

0365.00

**TOWN OF HIGH LEVEL  
DEVELOPMENT PERMIT**

**PERMIT NO.:** **DP25-016**  
**PROPOSED USE:** **Permitted Use – 697.2 ft<sup>2</sup> Solar Collector (Solar Collectors)**  
**APPLICANT:** **Infinity Solar Group Ltd**  
**LANDOWNER:** **Canadian Imperial Bank of Commerce c/o BGIS**  
**LOCATION:** **Lot 14 & 15, Block 24, Plan 4507NY**

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**A development involving Application No. DP25-016 has been Approved with Conditions.**

- 1. The site shall be developed in accordance with the site drawings and information attached hereto as Schedule A.**
- 2. The Applicant/Registered Owner shall provide the development authority with a copy of the required approvals from the Alberta Utilities Commission (AUC) and any other provincial or federal agency or utility company prior to the operation of any grid-connected solar energy system.**
- 3. Development must be commenced within one (1) year from the Date of Issue. If at the expiry of this period, the development has not commenced, this Permit shall be null and void.**
- 4. The Applicant/Registered Owner shall ensure there is no damage to municipal property resulting from this permit. Costs for repairs of municipal property will be assessed by the Town of High Level and will be charged back to the applicant.**

You are hereby authorized to proceed with the development specified, provided that any stated conditions are complied with, that all other applicable permits are obtained, and that the appropriate appeal period has been exhausted. Should an appeal be made against this decision to the Subdivision and Development Appeal Board, this Development Permit shall not come into effect until the appeal has been determined and the Permit upheld, modified or nullified.

**DATE OF DECISION OF DEVELOPMENT PERMIT:** **July 4, 2025**

**DATE OF ISSUE OF DEVELOPMENT PERMIT:** **July 4, 2025**

**DATE OF VALIDITY OF DEVELOPMENT PERMIT:** **July 26, 2025**

**SIGNATURE OF DEVELOPMENT AUTHORITY:**

  
\_\_\_\_\_  
Viv Thoss

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NOTES:

1. If the development is found to be incorrectly placed, the applicant may be required to move or remove the development at the sole expense of the Applicant/Registered Owner. Any changes to the attached plans will require a new development permit.
2. An appeal can be made by filing a written notice of appeal along with payment to the **Subdivision and Development Appeal Board (10511 103<sup>rd</sup> Street, High Level, AB, T0H 1Z0)** within 21 days from the date of the receipt of this decision. In the case of an appeal made by a person referred to in section 685(2) of the *Municipal Government Act*, within 21 days after the date on which the notice of the issuance of the permit was given.
3. **This is a Development Permit ONLY.** Issuance of this Permit does not excuse the applicant from satisfying all other applicable municipal, provincial and/or federal requirements.

**OTHER PERMITS ARE REQUIRED**

In the interest of public safety and as required by the Safety Codes Act construction permits must be obtained before commencing any work. Required permits may include building, electrical, gas, plumbing, and private sewage. Additionally, the Town of High Level requires permits for water & sewer connection, new accesses, and driveways.

**PLEASE NOTE**

The Applicant and/or Registered Owner are responsible for applying for, and receiving, all necessary permits prior to beginning construction. Ensure that you or your contractors obtain all other required permits related to the development. For more information regarding how to obtain the required permits, contact Superior Safety Codes 1-866-999-4777. If you are unsure which additional municipal permits you may need, please contact [development@highlevel.ca](mailto:development@highlevel.ca).

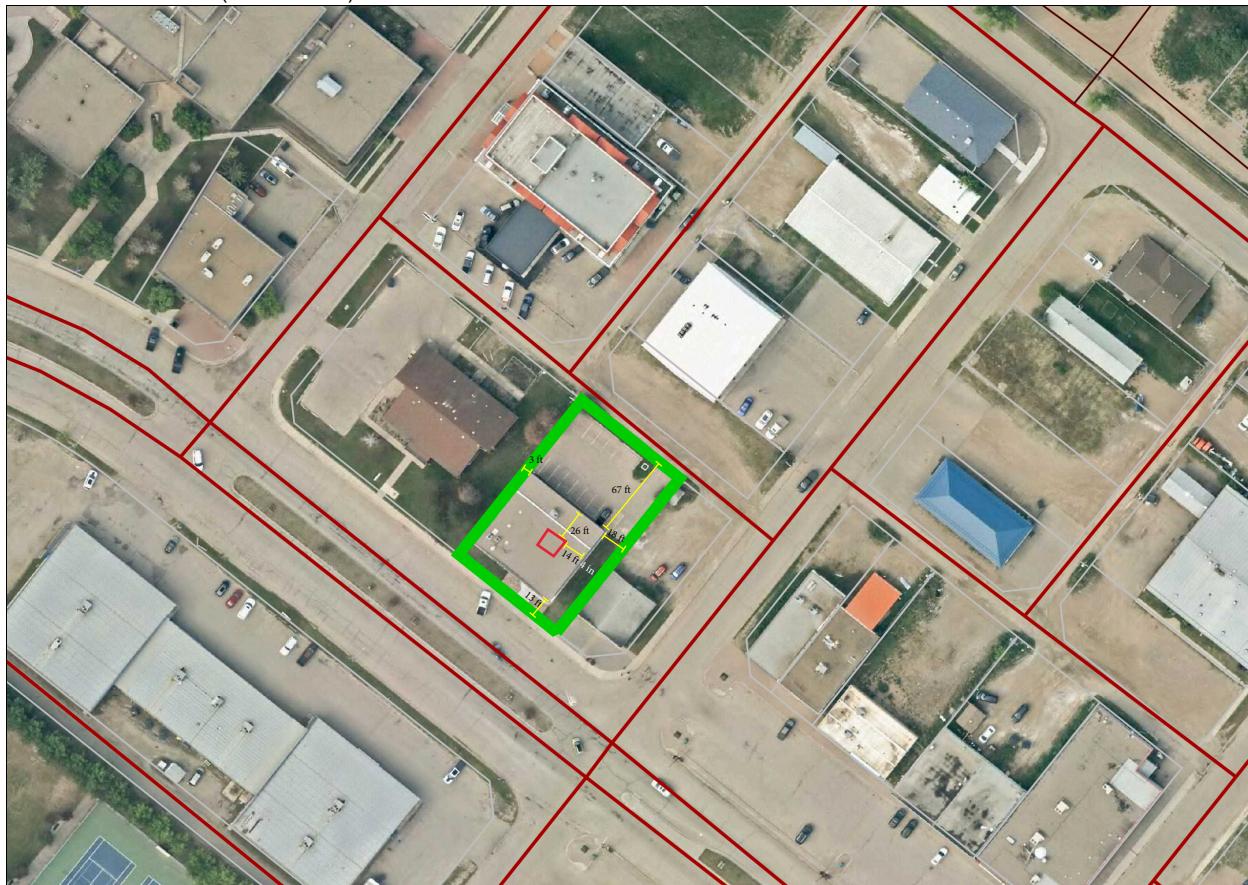
**SCHEDULE A**

Approved July 4, 2025



(12 pages)

Viv Thoss  
Development Authority



Legend	
Roads	
Railway	
Railway Crossings	
Town Boundary	
Cadastre	



10 yd  
10 m

Scale 1: 1,347

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Town of High Level

CIBC High Level

Date Created: 6/19/2025

# NEW PV SYSTEM: 14.64kWp

## CIBC - HIGH LEVEL

### 110004 100TH AVE

### HIGH LEVEL AB, T0H 1Z0

#### GENERAL NOTES

- 1.1.1 **PROJECT NOTES**
- 1.1.2 THIS PHOTOVOLTAIC (PV) SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC) ARTICLE 690, ALL MANUFACTURE LISTINGS 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 MICRONINVERTER IN ACCORDANCE WITH NEC 390.41 (B)
- 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 REQUIRED BY NEC 690.4 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 [NEC 110.3].
- 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
- 1.3.3 PV RACKING SYSTEM INSTALLATION
- 1.3.4 PV MODULE AND INVERTER INSTALLATION
- 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



**1** SITE PHOTO

Scale: NTS

#### PROJECT INFORMATION

**OWNER**  
NAME: CIBC  
**PROJECT MANAGER**  
NAME: --  
PHONE: --

**CONTRACTOR**  
NAME: INFINITY SOLAR GROUP LTD.

**AUTHORITIES HAVING JURISDICTION**  
BUILDING: --  
NAME: TOWN OF HIGH LEVEL  
UTILITY: --

**DESIGN SPECIFICATIONS**  
OCCUPANCY: RESIDENTIAL  
CONSTRUCTION: --  
GROUND SNOW LOAD: 1.48kPa  
WIND EXPOSURE: OPEN  
WIND FORCE  $q_{1/50}$ : 0.35kPa

**APPLICABLE CODES & STANDARDS**  
BUILDING: BC BUILDING CODE 2024  
ELECTRICAL: BC BUILDING CODE 2024  
ZONING: BC FIRE CODE 2024



#### CONTRACTOR

INFINITY SOLAR GROUP  
PHONE: 250-342-5993  
ADDRESS: PO 2452 Invermere, BC V0A 1K0  
LIC. NO: 770027860  
HIC. NO: -  
ELE. NO.: M9319

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NEW PV SYSTEM: 14.64kWp

#### CIBC OFFICE BUILDING

11004 100TH AVE  
HIGH LEVEL, AB  
T0H 1Z0

ENGINEER OF RECORD

11x17  
COVER

DATE: 05/23/24

SHEET LIST	
SHEET NUMBER	SHEET TITLE
T-001	COVER PAGE
G-001	NOTES
A-101	SOLAR ATTACHMENT PLAN
S-501	ASSEMBLY DETAILS

T-001

**64-06 OVERCURRENT PROTECTION (ALL RENEWABLE ENERGY SYSTEMS)**

WHERE CIRCUIT CONDUCTORS ARE CONNECTED TO MORE THAN ONE SOURCE, ALL OVERCURRENT DEVICES SHALL BE LOCATED IN SUCH A WAY THAT THEY PROVIDE OVERCURRENT PROTECTION FROM ALL SOURCES

OVERCURRENT DEVICES MARKED OR APPROVED ONLY FROM AC USE SHALL NOT BE USED IN DC CIRCUITS

CIRCUIT BREAKERS THAT ARE MARKED 'LINE' AND 'LOAD' HAVE BEEN EVALUATED FOR CONNECTION ONLY IN THE DIRECTION MARKED.

**64-060 DISCONNECTING MEANS (SEE ALSO 84-02, 84-024 & APPENDIX M)**

THE DISCONNECTING MEANS SHALL BE CAPABLE OF BEING ENERGIZED FROM BOTH SIDES, INDICATE OPEN OR CLOSED, LOCKABLE IN THE OPEN POSITION, CONFORM TO SECTION 14, CAPABLE OF OPENING AT THE RATED LOAD, CAPABLE OF BEING CLOSED UNDER FAULT CONDITIONS AND LOCATED WITHIN SIGHT AND 9M (30FT) OF OR INTEGRAL TO THE EQUIPMENT.

SOLID STATE DEVICES SHALL NOT BE USED AS ISOLATING SWITCHES OR AS A DISCONNECTING MEANS.

OUTPUT CIRCUITS RATED 48V AND GREATER SHALL HAVE A MANS TO DISABLE AND ISOLATE THEM.

DISCONNECTING MEANS SHALL BE PROVIDED TO DISCONNECT A FUSE FROM ALL SOURCES OF SUPPLY IF THE FUSE IS ENERGIZED FROM BOTH DIRECTIONS AS REQUIRED BY RULE 14-402.

DISCONNECTING MEANS ON DC CIRCUITS SHALL BE MARKED FOR THE PURPOSE FOR COMBINERS. A SINGLE DISCONNECT WITHIN 2M (6FT) OR INTEGRAL AND INTERLOCKED WITH THE COMBINER DOOR, IS REQUIRED FOR THE PHOTOVOLTAIC OUTPUT CIRCUIT RATED IN ACCORDANCE WITH RULE 64-206.

FOR RECOMBINERS A SINGLE DISCONNECT WITHIN 2M (6') OR INTEGRAL TO AND INTERLOCKED WITH THE RECOMBINER DOOR, IS REQUIRED FOR THE INVERTER INPUT CIRCUIT RATED IN ACCORDANCE WITH RULE 64-206.

**64-062 WIRING METHODS**

INSULATED CONDUCTORS FOR DC RENEWABLE ENERGY SOURCES OR SUPPLY CIRCUITS OF AN INTERACTIVE INVERTER, INSTALLED INSIDE A BUILDING OR STRUCTURE, MUST BE CONTAINED IN METALLIC RACEWAYS, METALLIC ENCLOSURES OR CABLES WHICH ARE METAL-SHEATHED OR METAL ARMORED.

**64-066 UNDERGROUND RENEWABLE ENERGY POWER SYSTEMS**

ALL SOURCE AND SUPPLY CONDUCTORS MUST HAVE OVERCURRENT PROTECTION (POSITIVE AND NEGATIVE CONDUCTORS) EXCEPT AS PER 64-214(1); INVERTERS OR CHARGE CONTROLLERS MUST BE SUITABLE FOR THE PURPOSE; THE SYSTEM MUST BE PROVIDED WITH GROUND FAULT PROTECTION; AND A SUITABLE WARNING MUST BE INSTALLED AT EACH JUNCTION BOX, DISCONNECT OR ANY OTHER DEVICE WHERE THESE CIRCUITS CAN BE EXPOSED DURING SERVICE. SEE APPENDIX M.

**64-070 EQUIPMENT BONDING**

THE INSTALLATION OF A #6 COPPER BOND CONDUCTOR, CONTINUOUS FROM THE MODULE BONDING SYSTEM, TO THE SYSTEM GROUND IN CONJUNCTION WITH AND EXTERNAL TO THE FEEDER CABLE, SHALL BE INSTALLED TO MEET THE INTENT OF THIS RULE FOR THE REMOVAL OF COMBINER BOXES, INVERTERS OR OTHER EQUIPMENT. SEE ALSO RULE 64-222, 10-708 & 22-200.

**RACKING SYSTEMS**

RACKING SYSTEMS SHALL BE APPROVED AS A BONDING SYSTEM FOR THE SPECIFIC MODULES AND THE MODULES MUST APPEAR IN THE 'VERIFIED COMPATIBLE MODULES LIST' OF THE RACKING SYSTEM. RACKING SYSTEMS USED TO BOND THE MODULES SHALL BE INSTALLED AS PER THE RACKING SYSTEM INSTALLATION MANUAL. IF THE RACKING IS NOT APPROVED AS A BONDING SYSTEM, THE SOLAR MODULES SHALL BE BONDED IN COMPLIANCE WITH THE MODULE INSTALLATION MODULE. MODULES CANNOT BE DRILLED (SEE MANUFACTURERS INSTRUCTIONS).

**64-112 UTILITY INTERACTIVE POINT OF CONNECTION (INVERTERS)**

THE OUTPUT OF AN INTERACTIVE INVERTER SHALL BE CONNECTED TO THE SUPPLY AUTHORITY SYSTEM IN ACCORDANCE WITH SECTION 84

THE OUTPUT OF AN INTERACTIVE INVERTER IS ALLOWED TO BE CONNECTED TO THE LINE SIDE OF THE SERVICE DISCONNECTING MEANS AT A DUAL LUG METER SOCKET OR OTHERS SOURCE(S).

THE OUTPUT OF AN INTERACTIVE INVERTER IS ALLOWED TO BE CONNECTED TO THE LOAD SIDE OF THE SERVICE DISCONNECTING MEANS PROVIDED THAT EACH SOURCE INTERCONNECTION IS MADE AT A DEDICATED CIRCUIT BREAKER OR FUSED DISCONNECTING MEANS. THIS POINT OF CONNECTION SHALL BE POSITIONED AT THE OPPOSITE (LOAD) END OF THE PANELBOARD, BUSBAR OR CONDUCTOR FROM THE INPUT FEEDER LOCATION OR MAIN CIRCUIT BREAKER LOCATION.

**64-210 WIRING METHODS (SEE 12-200)**

WHERE THE SOURCE AND OUTPUT CIRCUITS OPERATE AT A MAXIMUM SYSTEM VOLTAGE GREATER THAN 30V, THE WIRING IS DEEMED INACCESSIBLE TO THE PUBLIC AND NOT READILY ACCESSIBLE IF IT IS:

- CONTAINED IN A RACEWAY
- CONTAINED BEHIND METAL SCREENING OR GUARDING WITH HOLES NOT EXCEEDING 13MM (1/2") X 13MM (1/2");
- ELEVATED 2.5M OR MORE ABOVE GRADE LEVEL; OR
- LOCATED WITHIN A FENCED ENCLOSURE IN ACCORDANCE WITH RULE 26-304, 26-312 AND 26-314

CONDUCTORS AND CABLES SHALL BE SUPPORTED 300MM (12") FROM EVERY BOX AT INTERVALS NOT MORE THAN 1M (39") THROUGHOUT THE RUN.

RODENT PROTECTION IS REQUIRED ON ALL INSULATED CONDUCTORS OR CABLES, WITH THE EXCEPTION OF ARMOURED CABLES OR MI CABLES, INSTALLED ON OR ABOVE A BUILDING BY ENCLOSING THEM IN MATERIALS SUCH AS APPROVED RACEWAYS, EXPANDED METAL, SOLID METAL, METAL SCREENING (MAXIMUM 13MM (1/2") X 13MM (1/2") HOLES) OR OTHER ACCEPTABLE PROTECTION.

RPV CONDUCTORS SHALL BE PERMITTED FOR THE MODULE INTERCONNECTIONS IF THEY ARE CONTAINED IN A RACEWAY; TYPES RPV AND RPVU CONDUCTORS INSTALLED INSIDE A BUILDING OR STRUCTURE SHALL BE CONTAINED IN A METALLIC RACEWAY. SEE 64-062.

**64-212 INSULATED CONDUCTOR MARKING OR COLOR CODING**

RPVU OR RPV CONDUCTORS SHALL BE COLORED RED FOR POSITIVE, BLACK FOR NEGATIVE OR PERMANENT SURFACE PRINTING OF THE POLARITY ON THE INSULATED CONDUCTORS. TECK 90 CABLES MAY BE FIELD MARKED IN A PERMANENT MANNER (HEAT SHRINK).

**64-216 PHOTOVOLTAIC DC ARC-FAULT PROTECTION (SOLAR PHOTOVOLTAIC SYSTEMS)**

PHOTOVOLTAIC SYSTEMS WITH DC SOURCE OR OUTPUT CIRCUITS, OR BOTH, AND OPERATING AT A SYSTEM VOLTAGE OF 80V OR GREATER, SHALL BE DC ARC-FAULT PROTECTED.

**64-218 RAPID SHUTDOWN**

A PHOTOVOLTAIC SYSTEM RAPID SHUTDOWN DEVICE SHALL BE PROVIDED FOR A PHOTOVOLTAIC SYSTEM INSTALLED ON BUILDINGS OR STRUCTURES WHERE THE PHOTOVOLTAIC SOURCE OR OUTPUT INSULATED CONDUCTORS OR CABLES INSTALLED ON OR IN BUILDINGS ARE MORE THAN 1M (39") FROM THE PHOTOVOLTAIC ARRAY. SEE FIGURE 9.

THE RAPID SHUTDOWN INITIATING DEVICE, FOR SINGLE DWELLING UNITS, SHALL BE LOCATED AT THE UTILITY METER LOCATION.

FOR OTHER THAN SINGLE DWELLING UNITS, ONE INITIATING DEVICE SHALL BE AT THE UTILITY METER LOCATION AND A SECOND INITIATING DEVICE AT THE PERMANENT ACCESS TO THE BUILDING ROOF OR WITHIN SIGHT OF AND 9M (30') OF THE ARRAY.

PLACARDS SHALL BE LOCATED AT THE SUPPLY AUTHORITY METER LOCATION AND THE CONSUMERS SERVICE EQUIPMENT LOCATION. THE LOCATION OF THESE PLACARDS (OR ADDITIONAL PLACARDS) ON BUILDINGS WITHOUT EXTERIOR METERING MAY REQUIRE DISCUSSION WITH THE LOCAL FIRE DEPARTMENT (I.E. NEAR THE GAS METERS, WATER STANDPIPE, SERVICE SPLITTER, FIRE ANNUNCIATION PANEL, ETC).

IF THE UTILITY DISCONNECT SERVES A DUAL FUNCTION AS A RAPID SHUTDOWN, IT SHALL BE LABELED AS SUCH (E.G. SYSTEMS USING MICRO-INVERTERS OR OPTIMIZERS).

**64-220 ATTACHMENT PLUGS AND SIMILAR WIRING DEVICES (SEE APPENDIX B)**

PV CONNECTORS ARE ONLY TESTED AND APPROVED AS MATED PAIRS IN ACCORDANCE WITH CSA 22.2 NO 182.5 (UL 6703). EQUIPMENT WITH DIFFERENT TYPES OF MATED CONNECTORS WILL NOT BE ACCEPTED FOR INTERCONNECTION.

**64-222 PHOTOVOLTAIC MODULE BONDING (SOLAR PHOTOVOLTAIC SYSTEMS)**  
ALL EXPOSED METAL PARTS OF PHOTOVOLTAIC MODULES SHALL BE BONDED TO GROUND IN ACCORDANCE WITH THE MODULE INSTALLATION INSTRUCTIONS. IF THE RACKING SYSTEM IS USED TO BOND THE PV MODULES, THE RACKING SYSTEM SHALL BE APPROVED FOR THE SPECIFIC MODULES AND INSTALLED AS PER THE MODULE AND RACKING INSTALLATION INSTRUCTIONS.

USE OF UNAPPROVED RACKING SYSTEMS WILL REQUIRE INTERCONNECTION OF MODULES WITH A BONDING CONDUCTOR AND APPROVED MODULE BONDING LUGS. THE BONDING CONNECTIONS SHALL BE ARRANGED SO THAT REMOVAL OF A PHOTOVOLTAIC MODULE FROM THE ARRAY DOES NOT INTERRUPT A BONDING CONDUCTOR TO OTHER EQUIPMENT. SEE 64-070.



**INFINITY  
SOLAR  
GROUP LTD.**

**CONTRACTOR**

INFINITY SOLAR GROUP

PHONE: 250-342-5993

ADDRESS: PO 2452  
Invermere, BC V0A 1K0

LIC. NO: 770027860

HIC. NO: -

ELE. NO.: M9319

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NEW PV SYSTEM: 14.64kWP

**CIBC  
OFFICE BUILDING**

11004 100TH AVE  
HIGH LEVEL, AB  
T0H 1Z0

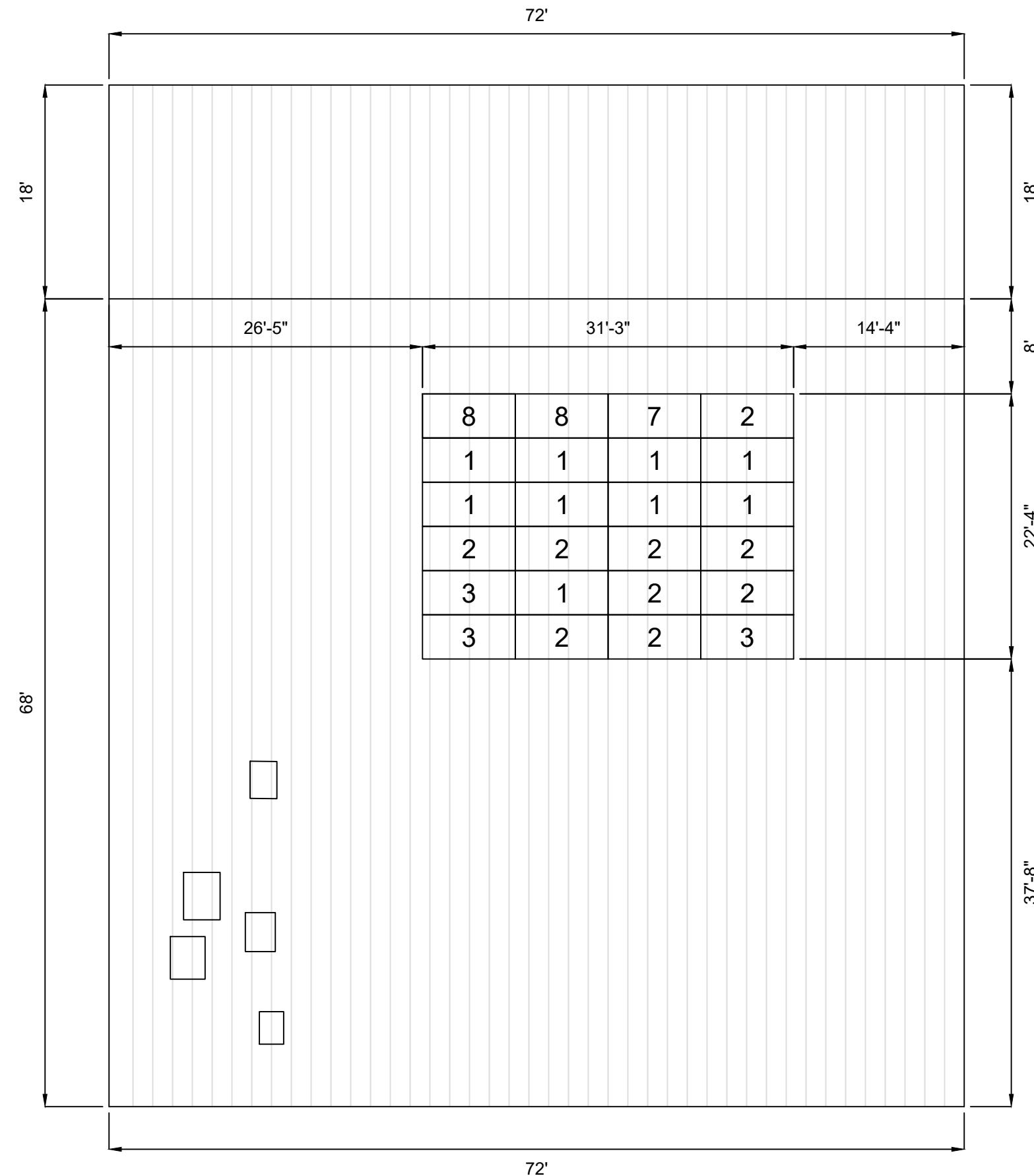
ENGINEER OF RECORD

11x17

NOTES

DATE: 05/23/24

**G-001**



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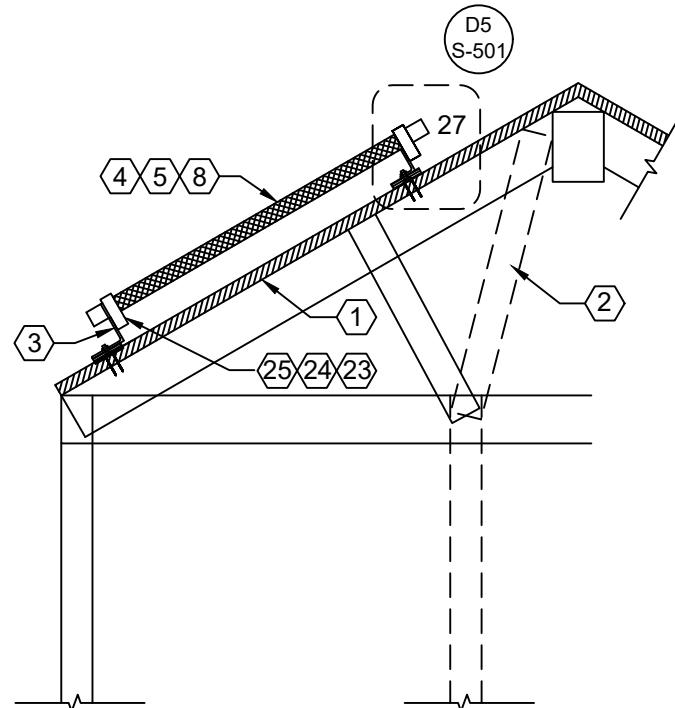
ENGINEER OF RECORD

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SOLAR ATTACHMENT  
PLAN

DATE: 05/23/24

**A-101**

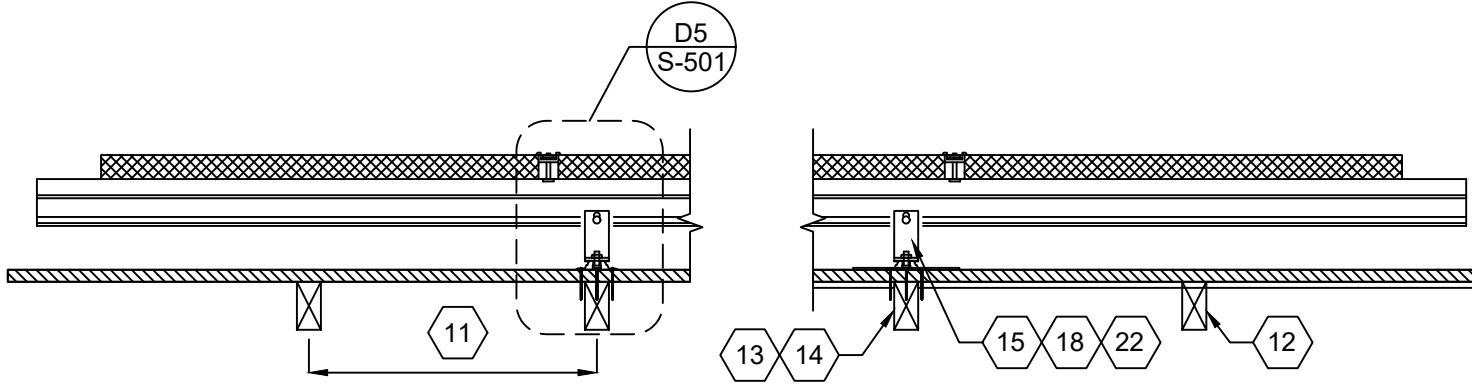


**D1** RACKING DETAIL (TRANSVERSE)

Scale: NTS

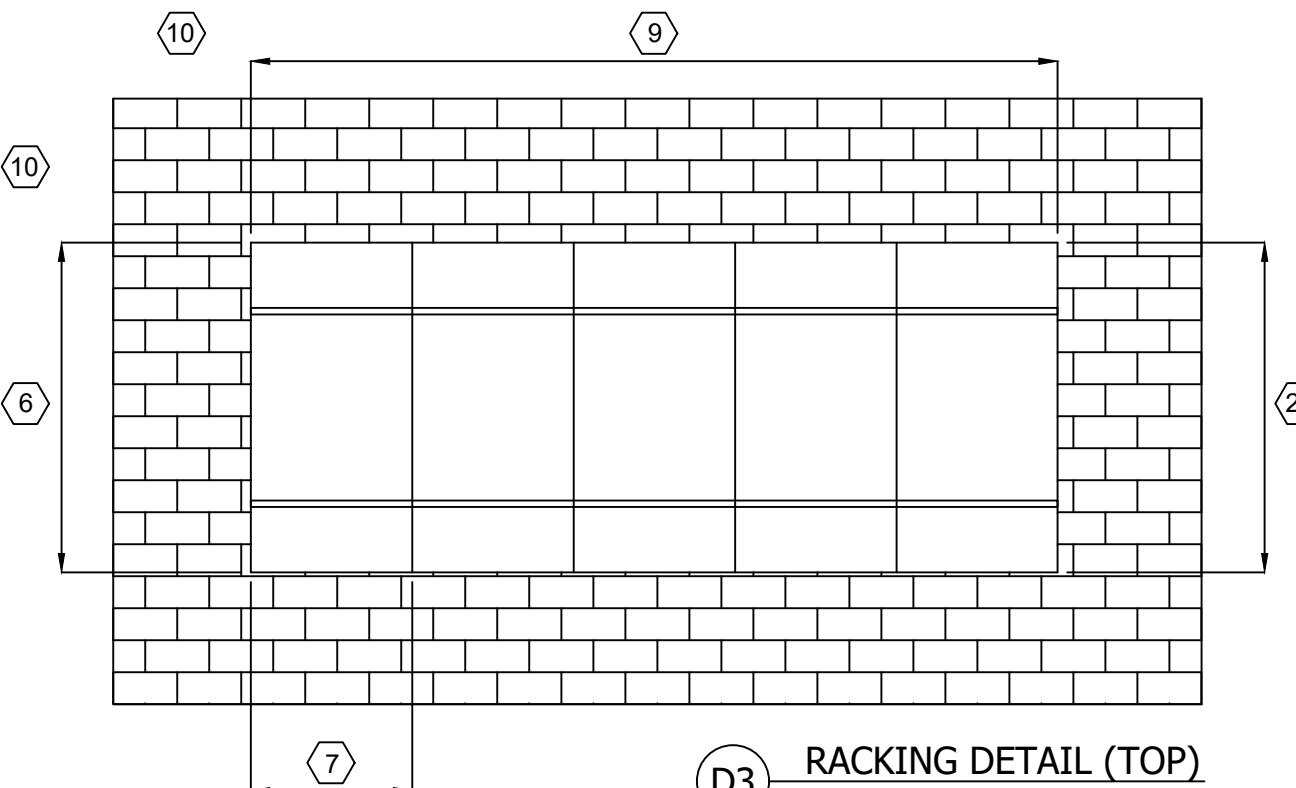
**GENERAL NOTES**

1. ROOF MATERIAL: ASPHALT SHINGLE
2. ROOF STRUCTURE: OWSJ
3. ATTACHMENT TYPE: BALLAST BLOCK
4. TOTAL # OF ATTACHMENTS: 59
5. MODULE MANUFACTURER: LONGI SOLAR
6. MODULE MODEL: LR7-72HGD-610M
7. MODULE LENGTH: 94"
8. MODULE WIDTH: 44.6"
9. MODULE WEIGHT: 74LBS.
10. SEE ATTACHED SPEC. SHEET FOR DIMENSION(S)
11. MIN. FIRE OFFSET: 3' FROM RIDGE/RAKE, 18" FROM HIPS/VALLEYS
12. RAFTER SPACING: 20 IN. O.C.
13. RAFTER SIZE: 2X6 IN. NOMINAL
14. TOTAL AREA: 697.2 SQ FT
15. TOTAL PANEL WEIGHT: 1,776 LBS
16. WEIGHT PER ATTACHMENT: 30.10 LBS
17. DISTRIBUTED LOAD: 2.19 PSF
18. MAX. HORIZONTAL STANDOFF: 48
19. MAX VERTICAL STANDOFF: IN ACCORDANCE WITH MODULE MANUFACTURER'S INSTRUCTIONS
20. STANDOFF STAGGERING: YES
21. PV RACKING MANUFACTURER (OR EQUIV.): UNIRAC
22. PV RACKING MODEL (OR EQUIVALENT): ECOFOOT2+
23. MAX. TRUSS SPAN: N/A
24. MODULE CLEARANCE: 3 IN. MIN., 6 IN. MAX.



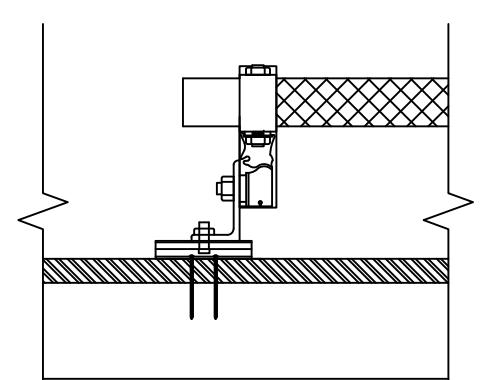
**D2** RACKING DETAIL (LONGITUDINAL)

Scale: NTS



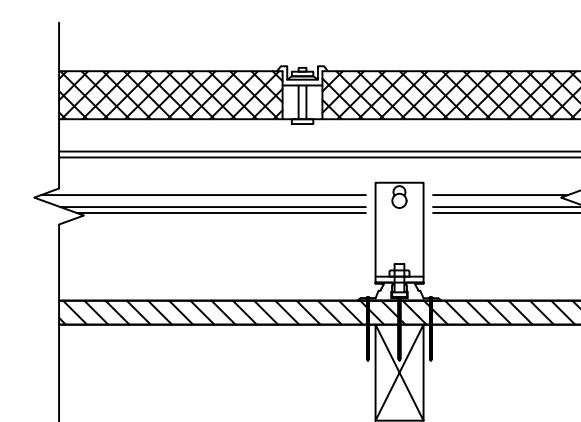
**D3** RACKING DETAIL (TOP)

Scale: NTS



**D4** DETAIL (TRANSVERSE)

Scale: NTS



**D5** DETAIL (LONGITUDINAL)

Scale: NTS



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ENGINEER OF RECORD

11x17

ASSEMBLY  
DETAILS

DATE: 05/23/24

**S-501**

# Hi-MO 7

## LR7-72HGD 585~620M

- High-performance PV modules for utility power plants
- Advanced HPDC cell technology delivers superior module efficiency and power
- High bifaciality and excellent power temperature coefficient achieves high energy yield
- LONGi lifecycle quality ensures long-term performance

**12** 12-year Warranty for Materials and Processing

**30** 30-year Warranty for Extra Linear Power Output

### Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

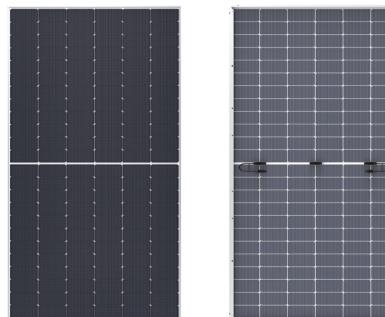
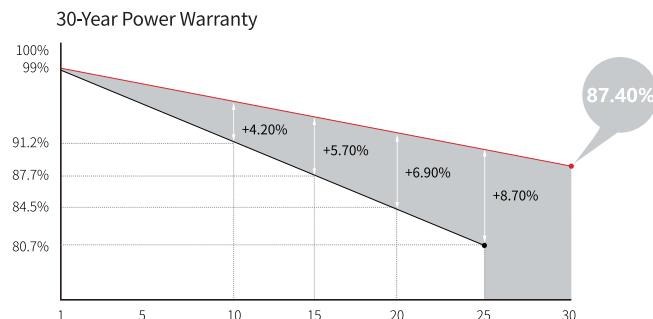
ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

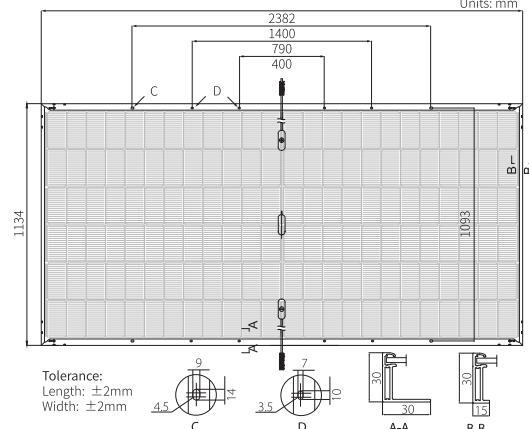
IEC62941: Guideline for module design qualification and type approval

**LONGi**



**23.0%**  
MAX MODULE  
EFFICIENCY**0~3%**  
POWER  
TOLERANCE**<1%**  
FIRST YEAR  
POWER DEGRADATION**0.4%**  
YEAR 2-30  
POWER DEGRADATION**HALF-CELL**  
Lower operating temperature**Additional Value**

Units: mm

**Mechanical Parameters**

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	33.5kg
Dimension	2382×1134×30mm
Packaging	36pcs per pallet / 180pcs per 20' GP / 720pcs per 40' HC

**Electrical Characteristics**STC : AM1.5 1000W/m<sup>2</sup> 25°CNOCT : AM1.5 800W/m<sup>2</sup> 20°C 1m/s

Test uncertainty for Pmax: ±3%

Module Type	LR7-72HGD-585M	LR7-72HGD-590M	LR7-72HGD-595M	LR7-72HGD-600M	LR7-72HGD-605M	LR7-72HGD-610M	LR7-72HGD-615M	LR7-72HGD-620M	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	585	445.3	590	449.1	595	452.9	600	456.7	605	460.6	610	464.4	615	468.2	620	472.0
Open Circuit Voltage (Voc/V)	51.89	49.32	52.00	49.42	52.11	49.53	52.22	49.63	52.33	49.73	52.44	49.84	52.55	49.94	52.66	50.05
Short Circuit Current (Isc/A)	14.25	11.45	14.33	11.51	14.41	11.58	14.49	11.64	14.57	11.70	14.65	11.76	14.73	11.83	14.81	11.90
Voltage at Maximum Power (Vmp/V)	43.79	41.62	43.90	41.72	44.01	41.83	44.12	41.93	44.23	42.03	44.34	42.14	44.44	42.23	44.55	42.34
Current at Maximum Power (Imp/A)	13.36	10.70	13.44	10.77	13.52	10.83	13.60	10.89	13.68	10.96	13.76	11.03	13.84	11.09	13.92	11.15
Module Efficiency(%)	21.7		21.8		22.0		22.2		22.4		22.6		22.8		23.0	

**Electrical characteristics with different rear side power gain (reference to 605W front)**

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
635	52.33	15.30	44.23	14.36	5%
666	52.33	16.03	44.23	15.05	10%
696	52.43	16.76	44.33	15.73	15%
726	52.43	17.49	44.33	16.41	20%
756	52.43	18.22	44.33	17.10	25%

**Operating Parameters**

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	80±5%
Fire Rating	UL type 29 IEC Class C

**Mechanical Loading**

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

**Temperature Ratings (STC)**

Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C

## MASTER THE MOST CHALLENGING ROOFTOPS

- Low part count
- Preassembled universal clamp
- Increased design flexibility
- More ballast capacity
- Simplified logistics
- Ship up to 50kW per pallet
- Rapid system deployment

## TESTED, CERTIFIED AND VALIDATED

- Grounding and Bonding
- 3rd party verified wind tunnel testing
- SEAOC seismic compliant
- CFD and structurally tested
- DNV GL rated at 13.5 panels per installer-hour

## THREE MAIN COMPONENTS

- UL-Listed ASA based resin is a durable material commonly used for automotive and construction products
- Preassembled universal clamp is ready to go right out of the box. Fits 30-50mm module frames with a single component
- Corrosion-resistant wind deflectors help to minimize uplift and reduce ballast requirements



## WHY ECOFOOT 2+?

Installers prefer EcoFoot2+ because it's fast, simple, and durable. The line-up is unbeatable:

- Ready-to-go, preassembled components and simple installation
- No PV panel prep required: bases self-align
- Low-effort roof layout, just two chalk lines required
- No training required, 5-minute learning curve







