



**NOTICE OF REGULAR MEETING AGENDA
HISTORIC LANDMARK PRESERVATION COMMITTEE
MUNICIPAL CENTER CITY COUNCIL CHAMBERS
211 N. HENRY STREET, LANCASTER, TEXAS**

Tuesday, February 23, 2021 - 7:00 PM



While the Chair of the Historic Landmark Preservation Committee may be physically present at City Hall, the other Committee members will attend via video or audio link due to the COVID-19 emergency situation.

IMPORTANT NOTICE: Due to the COVID-19 (coronavirus) state of emergency and consistent with the Governor's Order regarding modifications to the Texas Open Meetings Act ("TOMA"), and executive orders regarding the public will not be admitted to the physical meeting location.

Please click the link below for forms:

<https://www.lancaster-tx.com/1413/Notice-Regarding-Public-Participation>

Please click the link below to join the webinar:

https://us02web.zoom.us/webinar/register/WN_gRh3vJZzQiKAyDMNhbKfA

The meeting will be broadcast live via video at the following address:

<http://www.lancaster-tx.com/324/Watch-Meetings>

7:00 p.m. Regular Meeting

CALL TO ORDER

PUBLIC TESTIMONY:

At this time citizens who have pre-registered before the call to order will be allowed to speak on consent or action items on the agenda, with the exception of public hearings, for a length of time not to exceed three minutes. Anyone desiring to speak on an item scheduled for a public hearing is requested to hold their comments until the public hearing on that item.

CONSENT AGENDA:

Items listed under the consent agenda are considered routine and are generally enacted in one motion. The exception to this rule is that a Commission Member may request one or more items to be removed from the consent agenda for separate discussion and action.

1. Consider approval of minutes from the Historic Landmark Preservation Committee regular meeting held on January 26, 2021.

ACTION:

2. HLPC21-08 Discuss and consider a Certificate of Appropriateness (COA) for the installation of solar panels on the property addressed as 305 East 4th Street, City of Lancaster, Dallas County, Texas.

ADJOURNMENT

ACCESSIBILITY STATEMENT: Meetings of the Lancaster Boards and Commissions are held in municipal facilities and are wheelchair-accessible. For sign interpretive services, call the City Secretary's office, 972-218-1311, or TDD 1-800-735-2989, at least 72 hours prior to the meeting. Reasonable accommodation will be made to assist your needs.

PURSUANT TO SECTION 30.06 PENAL CODE (TRESPASS BY HOLDER WITH A CONCEALED HANDGUN), A PERSON LICENSED UNDER SUBCHAPTER H, CHAPTER 411, GOVERNMENT CODE (HANDGUN LICENSING LAW), MAY NOT ENTER THIS PROPERTY WITH A CONCEALED HANDGUN.

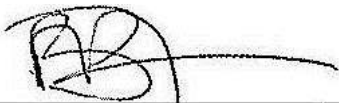
CONFORME A LA SECCION 30.06 DEL CODIGO PENAL (TRASPASAR PORTANDO ARMAS DE FUEGO CON LICENCIA) PERSONAS CON LICENCIA BAJO DEL SUB-CAPITULO 411, CODIGO DEL GOBIERNO (LEY DE PORTAR ARMAS), NO DEBEN ENTRAR A ESTA PROPIEDAD PORTANDO UN ARMA DE FUEGO OCULTADA.

PURSUANT TO SECTION 30.07 PENAL CODE (TRESPASS BY HOLDER WITH AN OPENLY CARRIED HANDGUN), A PERSON LICENSED UNDER SUBCHAPTER H, CHAPTER 411, GOVERNMENT CODE (HANDGUN LICENSING LAW), MAY NOT ENTER THIS PROPERTY WITH A HANDGUN THAT IS CARRIED OPENLY.

CONFORME A LA SECCION 30.07 DEL CODIGO PENAL (TRASPASAR PORTANDO ARMAS DE FUEGO AL AIRE LIBRE CON LICENCIA) PERSONAS CON LICENCIA BAJO DEL SUB-CAPITULO H, CAPITULO 411, CODIGO DE GOBIERNO (LEY DE PORTAR ARMAS), NO DEBEN ENTRAR A ESTA PROPIEDAD PORTANDO UN ARMA DE FUEGO AL AIRE LIBRE.

Certificate

I hereby certify the above Notice of Meeting was posted at Lancaster City Hall on February 19, 2020, @ 5:00 p.m. and copies thereof were provided to the Historic Landmark Preservation Committee members.



Bester Munyaradzi,
Board Liaison

CITY OF LANCASTER BOARDS AND COMMISSIONS

Historic Landmark Preservation Committee

1.

Meeting Date: 02/23/2021

Policy Statement: This request supports the City Council 2020-2021 Policy Agenda

Goal(s): Healthy, Safe & Engaged Community
Quality Development

Submitted by: Bester Munyaradzi, Senior Planner

Agenda Caption:

Consider approval of minutes from the Historic Landmark Preservation Committee regular meeting held on January 26, 2021.

Background:

Attached for your review and consideration are minutes from the:

- Historic Landmark Preservation Committee regular meeting held on January 26, 2021.

Attachments

Draft Minutes 01.26.2021

MINUTES

HISTORIC LANDMARK PRESERVATION COMMITTEE REGULAR MEETING OF JANUARY 26, 2021

The Historic Landmark Preservation Committee of the City of Lancaster, Texas, met in a Regular Session in the Council Chambers of City Hall on January 26, 2021 at 7:00 p.m. with a quorum present to-wit:

Members Present: (City Hall and Virtual)

Glenn Hooper, Chair
Patricia Siegfroid-Giles, Vice Chair
Dee Hinkle
Paul Laurens Wiseman

Members Absent:

Amy Glover

City Staff:

Emma Chetuya, Planner
Lexie Schrader, Planning Technician

Call to order:

Chair Hooper called the meeting to order at 7:00 p.m. on January 26, 2021.

Public Testimony:

At this time citizens who have pre-registered before the call to order will be allowed to speak on consent or action items on the agenda, with the exception of public hearings, for a length of time not to exceed three minutes. Anyone desiring to speak on an item scheduled for a public hearing is requested to hold their comments until the public hearing on that item.

There were no speakers.

CONSENT AGENDA:

Chair Hooper read the consent agenda.

1. **Consider approval of minutes from the Historic Landmark Preservation Committee regular meeting held on December 22, 2020.**

Committee Member Hinkle asked about the color "brite" referred to in the minutes. Vice Chair Siegfroid-Giles stated that "brite" referred to white per the agenda.

MOTION: Vice Chair Siegfroid-Giles made a motion, seconded by Committee Member Hinkle to approve item 1. The vote was cast 3 for, 0 against (Wiseman abstaining, Glover absent).

ACTION:

2. **HLPC21-06 Discuss and consider a Certificate of Appropriateness (COA) to allow for installed wood siding and aluminum windows at the property addressed as 710 North Dallas Avenue City of Lancaster, Dallas County, Texas.**

Planner Chetuya gave the staff report and stated that the applicant installed wood siding and aluminum single pane windows at the deck on the north side of the home. This request is coming before the HLPC because these additions are visible from the street and a COA has not been approved. According to permitting records, a permit for a 15' x 18' porch with a screen around it was issued on June 30, 2015. The permit expired on December 27, 2015 with no inspections requested or performed.

The added siding is in compliance with the Lancaster Historic Residential Design Regulations as it is wood and similar to the existing siding. The added windows are not in compliance with the regulations as their forms are not simpler in comparison to the existing windows and aluminum is not a permitted window material. The existing windows are 1/1 panel and the added windows are 2/2 panels, therefore being more complex than the existing windows. Staff recommends approval of the added wood siding and recommends the windows be replaced with 1/1 panel wood windows in order to maintain similarity with the existing windows.

Chair Hooper asked when the porch was constructed. Planner Chetuya stated that the porch was constructed between the permit approval in June of 2015 and now.

Committee Member Hinkle asked if they received a permit for a porch then decided to enclose it with wood siding without a permit. Planner Chetuya confirmed and stated that the permit was not approved nor inspected.

Chair Hooper asked when the porch was constructed. Jessica Prado, 710 N Dallas, applicant, stated that they received a permit five years ago and later enclosed the porch due to rain.

Committee Member Hinkle asked if the new wood on the porch would be painted to match the house. Ms. Prado said yes and stated that they intended to paint the entire house a different color.

Committee Member Hinkle asked if the roof of the porch was metal. Ms. Prado stated that she thought the roof was metal. Chair Hooper stated that it appeared to be roof flashing.

Committee Member Hinkle said that the regulations stated that additions should reflect the massing, roof shape, bay spacing, cornice lines and building materials of the house, and windows should be simpler in design than the historic structure. Committee Member Hinkle stated that the addition did not have a finished appearance, and tabling the item may be the best option.

Vice Chair Siegfried-Giles stated that the item before them was not finished. She stated that the wood needed to be painted, the roof needed to conform to the style of the home, and the windows on the addition needed to reflect the 1 over 1 style with wide trim. Vice Chair Siegfried-Giles stated that Committee Member Hinkle referred to table the item in order to give the applicant more time to produce photos and/or drawings of what the completed structure will look like.

Committee Member Wiseman stated that the metal flashing was inappropriate, and explained the difference between the 1/1 windows on the home and the 4 panel windows on the addition. He stated that it was possible to find inexpensive used wood windows if necessary.

Ms. Prado stated that the windows on the home are metal but have wood trim. Committee Member Hinkle stated that it would not be fair to require wood windows on the addition, but the aluminum windows must be comparable to those on the home. Chair Hooper recommended adding the wide wood siding and adding a roof overhang to make the addition look more consistent with the home.

Committee Member Wiseman asked the applicant if the mullions could be removed. Ms. Prado stated that she did not know whether the mullions could be removed. Vice Chair Siegfried-Giles stated that removing the mullions and adding a wood trim would help.

Vice Chair Siegfried-Giles asked if tabling the item would require them to pay for another application. Chair Hooper said no. Chair Hooper asked how many times the item could be tabled. Planner Chetuya stated that the Committee could table the items as many times as necessary.

Vice Chair Siegfried-Giles asked if it would be helpful to table the item for one month to provide documentation on what the finished addition will look like. Ms. Prado confirmed.

Chair Hooper stated that no work could be done on the addition in the time that it is tabled.

MOTION: Committee Member Hinkle made a motion, seconded by Vice Chair Siegfried-Giles to table item 2 for a month with the option for the applicant to request more time. The vote was cast 4 for, 0 against (Glover absent).

3. HLPC21-07 Discuss and consider a Certificate of Appropriateness (COA) to install a wood fence on the property addressed as 103 East Second Street City of Lancaster, Dallas County, Texas.

Planner Chetuya stated that the applicant is proposing to replace the existing wood fence on the west and south sides of the property and install a wood fence on the east side of the property as shown. The replaced and proposed fence will be wood, six feet in height, and stained. The entire fence will be located in the rear 50% of the side yard. The applicant will add an electric gate wood fence on the driveway leading to the garage on the east side of the property. The applicant's request is in compliance with the Lancaster Historic Residential Design Regulations. Staff recommends approval of the request as presented.

Chair Hooper asked the height of the fence. Jose Perez, 103 East Second Street, applicant, stated that the fence will be 6 feet tall all the way around the property.

Committee Member Hinkle asked if the gate would look like part of the fence. Mr. Perez confirmed.

Committee Member Wiseman asked if there was an existing chain link fence on the property. Mr. Perez stated that the existing fence is wood.

Committee Member Wiseman asked how far up the fence would come on the side of the home on the Dallas Avenue side. Mr. Perez stated that the fence will pass the back of the home by

around 8 feet, but will not cover the three windows on the side of the home. Committee Member Wiseman asked if this was an extension of where the fence currently is. Mr. Perez confirmed.

Committee Member Wiseman asked if the finished side of the fence would face outward. Mr. Perez confirmed.

Chair Hooper asked if there would be any other gates. Mr. Perez stated that the only gate would be on the driveway in front of the garage.

MOTION: Committee Member Hinkle made a motion, seconded by Committee Member Wiseman to approve item 3. The vote was cast 4 for, 0 against (Glover absent).

MOTION: Vice Chair Siegfried-Giles made a motion, seconded by Committee Member Wiseman to adjourn. The vote was cast 4 for, 0 against (Glover absent).

The meeting was adjourned at 7:46 PM.

ATTEST:

APPROVED:

Bester Munyaradzi, Senior Planner

Glenn Hooper, Chair

CITY OF LANCASTER BOARDS AND COMMISSIONS

Historic Landmark Preservation Committee

2.

Meeting Date: 02/23/2021

Policy Statement: This request supports the City Council 2020-2021 Policy Agenda

Goal(s): Healthy, Safe & Engaged Community
Quality Development

Submitted by: Bester Munyaradzi, Senior Planner

Agenda Caption:

HLPC21-08 Discuss and consider a Certificate of Appropriateness (COA) for the installation of solar panels on the property addressed as 305 East 4th Street, City of Lancaster, Dallas County, Texas.

Background:

1. **Location and Size:** The subject property is addressed as 305 East 4th Street and is .50 acre in size.
2. **Current Zoning:** The subject property is currently zoned Single-Family Residential (SF-6) and Historic Overlay District (HP) Subdistrict Area E. Single-family homes are permitted in this Overlay District.
3. **Adjacent Properties:**
North: HP-SF-6, Historic Overlay District, Single-Family Residential (Occupied Residence)
South: HP-SF-6, Historic Overlay District, Single-Family Residential (Occupied Residence)
East: HP-SF-6, Historic Overlay District, Single-Family Residential (Occupied Residence)
West: DOD-LI-HP, Downtown Overlay District, Light Industrial, Historic Overlay District (Vacant)
4. **Comprehensive Plan Compatibility:**
The Future Land Use Plan of the Comprehensive Plan identifies this site as suitable for single-family homes. The existing home on the property is consistent with the Future Land Use Plan of the Comprehensive Plan.
5. **Case History/Background:**
The home on the subject site was built in 1920 and is listed on the Dallas Central Appraisal District (DCAD) website as a block foundation and frame building.

Operational Considerations:

The applicant is requesting to install black solar panels on the front and sides of the roof on the home. The solar panels will be visible from the street. The applicant has indicated that it is necessary for the solar panels to be located on the east, west, and south sides of the roof in order to obtain optimal sunlight.

Section 3.17.2 of the Lancaster Historic Residential Design Regulations (LHRDR) *Roof Vents, Turbines, Skylights, and Other Equipment* states that, "Roof vents, turbines, skylights and other roof-mounted equipment should be located on the rear side of the house, such that these are not visible from the public street. If this is not possible, or for existing elements, they should be painted the same color as the

roofing material so they are less obtrusive." The proposed solar panels are not in compliance with the LHRDR as the solar panels will be located in the front and sides of the roof and will be visible from the public street. The color of the panels will be black and the color of the home's roof is grayish tan, as such, the solar panels and roof will be contrasting in colors.

The installation of the solar panels will be required to meet certain sections of the 2015 International Residential Code (for residential installations) and the 2017 National Electric Code. This will be evaluated during the permitting process.

Public Information Considerations:

This item is being considered at a Regular Meeting of the Historic Landmark Preservation Committee noticed in accordance with the Texas Open Meetings Act.

Options/Alternatives:

1. The Historic Landmark Preservation Committee may approve the request, as presented.
2. The Historic Landmark Preservation Committee may approve the request with conditions, and state those conditions.
3. The Historic Landmark Preservation Committee may deny the request.

Recommendation:

Staff recommends the solar panels be placed on the roof where they are not visible from the front street or use panels that have the same color as the roofing material so they are less obtrusive to meet the LHRDR requirement.

Attachments

Location Map

DCAD Report

Description of Request

Staff Photos

Letter of Intent

City of Lancaster

305 E Fourth St
Zoned: SF-6 & Historic District



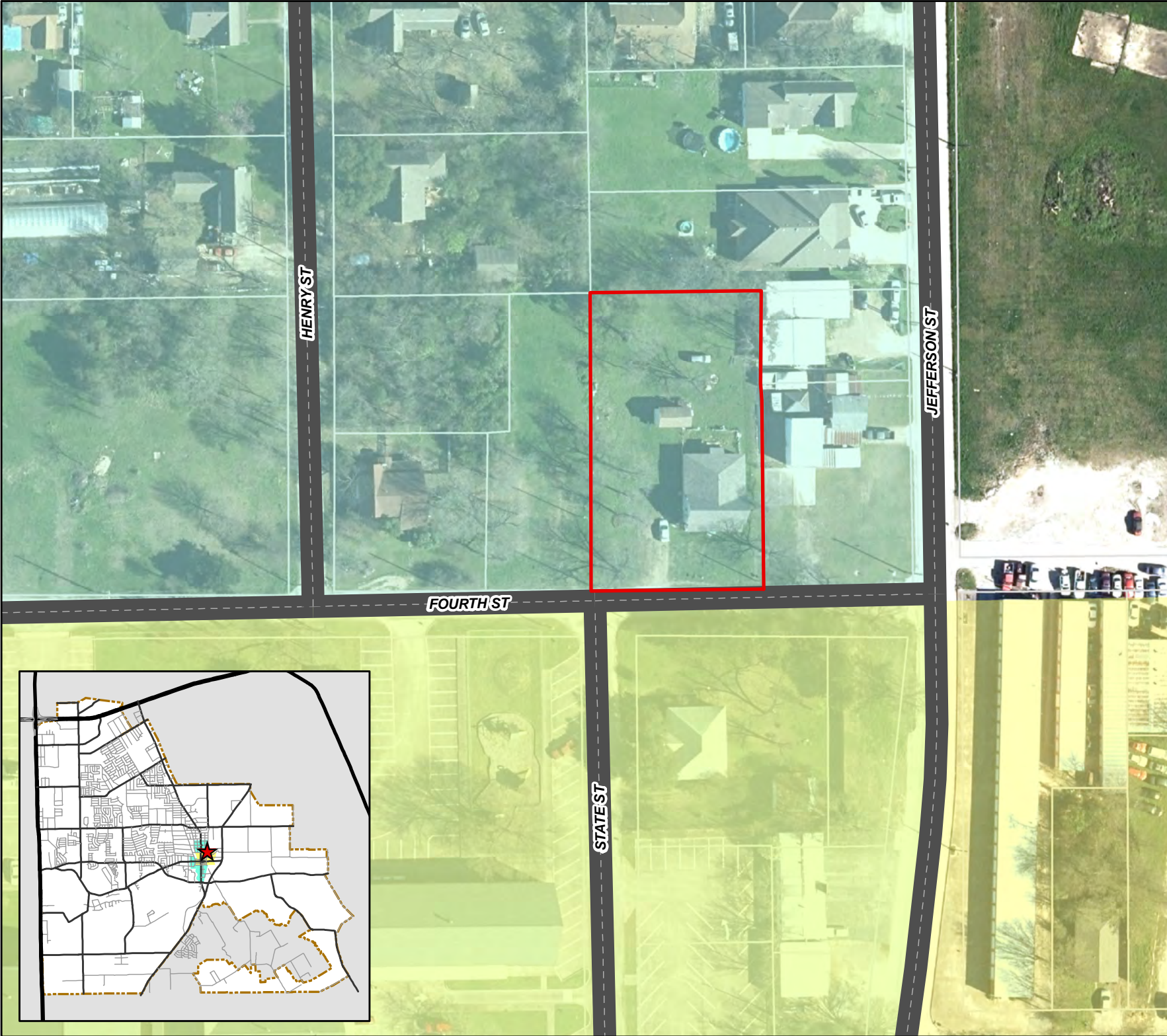
Legend

- Subject Property
- Downtown Districts
- Historic District
- Floodplain
- City Limits
- Parcels



0 20 40 80 Feet

date: 02/04/2021





Residential Account #36000500700290000

[Location](#)
[Owner](#)
[Legal Desc](#)
[Value](#)
[Main Improvement](#)
[Additional Improvements](#)
[Land](#)
[Exemptions](#)
[Estimated Taxes](#)
[History](#)

Property Location (Current 2021)

Address: 305 E 4TH ST
Neighborhood: 4LSG06
Mapsc: 86-C (DALLAS)

DCAD Property Map

2020 Appraisal Notice

Electronic Documents (ENS)

File Homestead Exemption Online



Print Homestead Exemption Form

Owner (Current 2021)

ROMINE MARTIN & REBECCA
 460 JONES ST
 CEDAR HILL, TEXAS 751042827

Multi-Owner (Current 2021)

Owner Name	Ownership %
ROMINE MARTIN & REBECCA	100%

Legal Desc (Current 2021)

- 1: ORIG TOWN LANCASTER
- 2: BLK 70 LT 29
- 3: ACS 0.50
- 4: INT201600186987 DD07012016 CO-DC
- 5: 0005007002900 4CN00050070

Deed Transfer Date: 7/12/2016

Value

2020 Certified Values	
Improvement:	\$80,270
Land:	+ \$49,730
Market Value:	= \$130,000
Revaluation Year:	2019
Previous Revaluation Year:	2017

Main Improvement (Current 2021)

Building Class	04	Construction Type	FRAME	# Baths (Full/Half)	1/ 0
Year Built	1920	Foundation	BLOCK	# Kitchens	1
Effective Year Built	1920	Roof Type	GABLE	# Bedrooms	3
Actual Age	101 years	Roof Material	COMP SHINGLES	# Wet Bars	0
Desirability	AVERAGE	Fence Type	NONE	# Fireplaces	0
Living Area	1,584 sqft	Ext. Wall Material	VINYL	Sprinkler (Y/N)	N
Total Area	1,584 sqft	Basement	NONE	Deck (Y/N)	N
% Complete	100%	Heating	CENTRAL FULL	Spa (Y/N)	N
# Stories	ONE STORY	Air Condition	CENTRAL FULL	Pool (Y/N)	N
Depreciation	50%			Sauna (Y/N)	N

Additional Improvements (Current 2021)

#	Improvement Type	Construction	Floor	Exterior Wall	Area (sqft)
1	STORAGE BUILDING		UNASSIGNED	FRAME	216

Land (2020 Certified Values)

#	State Code	Zoning	Frontage (ft)	Depth (ft)	Area	Pricing Method	Unit Price	Market Adjustment	Adjusted Price	Ag Land
1	SINGLE FAMILY RESIDENCES	SINGLE FAMILY RES-3 (7000)	112	194	22,100.0000 SQUARE FEET	STANDARD	\$2.25	0%	\$49,725	N

*** All Exemption information reflects 2020 Certified Values. ***

Exemptions (2020 Certified Values)

	City	School	County and School Equalization	College	Hospital	Special District
Taxing Jurisdiction	LANCASTER	LANCASTER ISD	DALLAS COUNTY	DALLAS CO COMMUNITY COLLEGE	PARKLAND HOSPITAL	UNASSIGNED
VETERANS EXEMPTION	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$0
Taxable Value	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$0

Exemption Details**Estimated Taxes (2020 Certified Values)**

	City	School	County and School Equalization	College	Hospital	Special District
Taxing Jurisdiction	LANCASTER	LANCASTER ISD	DALLAS COUNTY	DALLAS CO COMMUNITY COLLEGE	PARKLAND HOSPITAL	UNASSIGNED
Tax Rate per \$100	\$0.819736	\$1.4999	\$0.24974	\$0.124	\$0.2661	N/A
Taxable Value	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$0
Estimated Taxes	\$983.68	\$1,799.88	\$299.69	\$148.80	\$319.32	N/A
Tax Ceiling	N/A	N/A	N/A	N/A	N/A	N/A
Total Estimated Taxes:						\$3,551.37

DO NOT PAY TAXES BASED ON THESE ESTIMATED TAXES. You will receive an **official tax bill** from the appropriate agency when they are prepared. Please note that if there is an Over65 or Disabled Person **Tax Ceiling** displayed above, **it is NOT reflected** in the Total Estimated Taxes calculation provided. Taxes are collected by the agency sending you the **official** tax bill. To see a listing of agencies that collect taxes for your property. [Click Here](#)

The estimated taxes are provided as a courtesy and should not be relied upon in making financial or other decisions. The Dallas Central Appraisal District (DCAD) does not control the tax rate nor the amount of the taxes, as that is the responsibility of each Taxing Jurisdiction. Questions about your taxes should be directed to the appropriate taxing jurisdiction. We cannot assist you in these matters. These tax estimates are calculated by using the most current certified taxable value multiplied by the most current tax rate. **It does not take into account other special or unique tax scenarios, like a tax ceiling, etc..** If you wish to calculate taxes yourself, you may use the [Tax Calculator](#) to assist you.

History**History**

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Scott E. Wyssling, PE, PP, CME

Wyssling Consulting
76 North Meadowbrook Drive
Alpine, UT 84004
office (201) 874-3483
swyssling@wysslingconsulting.com

January 7, 2021

CNG Solar Engineers
1245 San Fernando Road #200
San Fernando, CA 91340

Re: Engineering Services
Romine Residence
305 E 4th Street, Lancaster TX
11.600 kW System

To Whom it May Concern:

Pursuant to your request, we have reviewed the following information regarding solar panel installation on the roof of the above referenced home:

1. Site Visit/Verification Form prepared by CNG Solar Engineers representative identifying specific site information including size and spacing of rafters for the existing roof structure.
2. Design drawings of the proposed system including a site plan, roof plan and connection details for the solar panels. This information was prepared by CNG Solar Engineers and will be utilized for approval and construction of the proposed system.
3. Photographs of the interior and exterior of the roof system identifying existing structural members and their conditions.

Based on the above information we have evaluated the structural capacity of the existing roof system to support the additional loads imposed by the solar panels and have the following comments related to our review and evaluation:

Description of Residence:

The existing residence is typical wood framing construction with the roof system consisting of truss system with all chords constructed of 2 x 4 dimensional lumber at 24" on center. The attic space is unfinished and photos indicate that there was free access to visually inspect the size and condition of the roof rafters. All wood material utilized for the roof system is assumed to be Doug-Fir #2 or better with standard construction components. The existing roofing material consists of composite asphalt shingles. Photos of the dwelling also indicate that there is a permanent foundation.

A. Loading Criteria Used

- 115 MPH wind loading based on ASCE 7-16 Exposure Category "B" at a slope of 18 degrees
- 7 PSF = Dead Load roofing/framing Live Load = 20 PSF Snow Load = 5 PSF
- 3 PSF = Dead Load solar panels/mounting hardware

Total Dead Load = 10 PSF

The above values are within acceptable limits of recognized industry standards for similar structures in accordance with the 2018 IRC. Analysis performed of the existing roof structure utilizing the above loading criteria indicates that the existing rafters will support the additional panel loading without damage, if installed correctly.

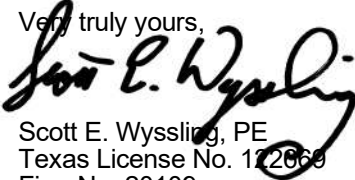
B. Solar Panel Anchorage

1. The solar panels shall be mounted in accordance with the most recent "*Everest Solar Systems Installation Manual*", which can be found on the Everest Solar Systems website (<http://everest-solarsystems.com/>). If during solar panel installation, the roof framing members appear unstable or deflect non-uniformly, our office should be notified before proceeding with the installation.
2. Maximum allowable pullout per lag screw is 235 lbs/inch of penetration as identified in the National Design Standards (NDS) of timber construction specifications for Doug-Fir (North Lumber) *assumed*. Based on our evaluation, the pullout value, utilizing a penetration depth of 2 ½", is less than what is allowable per connection and therefore is adequate. Based on the variable factors for the existing roof framing and installation tolerances, using a thread depth of 2 ½" with a minimum size of 5/16" lag screw per attachment point for panel anchor mounts should be adequate with a sufficient factor of safety.
3. Considering the roof slopes, the size, spacing, condition of roof, the panel supports shall be placed no greater than 72" o/c.
4. Panel supports connections shall be staggered to distribute load to adjacent rafters.

Based on the above evaluation, it is the opinion of this office that with appropriate panel anchors being utilized the roof system will adequately support the additional loading imposed by the solar panels. This evaluation is in conformance with the 2018 IRC, current industry and standards, and based on information supplied to us at the time of this report.

Should you have any questions regarding the above or if you require further information do not hesitate to contact me.

Very truly yours,


Scott E. Wyssling, PE
Texas License No. 122669
Firm No. 20109



PROPOSED 11.6 KW DC SYSTEM (STC) AT 305 E 4TH ST, LANCASTER, TX 75146

ID# TSP61968

Plot Plan & Photovoltaic Layout	PV-1.0
Project Notes, Conduit & Grounding Detail	PV-1.1
Racking Details	PV-2.0
Fire Labels & Equipment Elevation	PV-3.0
3 Line Diagram & 1 Line Diagram	PV-4.1 & PV-4.2
Safety Placard	PV-5.0
Manufacture Spec. Sheets	Attached

ONCOR UTILITY

1 Sheet Index

Scale: N/A

OCCUPANCY GROUP: R-3
TYPE OF CONSTRUCTION: TYPE V-B
AUTHORITY HAVING JURISDICTION: LANCASTER
ASSESSORS PARCEL NUMBER: #36000500700290000
NUMBER OF STORIES: 1-Story
ROOF PITCH: 18°, 40°

2 Site Information

Scale: N/A

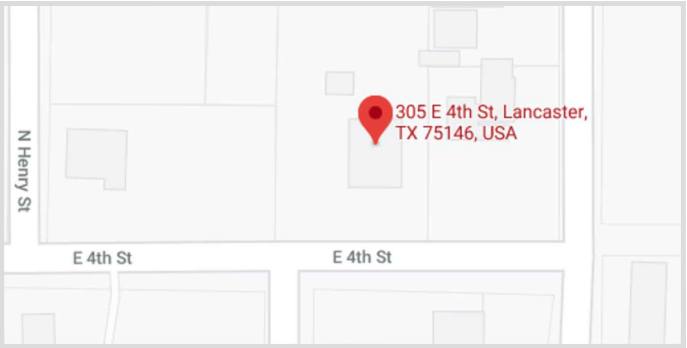
NOTES:
THE VISIBLE, LOCKABLE, LABELED AC
DISCONNECT IS LOCATED WITHIN 10 FT OF
ONCOR METER.

(1) SOLAREGE_ TECHNOLOGIES SE11400H-US (240V)
(40) Q_CELL Q.PEAK-G4.1 290
(40) SOLAREGE P320 [HD] OPTIMIZERS

ADDRESS : 305 E 4TH ST
CITY-ZIP : LANCASTER, TX 75146
ESI ID #: 10443720004108031
METER NUMBER : 128558413

3 AHJ Notes

Scale: N/A



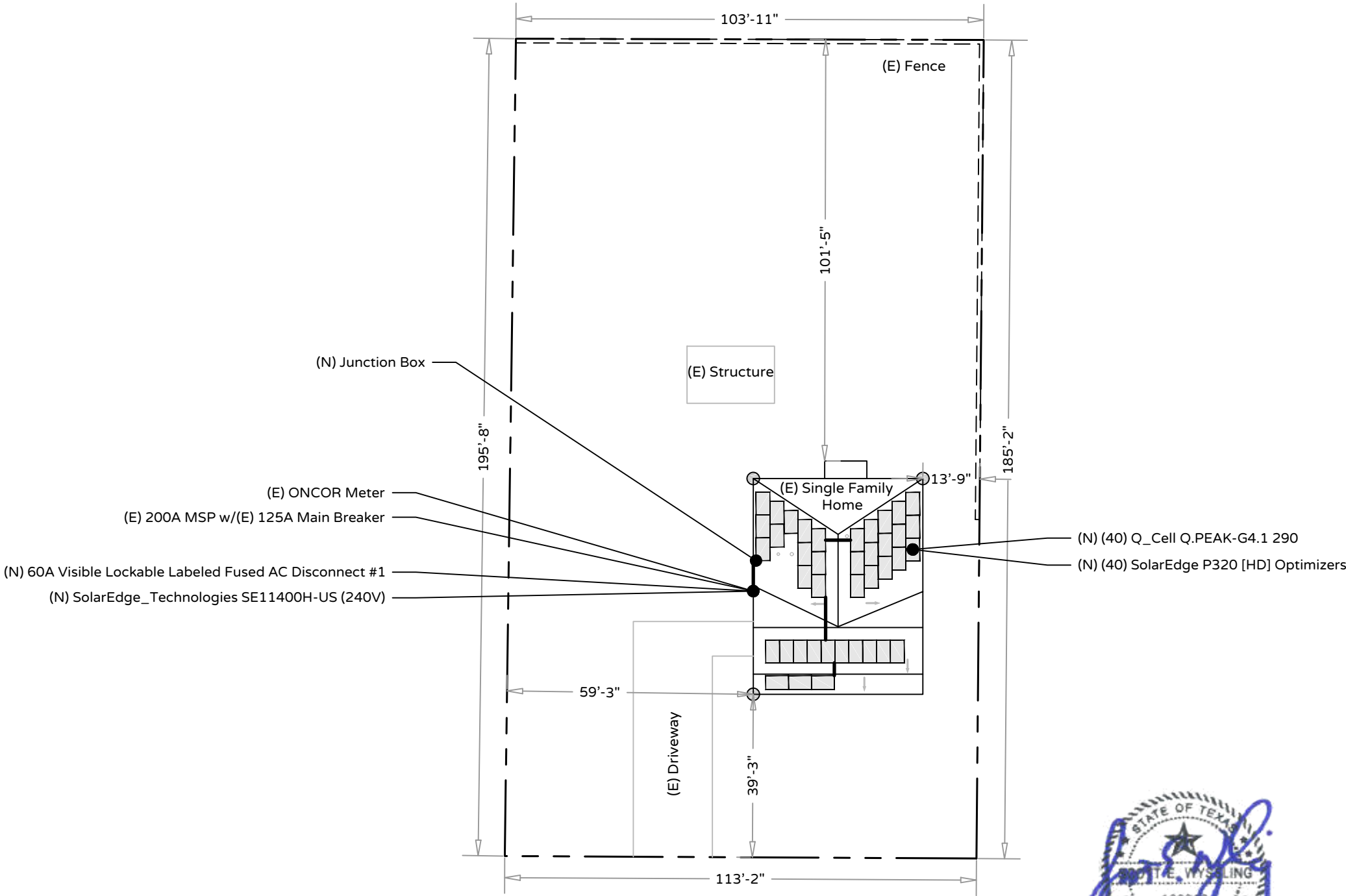
4 Vicinity Map

Scale: NTS



5 Plot Plan

Scale: 1" = 30'



Wyssling Consulting
Firm No. 20109

Roof Access Point	Property Lines	Fence Line	Block Wall	Conduit On Roof	Conduit In Attic	Conduit In Trench

CONTRACTOR INFORMATION



Titan Solar Power TX, Inc.
525 W. Baseline Rd
Mesa, AZ 85210
(480) 830-9290
CR11 #284331

SYSTEM INFORMATION

11.6 kW DC System (STC)
11.40 kW AC System
(40) Q_Cell Q.PEAK-G4.1 290
(40) SolarEdge P320 [HD] Optimizers
SolarEdge_Technologies SE11400H-US (240V)

PROJECT INFO.

Tyler Romine
305 E 4th St
Lancaster, TX 75146
(214) 536-3818
APN #36000500700290000

REVISION BLOCK

DESCRIPTION	DATE
Initial Draft of Plans	6/1/20

Design By: CNG SOLAR ENGINEERING, INC.



SHEET

PV-1.0

1 Applicable Codes

Scale: N/A

CODE BOOK:	2017 NEC®
BREAKER SIZES:	NEC 240.6(A)
WIRE AMPACITY TABLE:	NEC 310.15(B)(16)
MAX SYSTEM VOLTAGE CORRECTION:	NEC 690.7(A)
NUMBER OF CONDUCTORS CORRECTION:	NEC 310.15(B)(3)(A)
AMBIENT TEMPERATURE CORRECTION:	NEC 310.15(B)(2)(A)
AMBIENT TEMPERATURE ADJUSTMENT:	NEC 310.15(B)(3)(C)
DC GROUNDING ELECTRODE CONDUCTOR:	UNGROUND DC SYSTEM
AC GROUNDING ELECTRODE CONDUCTOR:	NEC 250.50
RACK GROUNDING ELECTRODE CONDUCTOR:	NEC 690.47(B)
MAXIMUM OCPD (120% RULE):	NEC 705.12

2 Electrical Code References

Scale: N/A

1. ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS.
2. WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE.
3. ADDITIONAL AC DISCONNECT(S) SHALL BE PROVIDED WHERE THE INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT.
4. ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL.
5. ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE

3 Equipment Location

Scale: N/A

1. THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS INPUT MAY NOT EXCEED 120% OF BUSBAR RATING.
2. WHEN SUM OF THE PV SOURCES EQUALS >100% OF BUSBAR RATING, PV DEDICATED BACKFFED BREAKERS MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD.
3. AT MULTIPLE PV OUTPUT COMBINER PANEL, TOTAL RATING OF ALL OVER CURRENT DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR.
4. SUPPLY SIDE TAP INTERCONNECTION WITH SERVICE ENTRANCE CONDUCTORS BACK FEEDING BREAKER FOR UTILITY-INTERACTIVE INVERTER OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING.

4 Interconnection Notes

Scale: N/A

1. MODULES ARE LISTED UNDER UL 1703 AND CONFORM TO THE STANDARDS.
2. INVERTERS ARE LISTED UNDER UL 1741 AND CONFORM TO THE STANDARDS.
3. DRAWINGS ARE DIAGRAMMATIC, INDICATING GENERAL ARRANGEMENT OF THE PV SYSTEM AND THE ACTUAL SITE CONDITION MIGHT VARY.
4. WORKING CLEARANCES AROUND THE ELECTRICAL EQUIPMENT WILL BE MAINTAINED.
5. ALL GROUND WIRING CONNECTED TO THE MAIN SERVICE GROUNDING IN MAIN SERVICE PANEL/ SERVICE EQUIPMENT.
6. ALL CONDUCTORS SHALL BE 600V, 75°C STANDARD COPPER UNLESS OTHERWISE NOTED.
7. WHEN REQUIRED, A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.
8. THE SYSTEM WILL NOT BE INTERCONNECTED BY THE CONTRACTOR UNTIL APPROVAL FROM THE LOCAL JURISDICTION AND/OR THE UTILITY.
9. ROOF ACCESS POINT SHALL BE LOCATED IN AREAS THAT DO NOT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT STRONG POINTS OF BUILDING CONSTRUCTION WHERE THE ACCESS POINT DOES NOT CONFLICT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREES, WIRES OR SIGNS.
- 10.PV ARRAY COMBINER/JUNCTION BOX PROVIDES TRANSITION FROM ARRAY WIRING TO CONDUIT WIRING

5 General Notes

Scale: N/A

1. ALL CONDUIT AND WIRE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.
2. DC WIRING LIMITED TO MODULE FOOTPRINT. MICRO INVERTER WIRING SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY WITH SUITABLE WIRING CLIPS.
3. AC CONDUCTORS COLORED OR MARKED AS FOLLOWS:
 - 3.1. PHASE A OR L1- BLACK
 - 3.2. PHASE B OR L2- RED, OR OTHER CONVENTION IF THREE PHASE
 - 3.3. PHASE C OR L3- BLUE, YELLOW, ORANGE*, OR OTHER CONVENTION
 - 3.4. NEUTRAL- WHITE OR GREY IN 4-WIRE DELTA CONNECTED SYSTEMS THE PHASE WITH HIGHER VOLTAGE TO BE MARKED ORANGE.

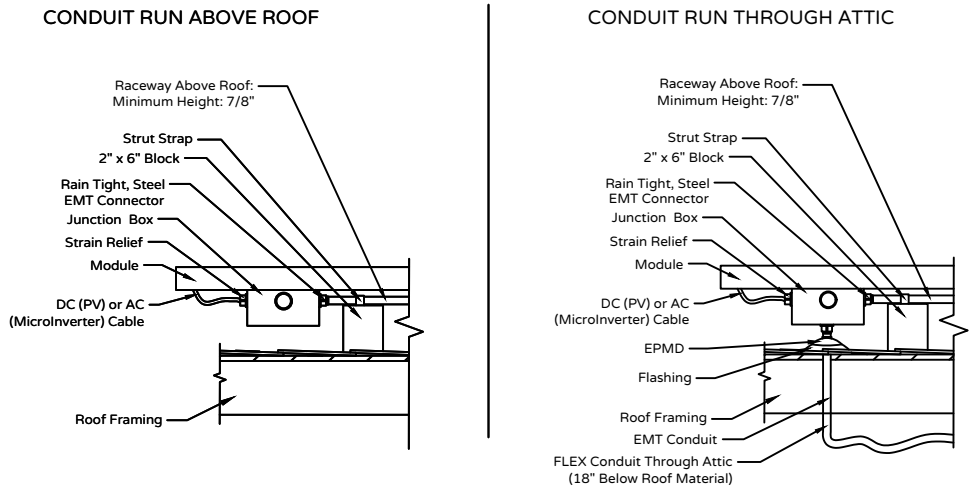
6 Wiring & Conduit Notes

Scale: N/A

1. GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVICES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR SUCH USE.
2. PV EQUIPMENT SHALL BE GROUNDED METAL PARTS OF MODULE FRAMES, MODULE RACKING, AND ENCLOSURES.
3. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO MICRO INVERTER MANUFACTURER'S INSTRUCTIONS.
4. THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.
5. GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER.
6. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, A GROUNDING ELECTRODE SYSTEM PROVIDED.

7 Grounding Notes

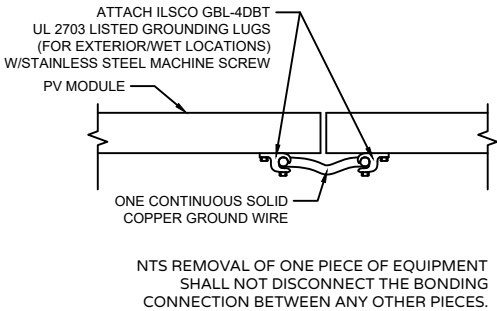
Scale: N/A



8 Conduit Run Details

Scale: NTS

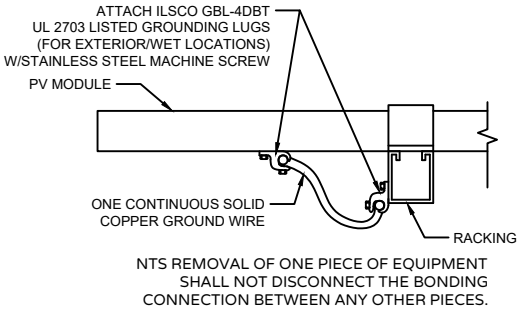
Module to Module



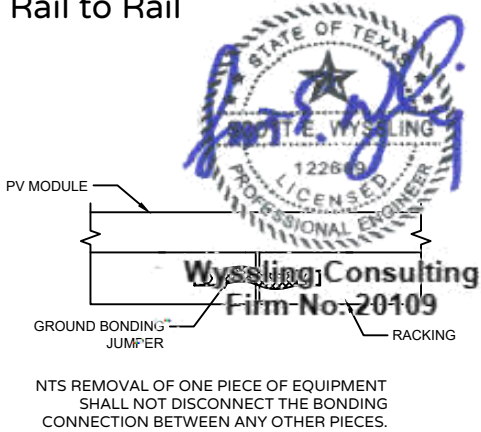
9 Grounding Details

Scale: NTS

Module to Rail



Rail to Rail



1. RACKING SYSTEM & PV ARRAY WILL BE INSTALLED ACCORDING TO CODE-COMPLIANT INSTALLATION TOP CLAMPS REQUIRE A DESIGNATED SPACE BETWEEN MODULES, AND RAILS MUST ALSO EXTEND A MINIMUM DISTANCE BEYOND EITHER EDGE OF THE ARRAY/SUBARRAY, ACCORDING TO RAIL MANUFACTURER'S INSTRUCTIONS.
2. JUNCTION BOX WILL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. IF ROOF-PENETRATING TYPE, IT SHALL BE FLASHED & SEALED PER LOCAL REQUIREMENTS.
3. ROOFTOP PENETRATIONS FOR PV RACEWAY WILL BE COMPLETED AND SEALED WITH APPROVED CHEMICAL SEALANT PER CODE BY A LICENSED CONTRACTOR.
4. ALL PV RELATED ROOF ATTACHMENTS TO BE SPACED NO GREATER THAN THE SPAN DISTANCE SPECIFIED BY THE RACKING MANUFACTURER.

10 Structural Notes

Scale: N/A

1. DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED, THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS).
2. DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH
3. RAPID SHUTDOWN OF ENERGIZED CONDUCTORS BEYOND 10 FT OF PV ARRAY OR 5 FT INSIDE A BUILDING WITHIN 10 SECONDS. CONTROLLED CONDUCTORS ≤30V AND ≤240VA. LOCATION OF LABEL ACCORDING TO AHJ.
4. IF REQUIRED BY AHJ, SYSTEM WILL INCLUDE ARC-FAULT CIRCUIT PROTECTION.

11 Disconnection & OCPD Notes

Scale: N/A



Titan Solar Power TX, Inc.
525 W. Baseline Rd
Mesa, AZ 85210
(480) 830-9290
CR11 #284331

SYSTEM INFORMATION

11.6 kW DC System (STC)
11.40 kW AC System
(40) Q_Cell Q-PEAK-G4.1 290
(40) SolarEdge P320 [HDI] Optimizers
SolarEdge_Technologies SE11400H-US (240V)

PROJECT INFO.

Tyler Romine
305 E 4th St
Lancaster, TX 75146
(214) 536-3818
APN #36000500700290000

REVISION BLOCK

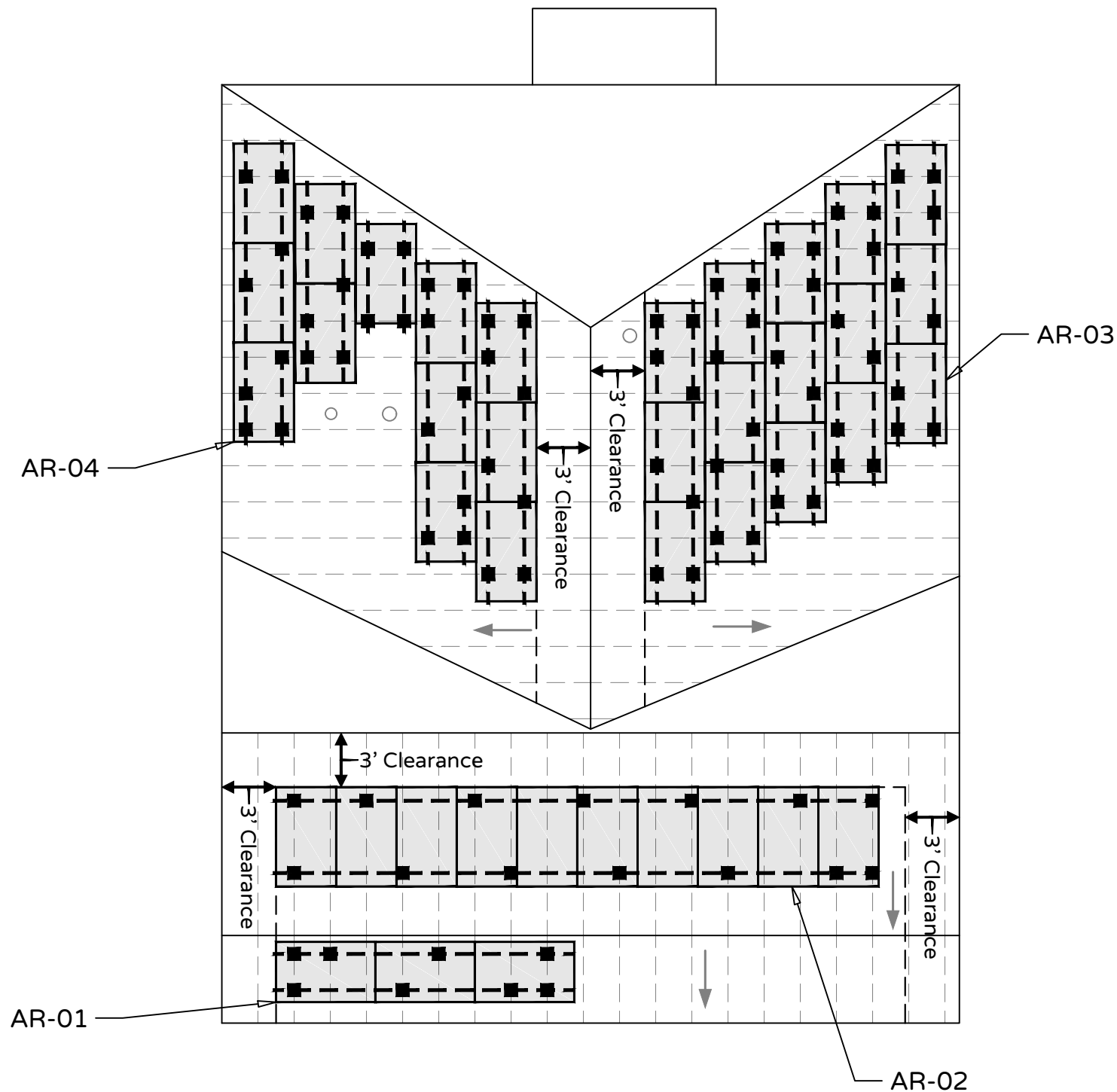
DESCRIPTION	DATE
Initial Draft of Plans	6/1/20

Design By: CNG SOLAR ENGINEERING, INC.



SHEET

Array	Quantity	Mounting Type	Array Tilt	Azimuth	Att. Spacing	Roof Type
AR-01	3	Flush Mounted	18°	180	72"	Comp. Shingle**
AR-02	10	Flush Mounted	40°	180	72"	Comp. Shingle**
AR-03	15	Flush Mounted	18°	90	72"	Comp. Shingle**
AR-04	12	Flush Mounted	18°	270	72"	Comp. Shingle**



1 PV Racking & Roof Framing Plan
Scale: 1/8" = 1'-0"

N

Modules

Fire Clearance

Obstructions

Attachments

Rafts

Rails

Roof Material:

Roof Framing:

Framing Size & Spacing:

Framing Span & Roof Pitch:

Framing Species & Grade:

Comp. Shingle.

Engineered Trusses.

2" x 4", 24" O.C.

10'-2", 18°, 40° Pitch

Douglas Fir Larch #2.

Racking / Rail Manufacture:

Attachment Manufacture:

Number of Attachments:

Racking Weight:

Everest Crossrail 48-X 14 Ft. Rails

Everest EverFlash.

96 Attachments

3.56 Lbs. / Module

Modules:

Module Dimensions:

Module Weight & Sq.Ft. :

Array Sq.Ft. :

(40) Q_Cell Q.PEAK-G4.1 290

65.7" x 39.4" x 1.26"

40.8 Lbs. , 17.98 Sq.Ft.

719.2 Sq.Ft.

Weight w/Racking & Add Ons:

Weight (Lbs.) / Attachment:

Distributed Weight on Roof:

1854.4 Lbs.

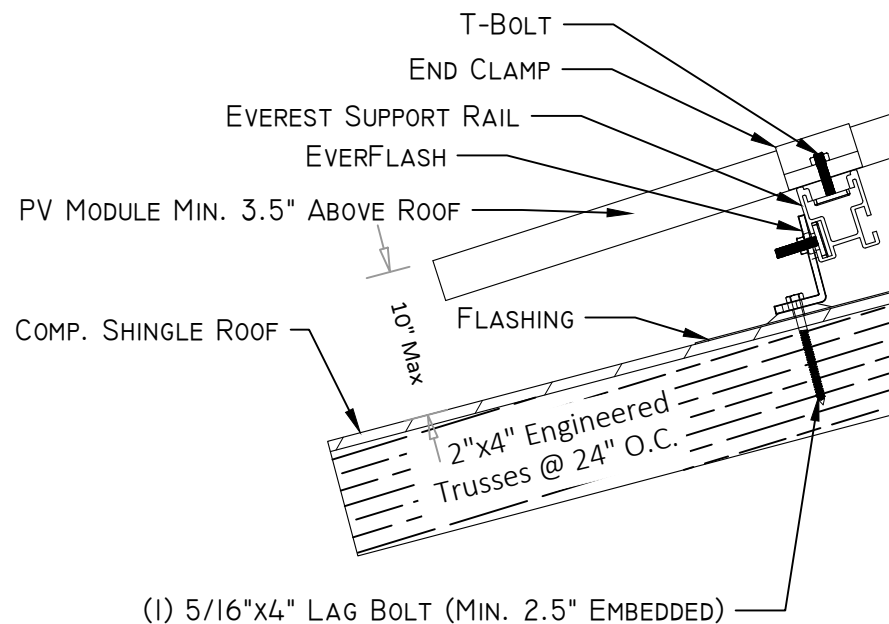
19.32 Lbs. / Attachment.

2.58 Lbs. / Square Foot.

2 Roof 1 Calculations
Scale: N/A

NOTE: ROOF FRAMING MEMBER'S SIZE, SPAN, AND SPACING TO BE VERIFIED IN FIELD PRIOR TO INSTALL. IF ROOF FRAMING INFORMATION DIFFERS FROM WHAT IS INDICATED ON THE PLANS, CONTACT DESIGN ENGINEER PRIOR TO INSTALL.

Both Roof Pitches Are Used Same Attachments



STATE OF TEXAS

122619

PROFESSIONAL ENGINEER

WYSSLING CONSULTING

Firm No. 20109

3 Roof 1 Attachment Detail
Scale: NTS

ID# TSP61968

CONTRACTOR INFORMATION



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CR11 #284331

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SHEET

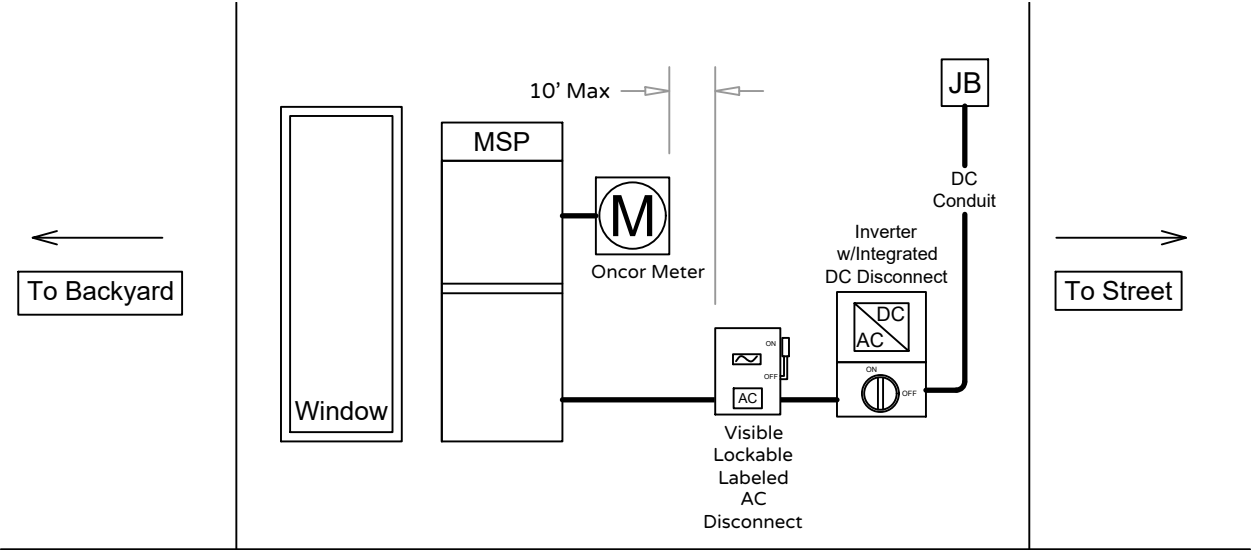
PV-2.0

LABEL PLACEMENT	LABELS
JUNCTION BOX	6, 12
DC CONDUIT	12
INVERTER	6, 9, 10
AC DISCONNECT (VLLD)	4, 6, 15, 16, 18, 19
MAIN SERVICE PANEL	1, 2, 4, 5, 11, 13, 14, 16, 17

WARNING

THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICES, EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE, SHALL NOT EXCEED AMPACITY OF BUSBAR.

FOR LINE-SIDE TAP: THIS LOAD CENTER IS IN COMPLIANCE WITH NEC 2017 ARTICLE 705. 12(A) "THE SUM OF THE RATINGS OF ALL OVER CURRENT DEVICES CONNECTED TO POWER PRODUCTION SOURCES SHALL NOT EXCEED THE RATINGS OF THE SERVICE."



1 PV Equipment Location & Fire Label Placement Table

Scale: NTS

- 1

CAUTION

PHOTOVOLTAIC SYSTEM CIRCUITS IS BACKRED

LOCATION : BACKFED BREAKER
CODE REF. : NEC 705.12(4)
- 2

WARNING

INVERTER OUTPUT CONNECTION:
DO NOT RELOCATE THIS
OVERCURRENT DEVICE

LOCATION : BACKFED BREAKER
CODE REF. : 2017 NEC 705.12(2)(3)(b)
- 3

WARNING

A GENERATION SCOURCE IS CONNECTED TO THE SUPPLY (UTILITY) SIDE OF THE MAIN SERVICE DISCONNECT.FOLLOW THE PROPER LOCK-OUT PROCEDURES TO ENSURE THE PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH IS OPENED PRIOR TO PERFORMING WORK ON THIS DEVICE

LOCATION : (IF APPLICABLE)
SUPPLY SIDE TAP
LOAD PANEL
CODE REF. : UTILITY
- 4

PHOTOVOLTAIC AC DISCONNECT SWITCH

RATED OUTPUT CURRENT: 47.5A
NOMINAL OPERATING VOLTAGE: 240V

LOCATION : MAIN PANEL AC DISCONNECT(S)
CODE REF. : NEC 690.54
- 5

RAPID SHUTDOWN SWITCH
FOR SOLAR PV SYSTEM

LOCATION : MAIN PANEL
CODE REF. : NEC 690.12
- 6

WARNING

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

LOCATION : PV SYSTEM DISCONNECT
AC DISCONNECT SWITCH
CODE REF. : NEC 690.17
UTILITY AND AHJ REQUIREMENTS



- 7

PHOTOVOLTAIC SYSTEM METER

LOCATION : DEDICATE KWH METER
CODE REF. : NEC 690.4(B) UTILITY
- 8

WARNING

PHOTOVOLTAIC SYSTEM COMBINER PANEL
DO NOT ADD LOADS

LOCATION : AC COMBINER PANEL
CODE REF. : NEC 690.13(B)
- 9

MAXIMUM VOLTAGE: 480V
MAXIMUM CIRCUIT CURRENT: 15A
MAX RATED OUTPUT CURRENT OF THE
CHARGE CONTROLLER
OR DC-TO-DC CONVERTER
(IF INSTALLED): 15A

LOCATION : DC DISCONNECT
INVERTER
CODE REF. : UTILITY
- 10

WARNING

ELECTRICAL SHOCK HAZARD
TERMINALS ON THE LINE AND
LOAD SIDES MAY BE ENERGIZED
IN THE OPEN POSITION
DC VOLTAGE IS ALWAYS PRESENT WHEN
SOLAR MODULES
ARE EXPOSED TO SUNLIGHT

LOCATION : DC DISCONNECT
COMBINER PANEL
CODE REF. : NEC 690.13(B)
- 11

SOLAR PV SYSTEM EQUIPPED
WITH RAPID SHUTDOWN

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

SOLAR ELECTRIC
PV PANELS

LOCATION : MAIN SERVICE
CODE REF. : NEC 690.12
NEC 690.56(C)(I)(A)
- 12

WARNING: PHOTOVOLTAIC
POWER SOURCE

LOCATION : DC CONDUIT
JUNCTION BOX
(NO MORE THAN 10FT)
CODE REF. : NEC 690.13(B)

- 13

CAUTION

DUAL POWER SOURCE SECOND SOURCE
IS PHOTOVOLTAIC

LOCATION : SERVICE METER MAIN PANEL
CODE REF. : UTILITY
- 14

WARNING

INVERTER OUTPUT CONNECTION:
DO NOT RELOCATE THIS
OVERCURRENT DEVICE

LOCATION : (IF APPLICABLE) SERVICE PANEL
CODE REF. : NEC 705.12(D)(7)
- 15

PHOTOVOLTAIC SYSTEM
UTILITY DISCONNECT SWITCH

LOCATION : AC DISCONNECT
CODE REF : UTILITY
- 16

WARNING

ELECTRIC SHOCK HAZARD
IF A GROUND FAULT IS INDICATED
NORMALLY GROUNDED CONDUCTORS MAY
BE UNGROUNDED AND ENERGIZED

LOCATION :AC DISCONNECT,COMBINER PANEL
SERVICE METER
CODE REF. : NEC 690.5(C)
- 17

PV SOLAR BREAKER

DO NOT RELOCATE THIS
OVERCURRENT DEVICE

LOCATION : MAIN PANEL,DEAD FRONT
CODE REF : NEC 705.12(B)(2)(3)(B)
- 18

CAUTION

POWER TO THE SERVICE IS ALSO SUPPLIED
FROM ON SITE SOLAR/WIND GENERATION AC
SYSTEM DISCONNECT.

LOCATION : AC DISCONNECT
- 19

CAUTION

ALTERNATIVE POWER SUPPLY AC SYSTEM
DISCONNECT

LOCATION : AC DISCONNECT

ID# TSP61968

TITAN SOLAR POWER

Titan Solar Power TX, Inc.
525 W. Baseline Rd
Mesa, AZ 85210
(480) 830-9290
CR11 #284331

SYSTEM INFORMATION

11.6 kW DC System (STC)
11.40 kW AC System
(40) Q_Cell Q,PEAK-G4.1 290
(40) SolarEdge P320 [HD] Optimizers
SolarEdge_ Technologies SE11400H-US (240V)

PROJECT INFO.

Tyler Romine
305 E 4th St
Lancaster, TX 75146
(214) 536-3818
APN #36000500700290000

REVISION BLOCK

DESCRIPTION	DATE
Initial Draft of Plans	6/1/20

Design By: CNG SOLAR ENGINEERING, INC.

NABCEP CERTIFIED

PV INSTALLATION PROFESSIONAL

SHEET

PV-3.0

2 Fire Labels

Scale: NTS

Wire Tag	Conductor Qty. Size & Type	Neutral Qty. Size & Type	Ground Qty., Size & Type	Raceway Size & Type	Raceway Location	Raceway Height Above Roof	Output Current	125% of Output Current	Min. OCPD	Wire De-Rate Calculation				Dist. (Ft)	Voltage	Voltage Drop %	Conduit Fill %
										Wire Rating	Ambient Temp	# of Cond.	Final Ampacity				
DC.1	(6) #10 AWG PV Wire		(1) #10 AWG Bare Copper	Not Applicable	Under Array	1"	15A	18.8A	20A	40A	X 0.91	X 1	= 36.4A	10 Ft.	400V	0.09%	
DC.2	(6) #10 AWG THWN-2		(1) #10 AWG THWN-2	3/4" EMT Conduit	Above Roof	1"	15A	18.8A	20A	40A	X 0.91	X 0.8	= 29.1A	20 Ft.	400V	0.19%	27.8%
AC.1	(2) #6 AWG THWN-2	(1) #6 AWG THWN-2	(1) #8 AWG THWN-2	3/4" EMT Conduit	Exterior Wall	"N/A"	47.5A	59.4A	60A	75A	X 0.91	X 1	= 68.3A	5 Ft.	240V	0.1%	35.5%

PV Module 1

(40) Q_Cell
Q.PEAK-G4.1 290
Power at STC: 290W
Power at PTC: 267.9W
V-oc: 39.19V V-mp: 31.96V
I-sc: 9.63A I-mp: 9.07A
V-oc Temp Coefficient: -0.28%/°C
Output (I-sc x 1.25 x 1.25): 15A

PV Optimizer 1

(40)SolarEdge P320 [HD]
Max I-sc Input: 11A
Max V-oc Input: 48V
Max Power Per String: 6000W
Inverter 1 (4060W/400V) = 10.2A

Inverter 1

SolarEdge_Technologies SE11400H-US (240V)
Max Output Current: 47.5A
Safety Rating: (47.5A x 1.25) = 59.4A
Minimum OCPD: 60A
Max Number of Strings: 3
Number of MPPT's: 1
Maximum Input Voltage: 480V
Transformerless (Y/N): Yes

Operating Current: 10.2A
Operating Voltage: 400V
Maximum System Voltage: 480V
Short Circuit Current: 15A

AC Disconnect #1

60A Visible Lockable Labeled Fused
AC Disconnect #1, 2 Pole, W/60A
Fuses, FUSED VISIBLE OPEN 60A
120/240V 2P 10KAIC EATON CAT#
DG222NRB.

Main Service Panel 1

Existing 200A MSP, Main Breaker
Only
1Ø, 3W, 120/240V
Utility: Oncor
Interconnection: Line-Side Tap
Main Breaker De-Rated:No

ONCOR UTILITY

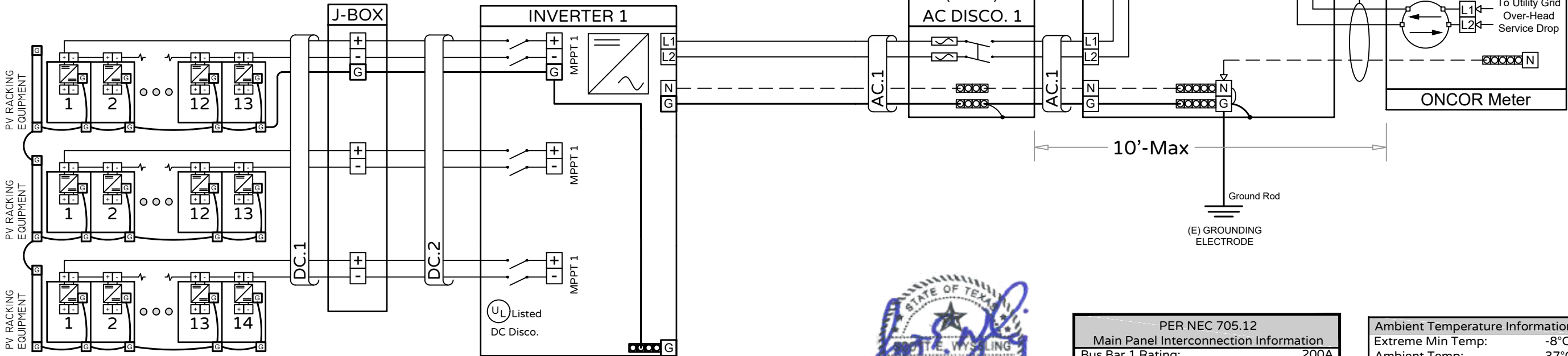
NOTES:
THE VISIBLE, LOCKABLE, LABELED AC
DISCONNECT IS LOCATED WITHIN 10 FT OF
ONCOR METER.

(1) SOLAREEDGE_TECHNOLOGIES SE11400H-US (240V)
(40) Q_CELL Q.PEAK-G4.1 290
(40) SOLAREEDGE P320 [HD] OPTIMIZERS

ADDRESS : 305 E 4TH ST
CITY-ZIP : LANCASTER, TX 75146
ESI ID #: 10443720004108031
METER NUMBER : 128558413

MSP NOTE: "AN ELECTRIC POWER PRODUCTION
SOURCE SHALL BE PERMITTED TO BE CONNECTED TO
THE SUPPLY SIDE OF THE SERVICE DISCONNECTING
MEANS AS PERMITTED IN 230.82(6). THE SUM OF THE
RATINGS OF ALL OVERCURRENT DEVICES CONNECTED
TO POWER PRODUCTION SOURCES SHALL NOT
EXCEED THE RATING OF THE SERVICE."

ILSCO IPC-1/0-2 K0451



Wyssling Consulting
Firm No. 20109

PER NEC 705.12 Main Panel Interconnection Information	
Bus Bar 1 Rating:	200A
Main Breaker 1 Rating:	125A
PV Back Feed (Actual Load):	N/A
PV OCPD:	N/A
Interconnection Calculation: 120% Rule	
Not Applicable	

Ambient Temperature Information	
Extreme Min Temp:	-8°C
Ambient Temp:	37°C
Ambient Temp. Adjustments	
0" to 7/8" Above Roof:	70°C
Voltage Drop Information	
DC Voltage Drop:	0.28%
AC Voltage Drop:	0.1%
Total System Voltage Drop:	0.38%

ID# TSP61968

CONTRACTOR INFORMATION



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SHEET

PV-4.1

Wire Tag	Conductor Qty. Size & Type	Neutral Qty. Size & Type	Ground Qty., Size & Type	Raceway Size & Type	Raceway Location	Raceway Height Above Roof	Output Current	125% of Output Current	Min. OCPD	Wire De-Rate Calculation				Dist. (Ft)	Voltage	Voltage Drop %	Conduit Fill %
										Wire Rating	Ambient Temp	# of Cond.	Final Ampacity				
DC.1	(6) #10 AWG PV Wire	(1) #6 AWG THWN-2	(1) #10 AWG Bare Copper	Not Applicable	Under Array Above Roof Exterior Wall	1"	15A	18.8A	20A	40A	X 0.91	X 1	= 36.4A	10 Ft.	400V	0.09%	27.8%
DC.2	(6) #10 AWG THWN-2		(1) #10 AWG THWN-2	3/4" EMT Conduit		1"	15A	18.8A	20A	40A	X 0.91	X 0.8	= 29.1A	20 Ft.	400V	0.19%	
AC.1	(2) #6 AWG THWN-2		(1) #8 AWG THWN-2	3/4" EMT Conduit		"N/A"	47.5A	59.4A	60A	75A	X 0.91	X 1	= 68.3A	5 Ft.	240V	0.1%	

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Max Number of Strings: 3
Number of MPPT's: 1
Maximum Input Voltage: 480V
Transformerless (Y/N): Yes

Operating Current: 10.2A
Operating Voltage: 400V
Maximum System Voltage: 480V
Short Circuit Current: 15A

AC Disconnect #1
60A Visible Lockable Labeled Fused
AC Disconnect #1, 2 Pole, W/60A
Fuses, FUSED VISIBLE OPEN 60A
120/240V 2P 10KAIC EATON CAT#
DG222NRB.

Main Service Panel 1
Existing 200A MSP, Main Breaker
Only
1Ø, 3W, 120/240V
Utility: Oncor
Interconnection: Line-Side Tap
Main Breaker De-Rated:No

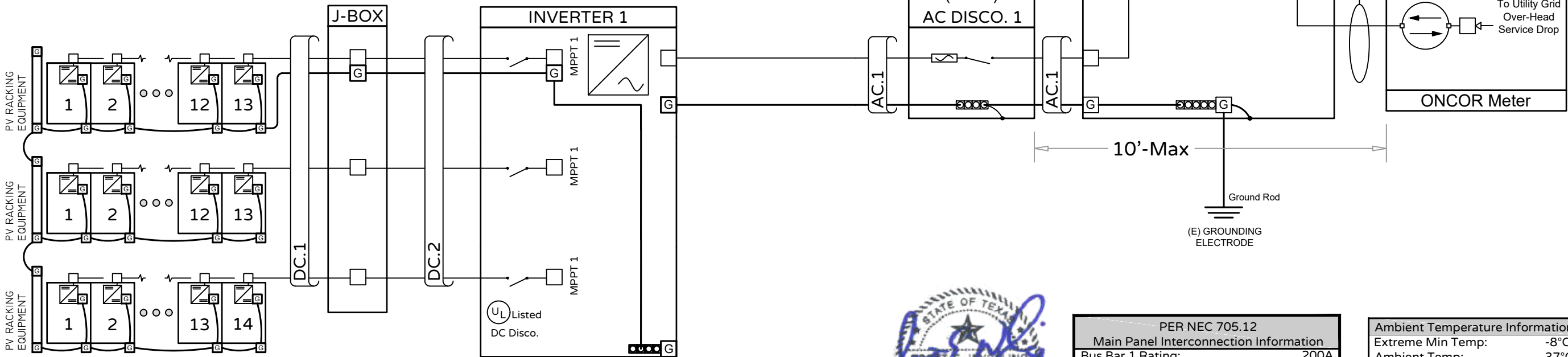
ONCOR UTILITY

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Wyssling Consulting
Firm No. 20109

PER NEC 705.12 Main Panel Interconnection Information	
Bus Bar 1 Rating:	200A
Main Breaker 1 Rating:	125A
PV Back Feed (Actual Load):	N/A
PV OCPD:	N/A
Interconnection Calculation: 120% Rule	
Not Applicable	

Ambient Temperature Information	
Extreme Min Temp:	-8°C
Ambient Temp:	37°C
Ambient Temp. Adjustments	
0" to 7/8" Above Roof:	70°C
Voltage Drop Information	
DC Voltage Drop:	0.28%
AC Voltage Drop:	0.1%
Total System Voltage Drop:	0.38%

ID# TSP61968

CONTRACTOR INFORMATION



Titan Solar Power TX, Inc.
525 W. Baseline Rd
Mesa, AZ 85210
(480) 830-9290
CR11 #284331

SYSTEM INFORMATION

11.6 kW DC System (STC)
11.40 kW AC System
(40) Q_Cell Q.PEAK-G4.1 290
(40) SolarEdge P320 [HD] Optimizers
SolarEdge_Technologies SE11400H-US (240V)

PROJECT INFO.

Tyler Romine
305 E 4th St
Lancaster, TX 75146
(214) 536-3818
APN #36000500700290000

REVISION BLOCK

DESCRIPTION	DATE
Initial Draft of Plans	6/1/20

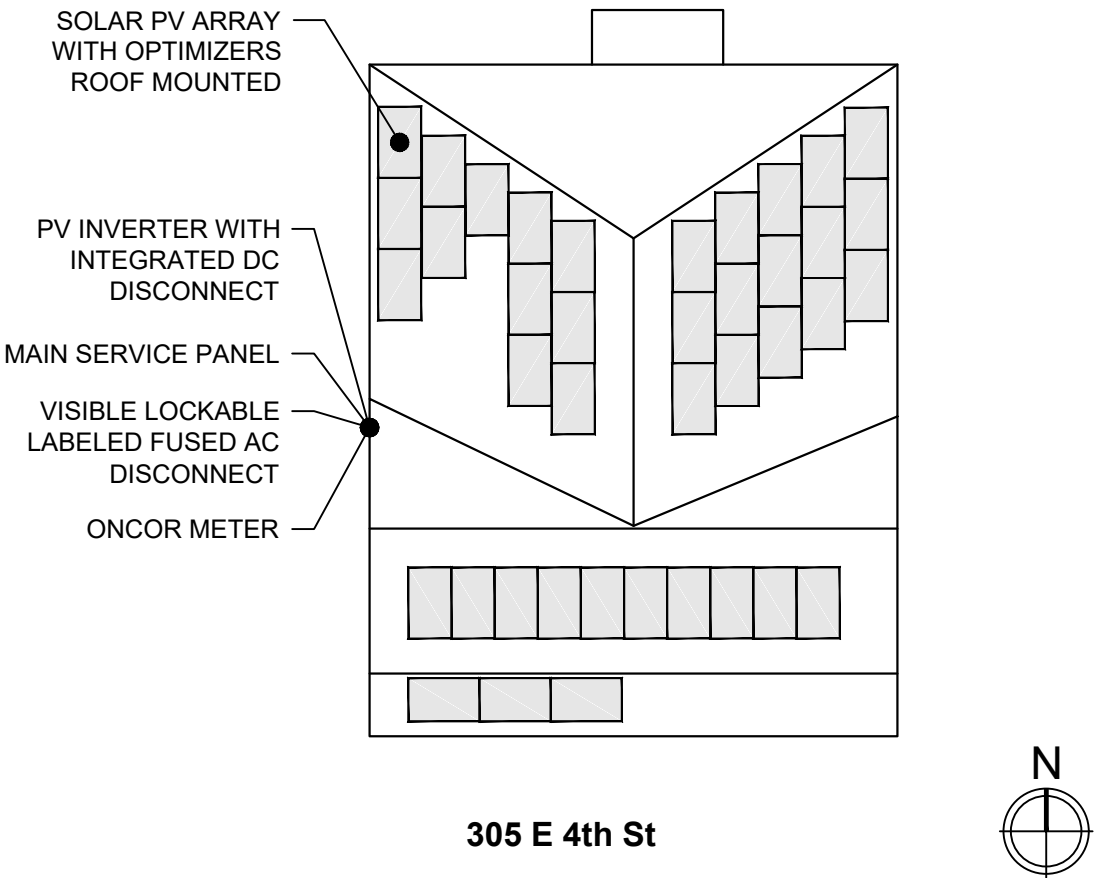
Design By: CNG SOLAR ENGINEERING, INC.



SHEET

PV-4.2

NOTES: INSTALLERS SHALL DRAW IN DESIGNATED SAFETY AREA AROUND HOME. INSTALLERS SHALL UPDATE NAME, ADDRESS, AND PHONE NUMBER OF NEAREST URGENT CARE FACILITY RELATIVE TO THE SITE BEFORE STARTING WORK.



LOCATION OF NEAREST URGENT CARE FACILITY

NAME:
ADDRESS:
PHONE NUMBER:



Wyssling Consulting
Firm No. 20109

CAUTION
POWER TO THE SERVICE IS ALSO SUPPLIED FROM ON SITE SOLAR/WIND GENERATION AC SYSTEM DISCONNECT.

LOCATION : AC DISCONNECT

CAUTION
ALTERNATIVE POWER SUPPLY AC SYSTEM DISCONNECT

LOCATION : AC DISCONNECT

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SHEET

PV-5.0



The new high-performance module **Q.PEAK-G4.1** is the ideal solution for all applications thanks to its innovative cell technology **Q.ANTUM**. The world-record cell design was developed to achieve the best performance under real conditions – even with low radiation intensity and on clear, hot summer days.

- LOW ELECTRICITY GENERATION COSTS**
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 18.9%.
- INNOVATIVE ALL-WEATHER TECHNOLOGY**
Optimal yields, whatever the weather with excellent low-light and temperature behavior.
- ENDURING HIGH PERFORMANCE**
Long-term yield security with Anti LID technology, Anti PID Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q™.
- EXTREME WEATHER RATING**
High-tech aluminum alloy frame, certified for high snow (5400Pa) and wind loads (4000Pa) regarding IEC.
- MAXIMUM COST REDUCTIONS**
Up to 10% lower logistics costs due to higher module capacity per box.
- A RELIABLE INVESTMENT**
Inclusive 12-year product warranty and 25-year linear performance guarantee².

THE IDEAL SOLUTION FOR:
Rooftop arrays on residential buildings

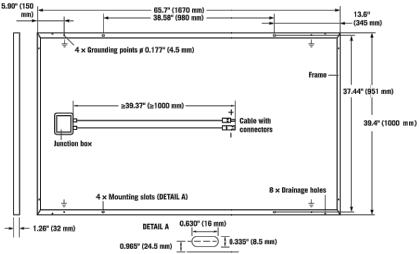
Engineered in Germany



¹ APT test conditions according to IEC/TS 62804-1:2015, method B (–1500V, 168h)
² See data sheet on rear for further information.

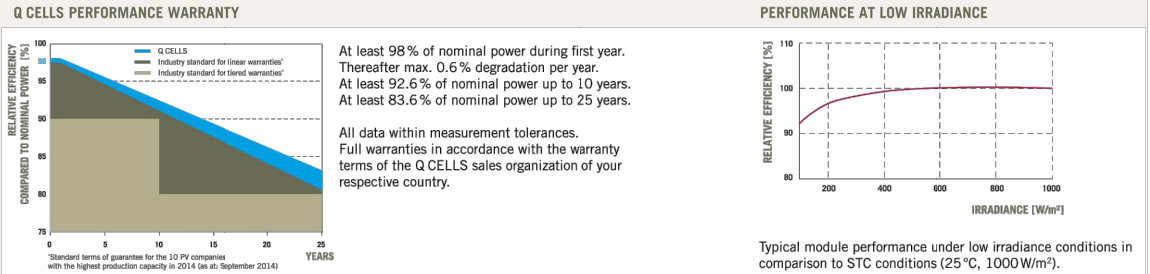


MECHANICAL SPECIFICATION	
Format	65.7 in × 39.4 in × 1.26 in (including frame) (1670 mm × 1000 mm × 32 mm)
Weight	40.8 lbs (18.5 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminum
Cell	6 × 10 monocrystalline Q.ANTUM solar cells
Junction box	2.60-3.03 in × 3.54-4.53 in × 0.59-0.75 in (66-77 mm × 90-115 mm × 15-20 mm), Protection class ≥ IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 39.37 in (1000 mm), (–) ≥ 39.37 in (1000 mm)
Connector	Multi-Contact MC4, IP68



ELECTRICAL CHARACTERISTICS		290	295	300	305	310
POWER CLASS		290	295	300	305	310
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W / –0W)						
Minimum	Power at MPP ¹	P _{MPP} [W]	290	295	300	305
	Short Circuit Current ¹	I _{SC} [A]	9.63	9.70	9.77	9.84
	Open Circuit Voltage ¹	V _{OC} [V]	39.19	39.48	39.76	40.05
	Current at MPP	I _{MPP} [A]	9.07	9.17	9.26	9.35
	Voltage at MPP	V _{MPP} [V]	31.96	32.19	32.41	32.62
	Efficiency ¹	η [%]	≥ 17.4	≥ 17.7	≥ 18.0	≥ 18.3
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT ²						
Minimum	Power at MPP	P _{MPP} [W]	216.4	220.1	223.9	227.6
	Short Circuit Current	I _{SC} [A]	7.76	7.82	7.87	7.93
	Open Circuit Voltage	V _{OC} [V]	36.87	37.14	37.41	37.68
	Current at MPP	I _{MPP} [A]	7.12	7.20	7.28	7.35
	Voltage at MPP	V _{MPP} [V]	30.39	30.58	30.76	30.94

¹Measurement tolerances P_{MPP} ± 3%; I_{SC} V_{OC} ± 5% at STC: 1000W/m², 25 ± 2°C, AM 1.5G according to IEC 60904-3 · ²800W/m², NMOT, spectrum AM 1.5G



TEMPERATURE COEFFICIENTS	
Temperature Coefficient of I _{SC}	α [%/K] +0.04
Temperature Coefficient of P _{MPP}	γ [%/K] –0.39
Temperature Coefficient of V _{OC}	β [%/K] –0.28
Normal Module Operating Temperature	NMOT [°F] 109 ± 5.4 (43 ± 3°C)

PROPERTIES FOR SYSTEM DESIGN	
Maximum System Voltage V _{sys}	[V] 1000 (IEC) / 1000 (UL)
Maximum Series Fuse Rating	[A DC] 20
Max. Design Load, Push / Pull ²	[lbs/ft ²] 75 (3600 Pa) / 55 (2667 Pa)
Max. Test Load, Push / Pull ²	[lbs/ft ²] 113 (5400 Pa) / 84 (4000 Pa)
Safety Class	II
Fire Rating	C (IEC) / TYPE 1 (UL)
Permitted module temperature on continuous duty	–40°F up to +185°F (–40°C up to +85°C)

QUALIFICATIONS AND CERTIFICATES	
UL 1703; VDE Quality Tested; CE-compliant; IEC 61215:2016; IEC 61730:2016, application class A	
PACKAGING INFORMATION	
Number of Modules per Pallet	32
Number of Pallets per 53' Container	30
Number of Pallets per 40' Container	26
Pallet Dimensions (L × W × H)	68.7 in × 45.3 in × 46.1 in (1745 mm × 1150 mm × 1170 mm)
Pallet Weight	1396 lbs (633 kg)

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

Hanwha Q CELLS America Inc.
300 Spectrum Center Drive, Suite 1250, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

Specifications subject to technical changes © Hanwha Q CELLS Q.PEAK-G4.1_290-310_2018-04_Rev01_MA

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DATA SHEET

Single Phase Inverter with HD-Wave Technology

for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US



INVERTERS

Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking 99% weighted efficiency
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Small, lightweight, and easy to install both outdoors or indoors
- Built-in module-level monitoring
- Optional: Faster installations with built-in consumption metering (1% accuracy) and production revenue grade metering (0.5% accuracy, ANSI C12.20)

solaredge.com



Single Phase Inverter with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US

MODEL NUMBER	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
APPLICABLE TO INVERTERS WITH PART NUMBER	SEXXXXH-XXXXXBXX4							
OUTPUT								
Rated AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
AC Output Voltage Min.-Nom.-Max. (211 - 240 - 264)	✓	✓	✓	✓	✓	✓	✓	Vac
AC Output Voltage Min.-Nom.-Max. (183 - 208 - 229)	-	✓	-	✓	-	-	✓	Vac
AC Frequency (Nominal)	59.3 - 60 - 60.5 ⁽¹⁾							Hz
Maximum Continuous Output Current @240V	12.5	16	21	25	32	42	47.5	A
Maximum Continuous Output Current @208V	-	16	-	24	-	-	48.5	A
Power Factor	1, Adjustable - 0.85 to 0.85							
GFDI Threshold	1							A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes							
INPUT								
Maximum DC Power @240V	4650	5900	7750	9300	11800	15500	17650	W
Maximum DC Power @208V	-	5100	-	7750	-	-	15500	W
Transformer-less, Ungrounded	Yes							
Maximum Input Voltage	480							Vdc
Nominal DC Input Voltage	380				400			Vdc
Maximum Input Current @240V ⁽²⁾	8.5	10.5	13.5	16.5	20	27	30.5	Adc
Maximum Input Current @208V ⁽²⁾	-	9	-	13.5	-	-	27	Adc
Max. Input Short Circuit Current	45							Adc
Reverse-Polarity Protection	Yes							
Ground-Fault Isolation Detection	600k Ω Sensitivity							
Maximum Inverter Efficiency	99	99.2						%
CEC Weighted Efficiency	99						99 @ 240V 98.5 @ 208V	%
Nighttime Power Consumption	< 2.5							W

⁽¹⁾ For other regional settings please contact SolarEdge support

⁽²⁾ A higher current source may be used; the inverter will limit its input current to the values stated



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DATA SHEET

/ Single Phase Inverter
with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US/
SE7600H-US / SE10000H-US / SE11400H-US

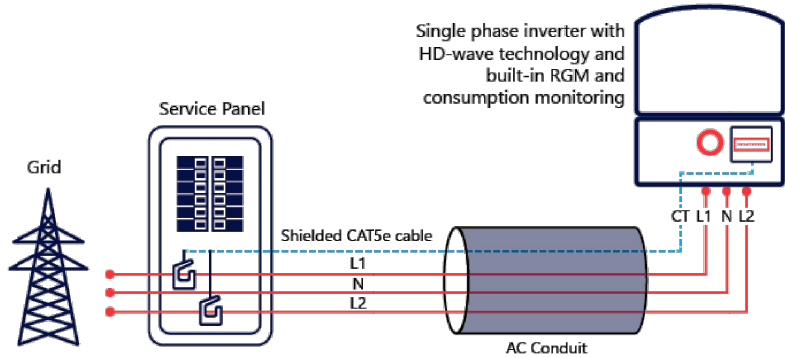
MODEL NUMBER	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US
ADDITIONAL FEATURES							
Supported Communication Interfaces	RS485, Ethernet, ZigBee (optional), Cellular (optional)						
Revenue Grade Metering, ANSI C12.20	Optional ⁽³⁾						
Consumption metering							
Inverter Commissioning	With the SetApp mobile application using Built-in Wi-Fi Access Point for Local Connection						
Rapid Shutdown - NEC 2014 and 2017 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect						
STANDARD COMPLIANCE							
Safety	UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07						
Grid Connection Standards	IEEE1547, Rule 21, Rule 14 (HI)						
Emissions	FCC Part 15 Class B						
INSTALLATION SPECIFICATIONS							
AC Output Conduit Size / AWG Range	1" Maximum / 14-6 AWG				1" Maximum /14-4 AWG		
DC Input Conduit Size / # of Strings / AWG Range	1" Maximum / 1-2 strings / 14-6 AWG				1" Maximum / 1-3 strings / 14-6 AWG		
Dimensions with Safety Switch (HxWxD)	17.7 x 14.6 x 6.8 / 450 x 370 x 174				21.3 x 14.6 x 7.3 / 540 x 370 x 185		in / mm
Weight with Safety Switch	22 / 10		25.1 / 11.4		26.2 / 11.9		38.8 / 17.6 lb / kg
Noise	< 25				<50		dBA
Cooling	Natural Convection						
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁴⁾						°F / °C
Protection Rating	NEMA 4X (Inverter with Safety Switch)						

⁽³⁾ Inverter with Revenue Grade Meter P/N: SExxxH-US000BNC4; Inverter with Revenue Grade Production and Consumption Meter P/N: SExxxH-US000BNI4 . For consumption metering, current transformers should be ordered separately: SEACT0750-200NA-20 or SEACT0750-400NA-20. 20 units per box

⁽⁴⁾ Full power up to at least 50°C / 122°F; for power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>

How to Enable Consumption Monitoring

By simply wiring current transformers through the inverter's existing AC conduits and connecting them to the service panel, homeowners will gain full insight into their household energy usage helping them to avoid high electricity bills



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RoHS



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DATA
SHEET

Power Optimizer

For North America

P320 / P340 / P370 / P400 / P401 / P405 / P485 / P505

POWER OPTIMIZER



PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- Fast installation with a single bolt
- Up to 25% more energy
- Next generation maintenance with module-level monitoring
- Superior efficiency (99.5%)
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Module-level voltage shutdown for installer and firefighter safety
- Flexible system design for maximum space utilization

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Power Optimizer
For North America

P320 / P340 / P370 / P400 / P401 / P405 / P485 / P505

Optimizer model (typical module compatibility)	P320 (for 60-cell modules)	P340 (for high-power 60-cell modules)	P370 (for higher-power 60 and 72-cell modules)	P400 (for 72 & 96-cell modules)	P401 (for high power 60 and 72 cell modules)	P405 (for high-voltage modules)	P485 (for high-voltage modules)	P505 (for higher current modules)	
INPUT									
Rated Input DC Power ^①	320	340	370	400		405	485	505	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48		60	80	60	125 ^②		83 ^②	Vdc
MPPT Operating Range	8 - 48		8 - 60	8 - 80	8-60	12.5 - 105		12.5 - 83	Vdc
Maximum Short Circuit Current (Isc)	11			10.1	11.75	11		14	Adc
Maximum Efficiency	99.5								%
Weighted Efficiency	98.8							98.6	%
Overvoltage Category	II								
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)									
Maximum Output Current	15								Adc
Maximum Output Voltage	60					85			Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)									
Safety Output Voltage per Power Optimizer	1 ± 0.1								Vdc
STANDARD COMPLIANCE									
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3								
Safety	IEC62109-1 (class II safety), UL1741								
Material	UL94 V-0 , UV Resistant								
RoHS	Yes								
INSTALLATION SPECIFICATIONS									
Maximum Allowed System Voltage	1000								Vdc
Compatible inverters	All SolarEdge Single Phase and Three Phase inverters								
Dimensions (W x L x H)	129 x 153 x 27.5 / 5.1 x 6 x 1.1			129 x 153 x 33.5 / 5.1 x 6 x 1.3	129 x 153 x 29.5 / 5.1 x 6 x 1.16	129 x 159 x 49.5 / 5.1 x 6.3 x 1.9		129 x 162 x 59 / 5.1 x 6.4 x 2.3	mm / in
Weight (including cables)	630 / 1.4			750 / 1.7	655 / 1.5	845 / 1.9		1064 / 2.3	gr / lb
Input Connector	MC4 ^③						Single or dual MC4 ^{③④}	MC4 ^③	
Input Wire Length	0.16 / 0.52								m / ft
Output Wire Type / Connector	Double Insulated / MC4								
Output Wire Length	0.9 / 2.95		1.2 / 3.9						m / ft
Operating Temperature Range ^⑤	-40 - +85 / -40 - +185								°C / °F
Protection Rating	IP68 / NEMA6P								
Relative Humidity	0 - 100								%

(1) Rated power of the module at STC will not exceed the optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.
(2) NEC 2017 requires max input voltage be not more than 80V
(3) For other connector types please contact SolarEdge
(4) For dual version for parallel connection of two modules use P485-4NMDMRM. In the case of an odd number of PV modules in one string, installing one P485 dual version power optimizer connected to one PV module. When connecting a single module seal the unused input connectors with the supplied pair of seals.
(5) For ambient temperature above +85°C / +185°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details.

PV System Design Using a SolarEdge Inverter ⁽⁶⁾⁽⁷⁾	Single Phase HD-Wave	Single phase	Three Phase for 208V grid	Three Phase for 277/480V grid	
Minimum String Length (Power Optimizers)	P320, P340, P370, P400, P401 P405, P485, P505	8 6	10 8	18 14	
Maximum String Length (Power Optimizers)		25	25	50 ⁽⁸⁾	
Maximum Power per String	5700 (6000 with SE7600-US - SE11400-US)	5250	6000 ⁽⁹⁾	12750 ⁽¹⁰⁾	W
Parallel Strings of Different Lengths or Orientations	Yes				

(6) For detailed string sizing information refer to: http://www.solaredge.com/sites/default/files/string_sizing_na.pdf
(7) It is not allowed to mix P405/P485/P505 with P320/P340/P370/P400/P401 in one string
(8) A string with more than 30 optimizers does not meet NEC rapid shutdown requirements; safety voltage will be above the 30V requirement
(9) For 208V grid: It is allowed to install up to 7,200W per string when the maximum power difference between each string is 1,000W
(10) For 277/480V grid: it is allowed to install up to 15,000W per string when the maximum power difference between each string is 2,000W

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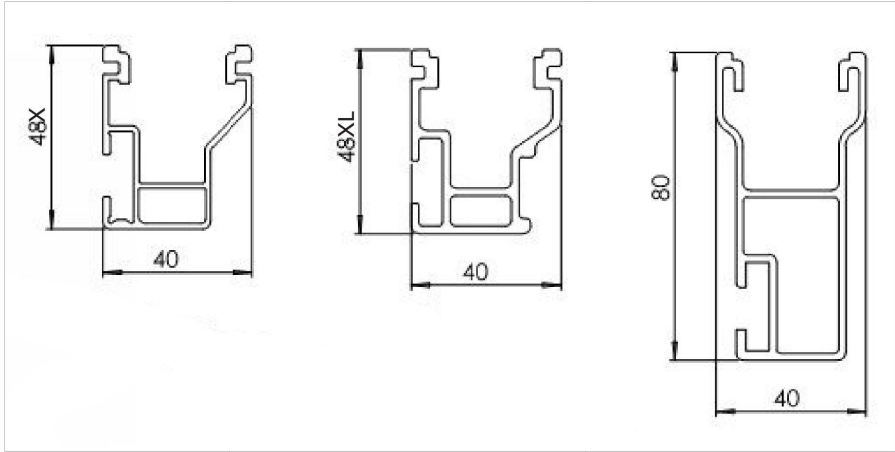
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DATA SHEET



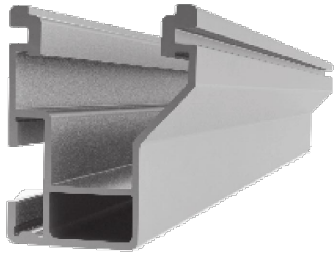
Technical data

	CrossRail System
Roof Type	Composition shingle, tile, standing seam
Material	High corrosion resistance stainless steel and high grade aluminum
Flexibility	Modular construction, suitable for any system size, height adjustable
PV Modules	For all common module types
Module Orientation	Portrait and landscape
Roof Attachment	Screw connection into rafter
Structural Validity	IBC compliant, stamped engineering letters available for all solar states
Warranty	25 years



www.everest-solarsystems.com

CrossRail 48-X

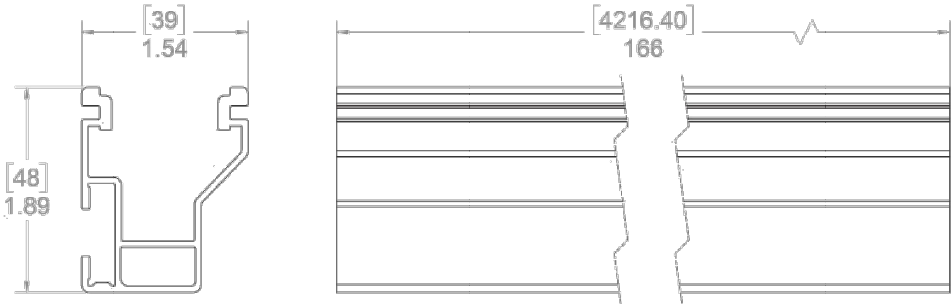


Mechanical Properties

	CrossRail 48-X
Material	6000 Series Aluminum
Ultimate Tensile Strength	37.7 ksi (260 MPa)
Yield Strength	34.8 ksi (240 MPa)
Weight	0.56 lbs/ft (0.833 kg/m)
Finish	Mill or Dark Anodized

Section Properties

	CrossRail 48-X
Sx	0.1980 in³ (3.245 cm³)
Sy	0.1510 in³ (2.474 cm³)
A (X-Section)	0.4650 in² (2.999 cm²)



Dimensions in [mm] Inches

- Notes:
- ▶ Structural values and span charts determined in accordance with Aluminum Design Manual and ASCE 7-16
 - ▶ UL2703 Listed System for Fire and Bonding

www.everest-solarsystems.com

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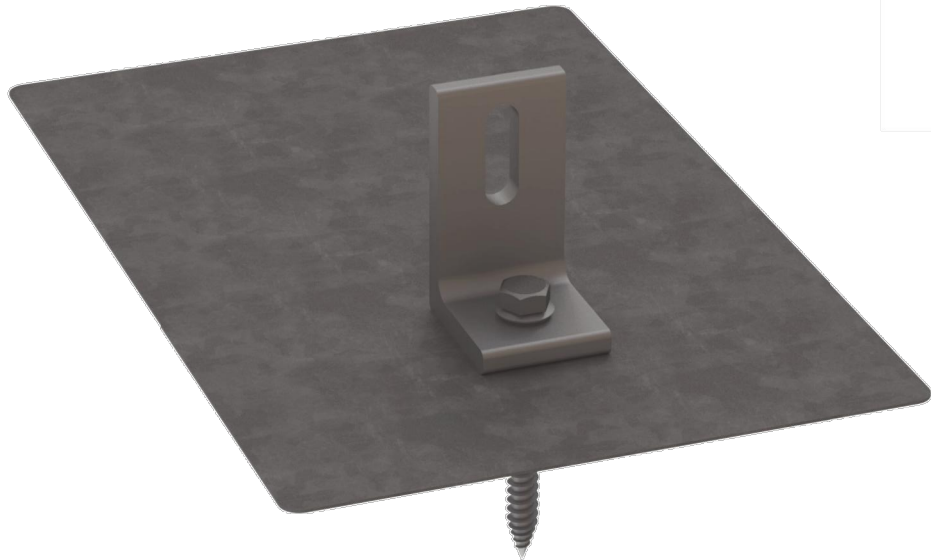
Design By: CNG SOLAR ENGINEERING, INC.



DATA SHEET



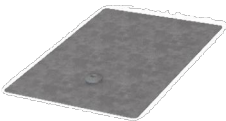
EverFlash eComp Kit



Part Number	Description
4000366	EverFlash eComp Kit, Black
4000679	EverFlash eComp Kit, Mill LF, Dark Flash
4000367	EverFlash eComp Kit, Silver

- ▶ High quality, patented design to ensure watertight seal
- ▶ Included as part of a UL 2703 Listed System
- ▶ Easy installation, can be retrofitted without removing shingles
- ▶ Meets or exceeds all known building codes
- ▶ Aluminum base with stainless steel hardware for high corrosion resistance
- ▶ Compatible with all our CrossRails

Components



EverFlash eComp, 8x12"
▶ Material: aluminum
▶ Finish: silver, black



L-Foot and Hardware
▶ Material: aluminum and stainless steel
▶ Finish: mill, dark



5/16" Sealing Washer
▶ Material: stainless steel, EPDM insert



5/16" Lag Bolt
▶ Material: stainless steel

www.everest-solarsystems.com

EverFlash eComp Kit Product Sheet US04 | 1019 · Subject to change · Product illustrations are exemplary and may differ from the original.

ID# TSP61968

CONTRACTOR INFORMATION



Titan Solar Power TX, Inc.
525 W. Baseline Rd
Mesa, AZ 85210
(480) 830-9290
CR11 #284331

SYSTEM INFORMATION

11.6 kW DC System (STC)
11.40 kW AC System
(40) Q_Cell Q.PEAK-G4.1 290
(40) SolarEdge P320 [HD] Optimizers
SolarEdge_Technologies SE11400H-US (240V)

PROJECT INFO.

Tyler Romine
305 E 4th St
Lancaster, TX 75146
(214) 536-3818
APN #36000500700290000



Wyssling Consulting
Firm No. 20109


REVISION BLOCK

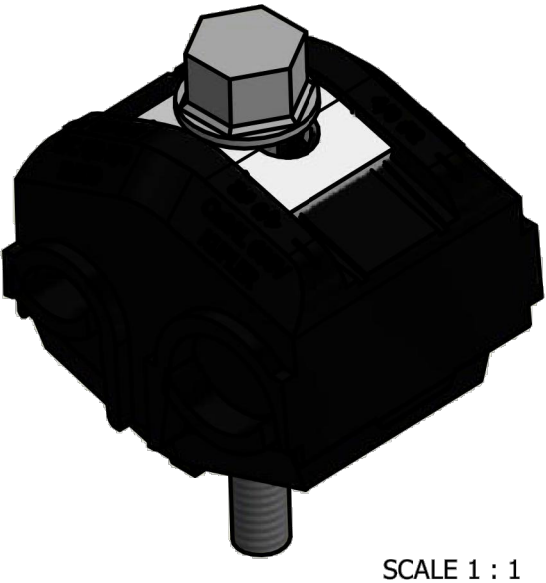
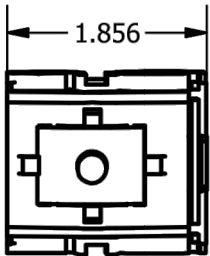
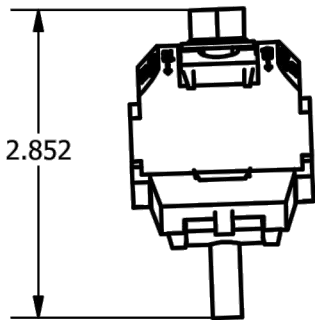
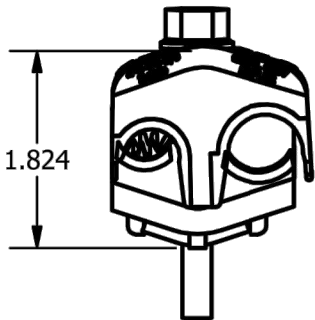
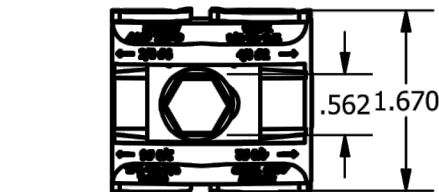
DESCRIPTION	DATE
Initial Draft of Plans	6/1/20

Design By: CNG SOLAR ENGINEERING, INC.



DATA SHEET

SCREW: 130051	MATERIAL: SEE NOTES 1 & 2	REV: M	<div>ILSCO</div> <div>connections matter</div> <div>800-776-9775 www.ilsco.com</div>	
CAT. NO.: IPC-4/0-2/0 & IPC-4/0-2/0-B	PLATING: NONE	DRAWN BY: JG	SCALE: 1:2	
INFORMATION SHEET: FORM 73	MARKING: MAIN 4/0-2, TAP 2/0-6 	DATE: 2/8/2008	SIZE: A	
		DWG. NO.	K0451	
		SHEET: 1 OF 1		



- NOTES:
- 1. NYLON BODY
 - 2. TIN PLATED COPPER TEETH
 - 3. WIRE RANGE: MAIN - 4/0 - 2
TAP - 2/0 - 6



THE INFORMATION CONTAINED WITHIN THIS DOCUMENT IS PROPRIETARY TO ILSCO AND MAY NOT BE DISCLOSED WITHOUT PRIOR WRITTEN CONSENT

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CR11 #284331

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SYSTEM INFORMATION

PROJECT INFO.

REVISION BLOCK

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Initial Draft of Plans	6/1/20

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DATA SHEET



East

South





Southwest Corner

Planning Division
972-218-1300 phone
972-227-7220 fax

City of Lancaster
HLPC APPLICATION
www.lancaster-tx.com

City of Lancaster 211
N. Henry Street
Lancaster, Texas 75146

Proposed Location

Address: 305 E 4th St Lancaster Texas 75146

or Subdivision: ORIG TOWN LANCASTER Block#: 70 Lot#: 29

Proposed Work

Please describe your proposed work simply and accurately. PLEASE TYPE AND SIGN OR SUBMIT A SEPARATE TYPED AND SIGNED WORD DOCUMENT.

Installation of a 11.6 kW dc rooftop PV solar array / Line side tap

Panels located on the east, west, and south roofs due to optimal sunlight. Sun trajectory will not reach the north side. Roof color is grayish tan and the panels we will install are black on black.

REQUIRED ATTACHMENTS: 3 COPIES

- ☐ Site Plan (existing and proposed, if applicable) 24" x 36"
 - ☐ Elevations (New structures only) 24" x 36"
 - ☐ Pictures (existing and proposed, if applicable)
 - ☐ Renderings (New structures only)
- ALL ATTACHMENTS SHOULD BE 11" x 17"