

CODE INFORMATION

2019 CALIFORNIA BUILDING CODE (CBC)
2019 CALIFORNIA RESIDENTIAL CODE (CRC)
2019 CALIFORNIA FIRE CODE (CFC)
2019 CALIFORNIA ELECTRICAL CODE (CEC)
2019 CALIFORNIA MECHANICAL CODE (CMC)
2019 CALIFORNIA PLUMBING CODE (CPC)
2019 CALIFORNIA ENERGY CODE (CEnc)
2017 NATIONAL ELECTRICAL CODE (NEC)

BUILDING INFORMATION

2 STORY HOUSE
SINGLE FAMILY RESIDENCE
CONSTRUCTION TYPE: V-B
OCCUPANCY: R3
ROOF: S-TILE
APN: 5022823500

SHEET INDEX

SOLAR A-0	COVER SHEET
SOLAR A-1	SIGNED LAYOUT
SOLAR A-2	ARRAY LAYOUT
SOLAR A-3	PROPERTY PLAN
SOLAR S-1	STRUCTURAL INFORMATION
SOLAR E-1	SINGLE LINE DIAGRAM
SOLAR E-2	CODE REQUIRED SIGNAGE
SOLAR D-n	EQUIPMENT SPEC SHEETS

VICINITY MAP

SCALE: NTS



AERIAL VIEW

SCALE: NTS

CONTRACTOR

FIRM NAME AND ADDRESS:

Solar Optimum, Inc.

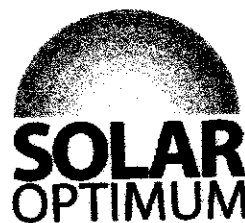
Address:

614 W. Colorado St.,
Glendale, CA 91204

Phone Number:

(818)745-1475

Lic# 972228, Class C-10



Signature with Seal



Solar Individual Permit Package

TERESA STARK

**6.40 KW Grid Tied
Photovoltaic System**

**11683
VIA RANCHO SAN DIEGO,
EL CAJON,
CA 92019**

Rev	Description	Date

DATE DRAWN	4.13.2022
DRAWN BY	FINS
SCALE	AS INDICATED

SHEET

SOLAR A-0

SOLAR INDIVIDUAL PERMIT PACK
TERESA STARK
6.40 KW GRID TIED PHOTOVOLTAIC SYS
11683 VIA RANCHO SAN DIEGO, EL CAJON,
AHJ:SAN DIEGO COUNTY

PHOTOVOLTAIC SYSTEM SUMMARY

GOAL (TOTAL KWH CONSUMPTION): 8332 KWh
PV PRODUCTION: 8810 KWh
AC SYSTEM SIZE = $((381 \times 16 \times 0.97) / 1000) = 5.913$ KW AC
DC SIZE: $16 \times 400 = 6.40$ KW DC
(N) 16 REC400A PURE (400W) PV MODULES
(N) 16 ENPHASE ENERGY IQ8M-72-2-US MICRO INVERTERS
(N) 01 50A EV OUTLET
UNIRAC SOLARMOUNT RACKING SYSTEM

ELECTRICAL INFORMATION

NEW
1 PHASE/ 3W / 120/240V
MAIN SERVICE PANEL BUS SIZE: 225A
MAIN SERVICE BREAKER SIZE: (N)200A
UTILITY: SDG&E

GENERAL NOTES

1. THE CONTRACTOR/INSTALLER OF THE SOLAR PV SYSTEM OVER EXISTING ROOF SHALL CONFIRM TO OSHA REQUIREMENTS DURING CONSTRUCTION PHASE. JOB SAFETY AND CONSTRUCTION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. IN CASE OF CONFLICT BETWEEN STRUCTURAL DRAWINGS AND ELECTRICAL DRAWINGS, THE MOST RIGID REQUIREMENT SHALL PREVAIL.
3. THE CONTRACTOR/INSTALLER SHALL VERIFY ALL EXISTING BUILDING INFORMATION SHOWN (DIMENSIONS, ROOF TOPOGRAPHY, ETC.) AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO INSTALLATIONS OF PV SYSTEM.
4. THE CONTRACTOR/INSTALLER SHALL VERIFY AND COORDINATE EXISTING OPENINGS, ROOF TOP UNITS, VENT PIPES, ETC. SHOWN ON DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ENGINEER PRIOR TO PERFORMING THE WORK.
5. ALL CONSTRUCTION IS TO BE PERFORMED IN STRICT CONFORMANCE WITH ALL APPLICABLE TOWN, COUNTY & STATE REGULATIONS AND/OR ANY OTHER GOVERNING BODIES.
6. DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS. CONTRACTOR MUST CONDUCT ROOF SURVEY TO VERIFY DIMENSIONS SHOWN ON PLAN PRIOR TO INSTALLATION. IF THERE IS A DISCREPANCY IT IS CONTRACTOR/INSTALLER'S RESPONSIBILITY TO NOTIFY THE ENGINEER IMMEDIATELY.
7. EACH MODULE TO BE GROUNDED USING THE SUPPLIED CONNECTION POINT PER MANUFACTURER'S REQUIREMENTS. ALL ELECTRICAL EQUIPMENT, AND METALLIC COMPONENTS ARE TO BE BONDED. IF THE EXISTING GROUNDING ELECTRODE SYSTEM (GEC) IS ONLY METALLIC WATER PIPING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE SYSTEM (GEC).
8. ALL PLAQUES AND SIGNAGE REQUIRED BY THE LATEST EDITION OF NATIONAL ELECTRICAL CODE. LABEL SHALL BE ENGRAVED OR MACHINE PRINTED IN A CONTRASTING COLOR TO THE PLAQUE. PLAQUE SHALL BE UV RESISTANT IF EXPOSED TO SUNLIGHT.
9. DC CONDUCTORS SHALL BE RUN IN EMT AND SHALL BE LABELED, "CAUTION DC CIRCUIT" OR EQUIV. EVERY 5 FT.
10. EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH 250.134 OR 250.136(A).
11. CONFIRM LINE SIDE VOLTAGE AT ELECTRIC UTILITY SERVICE PRIOR TO CONNECTING INVERTER. VERIFY SERVICE VOLTAGE WITHIN INVERTER VOLTAGE OPERATIONAL RANGE.
12. OUTDOOR EQUIPMENT SHALL BE NEMA-3R RATED OR BETTER.
13. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT EXPANSION JOINTS AND ANCHOR CONDUIT RUNS AS REQUIRED BY NATIONAL ELECTRICAL CODE.
14. ALL WIRING MUST BE PROPERLY SUPPORTED BY DEVICES OR MECHANICAL MEANS DESIGNED AND LISTED FOR SOLAR PV ROOF-MOUNTED SYSTEMS, WIRING MUST BE PERMANENTLY AND COMPLETELY HELD OFF OF THE ROOF SURFACE. NEVER USE NAILS TO SUPPORT WIRING.
15. ALL ROOF PENETRATIONS MUST BE FLASHED. SIMPLY CAULKING DOES NOT SUFFICE.
16. PV INSTALLATION SHALL COMPLY WITH ARTICLE 690 OF 2019 CEC. CRC REQUIRES THAT SMOKE ALARMS AND CARBON MONOXIDE DETECTORS BE RETROFITTED INTO EXISTING DWELLING, THE REQUIRED SMOKE ALARMS AND CARBON MONOXIDE DETECTORS SHALL BE REQUIRED PER SECTION R314 & R315 WITHIN THE CALIFORNIA RESIDENTIAL CODE.