

ITB# 4766 - Solar and Battery Storage Installation at City Facilities

**Homeland Solar
303 Metty Drive
Ann Arbor, MI 48103**

We have reviewed the drawings provided per ITB# 4766 and present these prices for completing the work as specified. These prices include prevailing wage and necessary bonds per RFP.

| Site | Jinko Solar Panels | Heliene Solar Panels |
|---------------------------------|---------------------------|-----------------------------|
| City Hall/Justice Center | \$371,800 | \$353,300 |
| Fire Station 1 | \$248,200 | \$240,000 |
| Fire Station 6 | \$489,300 | \$489,300 |
| Bicentennial Park | \$364,600 | \$358,400 |
| Total | \$1,473,900 | \$1,441,000 |

Our preference will be to use the Heliene panels as we have at other City Parks sites. The Heliene panels are nearly identical in mechanical and electrical characteristics, are more cost effective, have a better warranty, and are an approved alternate module per Nova Consultants.

Disclaimer Notice to Contracting Party:

Homeland Solar's bid numbers in this RFP response are based on cost of materials which precede the potentially impactful tariff actions initiated at the approximate time of this RFP by the federal US administration. It is not possible to estimate what cost impact any reciprocal tariffs or countervailing measures may have on solar panels and other major equipment we need to purchase during the time frame for completion of this contract. This disclaimer is issued and agreed to by contracting party to make clear that bidder (Homeland Solar) will pass through whatever tariff-caused or tariff-related changes impact the cost of materials required or approved for completion of the work specified in the RFP. In so doing, Homeland Solar agrees to meet with the contracting party as to details of the change in cost of materials, and to obtain acceptance of any said change(s).

Homeland Solar is pleased to provide this proposal to the City of Ann Arbor. Homeland Solar is a local Washtenaw County-based company with over 10 MW of solar installations serving residential, commercial, municipal, agricultural, and nonprofit/faith-based energy needs. Homeland Solar has over 14 years' experience installing solar PV systems.

Homeland Solar has worked collaboratively with Nova Consultants on many Ann Arbor Public School and other projects and enjoy a very good working relationship with them.

Homeland Solar is a fully licensed electrical and building contractor. All our employees are enrolled in the State of Michigan electrical apprenticeship program under the supervision of our staff Master Electrician. Homeland Solar has our own US Department of Labor authorized apprentice program as well. We have done and are currently doing prevailing wage and Davis Bacon work including weekly certified payrolls for many City of Ann Arbor and Ann Arbor Housing Commission projects.

As a Washtenaw-based installer, Homeland Solar takes special pride in being the go-to solar provider for many schools, parks, businesses, and residences throughout the county, including City of Ann Arbor, Ann Arbor Public Schools, Ann Arbor Housing Development, Food Gatherers, Humane Society of Huron Valley, Huron Valley Tennis Club, Huron Ophthalmology, Kyocera Unimerco, and Zingerman's Mail Order.

Homeland Solar has installed many flat and sloped roof, ground mount, and carport systems. Our carports are sourced locally from Marshall MI and can be seen at several Ann Arbor Parks sites. We have directional boring equipment and are capable of complete installation of these systems. We have installed residential and commercial EV chargers as well as battery storage systems.

It is important to note that Homeland Solar is not only headquartered in Washtenaw County, but most of the work will also be done by full-time Homeland Solar employees who live here in Washtenaw County, not subcontractors. Our office/warehouse is located at 303 Metty Drive (off Jackson Road). Much of the equipment used in the installation will be purchased from McNaughton-McKay, a major electrical distributor with one of its major warehouses also located in Washtenaw County.

Our project team is led by:

- Mark Dorogi – partner, Chief Operating Officer, design, procurement, and installation with 15 years of solar experience
- Dave Friedrichs – partner, contractor, and finance/accounting with 15 years of solar experiences
- Tim Neff – licensed master electrician with 15 years of solar experience
- Darin Rowe – manager and installation crew leader with 6 years of solar experience
- Linda Hoot – manager of permitting, interconnection, and procurement with 15 years of solar experience
- Larry Kerber- commercial solar consultant and financial analyst with 6 years of solar experience

The Homeland Solar proposal is based on a careful review of the drawings and specifications provided. We prefer to use Heliene modules as Homeland has a direct relationship with Heliene, a tier 1 manufacturer headquartered in Sault St Marie and with manufacturing facilities there as well as in Minnesota and Florida.

Homeland Solar is a licensed builder (2101098412) and licensed electrical contractor (6442902). A partial list of recent projects is summarized here:

| Representative Washtenaw County Installations - 6/2019 to 2/2024 | | | |
|--|-----------------------|---------|---------------|
| Customer | Property | Type | Capacity - kW |
| Ann Arbor Public Schools | Pioneer | Rooftop | 182.7 |
| " " | Westerman | Rooftop | 194.4 |
| " " | Scarlett | Rooftop | 199.2 |
| " " | Bryant | Rooftop | 194.4 |
| " " | Tappan | Rooftop | 199.2 |
| " " | Pattengill | Rooftop | 117.5 |
| Ann Housing Development | Creekside Apts. | Rooftop | 148.3 |
| " " | State Crossing Apts. | Rooftop | 72.9 |
| City of Ann Arbor - Parks & Rec. | Buhr Park | Rooftop | 162.4 |
| " " | Leslie Golf Club | Rooftop | 11.1 |
| " " | Leslie Golf Club | Ground | 32.9 |
| " " | Leslie Golf Club | Carport | 40.7 |
| " " | Huron Hills Golf Club | Ground | 24.4 |
| " " | Huron Hills Golf Club | Carport | 25.7 |
| " " | Cobblestone Farms | Rooftop | 47.8 |
| Zingerman's Mail Order | Ann Arbor | Rooftop | 179.4 |
| Food Gatherers | Ann Arbor | Rooftop | 160.0 |
| Huron Ophthalmology | Ypsilanti Twsp | Rooftop | 166.0 |
| Huron Valley Tennis Club | Superior Twsp. | Rooftop | 164.8 |
| Humane Society of Huron Valley | Superior Twsp. | Rooftop | 189.6 |
| Kyocera Unimerco | Pittsfield Twsp. | Ground | 200.1 |
| DataStat | Ann Arbor | Rooftop | 113.2 |
| Retirement Income Solutions | Ann Arbor | Rooftop | 79.1 |
| M4CIC Distributors | Ypsilanti | Rooftop | 76.5 |
| Genesis of Ann Arbor | Ann Arbor | Rooftop | 64.0 |
| St. Nicholas Greek Orthodox | Scio Twsp. | Rooftop | 62.4 |
| Trucent | Dexter | Ground | 46.7 |
| Washtenaw Dairy | Ann Arbor | Rooftop | 39.4 |
| Scio Township Fire Station | Scio Twsp. | Ground | 33.9 |

Our commitment to the City of Ann Arbor is to provide the highest quality solar installation and best solar value. Our project team will engage with you to ensure that your needs are met, both during the installation project and throughout the life of the solar system – 25 years or longer.

INVITATION TO BID

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements and Declaration of Compliance Form, Living Wage requirements and Declaration of Compliance Form, Prevailing Wage requirements and Declaration of Compliance Form, Vendor Conflict of Interest Form, Notice of Pre-Bid Conference, Instructions to Bidders, Bid, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans (if applicable) and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this Bid is one part.

In accordance with these bid documents, and Addenda numbered 1, the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:320 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder certifies that the statements contained in the City Prevailing Wage and Living Wage Declaration of Compliance Forms are true and correct. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Bid shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 3rd DAY OF April, 2025

Homeland Solar
Bidder's Name

David R Friedrichs
Authorized Signature of Bidder

303 Mettly Drive
Official Address ANN ARBOR MI

DAVID R FRIEDRICHS, MANAGING
(Print Name of Signer Above) MEMBER

734-663-8523
Telephone Number 48103

mdedorogi@comcast.net
Email Address for Award Notice

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:

~~* A corporation organized and doing business under the laws of the State of _____, for whom _____, bearing the office title of _____, whose signature is affixed to this Bid, is authorized to execute contracts.~~

~~NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority~~

* A limited liability company doing business under the laws of the State of MICHIGAN whom DAVID FRIEDRICH bearing the title of MANAGING MEMBER whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.

~~* A partnership, organized under the laws of the state of _____ and filed in the county of _____, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary):~~

~~* An individual, whose signature with address, is affixed to this Bid:~~

~~(initial here)~~

Authorized Official

David Friedrichs Date April 3, 2025

(Print) Name DAVID R. FRIEDRICHS Title MANAGING MEMBER

Company: HOMELAND SOLAR (aka, Homeland Builders of Michigan LLC)

Address: 303 Metty Drive

Contact Phone (734-846-8911) Fax (734-348-5960)

Email mdorogi@comcast.net

BID FORM

Section 1 – Schedule of Prices

Bid Form - City Hall/Justice Center

Company: Homeland Solar
 Project: ITB# 4766 – Solar Installation at City Hall/Justice Center

| ESTIMATED QUANTITIES | UNIT | DESCRIPTION OF WORK | UNIT PRICE | TOTAL PRICE |
|----------------------|-------|---|------------|-------------|
| 233 | Each | 580W solar panels with a minimum 12-year product, 30- year linear power warranty. Panels must be UL61730 certified. | \$360 | \$83,880 |
| 120 | Each | SolarEdge DC Power Optimizer with a 25 year warranty | \$230 | \$27,600 |
| 1 | Total | Solar Edge SE80KUS Solar Inverter | \$7820 | \$7820 |
| 1 | Total | Solar Edge SE30KUS Solar Inverter | \$5000 | \$5000 |
| 1 | Total | 60A, 480V, 3P, 4W Disconnect Switch W/ 50A RK-5 Fuses, NEMA 3R | \$500 | \$500 |
| 1 | Total | 200A, 480V, 3P, 4W Disconnect Switch W/ 125A RK-5 Fuses, NEMA 3R | \$1000 | \$1000 |
| 1 | Total | All electrical wiring and conduits to connect the system including labor to install all major material and balance of system including fused switches at point of connection. | \$125,000 | \$125,000 |
| 1 | Total | Removal of All Scrap Materials From Site | \$60,000 | \$60,000 |
| 1 | Total | Rooftop racking, slip sheets, and ballast blocks mounting with a minimum 25-year warranty | \$60,000 | \$60,000 |
| 1 | Total | Transfer of all warranties to the City | \$500 | \$500 |
| 1 | Total | Testing of interconnection | \$500 | \$500 |
| | | | | |
| | | | | |

ESTIMATED TOTAL \$ 371,800

includes performance, labor, material bond expense

Bid Form - Fire Station 1

Company: Homeland Solar
 Project: ITB# 4766 – Solar Installation at Fire Station 1

| ESTIMATED QUANTITIES | UNIT | DESCRIPTION OF WORK | UNIT PRICE | TOTAL PRICE |
|----------------------|-------|---|------------|-------------|
| 167 | Each | 580W solar panels with a minimum 12-year product, 30- year linear power warranty. Panels must be UL61730 certified. | \$360 | \$60,120 |
| 84 | Each | SolarEdge DC Power Optimizer with a 25 year warranty | \$230 | \$19,320 |
| 2 | Each | Solar Edge SE17.3KUS Inverter | \$5000 | \$10,000 |
| 1 | Total | Solar Edge SE50KUS Inverter | \$14,000 | \$14,000 |
| 1 | Total | 400A, 480V, 3P, 4W Disconnect Switch W/ 300A RK-5 Fuses, NEMA 3R | \$3500 | \$3500 |
| 1 | Total | 400A, 3P, 4W, 277/480V, NEMA3R Panelboard W/ 300A Main Breaker | \$6000 | \$6000 |
| 1 | Total | Rooftop racking, slip sheets, and ballast blocks mounting with a minimum 25-year warranty | \$50,000 | \$50,000 |
| 1 | Total | All electrical wiring and conduits to connect the system including labor to install all major material and balance of system. | \$84,260 | \$84,260 |
| 1 | Total | Removal of All Scrap Materials from Site | 0 | 0 |
| 1 | Total | Transfer of all warranties to the City | \$500 | \$500 |
| 1 | Total | Testing of interconnection | \$500 | \$500 |
| | | | | |

ESTIMATED TOTAL \$ 248,200

includes permitance, labor, material and expense

Bid Form - Fire Station 6

Company: Homeland Solar

Project: ITB# 4766 – Solar and Battery Storage Installation at Fire Station 6

| ESTIMATED QUANTITIES | UNIT | DESCRIPTION OF WORK | UNIT PRICE | TOTAL PRICE |
|----------------------|-------|--|------------|-------------|
| Existing | 3 | Existing Soar Edge 14.4KUS-208 Inverters. | X | X |
| 1 | Total | PV Sub Panel Combiner and Contactors 200A, 120/208V, 3P, 4W W/ 50A and 80A 3P Breakers, NEMA 1 | \$7,000 | \$7,000 |
| 1 | Total | Load Combiner Panelboard 400A, 120/208V 3P, 4W, W/ 400A and 200A Breakers, NEMA 1 | \$7,000 | \$7,000 |
| 1 | Total | Grid Combiner Panelboard 400A, 120/208V 3P, 4W, W/ 400A and 200A Breakers, NEMA 1 | \$7,000 | \$7,000 |
| 1 | Total | Solar PV Disconnect 400A, 120/208V, 3P, 4W NEMA1 Fused Disconnect W/400A RK-5 Fuses | \$3,000 | \$3,000 |
| 1 | Total | Manual Bypass Switch 400A, 120/208V, 3P, 4W, NEMA1 | \$5,000 | \$5,000 |
| 2 | Total | Sol-Ark 30KW Hybrid Inverter NEMA 3R (1 inverter shall have Emergency Shut Off Button for Rapid Shut-Down installed). | \$45,000 | \$45,000 |
| 6 | Total | Sol-Ark L3 HVR-60 Battery Energy Storage System installed in outdoor enclosure with climate control. | \$314,300 | \$314,300 |
| 1 | Total | All electrical conduits and wiring to connect the system including labor to install all major material and balance of system including communications. | \$100,000 | \$100,000 |
| 1 | Total | Removal of All Scrap Materials from Site | 0 | 0 |
| 1 | Total | Transfer of all warranties to the City | \$500 | \$500 |
| 1 | Total | Testing of interconnection | \$500 | \$500 |

ESTIMATED TOTAL \$ 489,300

includes performance, labor, material bond expense

Bid Form - Bicentennial Park

Company: Homeland Solar

Project: ITB# 4766 – Solar and EV Charging Installation at Bicentennial Park

| ESTIMATED QUANTITIES | UNIT | DESCRIPTION OF WORK | UNIT PRICE | TOTAL PRICE |
|----------------------|-------|---|------------------|-------------|
| 84 | Each | 585W solar panels with a minimum 12-year product, 30-year linear power warranty. Panels must be UL61730 certified. | \$360 | \$30,240 |
| 1 | Total | Solectria PVI-50TL – 480 Inverter | \$15,000 | \$15,000 |
| 1 | Total | Solar Canopy and Installation | \$125,000 | \$125,000 |
| 5 | Each | CT4000 Level 2 Commercial Charging Station, Dual Port with installation | \$150,000 | \$1,500,000 |
| 1 | Total | 75KVA Transformer Primary 277/480V Y Secondary 120/208V Y NEMA3R | \$8000 | \$8000 |
| 1 | Total | Panelboard - 400A, 3P, 120/208V NEMA 3R W/ 250A Main Breaker. | \$6000 | \$6000 |
| 1 | Total | 200A, 277/480V, 3P, NEMA 3R, Fused Disconnect Switch W/125A RK-5 Fuses. | \$1000 | \$1000 |
| 1 | Total | 100A, 277/ 480V, 3P, NEMA 3R, Fused Disconnect Switch W/80A RK-5 Fuses. | \$800 | \$800 |
| 1 | Total | All electrical wiring and conduits to connect the system including labor to install all major material and balance of system. | \$27,560 | \$27,560 |
| 1 | Total | Removal of All Scrap Materials from Site | 0 | 0 |
| 1 | Total | Transfer of all warranties to the City | \$500 | \$500 |
| 1 | Total | Testing of interconnection | \$500 | \$500 |
| | | | \$500 | |

ESTIMATED TOTAL \$ 364,600

includes performance, material, labor bond expense

BID FORM

Section 2 – Material, Equipment and Environmental Alternates

The Base Bid proposal price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

If the Contractor wishes to quote alternate items for consideration by the City, it may do so under this Section. A complete description of the item and the proposed price differential must be provided. Unless approved at the time of award, substitutions where items are specifically named will be considered only as a negotiated change in Contract Sum.

If an environmental alternative is bid the City strongly encourages bidders to provide recent examples of product testing and previous successful use for the City to properly evaluate the environmental alternative. Testing data from independent accredited organizations are strongly preferred.

| <u>Item Number</u> | <u>Description</u> | <u>Add/Deduct Amount</u> |
|---|--------------------------|--------------------------|
| Solar Panels | Helione instead of Jinko | -\$32,900 |
| * Helione Solar panels have been used by Homeland Solar at all City Parks sites | | |
| * Helione solar panels are same wattage, nearly identical electrical & mechanical characteristics compared to Jinko | | |
| * Helione solar panels are an approved alternate by Nova Consultants. | | |

If the Bidder does not suggest any material or equipment alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any material or equipment alternate under the Contract.

Signature of Authorized Representative of Bidder



Date

4/3/2025

BID FORM

Section 3 - Time Alternate

If the Bidder takes exception to the time stipulated in Article III of the Contract, Time of Completion, page C-2, it is requested to stipulate below its proposed time for performance of the work. Consideration will be given to time in evaluating bids.

If the Bidder does not suggest any time alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any time alternate under the Contract.

Signature of Authorized Representative of Bidder



Date 4/3/2025

BID FORM

Section 4 - Major Subcontractors

For purposes of this Contract, a Subcontractor is anyone (other than the Contractor) who performs work (other than or in addition to the furnishing of materials, plans or equipment) at or about the construction site, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of Contract with the Contractor), but shall not include any individual who furnishes merely the individual's own personal labor or services.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision to Section 4 of the General Conditions covering subcontractor's employees who perform work on this contract.

For the work outlined in these documents the Bidder expects to engage the following major subcontractors to perform the work identified:

Subcontractor (Name and Address)

Work

Amount

If the Bidder does not expect to engage any major subcontractor, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT expect to engage any major subcontractor to perform work under the Contract.

Signature of Authorized Representative of Bidder



Date

4-3-2025

BID FORM

Section 5 – References

Include a minimum of 3 references from similar projects completed within the past 3 years.

[Refer also to Instructions to Bidders for additional requirements, if any]

1) Kyocera-Unimerco \$372,000 2023
Project Name Cost Date Constructed

JOHN BRANNAN, CFO 734-944-4433
Contact Name Phone Number

2) W.I.S.D. - High Point \$261,043 2024
Project Name Cost Date Constructed

Tanner Rowe Phase II 734-649-1622
Contact Name (double w/ Phase I) or II Phone Number

3) AAPS- Tappan and \$822,500 2023
Project Name Scarlett Cost Date Constructed

Jason Bing 734-904-6480
Contact Name Phone Number

bingj@aaps.k12.mi.us

BID FORM

Section 6 – Contractor Information and Responsible Contractor Criteria

Backup documentation may be requested at the sole discretion of the City to validate all of the responses provided herein by bidders. False statements by bidders to any of the criteria provided herein will result in the bid being considered non-responsive and will not be considered for award.

Failure to provide responses to all questions may result in being deemed non-responsive.

Attach additional pages as needed if space below is insufficient.

Pursuant to Sec 1:312(20) of the City Code which sets forth requirements of a responsible bidder, Bidder is required to submit the following:

1. Organization Name: Homeland Solar (aka Homeland Builders of Michigan)

~~Social Security~~ or Federal Employer I.D. #: 20-2416578

Address: 303 Metty Drive

City: Ann Arbor State: MI Zip: 48103

Type of Organization (circle one below):

Individual

Partnership

Corporation

Joint Venture

Other

If "Other" please provide details on the organization:

LLC which files taxes as a "S" corp

Year organization established: 2005

2. Current owners/principals/members/managing members/partners of the organization:

DAVID R. FRIEDRICHS & MARK D. DOROGI

3. Assumed Names, "doing business as" d/b/a, and/or former organization names(s), if applicable: HOMELAND BUILDERS OF MICHIGAN LLC

(aka HOMELAND SOLAR)

Explanation of any business name changes:

LLC is most commonly known & referred to
as "HOMELAND SOLAR"

4. If applicable, please provide a list of all bidder's litigation and arbitrations currently pending and within the past five years, including an explanation of each (parties, court/forum, legal claims, damages sought, and resolution).

NONE

5. Qualifications of management and supervisory personnel to be assigned by the bidder:

Licensed in Building & Electrical ; owners w/ decades of managerial responsibility

6. List the state and local licenses and license numbers held by the bidder:

Michigan

7. Will all subcontractors, employees and other individuals working on the construction project maintain current applicable licenses required by law for all licensed occupations and professions?

Yes

No

8. Will contractors, subcontractors, employees, and other individuals working on the construction project be misclassified by bidder as independent contractors in violation of state or federal law?

Yes

No

9. Submit a statement as to what percentage of your work force resides within the City of Ann Arbor, and what percentage resides in Washtenaw County, Michigan, and the same information for any major subcontractors.

20% CITY of ANN ARBOR ADD'L 55% WASHTENAW CTY 25% OUT-COUNTY (NO MAJOR SUBCONTRACTORS)

10. Submit documentation as to bidder's employee pay rates (e.g., certified payroll without SSN or personal identifying information, or chart of job titles and pay rates, or other evidence). MULTI-YEAR HISTORY w/ CITY OF ANN ARBOR CERTIFIED

11. State whether bidder provides health insurance, pension or other retirement benefits, paid leave (vacation, personal time, sick leave, etc), or other benefits to its employees, and if so, state whether each benefit is provided directly to employees, by payments or contributions to a third-party administered plan, in cash (e.g., fringe benefit portion of prevailing wages), or other manner.

Bidder provides paid leave (as above) and annual S.E.P. IRA payments directly to personal accounts of employees. Bidder has group health plan it pays and is adding benefits during 2025 while also paying Prevailing ~~above~~ Living Wages at higher levels than required.

12. State whether bidder is an equal opportunity employer and does not discriminate in its hiring on the basis of race, sex, pregnancy, age, religion, national origin, marital status, sexual orientation or gender identity, height, weight, or disability.

Yes

No

13. State whether bidder has Equal Employment Opportunity Programs for minorities, women, veterans, returning citizens, and small businesses, and if so, submit supporting documentation or other evidence of such program(s).

No special programs offered, just On the Job training.

EMPLOYEE HANDBOOK AVAILABLE ON REQUEST

14. Has bidder had any violations of state, federal, or local laws or regulations, including OSHA or MIOSHA violations, state or federal prevailing wage laws, wage and hour laws, worker's compensation or unemployment compensation laws, rules or regulations, issued to or against the bidder within the past five years?

Yes

No

If you answered "yes" to the question above, for each violation provide an explanation of the nature of the violation, the agency involved, a violation or reference number, any other individual(s) or party(ies) involved, and the status or outcome and resolution.

15. Does bidder have an existing Fitness for Duty Program (drugs and alcohol testing) of each employee working on the proposed jobsite?

Yes

No

If you answered "Yes", please submit documentation of the Fitness for Duty Program and what it entails.

16. Submit documents or evidence of any debarment by any federal, state or local governmental unit and/or findings of non-responsibility or non-compliance with respect to any public or private construction project performed by the bidder.

N/A

17. Proof of insurance, including certificates of insurance, confirming existence and amount of coverage for liability, property damage, workers compensation, and any other insurances required by the proposed contract documents.

*Certificates of Insurance
have been provided to the City of A²
by insurance agents of bidder.
(Jobs-in-process).*

18. Does bidder have an on-going MIOSHA-approved safety-training program for employees to be used on the proposed job site?

Yes

☒ No

COMPANY EMPLOYEES
ATTEND MIOSHA TRAINING
ANNUALLY
OFFERED AT LOCAL BUILDING
ASSN OFFICES

If bidder answered "yes" to the question above, submit documentation of your safety-training program.

19. Does bidder have evidence of worker's compensation Experience Modification Rating ("EMR")? THROUGH P.E.O.

☒ Yes

No

EMR = .97

20. Will bidder use masters, journeypersons and apprentices on the project?

☒ Yes

No

If bidder answered "yes" to the question above, provide the ratio of masters and journeypersons to apprentices for this project.

Ratio: 1 : 3

If bidder answered "no" to the question above, submit documentation regarding the qualifications of each worker who may or will be assigned on the project.

If, yes, Ratio = _____

N/A

21. Can bidder provide documentation that it participates in a Registered Apprenticeship Program (RAP) that is registered with the United States Department of Labor Office of Apprenticeship or by a State Apprenticeship Agency recognized by the Office of Apprenticeship?

☒ Yes

No

If bidder answered "yes" to the question above, please submit a copy of the program document(s) and evidence of its registration.

DEPARTMENT OF LABOR

If bidder answered "no" to the question above, please provide details on how you assess the skills and qualifications of any employees who do not have master or journeyperson certification or status, or are not participants in a Registered Apprenticeship Program.

22. Will bidder comply with all applicable state and federal laws and visa requirements regarding the hiring of non-US citizens, and disclosure of any work visas sought or obtained by the bidder, any of the bidder's subcontractors, or any of the bidder's employees or independent contractors, in order to perform any portion of the project?

Yes

No

23. Submit evidence that bidder has financial resources to start up and follow through on the project and to respond to damages in case of default as shown by written verification of bonding capacity equal to or exceeding the amount of the bidders scope of work on the project. The written verification must be submitted by a licensed surety company rated B+ or better in the current A.M. Best Guide and qualified to do business within the State of Michigan, and the same audited financial information for any subcontractor estimated to be paid more than \$100,000 related to any portion of the project.

SEE ATTACHED FROM ATTORNEY-IN-FACT
FOR LIBERTY MUTUAL SURETY

24. Submit evidence of a quality assurance program used by the bidder and the results of same on the bidder's previous projects.



Date: September 17th, 2024

Re: W.E. O'Neil Construction Co.

To Whom it May Concern,

We understand that Homeland Builders of Michigan LLC DBA Homeland Solar has or is about to submit a proposal or proposals for work to be performed on the captioned project. This letter is to inform you that The Ohio Casualty Insurance Company has been the surety for Homeland Builders of Michigan LLC DBA Homeland Solar since 2022. We have considered single bond requests for Homeland Builders of Michigan LLC DBA Homeland Solar up to approximately \$3,000,000 and aggregate backlogs of \$6,000,000 and would consider other bond requests above these amounts subject to our normal underwriting conditions.

The Ohio Casualty Insurance Company has expressed their willingness to consider supporting Homeland Builders of Michigan LLC DBA Homeland Solar on the contract referenced in the caption. Please understand any such bond request is subject to favorable review of the contract documents, confirmation of project financing, and other underwriting considerations deemed necessary at the time of the request. This letter is not to be construed as an agreement to provide bonds for any particular project, but is offered as an indication of our past experience and confidence in Homeland Builders of Michigan LLC DBA Homeland Solar. Any arrangement to provide final bonds is a matter between The Ohio Casualty Insurance Company and Homeland Builders of Michigan LLC DBA Homeland Solar and we assume no liability to third parties if we do not execute said bond(s).

The Ohio Casualty Insurance Company is a subsidiary of Liberty Mutual Insurance Company. The Ohio Casualty Insurance Company is listed in the Federal Register dated July 1, 2024 with an underwriting limitation of \$254,064,000. We have been given a rating of A (Excellent) - XV by A. M. Best. The Ohio Casualty Insurance Company hereby certifies they are duly authorized by the certificate of authority issued by the State of Illinois Department of Insurance.

If you should need any additional information, please contact our office.

Sincerely,

A handwritten signature in black ink that reads "Grant Schweisthal". The signature is written in a cursive, flowing style.

Grant Schweisthal, Attorney-in-Fact
Liberty Mutual Surety



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: **8212349-974822**

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Paige Craft, Susie Curtis, Stephanie Farrell, Shelly Henry, Grant Schweisthal, Ryan Streit, David Wilson

all of the city of Fishers state of IN each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 30th day of August, 2024.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: Nathan J. Zangerle
Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 30th day of August, 2024 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 17th day of September, 2024.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

CITY OF ANN ARBOR PREVAILING WAGE DECLARATION OF COMPLIANCE

The "wage and employment requirements" of Section 1:320 of Chapter 14 of Title I of the Ann Arbor City Code mandates that the city not enter any contract, understanding or other arrangement for a public improvement for or on behalf of the city unless the contract provides that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. Where the contract and the Ann Arbor City Code are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used. Further, to the extent that any employees of the contractor providing services under this contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with section 1:320 of Chapter 14 of Title I of the Code of the City of Ann Arbor, employees shall be paid a prescribed minimum level of compensation (i.e. Living Wage) for the time those employees perform work on the contract in conformance with section 1:815 of Chapter 23 of Title I of the Code of the City of Ann Arbor.

At the request of the city, any contractor or subcontractor shall provide satisfactory proof of compliance with this provision.

The Contractor agrees:

- (a) To pay each of its employees whose wage level is required to comply with federal, state or local prevailing wage law, for work covered or funded by this contract with the City,
- (b) To require each subcontractor performing work covered or funded by this contract with the City to pay each of its employees the applicable prescribed wage level under the conditions stated in subsection (a) or (b) above.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the wage and employment provisions of the Chapter 14 of the Ann Arbor City Code. The undersigned certifies that he/she has read and is familiar with the terms of Section 1:320 of Chapter 14 of the Ann Arbor City Code and by executing this Declaration of Compliance obligates his/her employer and any subcontractor employed by it to perform work on the contract to the wage and employment requirements stated herein. The undersigned further acknowledges and agrees that if it is found to be in violation of the wage and employment requirements of Section 1:320 of the Chapter 14 of the Ann Arbor City Code it shall have been deemed a material breach of the terms of the contract and grounds for termination of same by the City.

Homeland Solar (aka Homeland Builders of Michigan LLC)
Company Name
David R Friedrichs 4-3-2025
Signature of Authorized Representative Date
DAVID R FRIEDRICHS, MANAGING MEMBER
Print Name and Title
303 METTY PR, ANN ARBOR MI 48103
Address, City, State, Zip
734-663-8523
Phone/Email address

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500

**CITY OF ANN ARBOR
LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE**

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here ☐ No. of employees _____

The Contractor or Grantee agrees:

- (a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as **\$17.08/hour for those employers that provide employee health care** (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than **\$19.04/hour for those employers that do not provide health care**. The Contractor or Grantor understands that the Living Wage is adjusted and **established annually on April 30** in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

Check the applicable box below which applies to your workforce

- ☒ Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits **POSSIBLE (PT) WORKERS**
- ☒ Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits **NOT COVERED DEPENDING ON LENGTH OF TIME w/ COMPANY**

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

Homeland Solar 303 Mettys Dr
Company Name Street Address
David Friedrichs 3/27/25 Ann Arbor MI 48103
Signature of Authorized Representative Date City, State, Zip
DAVID R FRIEDRICHS 313-600-1066 dave@
Print Name and Title Phone/Email address
MANAGING MEMBER homeland solar.com



Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

| Conflict of Interest Disclosure* | |
|---|---|
| Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest. | <input type="checkbox"/> Relationship to employee |
| | <input type="checkbox"/> Interest in vendor's company |
| | <input type="checkbox"/> Other (please describe in box below) |
| N/A | |

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

| I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below: | | |
|---|--|--|
| Homeland Solar | | 734-663-8523 |
| Vendor Name | | Vendor Phone Number |
| David R Friedrichs | | 4-3-25 |
| Signature of Vendor Authorized Representative | | Printed Name of Vendor Authorized Representative |

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org

COI - Ver. 1 - 6/9/16

ATTACHMENTS

**CITY OF ANN ARBOR
DECLARATION OF COMPLIANCE**

Non-Discrimination Ordinance

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record or criminal history, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

HOMELAND SOLAR (aka HOMELAND BUILDERS of MICHIGAN LLC)
Company Name
David R. Friedrichs 4-3-2025
Signature of Authorized Representative Date
DAVID R FRIEDRICHS, MANAGING MEMBER
Print Name and Title
303 METTY DRIVE, ANN ARBOR, MI 48103
Address, City, State, Zip
313-600-1066 dave@homeland-solar.com
Phone/Email Address

Questions about the Notice or the City Administrative Policy, Please contact:
Procurement Office of the City of Ann Arbor
(734) 794-6500

The United States Department of Labor

Office of Apprenticeship

Certificate of Registration of Apprenticeship Program

Homeland Builders of Michigan LLC

Ann Arbor, Michigan

for the Trade Classification of: Electrician

*Registered as part of the National Apprenticeship System
in accordance with the basic standards of apprenticeship
established by the Secretary of Labor*

October 24, 2023

Date

2024-MI-126098

Registration No.



John V. Ladd

Administrator, Office of Apprenticeship

Homeland Solar - Homeland Builders Safety Program

STATEMENT OF SAFETY POLICY

The management and staff at Homeland Solar - Homeland Builders are committed to providing a safe working environment for all our employees. We believe that all accidents are preventable, and that safety is everyone's business. We have developed an extensive safety program to meet this commitment and to comply with local, state, federal, mine, and customer safety and health regulations.

It is the policy of Homeland Solar - Homeland Builders to take a proactive approach to safety. We provide personal protective equipment, supply proper tools for the job, follow appropriate safety procedures, perform safety audits, and enforce drug and alcohol policies, meet with our employees to discuss safety issues, and instruct and train our employees about safety in the most effective manner possible.

As a condition of employment all employees receive a copy of Homeland Solar - Homeland Builders Employee Conduct and Safety Guidelines handbook and must sign his or her name, acknowledging agreement to comply with all safety practices.

Safety is part of every project we do. Supervisors, in conjunction with the principals, review and incorporate the customer's safety program into ours so that the customer can be confident that we have satisfied all safety concerns specific to their project.

An on-site safety representative, frequently one of our field foremen, enforces our safety program. The success of our safety program can be attributed to the dedication of all our employees to carry out his or her duties in a manner, which does not create a hazard or unsafe condition for himself or herself, coworkers, or any other person.

Any employee who willfully disregards this Safety Policy will be disciplined and/or retrained.

PURPOSE OF SAFETY POLICY

The Safety Policy is important for several reasons. Foremost is the safety of our employees. We believe that **No** job or task is more important than workers safety and health. **If a job cannot be done safely, it will not be done. Our future is only built through our people.**

In addition, due to the nature and scope of our operations, we have large worker's compensation and liability insurance costs. If we are able to reduce our accidents, (and therefore our losses), we will save money in direct insurance cost, as well as the indirect and uninsurable costs that are involved whenever an accident occurs.

Our customers pre-qualify us before we can bid projects. The customer reviews our safety program and our worker's compensation Experience Modification Rate (EMR) in the pre-qualification process. Accidents cause our EMR to increase and that affect the customer lack of interest in our company bidding work.

GOAL OF SAFETY POLICY

A Safety and Health Policy needs an established and communicated goal and objectives for meeting that goal, so that all members of the organization understand the results desired and the measures planned for achieving them. This goal for the Safety Policy is:

A comprehensive program to assess all circumstances (unsafe acts and conditions) and all known potential hazards of every worksite and to prevent or control these hazards.

We support this goal and will promote it through the implementation of this Safety Policy. Our Policy contains the basic requirements common to most successful construction job safety programs. These guidelines will give us a SYSTEM of control over the accident-producing elements involved in our job operations.

We have a safety program, we need to make it work, and we know each of you will do your part.

David R Friedrichs, Managing Member

After establishing the reason for the safety program - the policy, and the destination for the safety program- the goal of:

A comprehensive program to assess all circumstances (unsafe acts and conditions) and all known potential hazards of every worksite and to prevent or control these hazards.

We are ready to determine the direction of the safety program- the objectives. By setting these objectives we can improve the odds of obtaining our goal:

- To conduct weekly inspections with emphasis on proper use of protective equipment by the supervisor/foreman.
- To eliminate any hazard(s) identified during accident investigations and monthly planned inspections by the supervisor/foreman within 24 hours whenever possible.
- To impress all employees at the jobsite with the importance of correct work practice, each supervisor/foreman will be responsible for conducting a short (5 to 10 minute) safety briefing at least once every week.
- To determine the cause(s) of any accident within 24 hours by the supervisor/foreman.

Homeland Solar - Homeland Builders

ORGANIZATION AND RESPONSIBILITIES

It is the desire of Management to protect employees from accidental injury and damage to health while working for our organization. At the management level, we are committed to provide a safe and healthy worksite. In return we expect you, the employee, to support the established safety policies and to cooperate fully with the procedures and practices, which have been implemented to ensure everyone's safety.

All of us, from the management on down, have a responsibility to safety. These responsibilities, outlined below, must be understood and supported by all employees in order for our safety program to be effective.

MANAGEMENT (Principals) WILL:

1. Enforce this policy and **retrain and/or** discipline any employee willfully disregarding it.
2. Require the conducting of safety inspections and filling of reports.
3. Follow Red Cross and/or National Safety Council procedures for first-aid.
4. Establish a policy to have safe and healthful work and working conditions, which are in compliance with all applicable Federal or State standards.
5. Provide the leadership and resources to carry out Company's safety & health policy.
6. Set objectives and support safety personnel in their request for necessary information, training, experts, facilities, tools and equipment to conduct an effective program and establish a safe, healthy workplace and working conditions.
7. Assign clear responsibility for various aspects of the safety and health program and ensure that those with assigned responsibilities have adequate resources and authority to perform the duties assigned.
8. Hold those with assigned responsibilities accountable by checking to make sure responsibilities are met, correction and/or retraining provided.
9. Keep in touch with employees and their safety and health activities, assist in giving direction as to job activities, and let employees see visible involvement of leaders.
10. SET A GOOD EXAMPLE in following safety and health rules and safe work practices.
11. Require all vendors, customers, subcontractors and visitors to comply with the Company safety and health policy.

12. Make sure that you have a thorough understanding of the hazards and potential hazards that employees may be exposed to at the worksite and ensure that the program for prevention and control is put in place for all potential hazards.
13. Provide a reliable system for employees to report conditions and situations, which appear hazardous to appropriate management members and make sure that responses to them are appropriate and timely.
14. Establish a system of self-inspections and review the results periodically to ensure proper and timely hazard correction.
15. **Review accident reports** on quarterly bases to keep informed of accident causes and trends.
16. Provide a medical program, emergency response and first aid facilities, which are adequate for the size and hazards of the worksite.
17. Establish training programs to improve the competency of all employees in recognizing and understanding hazards and how to protect themselves and others.
18. Review and distribute Safety Regulation updates to all sites. Incorporate and distribute all updates and revisions to this program to all sites.
19. Conduct formal training using company policies and procedures for Right-to-Know, Aerial work platform, Bloodborne Pathogen, Lockout/tagout, Fall Protection, Ladder and Fire Extinguisher training. MIOSHA holds the management (owners) accountable for the training of employees. The employees shall be trained to the MIOSHA standards.

SUPERVISORS AND CREW LEADERS WILL:

1. Be familiar with and enforce established safety procedures applicable to Company operations on the jobsite.
2. Make available all necessary personal protective equipment, job safety materials and first aid equipment.
3. Instruct the workmen that safety practices are to be followed and safe conditions maintained throughout the job.
4. Require all subcontractors to adhere to all safety regulations.
5. Have available copies of federal and state, and other applicable regulations at jobsite.

6. Supervisor will make periodic job inspection (per inspection form supplied by the Company). Foreman will makes weekly inspection of job site and shop (per inspection form supplied by the Company).
7. Foremen investigate any and all accidents within 24 hours and file reports on each within 48 hours.
8. Instruct workers on location and use of Material Safety Data Sheets. Obtain signed acknowledgment from each employee.
9. Develop a cooperative attitude toward safety by setting a good example.
10. Maintain an effective, positive line of communication regarding safety matters to the work force.
11. **Ensure that all injured persons, regardless of how minor the injury, receive prompt and appropriate medical treatment.**
12. Ensure that prompt corrective action is taken whenever and wherever hazards are recognized or unsafe acts are observed.
13. Make sure that employees know about and are encouraged to use hazard reporting and safety and health suggestion systems, that they are protected from harassment, that their counsels are heeded, and that their ideas, when helpful and feasible, are adopted.
14. Make arrangements with management to conduct formal training of Right-to-Know, Aerial work platform, Bloodborne Pathogen, Lockout/tagout, Fall Protection, Ladder and Personal Protective Equipment Procedures.
15. **Keep abreast of accident and injury trends and take proper corrective action, when needed, to reverse these trends.**
16. **Actively discourage "short cuts" and consistently and fairly enforce safe work procedures and safety and health rules.**

OFFICE WILL:

1. Maintain all records of accidents that have taken place during Company operations on forms designed by insurance Company and other authorized agencies.
2. Process all paperwork associated with accidents, on site inspections and in - house audits. Maintain permanent record for Company files.
3. **Prepare all notices required by OSHA/MIOSHA and other appropriate agencies for posting at each construction project location in accordance with designated time regulations. (Example: MIOSHA's Summary of Occupational Injuries and Illnesses).**

ALL TRADE PERSONNEL WILL:

1. **Report any unsafe condition, act or equipment to immediate supervisor/foreman.**
2. **Report all accident and injuries to the supervisor/foreman immediately.**
3. Work according to the Company and project safety rules to avoid endangering themselves, fellow workers or the public.
4. Use the required safety devices and proper personal protective equipment.
5. Thoroughly understand the work to be done and the safety precautions that apply. Review and ask questions if you do not understand the safety educational material posted or distributed to work areas.
6. Assist in making the job as safe as possible.
7. **Learn and understand the rules, follow them and avoid "short cuts."**
8. Be certain that you completely understand instructions before starting work and avoid "short cuts" from safe work procedures.
9. Offer safety and health suggestions when such suggestions would reduce risk to workers.
10. Know how and where needed medical help may be obtained.
11. Make sure you understand exactly what your responsibilities are for each different kind of emergency situation that could arise.

SUBCONTRACTORS WILL:

1. The provisions of all safety responsibilities apply to subcontractor and their employees working on projects for this Company.
2. Inform **supervisor/foreman** of all injuries to sub-contractor's employees.
3. Report any unsafe condition or action.
4. Have available Material Safety Data Sheets (MSDS) for all material/chemicals used on the jobsite that require an MSDS.
5. Submit a written Safety Program.

Homeland Solar - Homeland Builders

ACCIDENT INVESTIGATION, REPORTING AND RECORD KEEPING

Each jobsite foreman will be responsible to investigate and make a written report on standard form, Supervisor's Accident/Injury/Illness Report, for every accident that occurs on his jobsite. An entry will also be made in the job progress report when an accident occurs. (NOTE DEFINITION: An accident will require investigation when the injured person requires medical treatment beyond normal first aid treatment at the jobsite.)

The following reports to be filled out in case of an accident:

- a. Fill out a Supervisor's Accident/Injury/Illness Report within 48 hours of the accident.
- b. Send copies of each report immediately to the office.
- c. Employers Basic Report of Injury will be completed by office using the data provided by Supervisor's Accident/Injury/Illness Report. The management will review the foreman's corrective actions/recommendations that have been or will be taken to prevent recurrence of the accident. Management will determine if environment (hazardous conditions), equipment (location/position of equipment/materials/employees), people (job procedure used, lack of personal protective equipment/emergency equipment), management (system defect), and occupational health (adverse occupational health environment) contributed to the accident/injury/illness.

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EMPLOYEE TRAINING

A key part of the Company Safety Program will be to inform all employees about the hazards associated with their job and how to work safely.

Each new employee will be given a basic safety briefing by his foreman prior to starting work. It will be the responsibility of the foreman to insure all employees receive this briefing at the jobsite. The safety briefing must include (but not limited to) the following items:

1. The Safety Policy of the Company.
2. The requirement for wearing personal protective equipment.
3. What to do when an injury occurs.
4. To comply with the foreman's safety instructions.
5. Only standard tools and work procedures will be allowed. "Jerry-rigged" tools, equipment, ladders and scaffolding will not be permitted.
6. A copy of the general safety rules will be given to each employee.
7. Instruction on location and use of Material Safety Data Sheets required under Hazard Communication.
8. Make arrangements with management to conduct formal training of Right-to-Know, Aerial work platform, Bloodborne Pathogen, Lockout/tagout, Fall Protection, Ladder procedures and use of Personal Protective Equipment.

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JOBSITE SAFETY BRIEFINGS

In order to impress all employees at the jobsite with the importance of correct work practice, each supervisor/foreman will be responsible for conducting a short (5 to 10 minute) safety briefing at least once every week. (One briefing each week is more desirable or may be required by contract.)

The safety briefing will be made to all employees who are available. The briefing should cover standard safe work practices related to the type of work being done at the jobsite. Maximum use of "NECA Toolbox Safety Talks" and MIOSHA's Five-Minute Safety Talks should be made. Any new or revised Material Safety Data Sheets should be reviewed.

A record of safety briefings should be kept at the main office to document safety training provided to employees. The form to be used for this is attached in the form section. "Sign in sheet" should include the signatures of attendees, signature of (supervisors) instructor, and date of tool box talk.

Consider having the supervisor (s) concentrate on the specific subject covered in the tool box talk of the week, when making his weekly inspection. Example: this week a supervisor presented a talk on ladder safety. He would then focus his inspection efforts on the choice, conditions, and proper use of ladders at his job(s). The company's "Weekly Project Field Status Report" should be used to report the substandard condition(s) and/or act(s) noted at time of the inspection and the action taken by the inspecting supervisor. This Keeps the Inspection and training process Simple and Short

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FIRST AID

Each jobsite will have available adequate first aid equipment to meet the need of the number of workers normally present at the jobsite. It will be the responsibility of the supervisor/foreman to inspect and maintain the first aid supplies monthly to ensure that the supplies and equipment meet the minimum standards. First aid kits will be maintained in all company vehicles.

The supervisor/foreman will be knowledgeable of the nearest suitable medical facility to accept and treat personnel who are injured or need medical attention beyond the requirements of the first aid kit. Management (estimator) will obtain location of medical provider at the onset of the project and make supervisor/foreman aware of the location and any necessary paper work i.e. return to work forms.

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JOBSITE INSPECTIONS

Each supervisor/foreman will conduct a thorough safety inspection of the shop entire jobsite at least weekly. The checklist and/or project report to be used for this inspection is found in the Field Forms Section of this Safety Program. (Job Inspection Form or Weekly Project Field Status Report)

Copies of each checklist and /or project status report with notes on the conditions found will be kept on file in the safety folder at the office and/or in the foreman's portable office box.

OSHA/MIOSHA INSPECTION

When an OSHA/MIOSHA inspector comes onto the jobsite, these procedures should be followed:

1. The supervisor/foreman shall immediately notify the office.
2. If available, someone from management shall go to the jobsite/customer's facility to meet with the OSHA/MIOSHA representative during the inspection. Otherwise, the project manager/foreman acts as the Company's designated representative.
3. The designated Company representative shall meet with the OSHA/MIOSHA Compliance Safety and Health Officer (CSHO) during the opening inspection conference to verify the officer's credentials and find out the purpose of the inspection.
4. The designated Company representative shall accompany the CSHO during the inspection of our portion of the project.
5. The designated Company representative shall attend the closing conference.
6. All inspection results shall be reported immediately to management.
7. The designated Company representative shall take all steps to correct all deficiencies cited in the inspection report as soon as possible.
8. When all deficiencies are corrected, the designated Company representative shall notify OSHA/MIOSHA.

Homeland Solar - Homeland Builders

GENERAL SAFETY RULES

THE GENERAL SAFETY RULES AND PROCEDURES LISTED BELOW ARE FOR YOUR PROTECTION AND ARE PROVIDED SO THAT YOU CAN WORK WITHOUT INJURY.

THESE STANDARDS WILL BE ENFORCED BY THE SUPERVISOR AND FOREMAN ON THE JOB.

Safety Equipment and Clothing

1. Hard hats and Safety Glasses shall be worn on the job when necessary, as determined by Homeland Solar Foreman or as set by General Contractors rules.
2. Wear clothing appropriate to the duties that you will perform on the job. Finger rings, exposed watch and key chains, and torn clothing are dangerous and should not be worn around electrical equipment, machinery or when climbing ladders or working on structures.
3. Only substantial, heavily soled shoes or boots shall be worn on the job. Do not wear low-cut shoes, unless they are the type designed for construction work.
4. Leather or leather-palmed gloves shall be worn when handling rough or sharp-edge material conduit or lumber with splinter and projecting nails. Gauntlet gloves are not recommended except for welders and other specific operations where workmen are subject to possible wrist burns by hot metal, acids, chemicals, cement or lime.
5. Oxyacetylene welding or cuttings without proper cup-type goggles with impact-resistant filter lenses and clear cover glass is prohibited.
6. Electric arc welding or cutting without a helmet equipped with appropriate filter lens and clear glass is prohibited.
7. Leather type gauntlet gloves shall be worn when chipping, drilling, and grinding concrete or at any time supervisor designates.

Tools and Equipment:

1. Do not leave fuel cans near combustible material or adjacent to areas where welding and cutting are performed. If you see any, move them.
2. Fire fighting equipment is to be used for that purpose only. Never place obstructions in front of extinguishers.
3. Avoid flash burns from arc welders. Do not watch welding flash or be continually exposed to direct flash without proper safety equipment.

4. Powder-activated tools shall be used only by licensed persons who have been instructed and tested in their safe use. Use permission is contingent on training.
5. Safe operating instructions of manufacturers shall be complied with.
6. Only authorized persons shall be allowed to operate equipment.
7. Compressed air shall not be used to blow dirt from clothing, or played with.
8. All safety devices such as chain guards on machinery shall be kept in place at all times except when making repairs.
9. Machinery shall not be repaired or maintained while in operation.
10. Defective ladders are not to be used. Ladders shall be tied off when in use.
11. Do not use any defective tools or equipment. If in doubt, check with crew chief.
12. Provide approved ground fault circuit interrupters on all temporary power.
13. Compressed gas cylinders shall be maintained in an up right position and secured.
14. Machinery or equipment requiring an operator shall not be run unattended. Where practical, unattended equipment shall be locked to prevent unauthorized use.
15. Machinery or equipment shall not be operated in a manner that endangers people or property nor shall the safe operating speeds or loads be exceeded.
16. Machinery and equipment shall not be operated where any part, its loads or lines are closer than ten (10) feet from exposed high voltage, (440 volts or higher) lines unless the current is OFF and/or positive means are taken to control exposure (i.e. rubber goods).
17. All machinery and equipment shall be shut down and positive means taken to prevent its operation while repairs, adjustments or manual lubrications are made.
18. All repairs on machinery or equipment shall be made at a location, which will provide a safe place for repairmen.
19. Contractor's vehicles - every person regularly or occasionally operating a contractor's motor vehicle shall have in his possession at all times while operating such a vehicle an applicable valid State motor vehicle operator's license.
20. Getting off or on any equipment while it is in motion is prohibited.
21. When using another Company's equipment, i.e. ladders, scissors lifts, it should be inspected or checked by supervision.
22. A Safety harness with lanyard should be used when working on lights deemed unsafe by any Homeland Solar – Homeland Builders crew chief, Construction Manager and/or General Contractor rules.

Work Procedures

1. Horseplay and/ or practical jokes are forbidden on the job.
2. Do not step from one elevation to another with heavy loads.
3. The practice of throwing tools from one location to another, from one employee to another or dropping them to lower levels shall not be permitted. When necessary to pass tools or materials under the above conditions, suitable containers or ropes shall be used.
4. Sharp edges or pointed tools shall not be carried in workmen's pockets.
5. No open fires will be permitted too close to buildings containing combustible materials.
6. There is no job that requires running. **WALK - DO NOT RUN!**
7. Do not go up or down a ladder without the free use of both hands. If material or tools have to be handled, use a tool bag on a rope to lift or lower them. Always face the ladder when climbing or descending.
8. Any employee found intoxicated, under the influence of drugs, or with alcoholic beverages or drugs in his possession while on duty will be subject to discipline.
9. All safety devices, guard rails, floor opening covers, and machine guards are not to be removed except with the knowledge and approval of the supervisor.
10. All nails remaining in used lumber will be removed or bent over.
11. Keep your work area clean. Remove trash as you work.
12. Help your own safety and the safety of others - when you see a safety hazard, correct it immediately or call it to the attention of your supervisor/foreman.
13. Do not enter roped off or barricaded area.
14. Trenching over 5 feet in depth must be shored or sloped as required by MIOSHA standard. Keep out trench s or excavations that have not been properly sloped or shored.
15. Use the "four and one" rule when using a ladder. One foot of base is required for every four feet of height. Always secure the bottom of the ladder with cleats and/or safety feet. Lash off the top of ladder to avoid shifting. Extension ladders should be extended 36 inches above the landing point.

First Aid

1. Injuries sustained while on duty shall be reported to the job supervisor/foreman immediately or as soon as possible after injury.
2. First aid must be obtained immediately after injury is sustained.
3. All employees shall report to a medical clinic or hospital when instructed to do so by the jobsite supervisor/foreman following an injury. Employee shall obtain a Return-to-Work form from medical provider and present it to the Job Foreman or crew chief. Said foreman shall send this form to Homeland office for processing.
4. Maintain small first aid kits in each crew chief or foreman's vehicle.

OBSERVANCE OF ALL THESE PRECAUTIONS IS PART OF YOUR JOB. FAILURE TO COOPERATE MAY RESULT IN DISCIPLINE/OR RETRAINING.

"SAFETY IS A SKILL THAT MUST BE PRACTICED LIKE YOUR TRADE."

Homeland Solar - Homeland Builders

FIELD REPORTS AND FORMS

Samples included in this section are:

Supervisor's Accident /Injury/Illness Report - to be filled out by the supervisor/foreman within 24 hours of the accident.

Jobsite Safety Inspection Report - filled out weekly by the supervisor/foreman and sent to the office.

Weekly Safety Meeting Report - to be completed and sent to the office after each jobsite meeting.

Report of Property Damage - to be filled out by the supervisor/foreman.

Motor Vehicle Report

OFFICE REPORTS AND FORMS

Employer's Basic Incident or Injury Report - Form #101

Log of Work-Related Injuries and Incidents - Form #200

Summary of Work-Related Injuries and Illnesses- Form #200A

INSTRUCTIONS FOR USE OF "SUPERVISORS ACCIDENT/ INJURY/ILLNESS REPORT"

This form will assist you in your investigation and is not to be submitted to the insurance Company or any government agency.

The steps necessary in investigating an accident and filling out the form are:

1. Discuss the accident with the employee involved and with any witnesses. Be sure to question why - what - where - when - who - how aspects of the accident.
2. Inspect the equipment or materials involved for conditions that can be made safer.
3. Study the job set-up manner of doing the work. Could it be improved?
4. Is the employee involved suited for the job he is doing? Did he receive adequate training? Are there any other problems - use of drugs, use of alcohol, or emotional problems?
5. Recommendations to correct the problem must be recommendations that will not create other situations that could result in injury to other employees.
6. Your report should be completed no later than 24 hours after the accident.

Homeland Solar - Homeland Builders

HAZARDOUS ENERGY CONTROL PROCEDURES **LOCKOUT**

I. Purpose and Scope

Effective hazardous energy control procedures will protect employees during machine and equipment servicing and maintenance where the unexpected energizing, start up or release of stored energy could occur and cause injury, as well as while working on or near exposed de-energized electrical conductors and parts of electrical equipment. Hazards being guarded against include being thrown from, or contacting live electrical circuits/parts.

The procedure herein established (III - VII) will ensure that machine and equipment are properly isolated from hazardous energy sources during servicing and maintenance and properly protect against re-energizing as required by 29 CFR 1910.147.

While any employee is exposed to contact with parts of fixed electrical equipment or circuits which have been de-energized, the circuits energizing the parts shall be locked out and tagged in accordance with the requirements of 29 CFR 1910.333 (b) (2).

Only when disconnecting means or other devices are incapable of being locked out, and until lockout capability is provided, will a tagout procedure (without lockout), be utilized.

II. Enforcement

Any employee who fails to follow these procedures will face disciplinary action and/or retraining in accordance with those listed in the Company policy.

III. Definitions

Authorized employee - a person who locks out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing service or maintenance, which exposes him/her to potentially hazardous energy.

Affected employee - an employee whose job requires him/her to operate/use a machine or equipment or work in an area in which service or maintenance is being performed under lockout.

Energy isolating devices - A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following:

A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches, and other control circuit type devices are not energy isolating devices.

Other employee - an employee whose work operations are or may be in area where energy controls procedures may be utilized.

IV. Authorization/Responsibility

Appropriate employee will be instructed in the safety significance of the lockout procedures. See list of employee authorized to lockout. See lists of job titles for affected and other employees.

V. Guidelines

- A. Locks, chains, wedges, or other hardware which meets the requirements defined in 1910.147 (c) (5) (ii) shall be provided by the Company's supervisor/foreman.
- B. Lockout devices shall be singularly identified. They shall be the only devices used for controlling energy and shall not be used for other purposes.
- C. The lockout devices shall indicate the identity of the employee applying the devices.
- D. All machines and equipment shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Lockout will also apply when working on or near exposed de-energized electrical circuit/parts.

- E. No employee shall attempt to operate any switch, valve, or other energy isolating devices, which are locked out.
- F. Each lockout device shall only be removed by the employee who applied the device.
(Exception: see VII. B. 2.)

VI. Lockout Procedures and Techniques

A. Preparation for Shutdown

1. In preparation for lockout, an initial survey must be made by supervisor, foremen, lead person to locate and identify all energy isolating devices to be certain which switch, valve, or other energy isolating devices apply to the machine/equipment to be locked out. More than one energy source (electrical, hydraulic, pneumatic, chemical, thermal, or others) may be involved.
2. Before an authorized or affected employee turns off a machine or piece of equipment, the authorized employee must have knowledge of the type and magnitude of the energy to be controlled, and the method or means to control the energy.

B. Machine or Equipment Shutdown

1. All affected employees shall be notified that a lockout system is going to be utilized and the reason for it, before the controls are applied.
2. If the machine or equipment is operating, shut it down by normal stopping procedure. (depressing stop button, open toggle switch, etc.)

C. Machine or Equipment Isolation

Physically locate and operate the switch, valve, or other energy isolating devices so that the equipment is isolated from its energy sources and apply adequate hardware.

D. Lockout Devices Application

1. Authorized employees shall lockout the energy isolating devices with assigned individual locks.
2. Lockout devices shall be applied so that they will hold the energy isolating devices in a "Neutral" or "Off" position.

E. Stored Energy

All stored or residual energy in rams, flywheels, springs, pneumatic, or hydraulic systems, etc. shall be blocked or dissipated. If there is a possibility of re accumulation of stored energy, verification of isolation must be continued until servicing or maintenance is completed.

F. Verification of Isolation

Prior to starting work on machine or equipment that have been locked and after ensuring that no personnel are exposed, the authorized employee shall operate the push button or normal operating controls to verify that the appropriate equipment or machine has been de-energized and make certain it will not operate.

CAUTION: Return Operating Controls to the "Neutral" or "Off" Position After the Test.

The machine/equipment is now locked out. Servicing or maintenance may now occur.

VII. **Removal of Lockout Devices**

- A. After the servicing and/or maintenance is completed and before the lockout devices are removed and energy is restored, the sequence of activities in "Specific Energy Control Procedures for Each or Type of Machine or Equipment" shall be completed by the authorized employee(s)
- B. If the authorized employee who applied the lock is not available, the supervisor shall take the following steps:
 - 1. Verify that the authorized employee who locked out the equipment is not at jobsite.
 - 2. Attempt to contact the authorized employee to inform him/her that his/her lock will be removed from the machine.
 - 3. Remove the lock.
 - 4. Make sure the employee is notified that his/her lock has been removed before he/she resumes work at the jobsite.
- C. In situations in which lockout device **MUST** be temporarily removed from the isolating device and the machine or equipment energized to test or position the machine, equipment, or component, the following sequence of actions will be followed:
 - 1. Clear the machine or equipment of tools and materials.
 - 2. Remove employees from the machine or equipment.
 - 3. Remove the lockout device.
 - 4. Energize and proceed with testing or positioning.

5. De-energize all systems and reapply energy control measures in accordance with procedures set forth under VI. **Lockout Procedures and Techniques.**

VIII. Additional Requirements

- A. Shift or Personnel changes - If a lockout procedure will extend into the following shift, the authorized employee who originally placed the lock will remove it and it will immediately be replaced with the lock of the authorized employee who is to continue the repair or maintenance on that equipment or machine for the following shift.
- B. Cord and Plug Connected Equipment - If servicing or maintenance is performed on cord and plug connected equipment the following procedures shall be performed to protect employees.
 - 1. Unplug equipment from its electrical socket.
 - 2. Place a lockable cover over the plug and a lock on the plug cover during machine/equipment servicing or maintenance.
- C. Other Contractors - If other contractors perform servicing or maintenance that requires lockout, the supervisor shall take the following steps.
 - 1. Inform the other contractor of our Company's lockout procedures and supply them with a copy.
 - 2. Obtain and review a copy of the other contractor's lockout procedures.
 - 3. Ensure that our employees understand and comply with the responsibilities and prohibitions of the other contractor's lockout procedures.

IX. TRAINING

- A. Authorized employees shall receive training covering:
 - 1. Recognition of hazardous energy sources.
 - 2. Types and magnitude of hazardous energy in the workplace.
 - 3. Methods, devices, and procedures used to lockout, verify lockout, and otherwise control hazardous energy on all pieces or types of equipment (including cord and plug connected equipment).
 - 4. Procedures for removing locks and returning a machine or piece of equipment to operation.
 - 5. Transfer of lockout responsibilities.

- B. Affected and all "other" employees shall receive training so that they are able to:
 - 1. Recognize when energy control procedures are being implemented, and
 - 2. Understand the purpose of the procedures and the importance of not attempting to start up or use the machine/equipment that has been locked out.
- C. All training will be certified.
 - 1. A sign in sheet with the title of training presented and instructor's signature and date of training.

X. Retraining

- A. Authorized and affected employees shall receive retraining in proper application of lockout procedures when there is a change in:
 - 1. Job assignment(s) that exposes an authorized employee to new hazards or lockout procedures.
 - 2. Machines, equipment, or processes that present a new hazard or require modified lockout procedures.
 - 3. Energy control procedures for a piece or type of equipment.
 - 4. Or when it becomes known that an employee incorrectly performs lockout procedures.
- B. Retraining will re-establish employee proficiency in lockout, and ensure that employees are knowledgeable of new or revised procedures. All retraining will be certified.

XI. Periodic Inspections

- A. An inspection of the energy control procedures will be conducted annually and will be certified.
- B. Energy control procedures for each machine or type of machine must be inspected.
- C. The inspection shall include a review of lockout responsibilities with each individual authorized to lockout the machine/equipment.
- D. The person who performs the inspection must be authorized to perform the lockout procedures being inspected. The inspector cannot, however, review his/her own use of lockout procedures.
- E. Any deviations or inadequacies identified shall be immediately addressed.

Homeland Solar - Homeland Builders

HAZARD COMMUNICATION PROGRAM

General Information

In order to comply with the Michigan Occupational Safety and Health Act, Hazard Communication, the following written Hazard Communication Program has been established for Homeland Solar - Homeland Builders

The written program will be available on the bulletin board and distributed to you for your review.

Homeland Solar - Homeland Builders will meet the requirements of this rule as follows:

1. Container Labeling

The supervisor/foreman will verify that all containers received for use will:

- o Be clearly labeled as to the contents
- o Note the appropriate hazard warning
- o List the name and address of the manufacturer

It is the policy of this Company that no container will be released for use until the above data is verified.

The supervisor /foreman will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or with the generic label which will have a block for identity and blocks for hazard warning.

2. Material Safety Data Sheets (MSDS)

Copies of MSDSs for all hazardous chemicals to which employees of this Company may be exposed will be kept in a binder at job site in office and office box in foreman's pick up.

MSDSs will be available to all employees in their work area for review during each work shift. If MSDSs are not available or new chemicals in use do not have MSDS, please immediately contact the supervisor /foreman.

3. Employees Training and Information

Prior to starting work each new employee of will attend a health and safety orientation and will receive information and training on the following:

- o An overview of the requirements contained in the Hazard Communication Rules
- o Chemicals present in their workplace operations

- o Location and availability of our written hazard program
- o Physical and health effects of the hazardous chemicals
- o Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area
- o How to lessen or prevent exposure to these hazardous chemicals through usage of control/work practices and personal protective equipment
- o Steps the Company has taken to lessen or prevent exposure to these chemicals
- o Safety emergency procedures to follow if they are exposed to these chemicals
- o How to read labels and review MSDSs to obtain appropriate hazard information

After attending the training class, each employee will sign a form to verify they attended the training, received our written materials, and understood this Company's policies on Hazard Communication.

Prior to a new hazardous chemical being introduced into any section of this Company, each employee of that section will be given information as outlined above. The supervisor /foreman are responsible for ensuring that MSDSs on the new chemical(s) are available.

4. List of Hazardous Chemicals

A list of all known Hazardous Chemicals used by employees of is located at the front of the MSDS manual. Further information on each noted chemical could be obtained by reviewing Material Safety Data Sheets located in the body of the MSDS manual.

5. Hazardous Non routine Tasks

Periodically, employees are required to perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee will be given information by their section leader about hazardous chemicals to which they may be exposed during such activity.

This information will include:

- o Specific chemical hazards
- o Protective/safety measures the employee can take
- o Measures the Company has taken to lessen the hazards including ventilation, respirators, presence of another employee, and emergency procedures.

6. Chemicals in Unlabeled Pipes

Employees in areas where chemicals are transferred through unlabeled pipes often perform work activities.

Prior to starting work in these areas, the employee should contact the supervisor /foreman for information regarding:

- o The chemical in the pipes
- o Potential hazards
- o Safety precautions, which should be taken

7. Informing Contractors

It is the responsibility of the supervisor /foreman to provide contractors (with employees) the following information:

- o Hazardous chemicals to which they may be exposed while on the job site
- Precautions the employees may take to lessen the possibility of exposure by usage of appropriate protective measures.

END



144HC M10 NTYP SL Bifacial Module

144 Half-Cut Monocrystalline 555W – 585W

22.64%

Utilizes the latest M10 size super high efficiency N-type silicon solar cells. Half cut design further reduces cell to module (CTM) losses.

Stability & Looks

3.2mm fully tempered frontside glass for superior hail resistance. Enhanced frame design to withstand higher wind, snow, and other mechanical stresses. Framed Glass-Backsheet aesthetic is ideal for high visibility

High Energy Yield

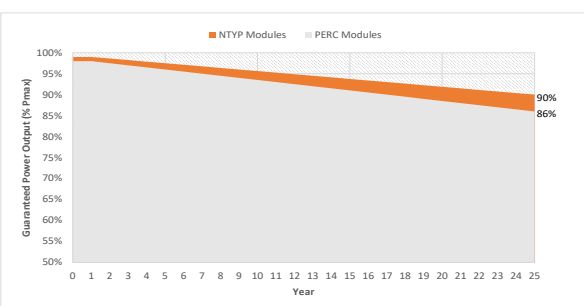
Highest efficiency, Excellent Bifaciality & Low temperature coefficient of N-type Silicon Solar Cells enable High Energy yield

High Reliability

N-type silicon solar cells result in low LID, reducing annual degradation and guaranteeing more power throughout the lifetime.

No Compromise Guarantee

15 Year Product Warranty
25 Year Linear Performance Guarantee



Highly efficient N-type Silicon Solar Cells

Low LCOE enabled by High Power Output & Low BOS Cost

1% First year degradation & 0.4% Annual Power degradation

World-class Quality

- Heliene's fully automated manufacturing facilities with state-of-the-art robotics and computer aided inspection systems ensure the highest level of product quality and consistency
- All manufacturing locations are compliant with international quality standards and are ISO 9001 certified
- Heliene modules have received Top Performer rankings in several categories from PV Evolution Labs (PV EL) independent quality evaluations

Bankable Reputation

- Established in 2010, Heliene is recognized as highly bankable Tier 1 manufacturer of solar modules and has been approved for use by the U.S. Department of Defense, U.S. Army Corps of Engineers and from numerous top tier utility scale project debt providers
- By investing heavily in research and development, Heliene has been able to stay on the cutting edge of advances in module technology and manufacturing efficiency

Local Sales, Service, and Support

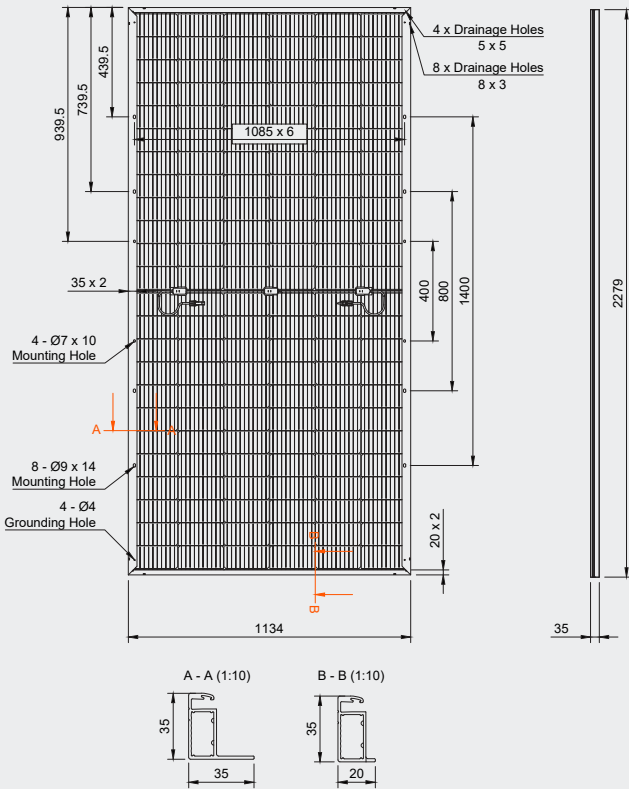
- With sales offices across the U.S. and Canada, Heliene prides itself on unsurpassed customer support for our clients. Heliene has become the brand of choice for many of the leading residential installers, developers and Independent Power Producers due to our innovative technology, product customization capability and just in time last-mile logistics support
- Local sales and customer support means answered phone calls and immediate answers to your technical and logistics questions. We understand your project schedules often change with little warning and endeavor to work with you to solve your project management challenges



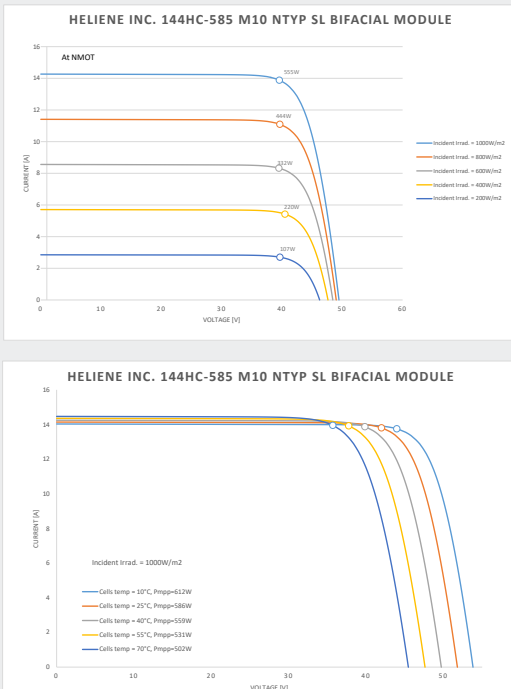
www.heliene.com



Dimensions for 144HC M10 NTYP SL Bifacial Series Modules



I-V Curves for 144HC M10 NTYP SL Bifacial Series Modules



Electrical Data (STC)

| | | | | | | | | |
|----------------------------|---------------|-------|-------|-------|-------|-------|-------|-------|
| Peak Rated Power* | P_{mpp} (W) | 585 | 580 | 575 | 570 | 565 | 560 | 555 |
| Maximum Power Voltage | V_{mpp} (V) | 43.81 | 43.62 | 43.37 | 43.13 | 42.88 | 42.63 | 42.39 |
| Maximum Power Current | I_{mpp} (A) | 13.36 | 13.32 | 13.28 | 13.24 | 13.20 | 13.16 | 13.12 |
| Open Circuit Voltage* | V_{oc} (V) | 51.79 | 51.65 | 51.51 | 51.37 | 51.24 | 51.09 | 50.95 |
| Short Circuit Current** | I_{sc} (A) | 14.14 | 14.10 | 14.06 | 14.02 | 13.99 | 13.95 | 13.91 |
| Module Efficiency | Eff (%) | 22.64 | 22.44 | 22.25 | 22.06 | 21.86 | 21.67 | 21.48 |
| Maximum Series Fuse Rating | MF (A) | 30 | 30 | 30 | 30 | 30 | 30 | 30 |

Power Sorting Range

[- 0/+3%]

Bifaciality Factor***

 $80 \pm 5\%$ STC - Standard Test Conditions: Irradiation 1000 W/m² - Air mass AM 1.5 - Cell temperature 25 °C,* P_{mpp} Production Tolerance $\pm 3\%$, V_{oc} Production Tolerance $\pm 3\%$, ** I_{sc} Production Tolerance $\pm 4\%$ ***Bifaciality Factor = $P_{mpp_{rear}}/P_{mpp_{front}}$ where $P_{mpp_{rear}}$ and $P_{mpp_{front}}$ are tested at STC

Electrical Data (NMOT)

| | | | | | | | | |
|-----------------------|---------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power | P_{mpp} (W) | 444 | 440 | 437 | 433 | 429 | 425 | 421 |
| Maximum Power Voltage | V_{mpp} (V) | 41.95 | 41.77 | 41.53 | 41.30 | 41.06 | 40.82 | 40.59 |
| Maximum Power Current | I_{mpp} (A) | 10.59 | 10.54 | 10.51 | 10.48 | 10.45 | 10.42 | 10.38 |
| Open Circuit Voltage | V_{oc} (V) | 49.59 | 49.45 | 49.32 | 49.19 | 49.06 | 48.92 | 48.78 |
| Short Circuit Current | I_{sc} (A) | 11.40 | 11.37 | 11.33 | 11.30 | 11.28 | 11.25 | 11.21 |

NMOT - Nominal Module Operating Temperature:

Irradiance at 800W/m², Ambient Temperature 20°C, Wind speed 1m/s

Mechanical Data

| | |
|------------------------|--|
| Solar Cells | 144 Half Cut, M10x, N-type Cells |
| Module Construction | Framed Glass-Backsheet |
| Backsheet | Transparent Backsheet with White Pattern |
| Dimensions (L x W x D) | 2279 x 1134 x 35 mm (89.72 x 44.65 x 1.38 inch) |
| Weight | 29.2 kg (64.3 lbs) |
| Frame | Double Webbed 15-Micron Anodized Aluminum Alloy |
| Glass | 3.2mm Fully Tempered, High-Transmission, PV Solar Glass with Anti Reflective Coating |
| Junction Box | IP-68 rated with 3 bypass diodes |
| Output Cables | 4mm ² (12 AWG), 0.3-meter Symmetrical Cables |
| Connectors | Multi-Contact/ Stäubli MC4 |

Certifications

UL Certification UL61215, UL61730, CSA C22.2 No. 61730

Temperature Ratings

| | |
|---|---------------------------------|
| Nominal Module Operating Temperature (NMOT) | +42°C ($\pm 2^\circ\text{C}$) |
| Temperature Coefficient of P_{max} | -0.30%/°C |
| Temperature Coefficient of V_{oc} | -0.25%/°C |
| Temperature Coefficient of I_{sc} | 0.045%/°C |

Maximum Ratings

| | |
|-------------------------|-------------------|
| Operational Temperature | -40°C to +85°C |
| Max System Voltage | 1500V |
| Mech. Load Test (Front) | 113 psf / 5400 Pa |
| Mech. Load Test (Back) | 50 psf / 2400 Pa |
| Fire Type | Type 1 |

Warranty

| |
|--------------------------------|
| 15 Year Product Warranty |
| 25 Year Linear Power Guarantee |

Packaging Configuration

| | |
|-----------------------------------|------------|
| Modules per Pallet 40' Container: | 31 pieces |
| Modules per 40' Container: | 620 pieces |
| Modules per Pallet 53' Trailer: | 28 pieces |
| Modules per 53' Trailer: | 644 pieces |

