Resolution 2021-60 Exhibit I

Anclote Harbor Hurricane Response Plan

This hurricane response plan was developed to:

- Provide proactive risk mitigation before a hurricane event
- Ensure employee and resident safety
- Expedite recovery with infrastructure plans

PRE-HURRICANE SEASON PLANNING

At least 60 days prior to the beginning of hurricane season (June 1st), Management will issue notice to residents informing them of the governmental resources available to them in case of emergency (Exhibit A). Residents will be encouraged to prepare a hurricane plan for their entire household. This outline will specify what every member of the household will do before, during and after a hurricane. Guidelines for preparing the hurricane plan are as follows:

- Gather a two-week supply of all items listed in "Suggested Hurricane Supply Checklist" (Exhibit B)
- Asking an out-of-town relative or friend to be an emergency contact, and to make sure everyone knows that person's phone number. Telling emergency contact person your location during the hurricane.
- Making arrangements, in advance, for where residents will stay during a hurricane at home, a friend's home, a shelter or a hotel. Making arrangements for a back-up location as well. Making sure your emergency contact knows the location, address and phone number.
- Making arrangements for those with special needs or pets and register with county.
- Practice and reviewing hurricane plan.
- Management will mass email periodic updates to all residents and advise current conditions or when services have been restored. Please make sure that management has an updated email address for you.

Elderly and Special needs Residents will be reminded of the following

- Elderly, frail, or a persons with disabilities will be encouraged to have friends or relatives help with housing and welfare.
- Making a list of prescribed medications, and get a month's supply. Making copies of the prescriptions. Special diets should be budgeted for at least 3 days
- Making sure you are wearing an I.D. bracelet with your name, medications, allergies and contact information.
- If someone in the residence requires special attention or medical care, contact Pinellas County Emergency Management at (727) 464-3800 to register and receive more information about available assistance.

BEFORE A HURRICANE EVENT:

In the event of a hurricane, Management issue notice (Exhibit C) informing residents of action plans. Residents and team members will be encouraged to adhere closely to the emergency response guidelines (Exhibit D). When an evacuation order is issued, EVERYONE must evacuate the community. Employees and emergency responders are expected to evacuate as well. There will be reduced access to emergency services during a storm, and authorities will not be available to help you. Essential operations, such as the elevators, air conditioning, water service etc. may be suspended. Please also keep in mind that if you do not evacuate, you can expect that there will be no staff available for possibly several days after the storm. Once evacuated, you should plan on having to stay away for up to a week or more. Government officials may block the return of all persons, except essential emergency personnel, from coming back to the area for up to several days. Residents who do not evacuate will be encouraged to comply with the Hurricane shelter in place recommendations (Exhibit E)

Residents will be advised to prepare their units for a hurricane as follows:

- Remove all furniture and decorative wall fixtures from any open balcony or patio.
- Close and firmly lock all sliding glass doors and windows.
- Prepare for the loss of utility services
- Clean bathtubs and fill with water in case water lines are damaged. Use this water for cleaning and to refill toilet as needed.

AFTER A HURRICANE EVENT:

Management Team will assess damage caused by the community and work with available resources to remediate and mitigate property damage to the extent possible. Management will issue post-storm notifications on guidelines (Exhibit F) to expedite recovery efforts. In the event of a power outage, the Clubhouse will serve as an emergency space to issue resident directives and help manage relief efforts. To help expedite community recovery efforts, emergency back-up power at the clubhouse will be provided via a rechargeable battery system utilizing solar panels to recharge batteries. This system will power essential appliances such as refrigeration critical for medicine, essential food items, lighting during night time, charging of mobile devices, and access control. When used conservatively, the backup system will be able to power clubhouse essentials for 7 days or more. A draft of this system is shown on Exhibit G.





Team Member/Resident Resources

Customer Service Statement

Governmental and nongovernmental agencies in the community at large can provide vital information and resources in emergencies and natural disasters.

<u>Standard</u>

7/2/2021

 Team Members maintain a listing of governmental and nongovernmental agencies that can be a valuable resource before, during, and after emergencies and natural disasters.

Task Breakdown

- 1. American Red Cross www.redcross.org
 - a. Agency provides disaster relief that includes shelter, food, health and mental health services. Local chapters can be located on the website.
- 2. Federal Emergency Management Agency (FEMA) www.fema.gov
 - a. Agency provides information and resources for planning, preparing, and managing disasters. The website also provides information about disaster survivor assistance and response and recovery.
- 3. NOAA National Weather Service www.weather.gov
- a. Site includes weather conditions, forecast, and active alerts and warnings.
- 4. National Hurricane Center www.nhc.noaa.gov
- a. Site includes forecasts and information on resources and preparedness.
- 5. FEMA tornado information www.ready.gov/tornadoes
- a. Site includes information on preparing for tornadoes and management during and after the storm. 6. FEMA earthquake information - www.ready.gov/earthquake
 - a. Site includes information on preparing for earthquakes, plus measures to take during and after the earthquake.
- 7. State emergency preparedness agencies: _

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Exhibit B

SUGGESTED HURRICANE SUPPLY CHECKLIST

HURRICANE SUPPLY KIT CHECKLIST (maintain a two-week supply for each person in your home of each of the following items):

Baby Supplies:	Formula, bottles, powdered milk, jarred/canned baby foods, diapers, towelettes and special medications.
Food Supplies:	Purchase foods that require no refrigeration and little preparation such as: ready-to-eat canned food, canned juices, milk/parmalat, soup, soft drinks, instant coffee/tea, lots of ice (you can freeze your water supply).
Medical Supplies:	First aid kit, rubbing alcohol, aspirin, non-aspirin pain reliever, anti-diarrheals and antacids, extra prescription medication (especially for those with heart problems and diabetics). Ask your physician or pharmacist how to store prescription medication.
Other Supplies:	Wind-up or battery-operated radios, flashlights, non- electric can opener, extra batteries, ABC-rated fire extinguisher in a small canister, portable cooler, absorbent towels, plastic trash bags, wind-up or battery operated clock, extra set of keys, screw driver, hammer, photocopies of prescriptions, photo identification, proof of occupancy of residence (utility bills), medical history and information.
Personal Items:	Toilet paper, towels, soap, shampoo, personal and feminine hygiene products, denture needs, contact lenses and an extra pair of eye glasses, sun protection and insect repellent
Water:	A minimum of seven gallons of water per person (1/2 gallon for drinking and 2 gallons for bathing, tooth brushing, etc.). Please store water in clean plastic containers.

Exhibit C

Dear Residents:

You may be aware that ________ is under a Hurricane Watch, which would mean that our area could be subject to hurricane conditions including high force winds and potentially heavy rainfall that could cause flooding, as well as additional post-storm rainfall over several days. While we hope that this severe weather threat passes, we urge you to take the necessary steps to be prepared in the event we do experience hurricane force winds and rain. We would like to advise you to closely monitor weather bulletins, forecasts and official declarations until the hurricane threat has passed.

In an effort to help you prepare for the effects of possible hurricane conditions we would like to share the following information gathered from the American Red Cross, National Weather Service and Federal Emergency Management Agency:

When a Hurricane Threatens

- Turn your refrigerator and freezer to the coldest settings, opening them only when absolutely necessary.
- Freeze water in plastic jugs and use them to fill every space in the refrigerator/freezer to keep food cool.
- Prepare an emergency water supply before the hurricane strikes. Figure one gallon of drinking water per person per day. Also, fill coolers with ice.
- Sterilize the bathtub, jugs, bottles, cooking utensils and other containers. Scrub thoroughly, sponge and swab with bleach, then rinse. Let the bathtub and other containers dry, and then fill with water. This water can be used for sanitary purposes.
- Make sure you have at least a two week supply of non-perishable foods. Don't forget a non-electric can opener.

Evacuations

- Given our location, the Pinellas County Emergency Management Department will likely issue an immediate evacuation order. All residents and employees will be required to evacuate the building in short order. Residents are encouraged to stay with family members of friends who live in a non-evacuation area.
- Upon receipt of the evacuation order, the Management Team will relay the evacuation requirement via email and to mobile numbers on file via SMS (Short Message Service).
- Please ensure the Management Office has your most updated contact information (cell phones, emails, emergency contacts). These will be used to communicate when it is safe to return
- •

Residents are responsible for securing their personal belongings

- Remove everything from your balconies.
- Secure all windows and sliding glass doors.
- Place towels around windowsills in case of water intrusion.
- Closely monitor projected conditions. Follow directions issued by local, state, and federal agencies
- Insurance is recommended to insure your belongings against loss or displacement. You may want to
 review the terms of your current policy to ensure that you have coverage for any personal loss.
- Unplug your television, computer, DVD and stereo equipment.
- Back up your computer. If you are in a flood-prone area, move electronic equipment above the floor level.
- Bring in all objects that can be easily blown away, such as patio furniture, bikes, plants and grills.
- Prepare your vehicle. Fill your gas tank early. Gasoline may not be available for days after the hurricane strikes due to power outages.
- If available, park your car in a garage or away from trees. Try to avoid sub-grade parking areas and if possible, park your vehicle above ground level.
- Check all flashlights, battery powered lanterns and portable radios and have spare batteries on hand.
- Make sure you have plenty of water and food for your pet. You may also consider having disposable waste
 pads available in the event you cannot take your pet outdoors.
- Collect your disaster supply kits, along with blankets and sleeping bags and keep them with you.
- Store valuables and documents, place valuables, personal papers and insurance information in a waterproof container and store them in the highest possible spot.
- Make sure you have plenty of cash, as ATM machines will be down if there is a power outage.
- Inventory your personal property (a video is an excellent idea).

During a Hurricane

- Weather conditions may deteriorate rapidly, hours before the arrival of the actual hurricane. Stay indoors. An interior room or a room without windows is usually the safest.
- If the center (eye) of the hurricane passes through our area, continue to stay indoors unless emergency repairs are absolutely necessary. Wind and rain may stop for a few minutes or for more than an hour. If this occurs, beware, the winds can/will suddenly pick up again from the opposite direction and possibly with more force than before.
- If winds become strong, stay away from windows and doors. Take refuge in a small interior room, closet or hallway. Take a battery powered radio or TV and a flashlight with you to your place of refuge. Close all interior doors and secure all exterior doors.
- If flooding threatens your home, turn off the electricity at the main breaker.
- If you lose power, turn off major appliances such as the A/C and water heater to reduce damage.

<u>After a Hurricane</u>

- Remain indoors until the official "All Clear" is given. Continue to monitor television and/or radio on your battery powered unit. Your local news stations will be issuing official announcements from the National Hurricane Center and local officials.
- Do not use your telephone unless you have an emergency. Do not call 911 except for life threatening situations. Consider putting your mobile device on power-save mode.
- Do not report individual interruptions in electricity, water or telephone services. The utility companies have
 plans to restore service as quickly as possible, and property management has no control over utility service
 restoration. Report individual trouble only after service has been generally restored in your area.
- If the water supplies should become contaminated, the Public Health Department will issue a boil water order after the hurricane passes. The order will remain in effect for at least 72 hours.

The on-site office will remain open as long as possible in order to assist you in any way that we can. Emergency service will be available by dialing our office telephone number as long as telephone service is still available. On site management will utilize the Active Building Resident Portal, the Community App and Facebook to send notifications and post updates to our residents.

For medical or other emergencies such as fire always dial 911 first.

EMERGENCY CONTACT INFORMATION

Medical, Police, Fire	911	
Federal Emergency Management Administration	1-800-621-3362	www.fema.gov
American Red Cross	www.redcross.org	
Check here for a recommended supply list:	http://www.weather.go	<u>ov/tbw/</u>

You may also want to download helpful apps to stay updated on storm and flooding developments.

We hope that you and your family will monitor the weather conditions closely and be safe throughout. If you have any other questions, concerns or special needs, please do not hesitate to contact us.

Sincerely,





5085

Hurricane, Preparation and Evacuation

Customer Service Statement

Morgan is committed to making optimal preparations in the event of a hurricane so as to minimize loss of life and damages.

<u>Standard</u>

- Team Members prepare effectively for hurricanes, recognizing that hurricanes have the potential for catastrophic damage.
- Team Members understand hurricane-related terminology and are aware of sources for monitoring storm progression (National Weather Service, local television and radio).
 - Hurricane watch: Hurricane conditions are possible within the area. A watch can be issued up to 48 hours in advance of the storm.
 - Hurricane warning: A hurricane is expected within the area. The warning may be issued 36 hours in advance.
- Team Members follow the guidelines in the Communicating within the Company and Communicating with Residents and Others standards.
- Team Members seek approval by the Regional Property Manager for all Resident communication.
- Team Members provide Resident notification in timely manner.
- Team Members follow the directives of local authorities, including orders to evacuate.
- If ordered to evacuate, Team Members close the offices and follow the guidelines in the Evacuation
 Plan standard. If evacuated from the Community, they will be off-duty (including from on-call responsibilities)
 until the storm has passed.
- Maintain a list of current and approved Supplier Partners (such as general contractors, roofers, tree companies, water extraction, etc.) and be prepared to contact them in advance.

<u>Task Breakdown</u>

Hurricane Watch

- 1. If under a hurricane watch, be alert.
 - a. Stay tuned to the local media and/or the National Weather Service for changing weather conditions.
- 2. Consult with the Regional Property Manager regarding precautions and Resident notification.
- 3. Review the Evacuation Plan standard and emergency procedures.
- 4. Gather emergency supplies (bottled water, flashlight, batteries, garbage bags, shovels, rakes, cell phones, plywood, gasoline and first aid kit).
- 5. Determine the location of nearest storm shelter.

Hurricane Warning

- 1. If a hurricane warning is issued, perform all of the above (if not already done).
- Notify the Residents as soon as possible by posting hurricane warning notices in all common areas and entrances to the Community. All communications/notifications must be approved by the Regional Property Manager.
- 3. Follow precautions issued by the Regional Property Manager and local authorities, including:
 - a. Electrical/maintenance:
 - Disconnect electrical power, where appropriate.
 - Shut down irrigation systems to prevent water intrusion.
 - Store maintenance/shop inventory above anticipated water level.
 - Call elevators up to at least the 4th floor and notify residents.
 - b. Pool:
 - · Lower pool water levels and turn off power to pool pumps.
 - · Secure pool furniture or move to storage area.
 - c. Office:
 - Back up and print key code list. Store in a safe, accessible place.
 - Back up computers prior to turning them off. Store hard drives in a secure place.
 - Move equipment above anticipated water level.
 - d. Community (general):
 - Secure dumpsters, signage, and loose gutters.

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4. Board up windows to the Leasing Office, maintenance shop, clubhouse, and other common areas, as directed by supervisors and local authorities.

Notes and Materials

- Notification letter to Residents
- Emergency Contact List

Last Updated 04/07/2021 05:05 PM ET

Print Content





5090

Hurricane, In Progress

Customer Service Statement

Team Members comply with the directives of local officials and company supervisors during a natural disaster such as a hurricane. If unable to evacuate prior to the storm, Team Members will take measures to maximize their safety.

Standard

- Team Members will attempt to complete hurricane preparations and close the offices before the storm, but they understand that following the directives of local authorities and company supervisors takes priority.
- If the hurricane strikes before evacuation is possible, Team Members take measures to maximize their safety.

<u>Task Breakdown</u>

- 1. If you are unable to evacuate, take shelter in a wind-safe room (a reinforced room able to withstand high winds and airborne debris) or an area such as the following:
 - a. A windowless room in the center of the building, such as a closet or bathroom, on the lowest level (safest location)
 - b. An interior hallway with few or no windows
- 2. Close all interior doors. Secure external doors.
- 3. Quickly gather any immediately needed emergency supplies such as cell phones, flashlights, batteries, radios, and water.
- 4. Take cover, staying low to the ground.
- 5. Remember: If there is a lull, it could be the eye of the storm. Once the eye passes, the storm will begin again.
- 6. Remain indoors until storm passes.

Last Updated 04/15/2015 04:31 PM ET

Print Content



Hurricane, After

Customer Service Statement

Morgan is committed to optimizing the safety of Residents, Team Members, and others in the Community after a hurricane.

Exhibit F

<u>Standard</u>

- Team Members follow the guidelines in the Accident or Medical Emergency standard if injuries are suffered during and after the storm.
- Team Members understand that potential hazards (extensive rainfall, flooding, broken gas lines or power lines, weakened structures) exist after a hurricane has passed and take measures to maximize the safety of themselves and others and to minimize damage.
- Team Members assess the Community for risks and work with the company and local agencies to restore the Community.
- Team Members communicate with the company, Residents, and others following company standards.

Task Breakdown

Health and Safety

- Immediately following the storm, determine the health and safety of individuals in the area.
 a. Refer to the Accident or Medical Emergency standard, as necessary.
- 2. Take measures to calm and comfort the Residents and others.

Post-Storm Communication

- 1. Communicate with the Regional Property Manager to:
 - a. Provide an update on the situation and receive any directives.
 - b. Obtain directives regarding Resident notifications and information to be given to the answering service.
- 2. Notify the answering service of the Regional Property Manager-approved statement to be given out in response to inquiries.
- 3. Distribute the notification/information letter to the Residents (following approval by Regional Property Manager).
- 4. Consult with the local authorities, including utility companies, regarding issues in the Community (see below). Water quality may need to be determined before tap water can be safely ingested.

Assessment of the Community

- 1. Once storm has passed, assist authorities, as appropriate, with the inspection of the Community before reentering buildings or damaged areas. Note hazards such as:
 - a. Flooded areas/roads
 - b. Loose or dangling power lines/utility outage (refer to the Utility Outage standard)
 - c. Fallen objects
 - d. Suspected gas leaks (refer to the Gas Leak standard)
 - e. Structural damage
- 2. When entering buildings without electricity, use only flashlights (no candles) to help visibility. Turn on flashlights outside before entering building (battery may spark and ignite leaking gas).
- 3. Document and photograph the damaged areas.
- 4. Submit the property damage claims to the company's insurance claims representative. Send a copy to the Regional Property Manager.
- 5. Complete an incident report. Refer to the Incident Reporting and Distribution standard.
- 6. Wear proper PPE (e.g., hard hats) if entering buildings.
- 7. As soon as practically possible, set up a meeting with the Facilities Project Manager to assess property damage and prepare a preliminary budget. Forward the preliminary budget to the Risk Management Department as soon as possible.

Post-Storm Housing/Resident Belongings

10/4/21, 1:18 PM

Print Content

- 1. Resident belongings should be insured through the Residents' personal renter's insurance. The company's insurance carrier may make later settlements once responsibility for the loss is determined.
- 2. When situations warrant, contact the Red Cross to request assistance with coordinating temporary housing, food, and clothing vouchers. The agency may establish a crisis center location within the Community and be available to counsel Residents.

Notes and Materials

- Notification letter to Residents
- Camera
- Emergency Contact List
- Incident Report

Last Updated 11/24/2019 03:47 PM ET

Exhibit G Clubhouse Backup Power, Preliminary Design

This preliminary plan is subject to changes based on the evolution of electrical plans of the clubhouse, permissibility, and alternative back-up power innovations during the design and construction of the project.

System Overview:



The Total Maximum demand amps for the clubhouse are expected to range from 450 to 500 amps. The systems considers a maximum emergency load of 400 amps or 133.94 kWhs when excluding nonessentials demand. The solar system as currently designed is expected to produce an average 233 kWh per day split into two gateways of 116 kWh each, allowing for some margin over the expected load. When solar is down (night time), battery back up will have a storage capacity of 81 kWhs or 60% of the expected total demand load during an emergency. This overnight use should be fully recharged and the cycle can continue indefinitely weather permitting.

Design details on following pages:

PROPOSED SOLAR SYSTEM



PV SYSTEM DETAILS

TOTAL SOLAR MODULES

SYSTEM SIZE

57.96 kW

Tesla 420W

138

EST. ANNUAL SOLAR ENERGY PRODUCTION (ASSUMING 85,378 kWh ZERO SHADING)

MODULE MANUFACTURER & WATTAGE

INVERTERS & DC OPTIMIZERS TYPE

SolarEdge Technologies Inc.

ENVIRONMENTAL FACTORS



PLANTING 29,895 TREES



DRIVING 115,435 FEWER MILES PER YEAR



TAKING 10 CARS OFF THE ROAD

PROPOSED STORAGE SYSTEM



SYSTEM PERFORMANCE & COST ANALYSIS

NUMBER OF TESLA POWERWALLS	12
TOTAL MAX CONTINUOUS REAL POWER	60 kW
TOTAL USABLE ENERGY	162 kWh



HOW IT WORKS

DURING A GRID OUTAGE A SOLAR ONLY SYSTEM IS DESIGNED TO SHUT O FOR SAFETY REASONS. THIS MEANS THAT EVEN WITH THE SUN SHINING THE HOME IS LEFT WITHOUT POWER.



SEAMLESS BACKUP POWER (POWER RESTORED IN ¼ SECOND!)

IN THE EVENT OF A POWER OUTAGE, THE BACKUP GATEWAY DISCONNECTS POWER BETWEEN THE UTILITY METER AND MAIN PANEL (WHOLE HOME CON GURATION) OR THE MAIN PANEL AND SUBPANEL (PARTIAL HOME CON GURATION) AND REESTABLISHES POWER. THE TIME FROM POWER OUTAGE TO POWER RESTORED IS A QUARTER OF A SECOND. UNLIKE GENERATORS THAT TAKE 30 SECONDS TO 3 MINUTES TO RESTORE POWER, POWERWALL IS FAST ENOUGH THAT CLOCKS AND APPLIANCES ARE NOT A ECTED. MOST CUSTOMERS WILL ONLY EXPERIENCE A BRIEF DIP IN LIGHTING WHILE THE TRANSITION OCCURS.



HOW IT WORKS

IN THE EVENT OF A POWER OUTAGE, THE BACKUP GATEWAY DISCONNECTS POWER BETWEEN THE UTILITY METER AND MAIN PANEL (WHOLE HOME CONFIGURATION) OR THE MAIN PANEL AND SUBPANEL (PARTIAL HOME CONFIGURATION) AND REESTABLISHES POWER. THE TIME FROM POWER OUTAGE TO POWER RESTORED IS A QUARTER OF A SECOND. UNLIKE GENERATORS THAT TAKE 30 SECONDS TO 3 MINUTES TO RESTORE POWER, POWERWALL IS FAST ENOUGH THAT CLOCKS AND APPLIANCES ARE NOT AFFECTED. MOST CUSTOMERS WILL ONLY EXPERIENCE A BRIEF DIP IN LIGHTING WHILE THE TRANSITION OCCURS.



HOW BACKUP WORKS:

- BACKUP GATEWAY DETECTS OUTAGE
- POWERWALL PROVIDES POWER
- INVERTER DETECTS VOLTAGE/FREQUENCY AND KEEPS WORKING
- SOLAR KEEPS GENERATING POWER FOR THE HOME AND CHARGING POWERWALL

POWERWALL DESIGN

POWERWALL IS THE CENTERPIECE OF A TESLA HOME ENERGY SYSTEM. IN ORDER TO FULLY PURSUE OUR MISSION, TO ACCELERATE THE WORLD'S TRANSITION TO SUSTAINABLE ENERGY, WE MUST NOT ONLY BE FOCUSED ON THE ADOPTION OF ELECTRIC VEHICLES, WE MUST FOCUS ON THE SOURCE OF THE ENERGY USED IN EVS.

POWERWALL IS COMPACT, STACKABLE AND WITH A BUILT-IN INVERTER, POWERWALL ALSO COMES READY TO INTEGRATE SEAMLESSLY WITH TESLA SOLAR OR ALTERNATIVE SOLAR PV SYSTEMS, ENABLING CUSTOMERS TO SELF-POWER THEIR HOME OR EVEN GO O -GRID.



PRODUCT HIGHLIGHT

INSIDE POWERWALL



- ALL IN ONE BATTERY + BATTERY INVERTER
- INSTALLED IN AN AC COUPLED CONFIGURATION TO ANY COMPATIBLE ELECTRICAL SYSTEM CAPABLE OF PROVIDING WHOLE HOME BACKUP
- CAN BE USED WITHOUT SOLAR, RETRFITTED WITH EXISTING SOLAR OR PAIRED WITH NEW SOLAR UP TO 10 POWERWALLS IN A SYSTEM
- PROVIDES FLEXIBILITY OF INSTALLATION BY DECOUPLING BATTERIES WITH SOLAR

TECHNICAL SPECIFICATION

POWERWALL PROVIDES 5KW (7KW PEAK) OF CONTINUOUS POWER AND 14KWH (13.5KWH USABLE) OF ENERGY. IT'S INTEGRATED DESIGN PROVIDES THIS BEST IN CLASS ENERGY AND POWER CAPABILITY WITH MINIMAL FOOTPRINT. IT'S UNIQUE ACTIVE COOLING SYSTEM ALLOWS IT TO BE INSTALLED IN ALMOST ANY CLIMATE.



Usable Capacity 13.5 kWh

Depth of Discharge 100%

Efficiency >90% round-trip

Power 7kW peak / 5kW continuous

Supported Applications Solar self-consumption Time of use load shifting Backup Off grid

Warranty 10 years Scalable Up to 10 Powerwalls

Operating Temperature -4° to 122°F / -20°C to 50°C

Dimensions L x W x D: 44" x 29" x 5.5" (1150mm x 755mm x 155mm)

Weight 276 lb / 125 kg

Installation Floor or wall mounted Indoor or outdoor

Certification North American and International Standards Grid code compliant

Tesla Photovoltaic Module

T420S, T425S, and T430S

Maximum Power

The Tesla module is one of the most powerful residential photovoltaic modules available. Our system requires up to 20 percent fewer modules to achieve the same power as a standard system. The module boasts a high conversion efficiency and a half-cell architecture that improves shade tolerance.

Beautiful Solar

Featuring our proprietary Zep Groove design, the all-black module connects easily with Tesla ZS components to keep panels close to your roof and close to each other for a blended aesthetic with simple drop-in and precision quarter-turn connections.

Reliability

Tesla modules are subject to automotive-grade engineering scrutiny and quality assurance, far exceeding industry standards. Modules are certified to IEC / UL 61730 - 1, IEC / UL 61730 - 2 and IEC 61215.



Limited Warranty

Materials and Processing Extra Linear Power Output 25 years 25 years

The maximum Pmax degradation is 2% in the 1st year and 0.54% annually from the 2nd to 25th year.

Linear Power Warranty



Module Specifications

Electrical Characteristics

Power Class	T4	205	T42	255	T43	30S
Test Method	STC	NOCT	STC	NOCT	STC	NOCT
Max Power, P _{MAX} (W)	420	313.7	425	317.4	430	321.1
Open Circuit Voltage, V _{oc} (V)	48.5	45.47	48.65	45.61	48.8	45.75
Short Circuit Current, I _{sc} (A)	11.16	9.02	11.24	9.09	11.32	9.15
Max Power Voltage, V _{MP} (V)	40.90	38.08	41.05	38.22	41.20	38.36
Max Power Current, I _{MP} (A)	10.27	8.24	10.36	8.3	10.44	8.37
Module Efficiency (%)	19.3		19.6		19.8	
STC	1000 W/m², 25°C, AM1.5					
NOCT	800 W/m², 20°C, AM1.5, wind speed 1m/s					

Mechanical Loading

Front Side Test Load6120 Pa | 128 lb/ft²Rear Side Test Load5190 Pa | 108 lb/ ft²Front Side Design Load4080 Pa | 85 lb/ft²Rear Side Design Load3460 Pa | 72 lb/ft²Hailstone Test25 mm Hailstone at 23 m/s

Temperature Rating (STC)

40 +/- 0.5 mm

1.57 +/- 0.020 in

Temperature Coefficient of Isc	+0.040% / °C
Temperature Coefficient of V _{oc}	-0.260% / °C
Temperature Coefficient of P _{MAX} (W)	-0.331% / °C



35 mm / 1.378 in

Mechanical Parameters

Cell Orientation	144 (6 x 24)
Junction Box	IP68, 3 diodes
Cable	4 mm² 12 AWG, 1400 mm 55.1 in. Length
Connector	Staubli MC4 or EVO2
Glass	3.2 mm ARC Glass
Frame	Black Anodized Aluminum Alloy
Weight	25.3 kg 55.8 lb
Dimension	2094 mm x 1038 mm x 40 mm 82.4 in x 40.9 in x 1.57 in

Operation Parameters

Operational Temperature	-40°C up to +85°C
Power Output Tolerance	-0 /+5 W
V _{oc} & I _{sc} Tolerance	+/- 3%
Max System Voltage	DC 1000 V (IEC/UL)
Max Series Fuse Rating	20 A
NOCT	45.7 +/- 2°C
Safety Class	Class II
Fire Rating	UL Type 1 or 2







Current vs. Voltage

