



CERTIFICATE OF APPROPRIATENESS APPLICATION FORM

Incomplete applications will not be processed for Commission review.
Please print legibly.

1. **HISTORIC NAME OF PROPERTY OR HISTORIC DISTRICT:** (if known)

ADDRESS OF PROPERTY:

2. **NAME AND ADDRESS OF OWNER:**

Name(s):

Address:

City:

State:

ZIP:

Email:

Telephone number (area code & number) Daytime:

Evening:

3. **APPLICANT, AGENT OR CONTRACTOR:** (if different from owner)

Name(s):

Address:

City:

State:

ZIP Code:

Email:

Telephone number (area code & number) Daytime:

Evening:

4. **ATTACHMENTS:** (Because projects can vary in size and scope, please call the HPC Office at 414-286-5712 for submittal requirements)

A. REQUIRED FOR MAJOR PROJECTS:

Photographs of affected areas & all sides of the building (annotated photos recommended)

Sketches and Elevation Drawings (1 full size and 1 reduced to 11" x 17" or 8 1/2" x 11")
A digital copy of the photos and drawings is also requested.

Material and Design Specifications (see next page)

B. NEW CONSTRUCTION ALSO REQUIRES:

Floor Plans (1 full size and 1 reduced to a maximum of 11" x 17")

Site Plan showing location of project and adjoining structures and fences

PLEASE NOTE: YOUR APPLICATION CANNOT BE PROCESSED UNLESS BOTH PAGES OF THIS FORM ARE PROPERLY COMPLETED AND SIGNED.

5. DESCRIPTION OF PROJECT:

Tell us what you want to do. Describe all proposed work including materials, design, and dimensions. Additional pages may be attached via email.

6. SIGNATURE OF APPLICANT:

Colin Buschel

Signature

Please print or type name

Date

This form and all supporting documentation MUST arrive by 4:00 pm (11:59 pm via email) on the deadline date established to be considered at the next Historic Preservation Commission Meeting. Any information not provided to staff in advance of the meeting will not be considered by the Commission during their deliberation. Please call if you have any questions and staff will assist you.

Mail or Email Form to:

Historic Preservation Commission
City Clerk's Office
841 N. Broadway, Rm. B1
Milwaukee, WI 53202

PHONE: (414) 286-5712 or 286-5722

hpc@milwaukee.gov

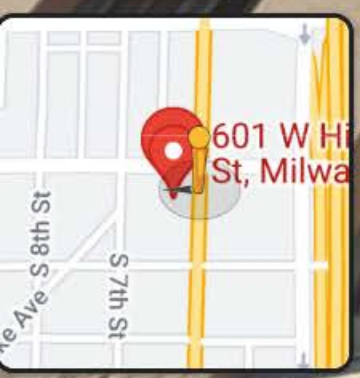
www.milwaukee.gov/hpc

Or click the SUBMIT button to automatically email this form for submission.

1707 S 6th St
Milwaukee, Wisconsin



Street View - Oct 2019



Google





Google





COMPANY INFORMATION

ALL ENERGY SOLAR, INC
1264 ENERGY LANE
ST PAUL, MN 55108
(800) 620-3370
INFO@ALLENERSOLAR.COM

CLIENT INFORMATION

**TS INVESTMENT GROUP
LLC**
601 WEST HISTORIC
MITCHELL STREET
MILWAUKEE, WI 53204
PO 56960

SYSTEM DETAILS

TOTAL: (130) JINKO JKM455M-7RL3-TV-A3-US 455W SOW SOLAR MODULE 455W MODULES = 59.15kW

ARRAY 1:
• (10) JINKO JKM455M-7RL3-TV-A3-US 455W SOW SOLAR MODULE 455W MODULES = 4.55kW
• 20° TILT, 270° AZIMUTH

ARRAY 2:
• (10) JINKO JKM455M-7RL3-TV-A3-US 455W SOW SOLAR MODULE 455W MODULES = 4.55kW
• 20° TILT, 90° AZIMUTH

ARRAY 3:
• (92) JINKO JKM455M-7RL3-TV-A3-US 455W SOW SOLAR MODULE 455W MODULES = 41.86kW
• 17° TILT, 180° AZIMUTH

ARRAY 4:
• (18) JINKO JKM455M-7RL3-TV-A3-US 455W SOW SOLAR MODULE 455W MODULES = 8.19kW
• 18° TILT, 90° AZIMUTH

REVISIONS

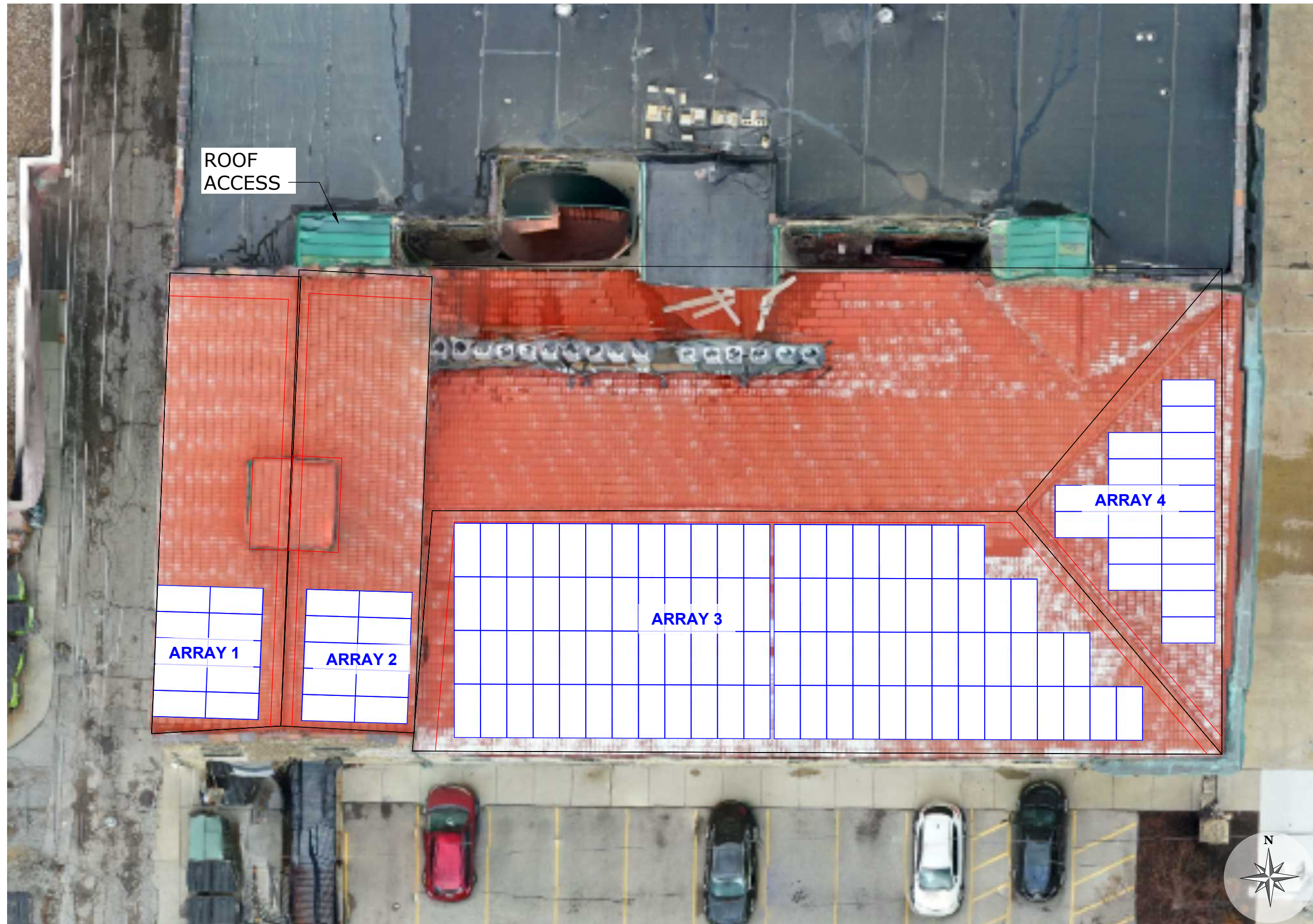
LAST: 02/10/2023 JM

SHEET TITLE

COVER PAGE

SHEET NUMBER

G-901



ROOF ACCESS

ARRAY 1

ARRAY 2

ARRAY 3

ARRAY 4



1

2

3

4

5

6

7

8

A

B

C

D

E

A

B

C

D

E

2



SOLARHOOKS

PRO SERIES

UNIVERSAL

INSTALLATION GUIDE

3
PAGE



COMPANY INFORMATION

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NOTES:

1. ELEVATIONS MAY VARY
DEPENDING ON GROUND ELEVATION
BUT ARE DRAWN TO THE BEST OF
OUR ABILITY.

ARRAY 1:
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REVISIONS

LAST: 02/10/2023 JM

SHEET TITLE

ATTACHMENT
DETAIL 1

SHEET NUMBER

S-301



1. Remove tiles around installation area.



2. Locate and mark rafters.



3. Position hook, adjusting arm-base bolt position as needed. Use 3/16" bit to drill 2 pilot holes.

Torque arm-base nut to 16 ft. lbs.



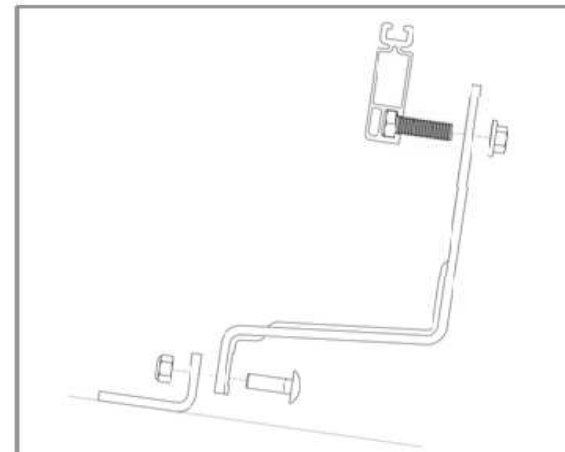
4. Remove hook, clean debris and fill pilot holes with roofing sealant.



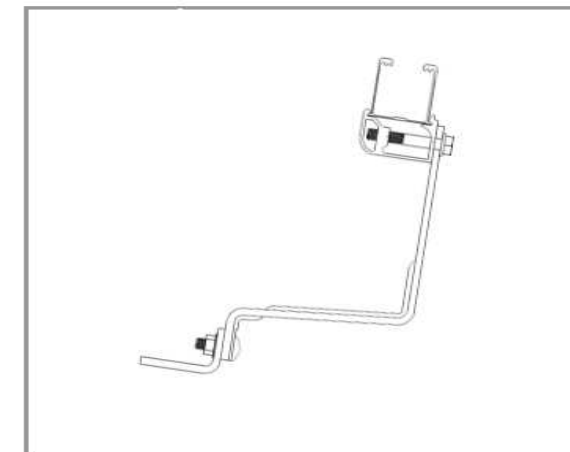
5. Reposition hook, secure with included lag screws.



6. Replace tiles, if necessary notch with grinder to ensure proper fit.



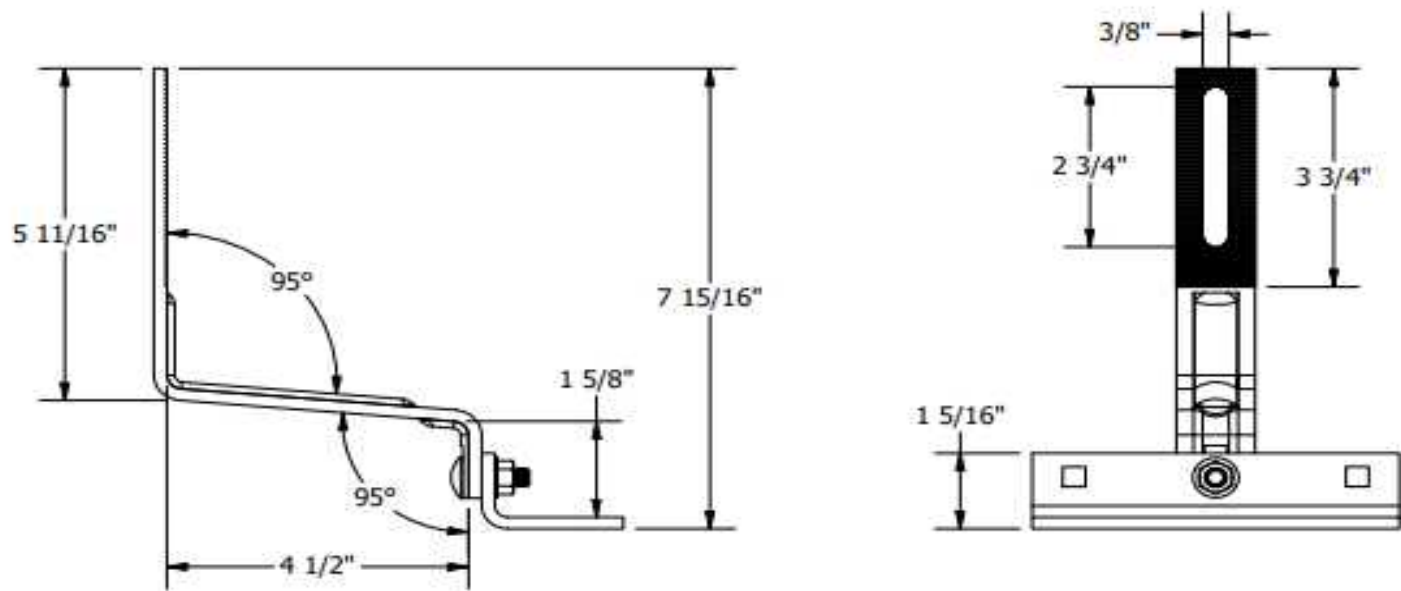
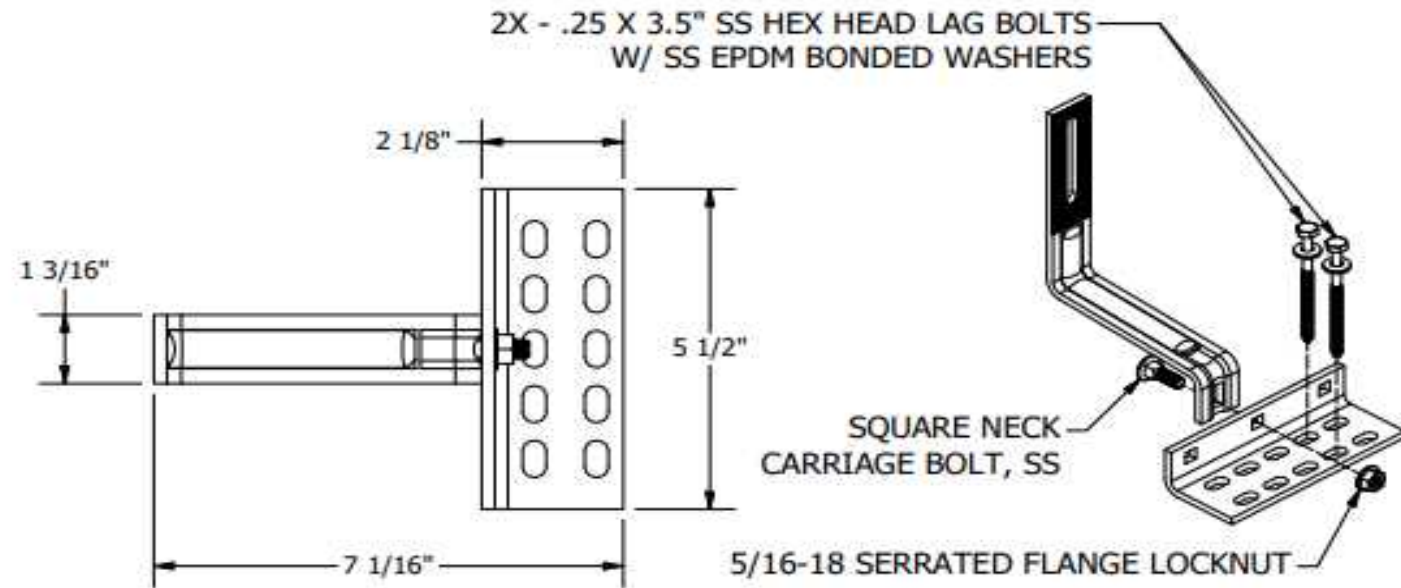
Install components as shown above.



Install components as shown above.

NOTE: SOLARHOOKS UNIVERSAL CT5 is compatible with all tile profiles. Installation process is the same for all tile profiles.
NOTE: Refer to the SOLARMOUNT or NXT HORIZON Installation Guide for the remaining system installation.

- NOTES:
 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH SOLARHOOKS INSTALLATION GUIDE.
 2. PACKAGING: KITS OF 30



PART # TABLE	
P/N	DESCRIPTION
004CT5H	SOLARHOOK UNIVERSAL

UNIRAC
 1411 BROADWAY BLVD. NE
 ALBUQUERQUE, NM 87102 USA
 PHONE: 505.242.6411
 WWW.UNIRAC.COM

PRODUCT LINE:	SOLARHOOK
DRAWING TYPE:	PART & ASSEMBLY
DESCRIPTION:	UNIVERSAL
REVISION DATE:	11/21/2019

DRAWING NOT TO SCALE
 ALL DIMENSIONS ARE
 NOMINAL

PRODUCT PROTECTED BY
 ONE OR MORE US PATENTS
 LEGAL NOTICE

SH2-P04
 SHEET



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CLIENT INFORMATION

TS INVESTMENT GROUP
 LLC
 601 WEST HISTORIC
 MITCHELL STREET
 MILWAUKEE, WI 53204
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REVISIONS

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SHEET TITLE

ATTACHMENT
 DETAIL 2

SHEET NUMBER

S-302



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SYSTEM DETAILS

- SYNERGY UNIT 1
- SYNERGY UNIT 2
- SYNERGY UNIT 3

REVISIONS

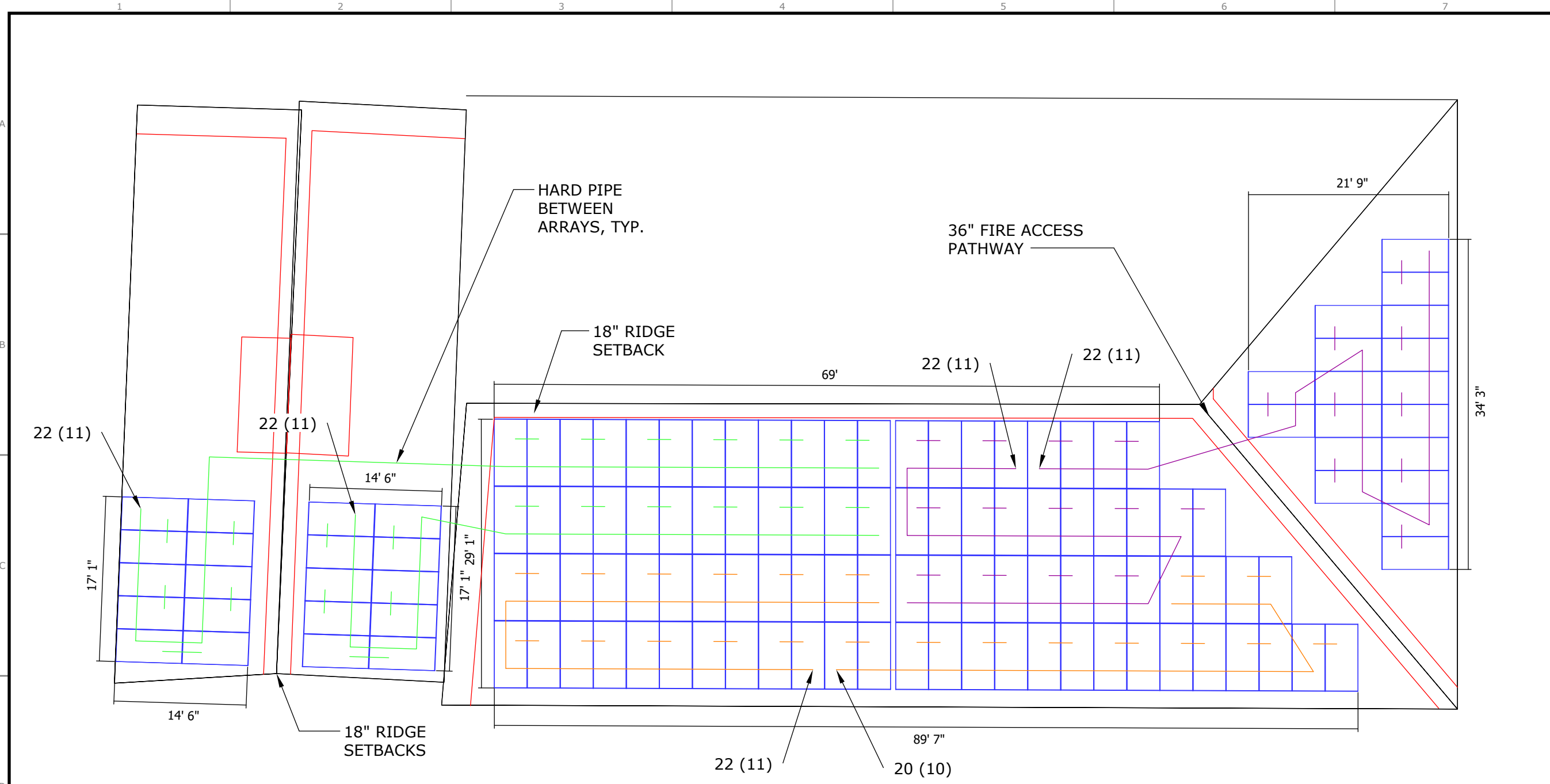
LAST: 02/10/2023 JM

SHEET TITLE

ARRAY LAYOUTS

SHEET NUMBER

S-101



JINKO JKM455M-7RL3-TV-A3-US 455W SOW SOLAR MODULE	86.81 x 40.63 x 1.57"
P1101±	SE50K-US (208V)
Max string length:	23 Modules (12 Optimizers)
	[Minimum 19 (10)] 2+ Strings, all within 1000W
Max String Inputs:	9



DISTANCES:

SOLAR PANELS - DC OPTIMIZERS: 5'
 DC OPTIMIZERS - STRING INVERTER(S): 150'
 STRING INVERTER(S) - UTILITY AC DISCONNECT: 2'
 UTILITY AC DISCONNECT - PV PRODUCTION METER: 2'
 PV PRODUCTION METER - MAIN ELECTRIC SERVICE: 2'
 MAIN ELECTRIC SERVICE - UTILITY METER: 2'

LABELS LOCATED ON PV PRODUCTION METER, BI-DIRECTIONAL/UTILITY METER, AC DISCONNECT, INVERTER(S), AND APPROPRIATE LABELS ON MAIN ELECTRIC SERVICE. ALL LABELS ARE PERMANENT, WEATHERPROOF, AND DURABLE.

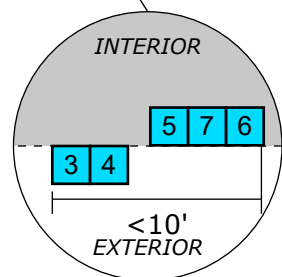
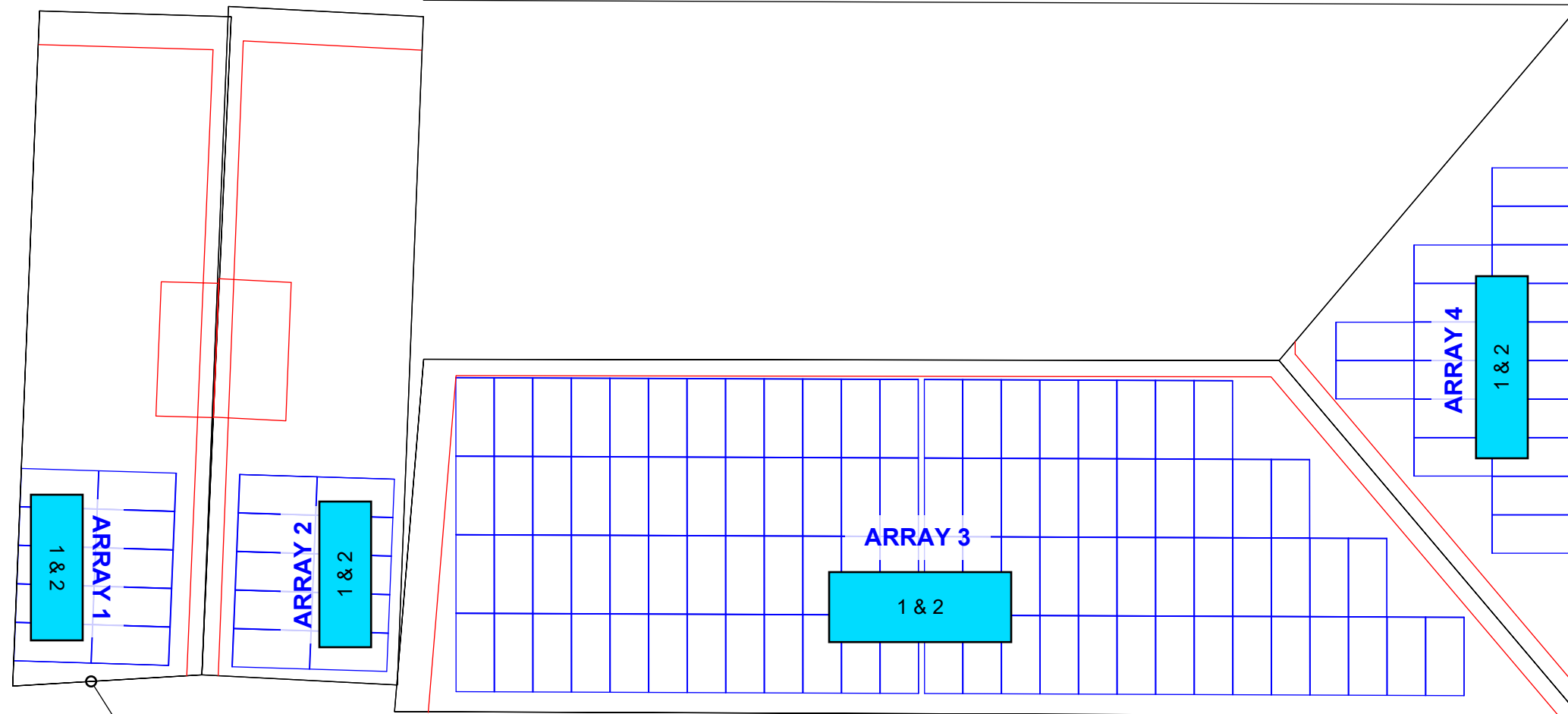
THERE ARE NO CLEARANCE ISSUES DUE TO OVERHEAD POWERLINES.

NOTES:

1. LOCATION OF SERVICE PANEL AND ELECTRICAL EQUIPMENT ARE SHOWN. FINAL LOCATION MAY CHANGE
2. LOCATION OF SERVICE PANEL AND ADDITIONAL ELECTRICAL EQUIPMENT NOT DRAWN TO SCALE
3. **AC DISCONNECT AND PRODUCTION METER WITHIN 10' OF MAIN SERVICE METER/BI-DIRECTIONAL METER. 24/7 UNESCORTED KEYLESS ACCESS TO BE PROVIDED FOR ALL UTILITY EQUIPMENT.**
4. PV EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH NEC 690 AND POSTED WITH APPLICABLE WARNINGS, SIGNAGE, AND PLAQUES PER NEC 705-10, 690-17, & 690-64 (b)(5).

CALL-OUTS:

- 1: SOLAR PANELS
- 2: DC OPTIMIZERS
- 3: STRING INVERTER(S)
- 4: UTILITY AC DISCONNECT
- 5: PV PRODUCTION METER
- 6: MAIN ELECTRIC SERVICE
- 7: UTILITY METER



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ACCOUNT: 0703117407-00004

PREMISE:

METER: PNXZT22802

REVISIONS

LAST: 02/10/2023 JM

SHEET TITLE

ELECTRICAL SITE MAP

SHEET NUMBER

E-402





THE MOST DEPENDABLE SOLAR BRAND

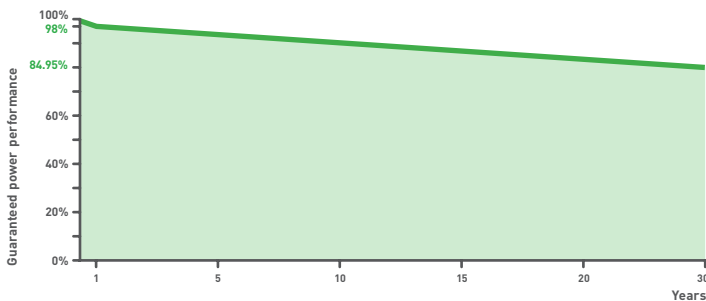
EAGLE 78TR G4b

445-465 WATT
TILING RIBBON BIFACIAL MODULE
Positive power tolerance of 0~+3%

- NYSE-listed since 2010, Bloomberg Tier 1 manufacturer
- Best-selling panel globally for last 4 years
- Top performance in the strictest 3rd party labs
- 99.9% on-time delivery
- Automated manufacturing utilizing artificial intelligence
- Vertically integrated, tight controls on quality
- Premium solar panel factories in USA and Malaysia

LINEAR PERFORMANCE WARRANTY

30-Year Performance Warranty



Nomenclature:

JKM465M-7RL3-TV

Type	Cell Size	Backsheet
78TR	163.75mm	Transparent



- ISO9001:2015 Quality Standards
- ISO14001:2015 Environmental Standards
- IEC61215, IEC61730 certified products

- ISO45001:2018 Occupational Health & Safety Standards
- UL61730 certified products

KEY FEATURES



TR Technology

TR technology eliminates cell gaps to increase module efficiency and power



Bifacial Power Gain

Bifacial cell architecture allows backside bonus and more lifetime power yield



Transparent Backsheet

Easier installation and lower balance of system cost than dual glass solution



Designed for Long Life

Uses the same DuPont protective film as the Space Station, Mars Lander, and jetliners. 30-year warranty



Shade Tolerant

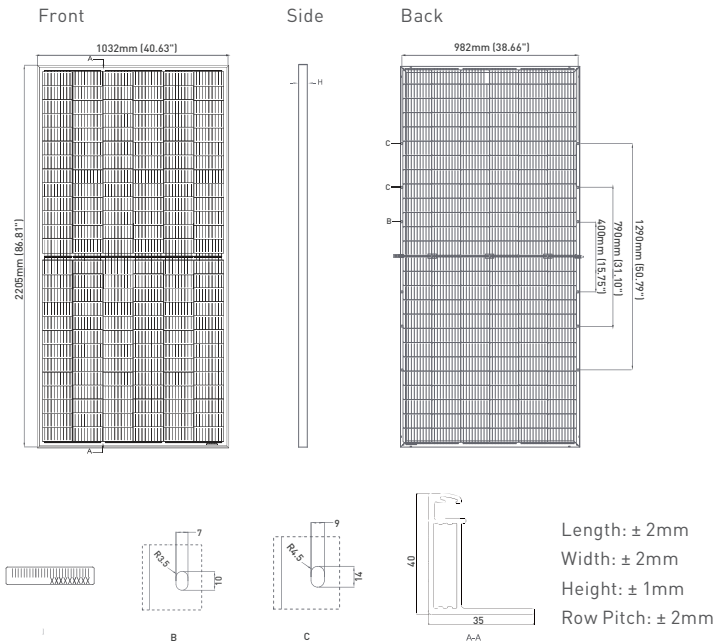
Twin array design allows continued performance even with shading by trees or debris



Protected Against All Environments

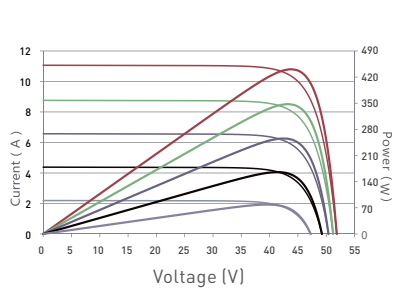
Certified to withstand humidity, heat, rain, marine environments, wind, hailstorms, and packed snow

ENGINEERING DRAWINGS

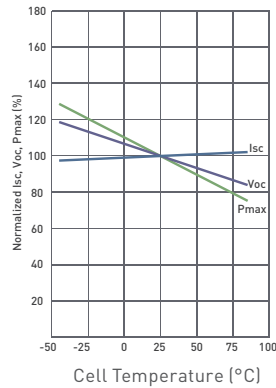


ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

Current-Voltage & Power-Voltage Curves (475W)



Temperature Dependence of Isc, Voc, Pmax



MECHANICAL CHARACTERISTICS

No. of Half Cells	156 (2x78)
Dimensions	2205x1032x40mm [86.81x40.63x1.57in]
Weight	26.5kg [58.42lbs]
Front Glass	3.2mm, Anti-Reflection Coating High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Output Cables	12 AWG, 1400mm (55.12in) or Customized Length
Fire Type	Type 1
Pressure Rating	5400Pa (Snow) & 2400Pa (Wind)
Hailstone Test	45mm Hailstones at 29m/s

TEMPERATURE CHARACTERISTICS

Temperature Coefficients of Pmax	-0.35%/°C
Temperature Coefficients of Voc	-0.28%/°C
Temperature Coefficients of Isc	0.048%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C
Refer. Bifacial Factor	70±5%

MAXIMUM RATINGS

Operating Temperature [°C]	-40°C~+85°C
Maximum System Voltage	1500VDC (UL and IEC)
Maximum Series Fuse Rating	25A

PACKAGING CONFIGURATION

(Two pallets = One stack)
27pcs/pallet, 54pcs/stack, 540pcs/40'HQ Container

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

	Maximum Power (Pmax)	467Wp	473Wp	478Wp	483Wp	488Wp
5%	Module Efficiency (%)	20.53%	20.76%	20.99%	21.23%	21.46%
15%	Maximum Power (Pmax)	512Wp	518Wp	523Wp	529Wp	535Wp
	Module Efficiency (%)	22.49%	22.74%	22.99%	23.25%	23.50%
25%	Maximum Power (Pmax)	556Wp	563Wp	569Wp	575Wp	581Wp
	Module Efficiency (%)	24.44%	24.72%	24.99%	25.27%	25.54%

ELECTRICAL CHARACTERISTICS

Module Type	JKM445M-7RL3-TV		JKM450M-7RL3-TV		JKM455M-7RL3-TV		JKM460M-7RL3-TV		JKM465M-7RL3-TV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	445Wp	331Wp	450Wp	335Wp	455Wp	339Wp	460Wp	342Wp	465Wp	346Wp
Maximum Power Voltage (Vmp)	43.13V	39.51V	43.19V	39.62V	43.25V	39.73V	43.32V	39.84V	43.38V	39.95V
Maximum Power Current (Imp)	10.32A	8.38A	10.42A	8.45A	10.52A	8.52A	10.62A	8.59A	10.72A	8.66A
Open-circuit Voltage (Voc)	51.60V	48.70V	51.70V	48.80V	51.80V	48.89V	51.90V	48.99V	52.00V	49.08V
Short-circuit Current (Isc)	11.08A	8.95A	11.17A	9.02A	11.26A	9.09A	11.35A	9.17A	11.44A	9.24A
Module Efficiency STC (%)	19.56%		19.78%		20.00%		20.21%		20.43%	

*STC: ☀ Irradiance 1000W/m²

NOCT: ☀ Irradiance 800W/m²

🌡 Cell Temperature 25°C

🌡 Ambient Temperature 20°C

☁ AM = 1.5

☁ AM = 1.5

🌀 Wind Speed 1m/s

*Power measurement tolerance: ±3%

The company reserves the final right to explain any of the information presented. JKM445-465M-7RL3-TV-A3-US

BUILDING YOUR TRUST IN SOLAR. JINKOSOLAR.US

Jinko Solar