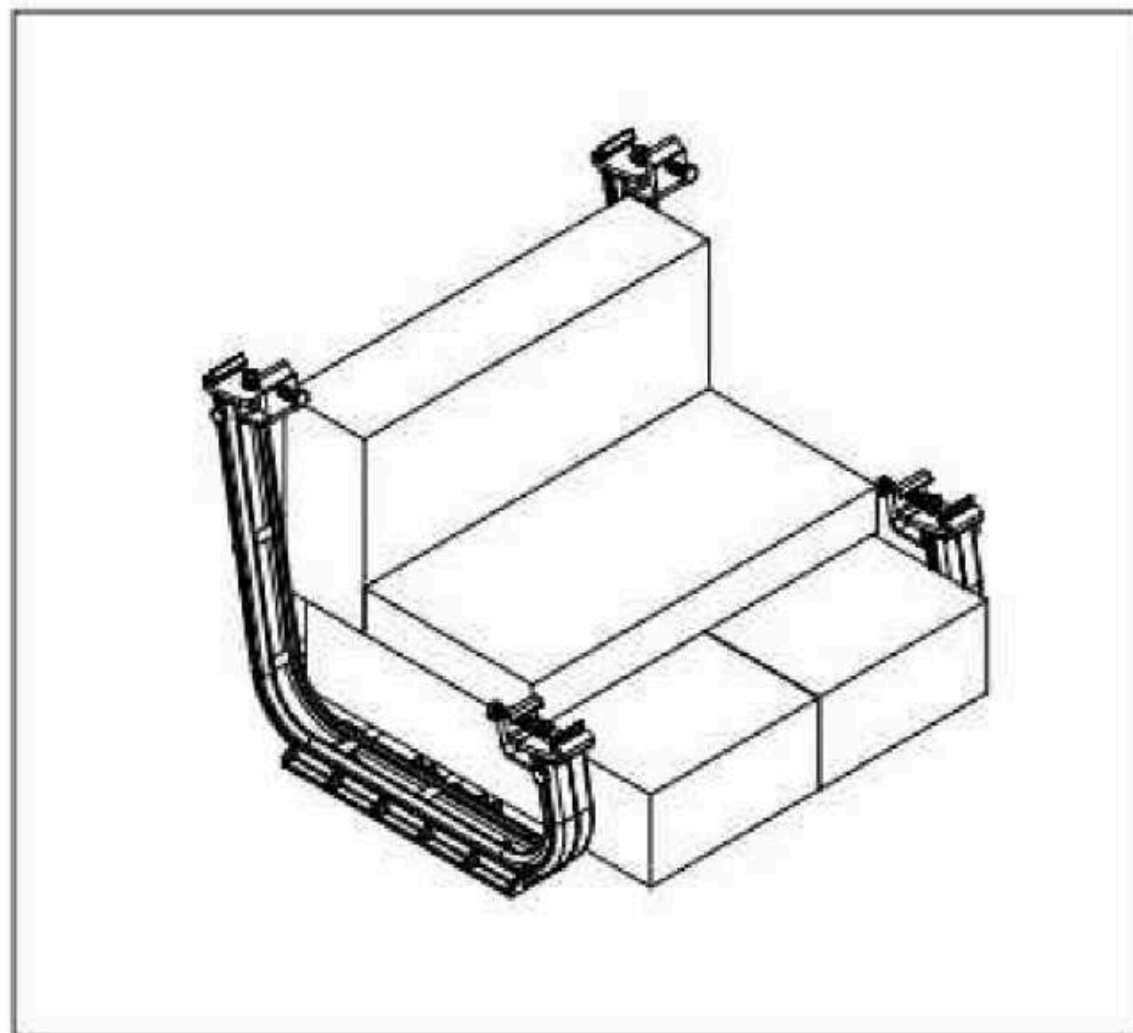
1-Block Configuration



2-Block Configuration

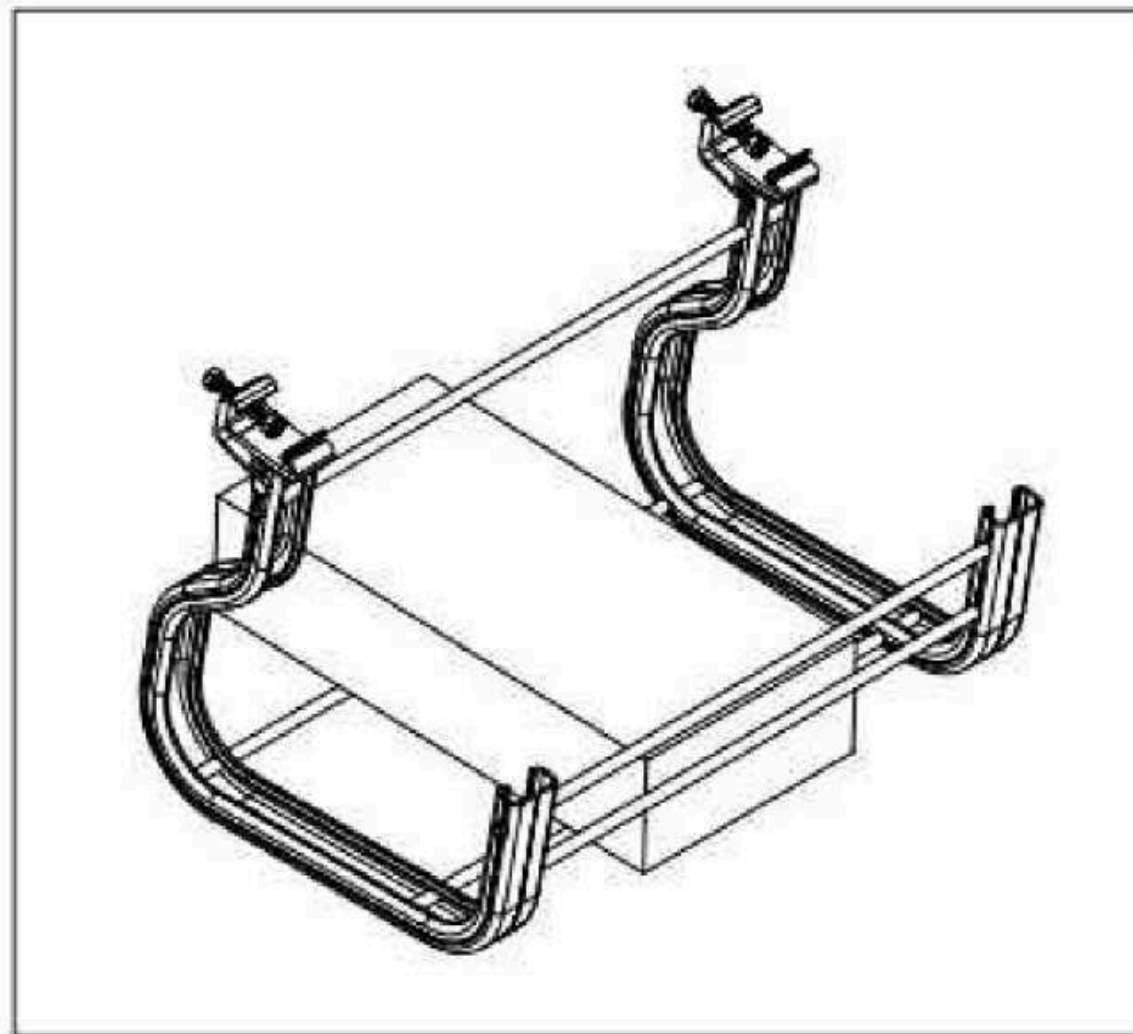


3-Block Configuration

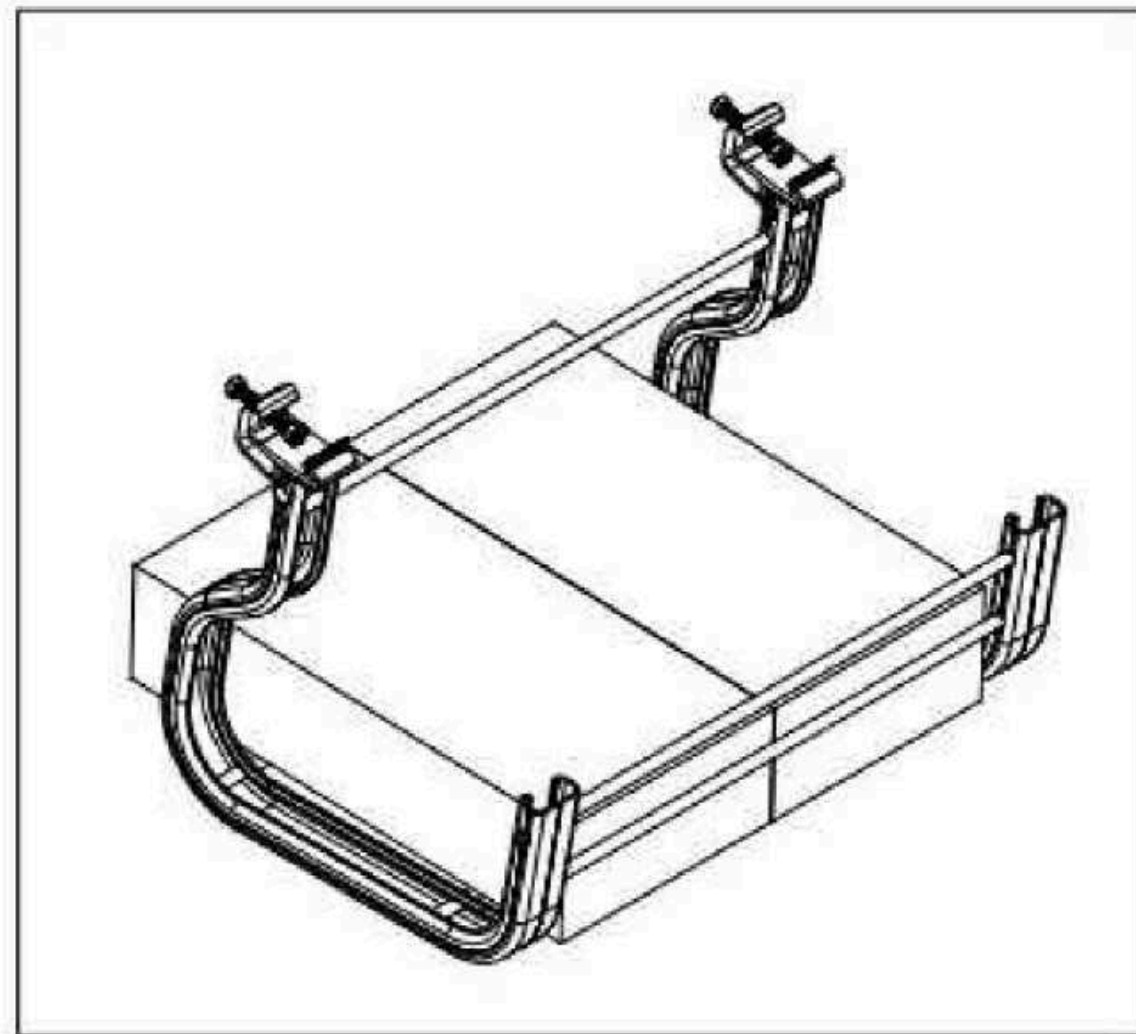


3 1/2-Block Configuration

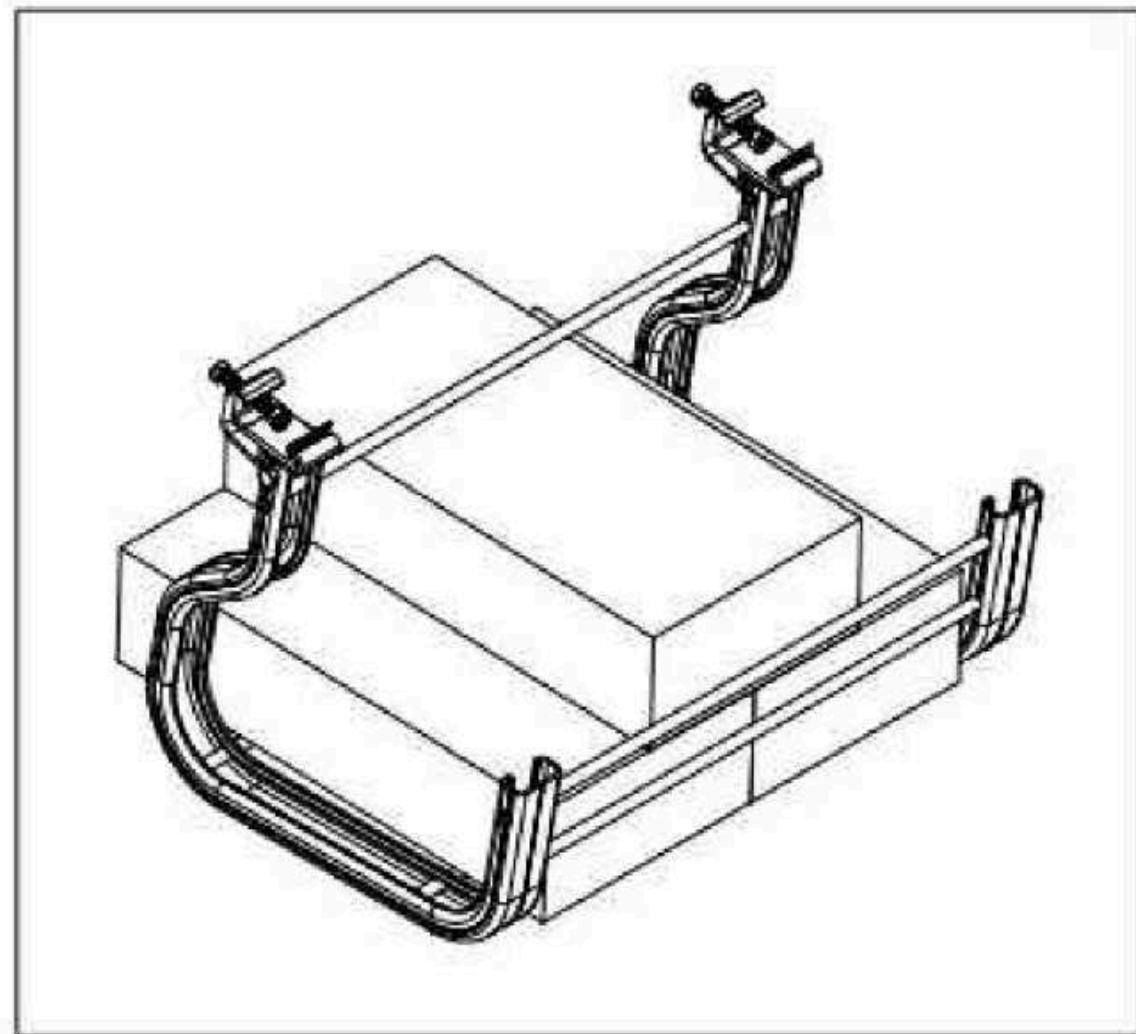
NORTH BAY:



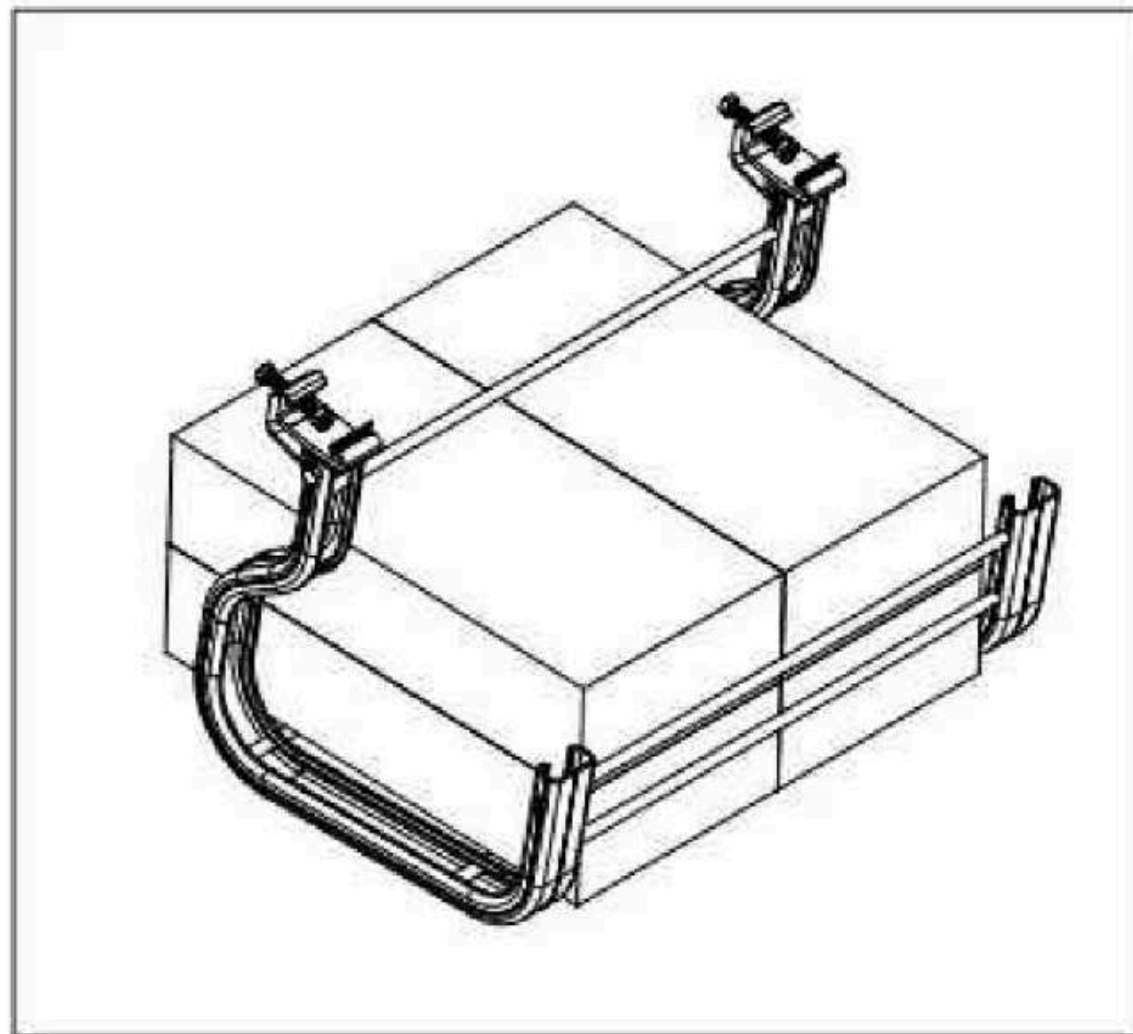
1-Block Configuration



2-Block Configuration



3-Block Configuration



4-Block Configuration

SYSTEM INFO.		
(199)AE SOLAR GMBH		
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(01) SOLAREEDGE SE100KUS (480V)		
INVERTER		
DC SYSTEM SIZE: 118.405 KWDC		
AC SYSTEM SIZE: 100.00 KWAC		

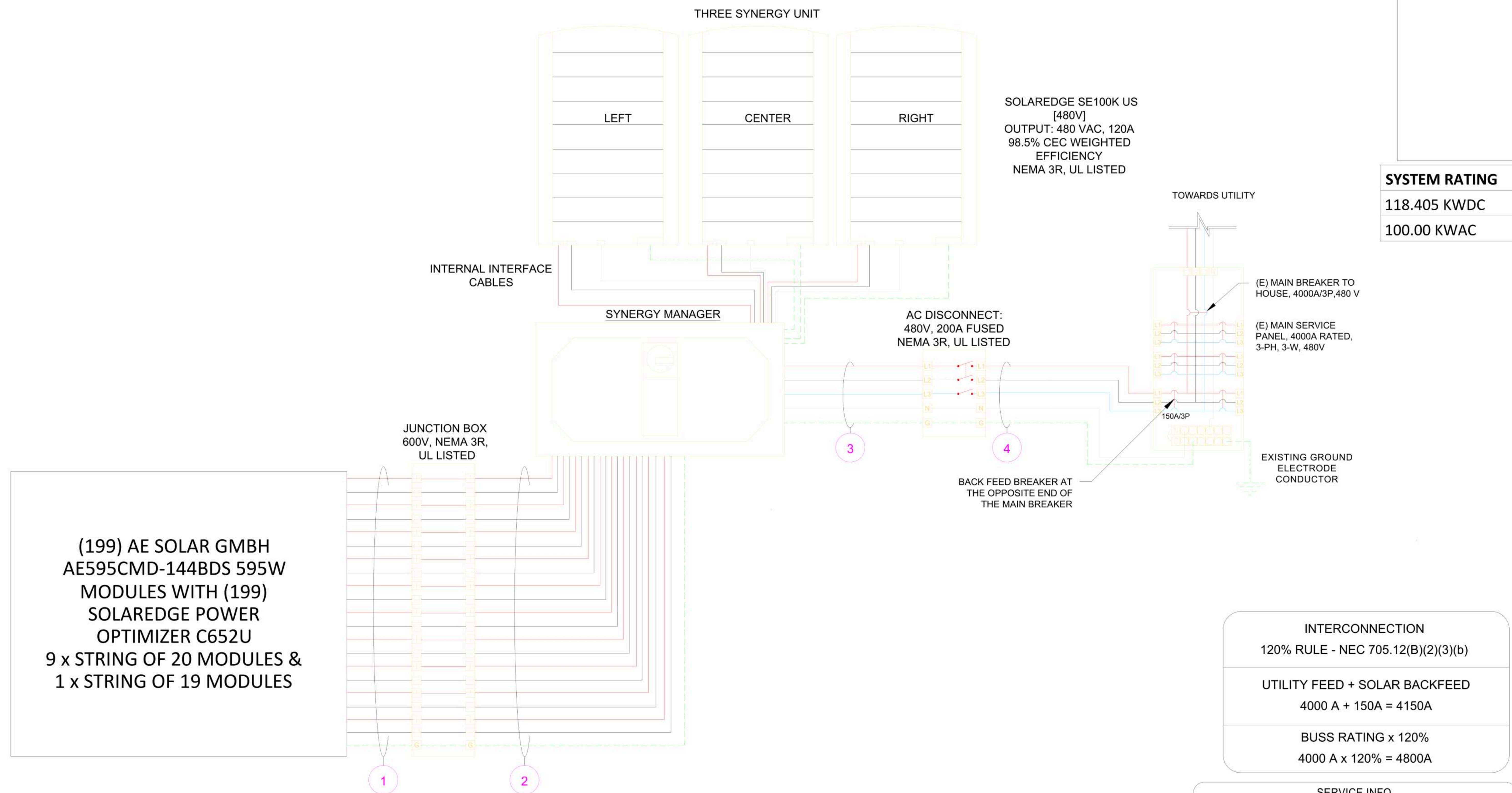
REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025
SHEET NAME
ATTACHMENT
DETAILS
SHEET SIZE
ANSI B
24" X 36"
SHEET NUMBER
PV-3A

ID	TYP.	INITIAL CONDUCTOR LOCATION	FINAL CONDUCTOR LOCATION	CONDUCTOR		CONDUIT	# OF PARALLEL CIRCUITS	CURRENT-CARRYING CONDUCTORS IN CONDUIT	CONDUIT FILL PERCENT	OCPD	EGC		TEMP. CORR. FACTOR		CONDUIT FILL FACTOR	CONT. CURRENT	MAX. CURRENT	BASE AMP.	DERATED AMP.	TERM. TEMP. RATING	LENGTH	
1	10	STRING	JUNCTION BOX	10 AWG	PV WIRE		Open Air	1	2	N/A	N/A	6 AWG	BARE COPPER	0.71	(56°C)	N/A	20.00A	25.0A	40A	28.4A	75°C	60FT
2	1	JUNCTION BOX	INVERTER	10 AWG	THWN-2	COPPER	MIN 1.25" Dia EMT	10	20	28.58%	N/A	8 AWG	THWN-2, COPPER	0.96	(34°C)	0.5	20.00A	25.0A	40A	19.20A	75°C	140FT
3	1	INVERTER	AC DISCONNECT	2/0 AWG	THWN-2	COPPER	MIN 1.50" Dia EMT	1	4	31.40%	N/A	8 AWG	THWN-2, COPPER	0.96	(34°C)	0.8	120.00A	150.0A	195A	149.76A	75°C	10FT
4	1	AC DISCONNECT	MSP	2/0 AWG	THWN-2	COPPER	MIN 1.50" Dia EMT	1	4	31.40%	150A	6 AWG	THWN-2, COPPER	0.96	(34°C)	0.8	120.00A	150.0A	195A	149.76A	75°C	10FT



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PROJECT NAME & ADDRESS

DATE: 12/18/2025

SHEET NAME

ELECTRICAL LINE

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-4

1 | ELECTRICAL LINE DIAGRAM

PV-4

SCALE: NTS

ALL NEW CIRCUIT BREAKERS INSTALLED IN
PANEL SHALL MATCH THE HIGHEST
EXISTING AIC RATED CIRCUIT BREAKER
WITHIN THAT BOARD. INSPECTOR TO
VERIFY HIGHEST AIC RATING AT THE SITE.

EQUIPMENT SUMMARY

199 AE SOLAR GMBH AE595CMD-144BDS 595W
MODULES

01 SOLAREDGE SE100KUS (480V) INVERTERS

100 SOLAREDGE POWER OPTIMIZER C652U

INTERCONNECTION

120% RULE - NEC 705.12(B)(2)(3)(b)

UTILITY FEED + SOLAR BACKFEED

$$4000 \text{ A} + 150 \text{ A} = 4150 \text{ A}$$

BUSS RATING x 120%

$$4000 \text{ A} \times 120\% = 4800\text{A}$$

SERVICE INFO.

UTILITY PROVIDER: ----
MAIN SERVICE VOLTAGE: 480V
AHJ NAME: SAN LEANDRO CITY
MAIN SERVICE LOCATION: EAST
SERVICE FEED SOURCE: UNDERGROUND

PHOTOVOLTAIC POWER SOURCE

CODE : PER NEC 690.31(D)(2)

SOLAR PV DC CIRCUIT

CODE : PER NEC 690.31(O)(2)

1 DC Conduit

Scale: NTS

! WARNING

TURN OFF PHOTOVOLTAIC AC
DISCONNECT PRIOR TO
WORKING INSIDE PANEL

CODE : PER NEC 110.27(C) & OSHA 1910.145(f)(7)

! WARNING

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

CODE : PER NEC 110.27(C) & OSHA 1910.145(f)(7)

2 Junction Box

Scale: NTS

! WARNING

THE DISCONNECTION OF THE
GROUNDED CONDUCTORS(S)
MAY RESULT IN OVERVOLTAGE
OF THE EQUIPMENT

CODE : PER NEC 690.13(B)

3 Inverter

Scale: NTS

! WARNING

RACEWAY IS ENERGIZED WHENIN
THE OPEN POSITION. DO NOT
RELOCATE OR CUT

4 Conduit

Scale: NTS

! WARNING

THIS EQUIPMENT FED BY MULTIPLE
SOURCES: TOTAL RATING OF ALL OVER
CURRENT DEVICES EXCLUDING MAIN
POWER SUPPLY SHALL NOT EXCEED
AMPACITY OF BUSBAR

CODE : PER NEC 690.13(B)

! WARNING

ELECTRIC SHOCK HAZARD
TERMINALS ON BOTH LINE AND
LOAD SIDES MAY BE ENERGIZED
IN THE OPEN POSITION

CODE : PER NEC 706.15(C)(4) and NEC 690.13(B)

PHOTOVOLTAIC SYSTEM AC DISCONNECT

RATED AC OPERATING CURRENT 120.00 AMPS

AC NOMINAL OPERATING VOLTAGE 480 VOLTS

CODE : PER NEC 690.54

5 AC Disconnects

Scale: NTS

MAIN PHOTOVOLTAIC

SYSTEM DISCONNECT

CODE : PER NEC 690.13(B)

RAPID SHUTDOWN FOR
SOLAR PV SYSTEM

CODE : PER NEC 690.56(C)(2)

DO NOT DISCONNECT
UNDER LOAD

CODE : PER NEC 690.15(B) and NEC 690.33(D)(2)

WARNING DUAL POWER SOURCE SECOND
SOURCE IS PHOTOVOLTAIC SYSTEM

CODE : PER NEC 690.59 and NEC 705.12(D)(3)

! WARNING

POWER SOURCE OUTPUT
CONNECTION. DO NOT RELOCATE
THIS OVERCURRENT DEVICE.

CODE : PER NEC 705.12(B)(3)(2)

! CAUTION

PHOTOVOLTAIC SYSTEM CIRCUIT IS BACKFED

CODE : PER NEC 705.12(B)(3)(2)

PANEL BOARD ENERGIES FROM
TWO SOURCES OF AC POWER
SOLAR 120.00A AT 480V
UTILITY GRID 4000A AT 480V

CODE : PER NEC 690.54

! WARNING

TURN OFF PHOTOVOLTAIC
AC DISCONNECT PRIOR TO
WORKING INSIDE PANEL

CODE : PER NEC 110.27(C) & OSHA 1910.145(f)(7)

! WARNING

ELECTRIC SHOCK HAZARD
TERMINALS ON BOTH LINE AND
LOAD SIDES MAY BE ENERGIZED
IN THE OPEN POSITION

CODE : PER NEC 706.15(C)(4) and NEC 690.13(B)

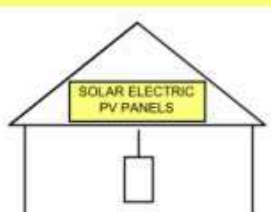
! WARNING

SINGLE 120-VOLT SUPPLY
DO NOT CONNECT
MULTI WIRE BRANCH CIRCUITS

CODE : PER NEC 706.15(C)(4) and NEC 690.13(B)

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 THE ARRAY



CODE : PER NEC 605.11.3.1(1) and NEC 690.56(C)

! WARNING: DUAL POWER SOURCE
SECOND SOURCE IS PHOTOVOLTAIC SYSTEM

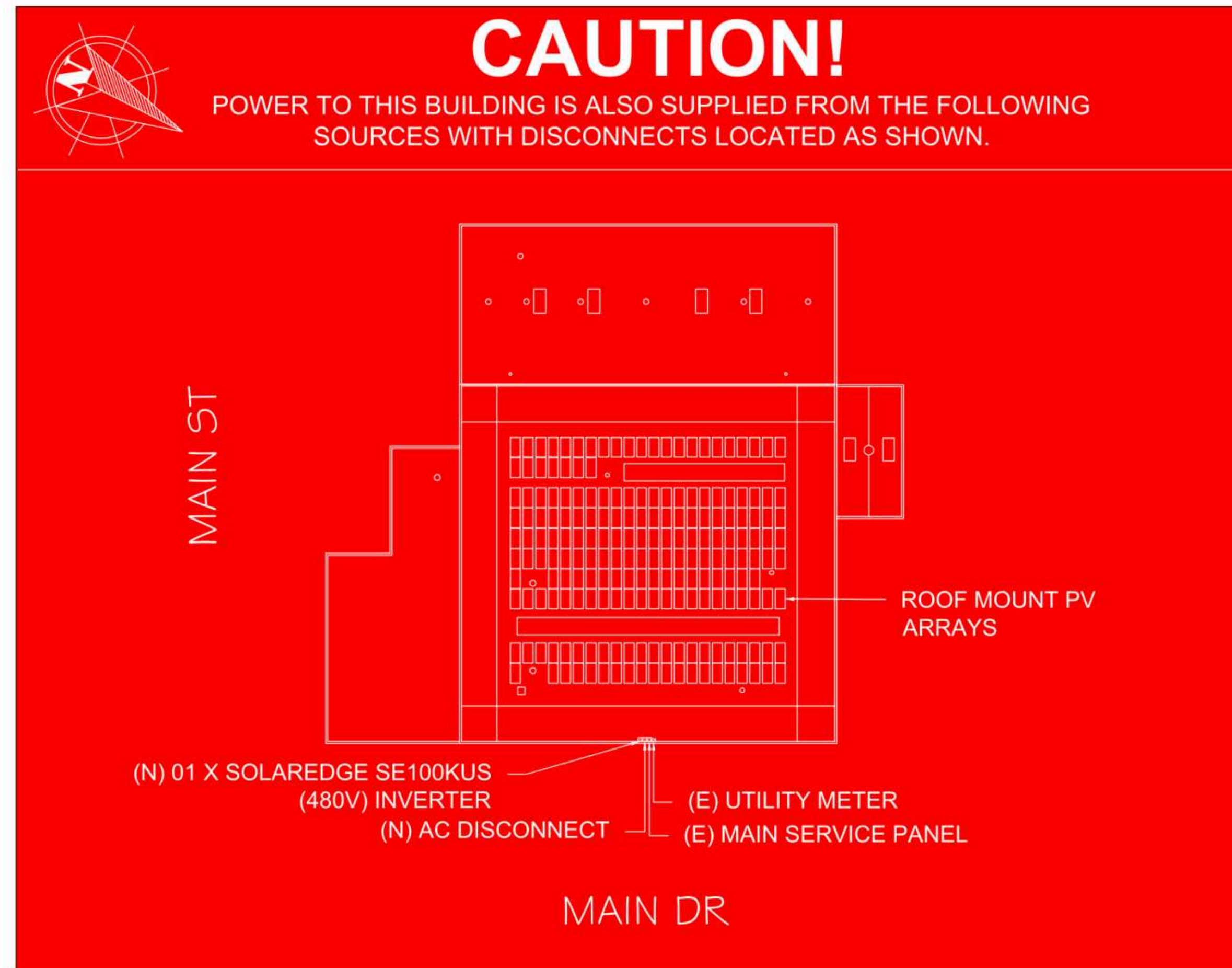
(PER CODE: NEC 705.12(B)(3-4) & and 690.59)

7 Point of Interconnection

Scale: NTS

PLACARDS NOTES

1. NEC ARTICLES 690 AND 705 AND IRC SECTION R331 MARKINGS SHOW HEREON
2. ALL MARKINGS SHALL CONSIST OF THE FOLLOWING:
 - A. UV RESISTANT SIGN MATERIAL WITH ENGRAVED OR MACHINE PRINTED LETTERS OR ELECTRO-PLATING
 - B. RED BACKGROUND COLOR WITH WHITE TEXT AND LINE WORK
 - C. ARIAL FONT.
3. ALL SIGNS SHALL BE SIZED APPROPRIATELY AND PLACED IN THE LOCATIONS SPECIFIED.
4. SIGNS SHALL BE ATTACHED TO THE SERVICE EQUIPMENT USING POP-RIVETS OR SCREWS.
5. THE LABEL SHALL BE SUITABLE FOR THE ENVIRONMENT WHERE IT IS INSTALLED.
6. WHERE REQUIRED ELSEWHERE IN THIS CODE, ALL FIELD APPLIED LABELS, WARNINGS AND MARKINGS SHOULD COMPLY WITH ANSI Z535.4 [NEC 110.21(8) FIELD MARKING].
7. ADHESIVE FASTENED SIGNS MAY BE ACCEPTABLE IF PROPERLY ADHERED. VINYL SIGNS SHALL BE WEATHER RESISTANT [IFC 605.11.1.3]



LABEL LOCATION:
MAIN SERVICE PANEL & UTILITY METER &
SUB PANEL, AC PANEL, AC DISCONNECT

SYSTEM INFO.

(199)AE SOLAR GMBH
AE595CMD-144BDS 595W MODULE
(01) SOLAREEDGE SE100KUS (480V)
INVERTER
DC SYSTEM SIZE: 118.405 KWDC
AC SYSTEM SIZE: 100.00 KWAC

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025

SHEET NAME

SIGNAGE

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-5



Deutsche
Qualität
Garantiert



METEOR
N-TYPE TOPCON TECHNOLOGY

CMD-144BDS 575W-595W

More power, less degradation

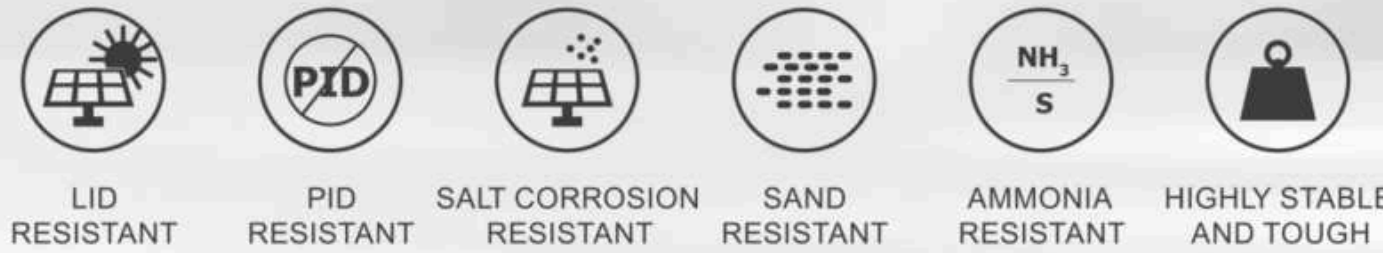
23.05%
MAXIMUM EFFICIENCY

144
HALF CELLS

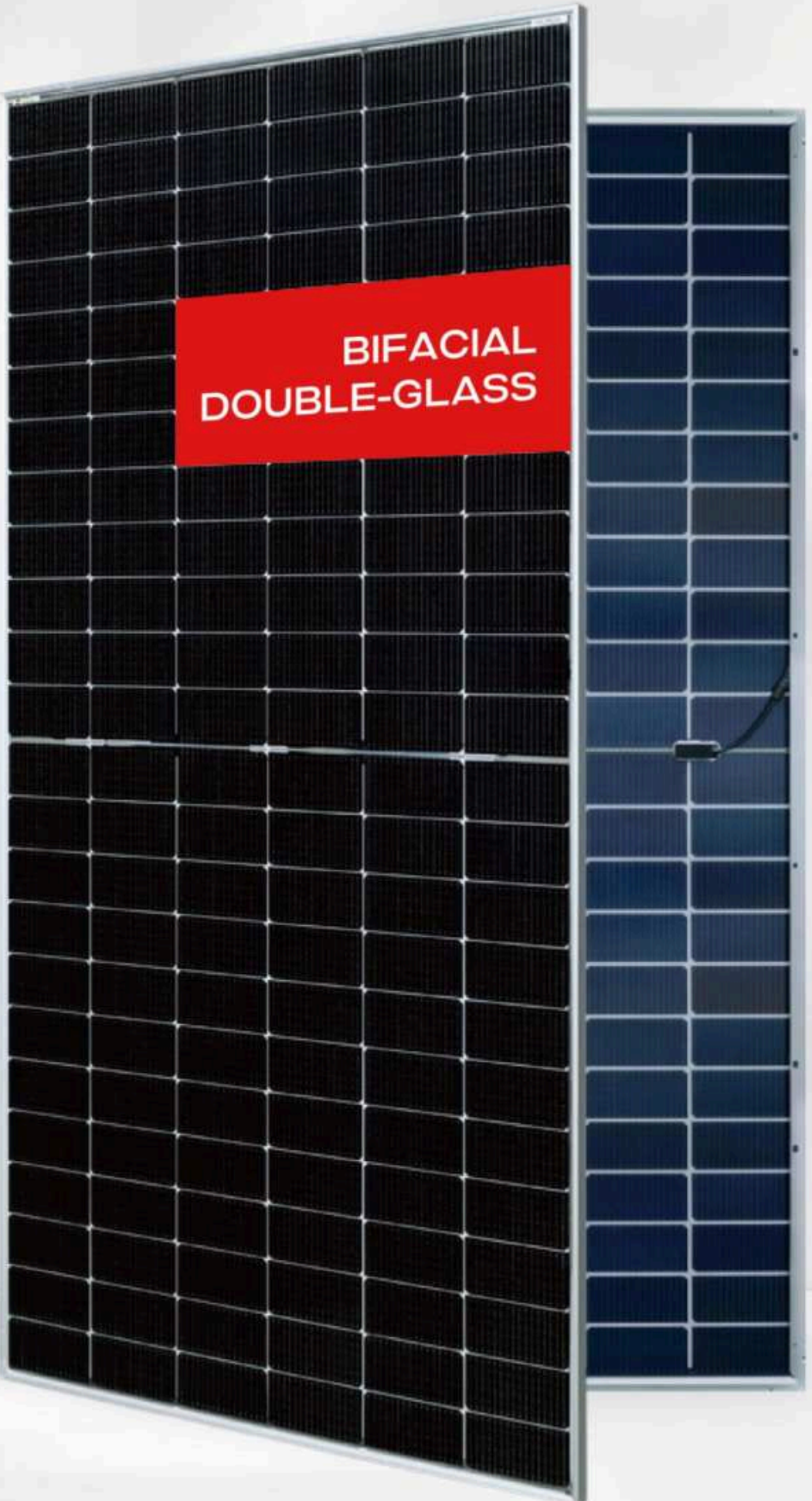
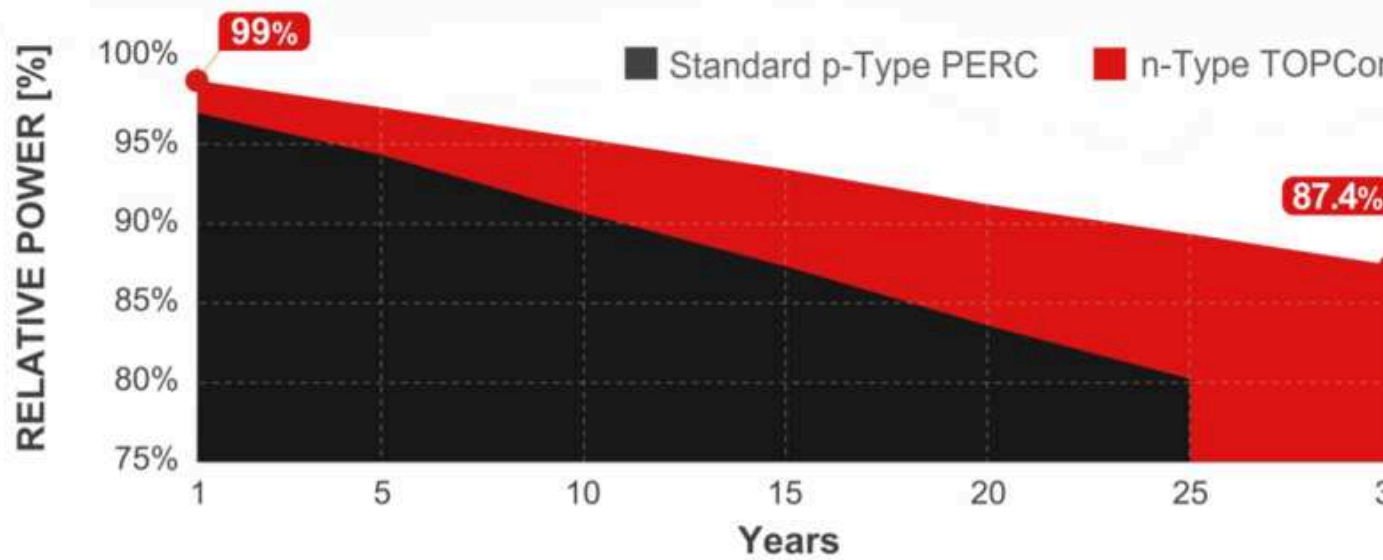
30 YEARS
Performance Warranty

up to **30 YEARS***
Product Warranty

*The regular product warranty is 15 years, please refer to the latest version of AESOLAR Limited Warranty for the duration of the product warranty under special conditions. for extensions, please contact AESOLAR staff.



OUR PERFORMANCE WARRANTY



SYSTEM AND PRODUCT CERTIFICATIONS

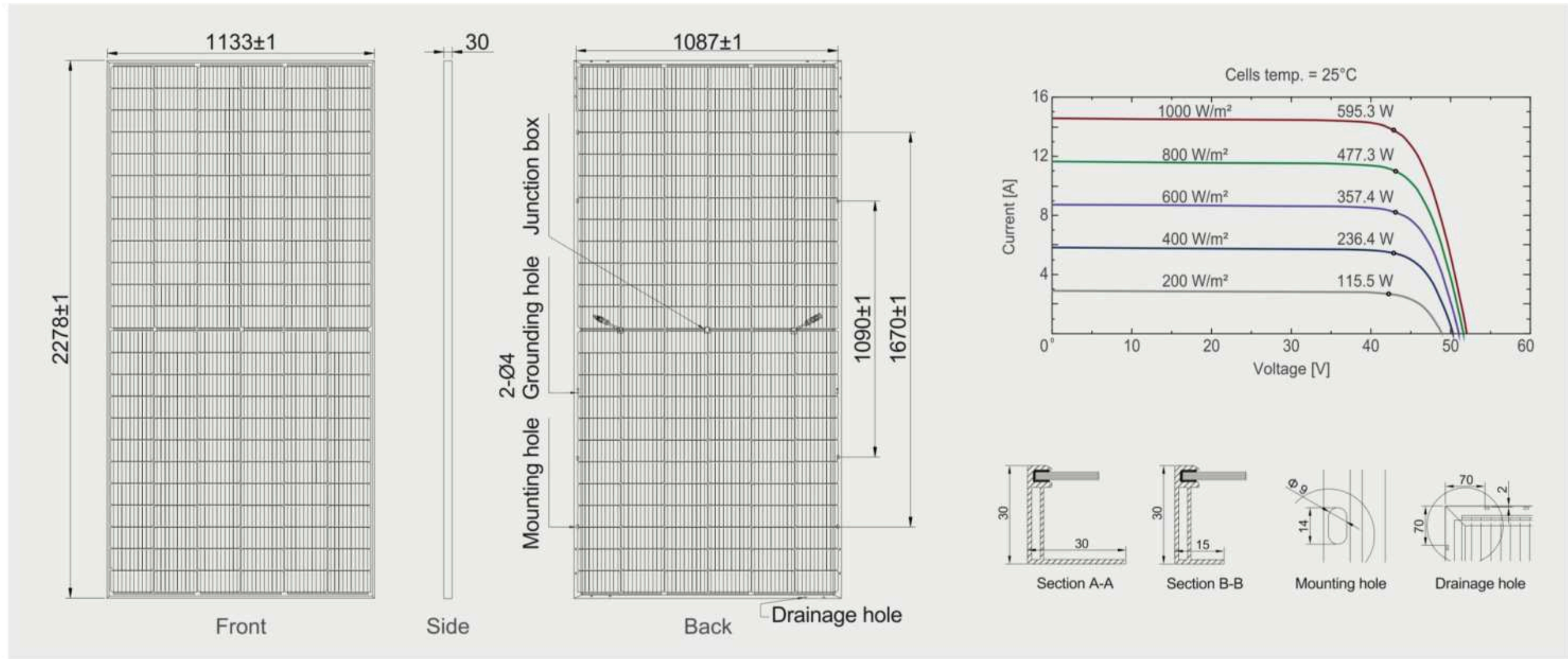


www.ae-solar.com

AE CMD-144BDS 575W-595W

N-TYPE TOPCON TECHNOLOGY PV MODULE

BIFACIAL • DOUBLE-GLASS



Electrical specifications (STC*):

Nominal max. power	P_{max} (Wp)	575	580	585	590	595
Maximum operating voltage	V_{MPP} (V)	42.88	43.04	43.14	43.29	43.46
Maximum operating current	I_{MPP} (A)	13.41	13.49	13.56	13.63	13.69
Open-circuit voltage	V_{oc} (V)	50.73	50.86	51.83	52.02	52.21
Short-circuit current	I_{sc} (A)	14.33	14.40	14.47	14.54	14.61
Module efficiency	η (%)	22.28	22.47	22.67	22.86	23.05
Power tolerance	(W)	0~+5				
Maximum system voltage	(V)	1500				
Maximum series fuse rating	(A)	25				

*STC: Standard Test Conditions (irradiance 1000 W/m², cell temperature 25°C and air mass of AM1.5), measurement tolerance Pmax: ±3%

Electrical specifications (NMOT*):

Nominal max. power	P_{max} (Wp)	437.4	440.0	445.0	448.0	452.0
Maximum operating voltage	V_{MPP} (V)	39.80	39.90	40.13	40.22	40.39
Maximum operating current	I_{MPP} (A)	10.99	11.04	11.09	11.14	11.19
Open-circuit voltage	V_{oc} (V)	48.00	48.20	48.40	48.60	48.80
Short-circuit current	I_{sc} (A)	11.55	11.60	11.65	11.70	11.75

*NMOT: Normal Module Operating Temperature (irradiance 800 W/m², ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

Bifacial electrical specifications

Max.power front-side $P_{max front}$ (Wp)	575	580	585	590	595
Backside Power Gain	5% 10%	5% 10%	5% 10%	5% 10%	5% 10%
Total equivalent power $P_{max equ}$ (Wp)	604 633	610 639	614 644	620 649	625 655
Module efficiency η (%)	23.39 24.51	23.62 24.75	23.80 24.93	24.00 25.15	24.20 25.36

*Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on the mounting (structure, height, tilt angle, etc.) and albedo of the ground.

The specifications and characteristics contained in this datasheet may deviate slightly from our actual products due to the product developments and uncertainty of measurement devices. The specifications included in the datasheet are subject to change without prior notice.



Mechanical and design specification

Cell type	n-Type TOPCon technology, half-cut cells
No. of cells	144
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP68 rated, 3 bypass diodes
Frame	30 mm anodized aluminium alloy
Cable (Including Connector)	1 x 4 mm², 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2278 mm x 1133 mm x 30 mm
Weight	31 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa or 244 kg/m²
Snow load	5400 Pa or 550 kg/m²
Fire rating	Class A (according to UL 790)

Temperature ratings

Operating temperature	-40 to +85°C
Temp. coefficient of P_{max}	-0.29 %/°C
Temp. coefficient of V_{oc}	-0.25 %/°C
Temp. coefficient of I_{sc}	0.046 %/°C
Nom. operating cell temp. NOCT	42 ± 2°C

Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	720 pcs / 40 HQ
Size / Pallet	2310 mm x 1140 mm x 1245 mm
Weight	1160 kg / pallet

+49 8231 978268 0
sales@ae-solar.com
www.ae-solar.com

AESOLAR
Messerschmitttring 54
86343 Königsbrunn, Germany

Ver. 24.12.1

SYSTEM INFO.
(199)AE SOLAR GMBH
AES95CMD-144BDS 595W MODULE
(01) SOLAREEDGE SE100KUS (480V)
INVERTER
DC SYSTEM SIZE: 118.405 KWDC
AC SYSTEM SIZE: 100.00 KWAC

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025

SHEET NAME
**EQUIPMENT
SPECIFICATION**

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-6

Three Phase Inverter with Synergy Technology

USA Domestic Content Eligible

For North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS



INVERTER

Three Phase Inverter with Synergy Technology

USA Domestic Content Eligible for North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS

Applicable to inverters with part numbers	SE-DBL-USxxIBNxx	SE-TRI-USxxIBNxx				UNITS
	SE80KUS	SE50KUS	SE100KUS	SE110KUS	SE120KUS	
OUTPUT						
Total Rated AC Output Capacity	80,000	120,000				W
Rated AC Active Output Power	80,000	50,000	100,000	110,000	120,000	W
Maximum AC Apparent Output Power	80,000	50,000	100,000	120,000	120,000	VA
AC Output Line Connections	3W + PE, 4W + PE					
Supported Grids	WYE: TN-C; TN-S; TN-C-S; TT, IT; Delta: IT					
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-N)	244 – 277 – 305	105 – 120 – 132.5	244 – 277 – 305			Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-L)	422.5 – 480 – 529	183 – 208 – 229	422.5 – 480 – 529			Vac
AC Frequency Minimum-Nominal-Maximum ⁽¹⁾	59.5 – 60 – 60.5					Hz
Maximum Continuous Output Current (per phase, PF=1)	96.5	139.5	120	144.3		Aac
GFDI Threshold	1					A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes					
Total Harmonic Distortion	≤ 3					%
Power Factor Range	±0.85 to 1					
INPUT ⁽²⁾						
Maximum DC Power (Module STC) Inverter / Synergy Unit	140,000 / 70,000	87,500 / 29,165	175,000 / 58,300	210,000 / 70,000		W
Transformer-less, Ungrounded	Yes					
Maximum Input Voltage DC+ to DC-	1000	600	1000			Vdc
Operating Voltage Range	850 – 1000	370 – 600	850 – 1000			Vdc
Maximum Input Current	2 x 48.25	3 x 46.5	3 x 40	3 x 48.25		Adc
Reverse-Polarity Protection	Yes					
Ground-Fault Isolation Detection	167kΩ sensitivity per Synergy Unit ⁽³⁾					
CEC Weighted Efficiency	98.5	97	98.5			%
Nighttime Power Consumption	< 8	< 12				W
ADDITIONAL FEATURES						
Supported Communication Interfaces ⁽⁴⁾	2 x RS485; Ethernet; Wi-Fi (optional); Cellular (optional)					
Smart Energy Management	Export Limitation					
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection					
Arc Fault Protection	Built-in, user configurable (according to UL 1699B)					
Photovoltaic Rapid Shutdown System	NEC 2014 – 2023, built-in, if paired with C651U					
PID Rectifier	Nighttime, built-in					
RS485 Surge Protection (ports 1+2)	Type II, field replaceable, integrated					
AC, DC Surge Protection	Type II, field replaceable, integrated					
DC SAFETY SWITCH						
DC Disconnect	Built-in					
STANDARD COMPLIANCE						
Safety	UL 1699B; UL 1741; UL 1741 SA; UL 1741 SB; UL 1998; CSA C22.2#107.1; Canadian AFCI according to T.I.L. M-07					
Grid Connection Standards	IEEE 1547-2018, Rule 21, Rule 14 (H1)					
Emissions	FCC Part 15 Class A					

(1) For other regional settings please contact SolarEdge support.
(2) For compatibility of inverters and power optimizers, see this [technical note](#).
(3) Where permitted by local regulations.
(4) For specifications of the optional communication options, visit the [Communication product page](#) or the [Knowledge Center](#) to download the relevant product datasheet.

SolarEdge's USA-manufactured Offering for C&I rooftops and carports

- Eligible for domestic content*: SolarEdge USA-manufactured inverters, when paired with certain SolarEdge USA-manufactured power optimizers, are intended to be eligible for the enhanced federal income tax credit for domestic content
- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy two-person installation with lightweight, modular design (each inverter consists of two or three Synergy units and one Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring, ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored** and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

* For more details, see Eligibility for Domestic Content on the last page.
** Applicable only for DC and AC SPDs.

[solaredge.com](#)



SYSTEM INFO.		
(199)AE SOLAR GMBH		
AE595CMD-144BDS 595W MODULE		
(01) SOLAREGE SE100KUS (480V)		
INVERTER		
DC SYSTEM SIZE: 118.405 KWDC		
AC SYSTEM SIZE: 100.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal		

PROJECT NAME & ADDRESS		

DATE: 12/18/2025		
SHEET NAME		
EQUIPMENT SPECIFICATION		
SHEET SIZE		

ANSI B		
24" X 36"		
SHEET NUMBER		
PV-7		

Three Phase Inverter with Synergy Technology
USA Domestic Content Eligible for North America
SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS

Applicable to inverters with part numbers		SE-DBL- USxxIBNxx	SE-TRI-USxxIBNxx				UNITS
Model Number		SE80KUS	SE50KUS	SE100KUS	SE110KUS	SE120KUS	
INSTALLATION SPECIFICATIONS							
Number of Synergy Units per Inverter		2	3				
AC Maximum Conduit Size		2 ½"					in
AC Maximum Conductor Size Line / PE		4/0 AWG / 1/0 AWG					
DC Maximum Conduit Size		1 x 3"; 2 x 2"					in
Inverter Unit / Synergy Manager	Multi-input (fuse-less) ⁽⁵⁾ (SE-xxx-USxxlxxSx)	6 / 3 pairs; 6 – 12 AWG	9 / 3 pairs; 6 – 12 AWG				
	Combined input (fuse-less) (SE-xxx-USxxlxxWx)	N/A	3 pairs / 1 pair, 2 – 4 AWG; copper or aluminum				
Dimensions (H x W x D)		Synergy Unit: 22 x 12.9 x 10.75 / 558 x 328 x 273 Synergy Manager: 14.17 x 22.4 x 11.6 / 360 x 560 x 295					in / mm
Weight		Synergy Unit: 70.4 / 32 Synergy Manager: 39.6 / 18					lb / kg
Operating Temperature Range		-40 to +140 / -40 to +60 ⁽⁶⁾					*F / °C
Cooling		Fan (user replaceable)					
Noise		< 67					dBA
Protection Rating		NEMA 3R					
Mounting		Brackets provided					

(5) Fusing is not included with the multi-input version of the Synergy Manager.
(6) For power derating information, see the [Temperature Derating](#) technical note for North America.

*Eligibility for Domestic Content

As it relates to the domestic content rules, the U.S. Department of Treasury and the IRS have not yet issued proposed or final regulations. Rather, the IRS has issued three notices - Notice 2023-38, Notice 2024-41 and Notice 2025-08. These notices provide guidance regarding the domestic content rules. SolarEdge products referenced herein are manufactured with the intent to be eligible for inclusion under the elective safe harbor table in calculating the Domestic Cost Percentage under the "Rooftop (MLPE)" category (under IRS Notices 2024-41 and 2025-08, depending on the PN used – see chart below). Eligibility is subject to the installation of qualified USA-Manufactured inverters and Power Optimizers (C651U) in the same project. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% Domestic Content bonus, to determine how the applicable rules apply to your project. The forward-looking statements in this document are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

PN	Domestically produced MPCs per notice 2024-41*	Domestically produced MPCs per notice 2025-08*
USESUK-USR0INN6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESUK-USR0INN8, when paired with C651U	Printed Circuit Board Assemblies, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

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Cautionary Note Regarding Market Data and Industry Forecasts: This brochure may contain market data and industry forecasts from certain third-party sources. This information is based on industry surveys and the preparer's expertise in the industry and there can be no assurance that any such market data is accurate or that any such industry forecasts will be achieved. Although we have not independently verified the accuracy of such market data and industry forecasts, we believe that the market data is reliable and that the industry forecasts are reasonable.



SYSTEM INFO.		
(199)AE SOLAR GMBH		
AE595CMD-144BDS 595W MODULE		
(01) SOLAREEDGE SE100KUS (480V) INVERTER		
DC SYSTEM SIZE: 118.405 KWDC		
AC SYSTEM SIZE: 100.00 KWAC		
REVISIONS		
DESCRIPTION	DATE	REV
Signature with Seal		
PROJECT NAME & ADDRESS		
DATE: 12/18/2025		
SHEET NAME		
EQUIPMENT SPECIFICATION		
SHEET SIZE		
ANSI B 24" X 36"		
SHEET NUMBER		
PV-7A		

Commercial Power
Optimizer
USA Domestic Content Eligible*
C652U

POWER OPTIMIZER



SolarEdge's USA-manufactured offering for C&I carport applications, for power optimization at the module level

- Eligible for Domestic Content*

SolarEdge USA-manufactured power optimizers, when paired with certain SolarEdge USA-manufactured inverters, are intended to be eligible for the enhanced federal income tax credit for domestic content
- Enhanced Monitoring and Visibility

Maximum system visibility up to the individual module level

Pinpointed fault detection and remote troubleshooting
- Higher Energy Yields

Generates maximum power from each PV module

High efficiency (99.5%)

Supports high power and bifacial PV modules, including G12 modules
- Maximum Protection with Built-in Safety

Designed to automatically reduce high DC voltage to touch-safe levels, upon grid/inverter shutdown, with SafeDC™

Includes SolarEdge Sense Connect, designed to prevent arcs by monitoring Power Optimizer connectors for overheating

* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Cost Percentage under the "Rooftop (MLPE)" category (under IRS Notice 2024-41). The PCBA, Electrical Parts, and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.



Power Optimizer
USA Domestic Content Eligible, for North America
C652U

Power Optimizer Model	C652U	
INPUT		
Rated Input DC Power ⁽¹⁾	650	W
Absolute Maximum Input Voltage (Voc)	80	Vdc
MPPT Operating Range	12.5 – 80	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module ⁽²⁾	20	Adc
Maximum Adjusted Short Circuit Current (with Safety Factor) ⁽³⁾	25	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overvoltage Category	II	
OUTPUT DURING OPERATION		
Maximum Output Power	650	Wdc
Maximum Output Current	24	Adc
Maximum Output Voltage	60	Vdc
SAFETY FEATURES		
SafeDC™	Yes	
Safety Output Voltage per Power Optimizer	0.5 + 0.075	Vdc
Sense Connect	Yes	
STANDARD COMPLIANCE		
EMC	FCC Part 15; IEC 61000-6-2; IEC 61000-6-3	
Safety	IEC62109-1 (class II safety); UL 1741; CSA C22.2#107.1	
Material	UL94 V-0, UV Resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters ⁽⁴⁾	Commercial Three Phase Inverters with one of the following part number structures: USE-SIN-USxxxxxx SE-DBL-USxxxxxx SE-TRI-USxxxxxx	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	128 x 155 x 52 / 5.03 x 6.10 x 2.05	mm / in
Weight	1080 / 2.38	gr / lb
Input Connector	MC4 ⁽⁵⁾	
Input Wire Length	(+) 1.4; (-) 1.4 / (+) 4.59; (-) 4.59 ⁽⁶⁾	m / ft
Output Connector	MC4	
Output Wire Length	(+) 3.0 (-) 0.10 / (+) 9.84; (-) 0.32	m / ft
Operating Temperature Range ⁽⁷⁾	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA5P	
Relative Humidity	0 – 100	%

(1) Modules with a front side maximum power of up to 715W at STC are allowed. Up to +5% power tolerance is allowed.
(2) When using bifacial modules, consider only the front side Isc at STC (0% back side gain). For details, see [here](#).
(3) Adjusted for ambient temperature, irradiance, bifacial gain, safety factor, and so on, in accordance with NEC and CSA.
(4) For detailed inverter compatibility information, see [here](#).
(5) For other connector types please contact SolarEdge.
(6) The Sense Connect feature is only enabled on the output wire connectors. For details, see [here](#).
(7) For ambient temperatures above +65°C / +149°F, power derating is applied. For details, see [here](#).

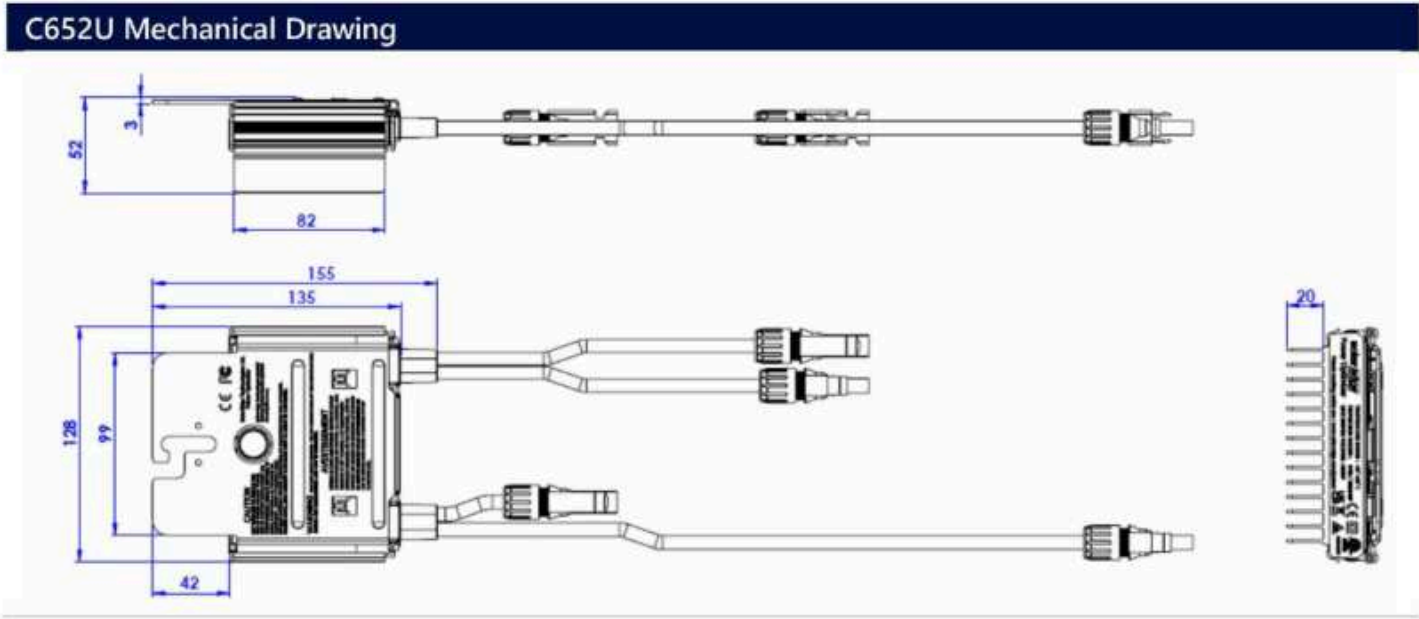
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Power Optimizer
USA Domestic Content Eligible, for North America
C652U

PV System Design Using a SolarEdge Inverter ⁽⁸⁾	208V Grid SE10K	208V Grid SE17.3K*	277/480V Grid SE30K, SE33.3K*	277/480V Grid SE40K*	
Compatible Power Optimizers					
Minimum String Length	Power Optimizers	13	13	18	
	PV Modules	13	13	18	
Maximum String Length	Power Optimizers	57	57	57	
	PV Modules	57	57	57	
Maximum Continuous Power per String		10,000	9600	20,400	W
		1 string or more – 15,000	1 string – 11,400 2 strings or more – 15,600	1 string – 22,650 2 strings or more – 30,400	1 string – 22,650 2 strings or more – 30,400
Maximum Allowed Connected Power per String ⁽⁹⁾		Yes			
Parallel Strings of Different Lengths or Orientations		Yes			
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimizers			

*The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter.
(8) C652U cannot be mixed with any other Power Optimizer models in the same string.
(9) To connect more STC power per string, design your project using [SolarEdge Designer](#).



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SYSTEM INFO.		
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AE595CMD-144BDS 595W MODULE		
(01) SOLAREEDGE SE100KUS (480V) INVERTER		
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AC SYSTEM SIZE: 100.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025
SHEET NAME EQUIPMENT SPECIFICATION
SHEET SIZE ANSI B 24" X 36"
SHEET NUMBER PV-8

ROOFMOUNT | RM10 EVO



LAY IT DOWN AND POWER UP! Unirac has taken the tried-and-true form and functionality of RM10 and evolved it to maximize the potential of flat roof solar projects. We have paired simplicity with power by improving the function, strength and reliability of the module clamps and modified the shape of the north row bay to optimize space and increase module density by up to 20%. The system continues to consist of only three major components, minimizing installation time and reducing soft costs. Quickly design around roof obstacles and bond the system with just the turn of a wrench. As with our legacy systems, optional roof attachments, roof pads, and MLPE mounts provide a complete solution. Unirac's unmatched commercial project support makes construction easy, from permitting through installation, and as always, Unirac is supported by North America's largest distribution network and industry leading 25-year warranty. AERODYNAMIC DESIGN. SIMPLICITY OF FORM.



LAY IT DOWN AND POWER UP!

FOR QUESTIONS OR CUSTOMER SERVICE VISIT UNIRAC.COM OR CALL (505) 248-2702

ROOFMOUNT | RM10 EVO



STREAMLINED DESIGN. EVOLVED SIMPLICITY. OPTIMIZED FOR POWER DENSITY.
THREE MAJOR COMPONENTS. ONE TOOL.

RM10 EVO supports most framed PV modules (conventional, bi-facial, and large format) at a 10-degree tilt. The component list consists of three SKUs- a fully assembled ballast bay, a tucked north row bay and a redesigned universal module clamp. Together this system enables improved 13" row spacing and up to a 20% increase in the number of modules installed on the roof. Our legacy RM10 system has over a decade long proven track record, and we have retained all the features that will make RM10 EVO as reliable, simple to install, and robust. UL2703 certified grounding path from module to ballast bay, with just the turn of a wrench. RM10 EVO is designed to conveniently work with off the shelf wire management products.

AVAILABILITY NATIONWIDE NETWORK

UNIRAC maintains the largest network of stocking distributors for our racking solutions. Our partners have distinguished their level of customer support, availability, and overall value, thereby providing the highest level of service to users of UNIRAC products. Count on our partners for fast and accurate delivery to meet your project needs. Visit unirac.com for a list of distributors.

AUTOMATED DESIGN TOOL DESIGN PLATFORM AT YOUR SERVICE

Creating a bill of materials is just a few clicks away with U-Builder, a powerful online tool that streamlines the process of designing a code compliant solar mounting system. Save time by creating a user profile, and recall preferences and projects automatically when you log in. You will enjoy the ability to share projects with customers; there's no need to print results and send to a distributor, just click, and share.

LISTED UL2703 BONDING & GROUNDING
MECHANICAL LOADING
SYSTEM FIRE CLASSIFICATION

UNIRAC CUSTOMER SERVICE MEANS THE HIGHEST LEVEL OF PRODUCT SUPPORT

UNMATCHED EXPERIENCE

CERTIFIED QUALITY

ENGINEERING EXCELLENCE

BANKABLE WARRANTY

DESIGN TOOLS

PERMIT DOCUMENTATION

TECHNICAL SUPPORT

UNIRAC's technical support team is dedicated to answering questions & addressing issues in real time. An online library of documents including engineering reports, stamped letters and technical data sheets greatly simplifies your permitting and project planning process.

CERTIFIED QUALITY PROVIDER

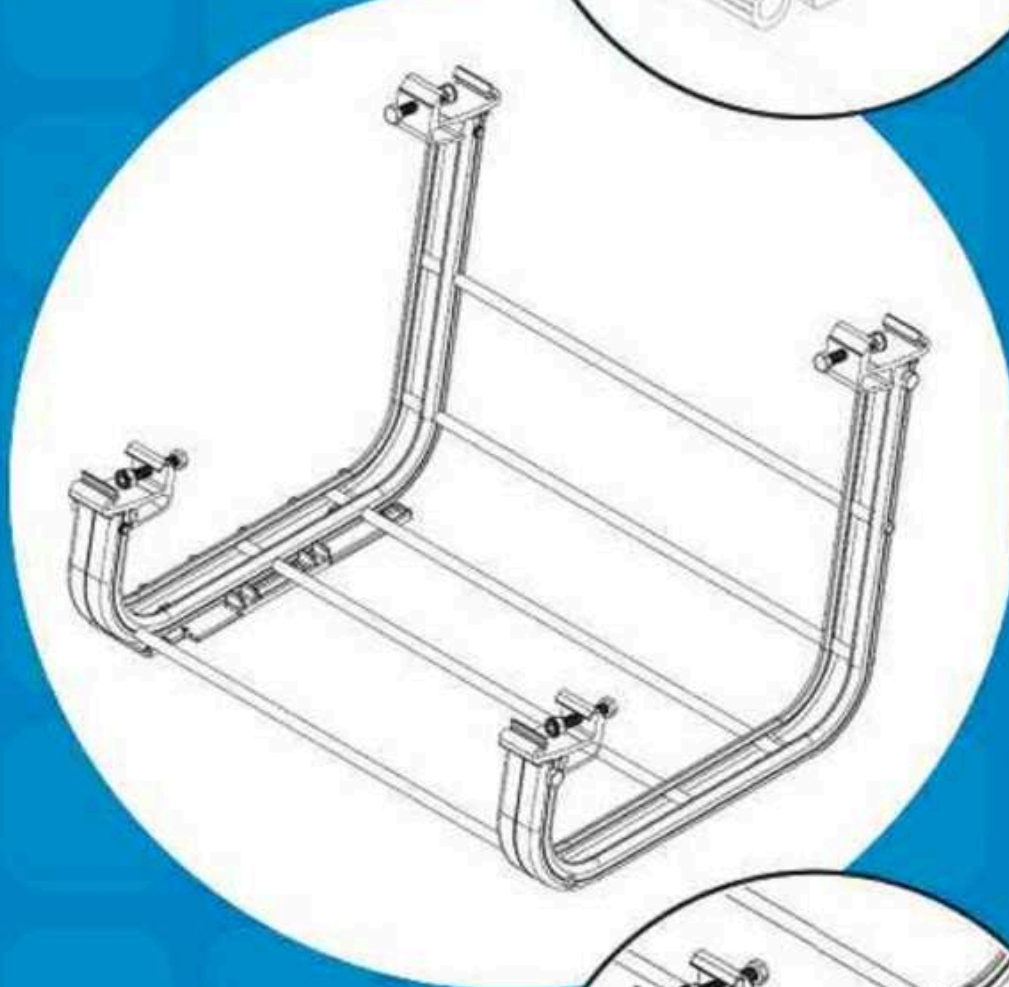
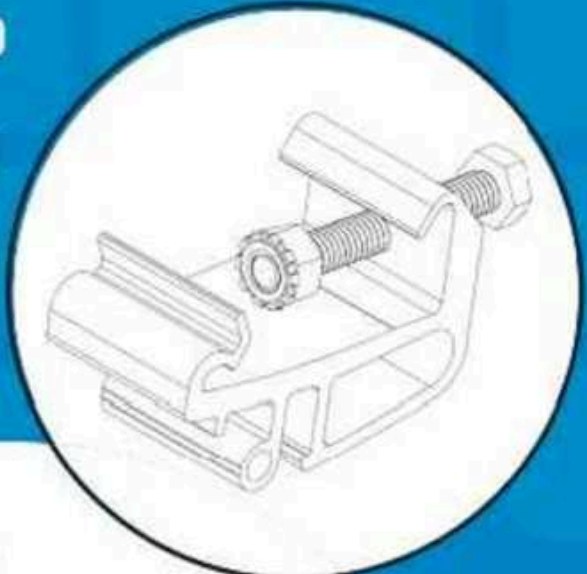
UNIRAC is the only PV mounting vendor with ISO certifications for 9001:2015, 14001:2015 and OHSAS 18001:2007, which means we deliver the highest standards for fit, form, and function. These certifications demonstrate our excellence and commitment to first class business practices.

BANKABLE WARRANTY

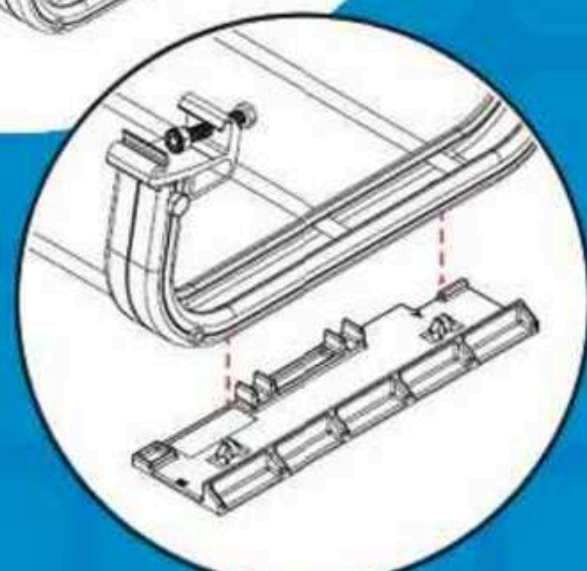
Don't leave your project to chance, UNIRAC has the financial strength to back our products and reduce your risk. Have peace of mind knowing you are receiving products of exceptional quality. **ROOFMOUNT** is covered by a twenty five (25) year limited product warranty.

PROTECT YOUR REPUTATION WITH QUALITY RACKING SOLUTIONS BACKED BY ENGINEERING EXCELLENCE AND A SUPERIOR SUPPLY CHAIN
PUB2022JAN11-VERSION 2

IMPROVED CLAMP FEATURES



OPTIONAL UNIVERSAL ROOF PAD



SYSTEM INFO.		
(199)AE SOLAR GMBH		
AE595CMD-144BDS 595W MODULE		
(01) SOLAREEDGE SE100KUS (480V) INVERTER		
DC SYSTEM SIZE: 118.405 KWDC		
AC SYSTEM SIZE: 100.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

DATE: 12/18/2025
SHEET NAME EQUIPMENT SPECIFICATION
SHEET SIZE ANSI B 24" X 36"
SHEET NUMBER PV-9