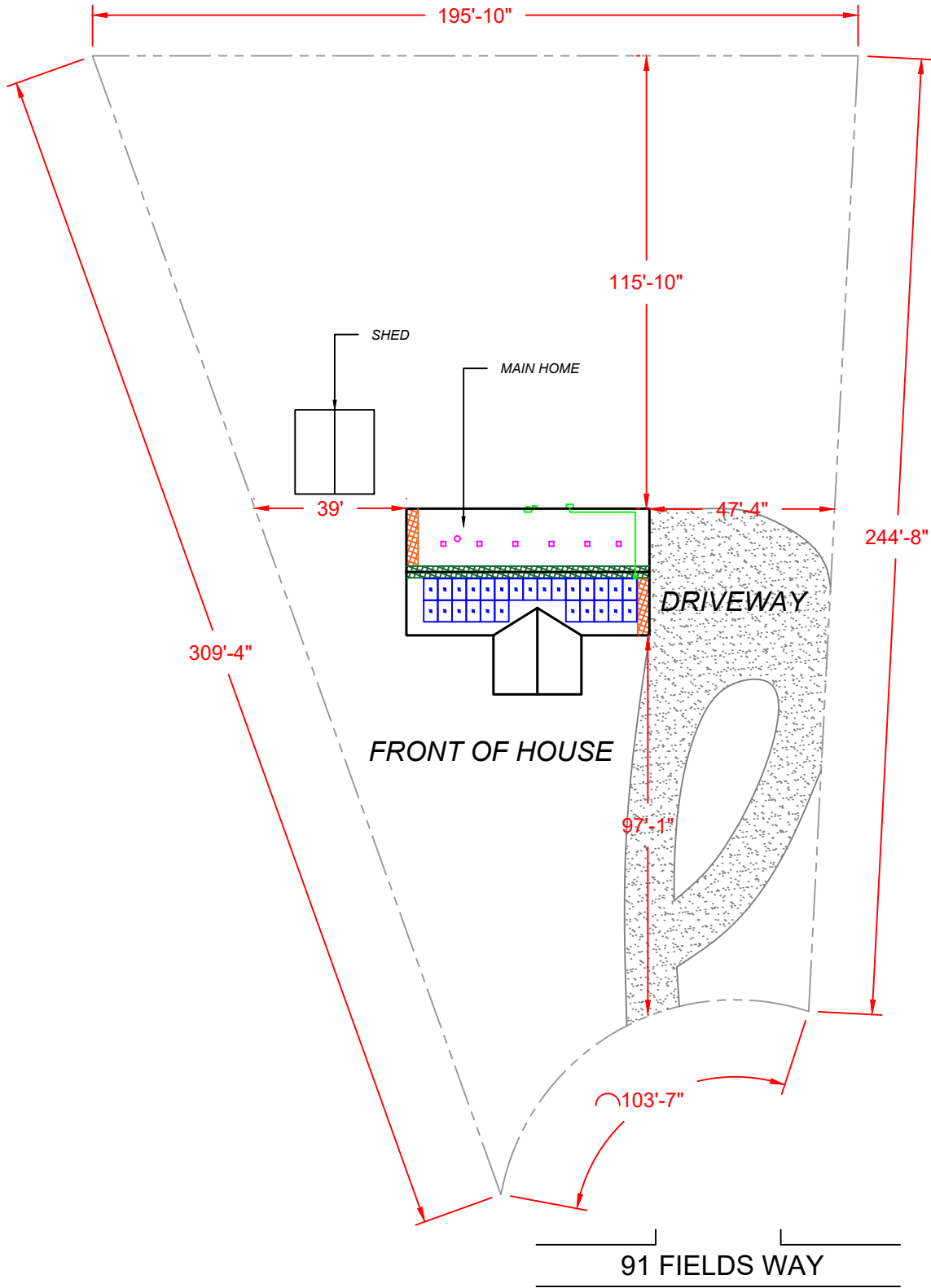


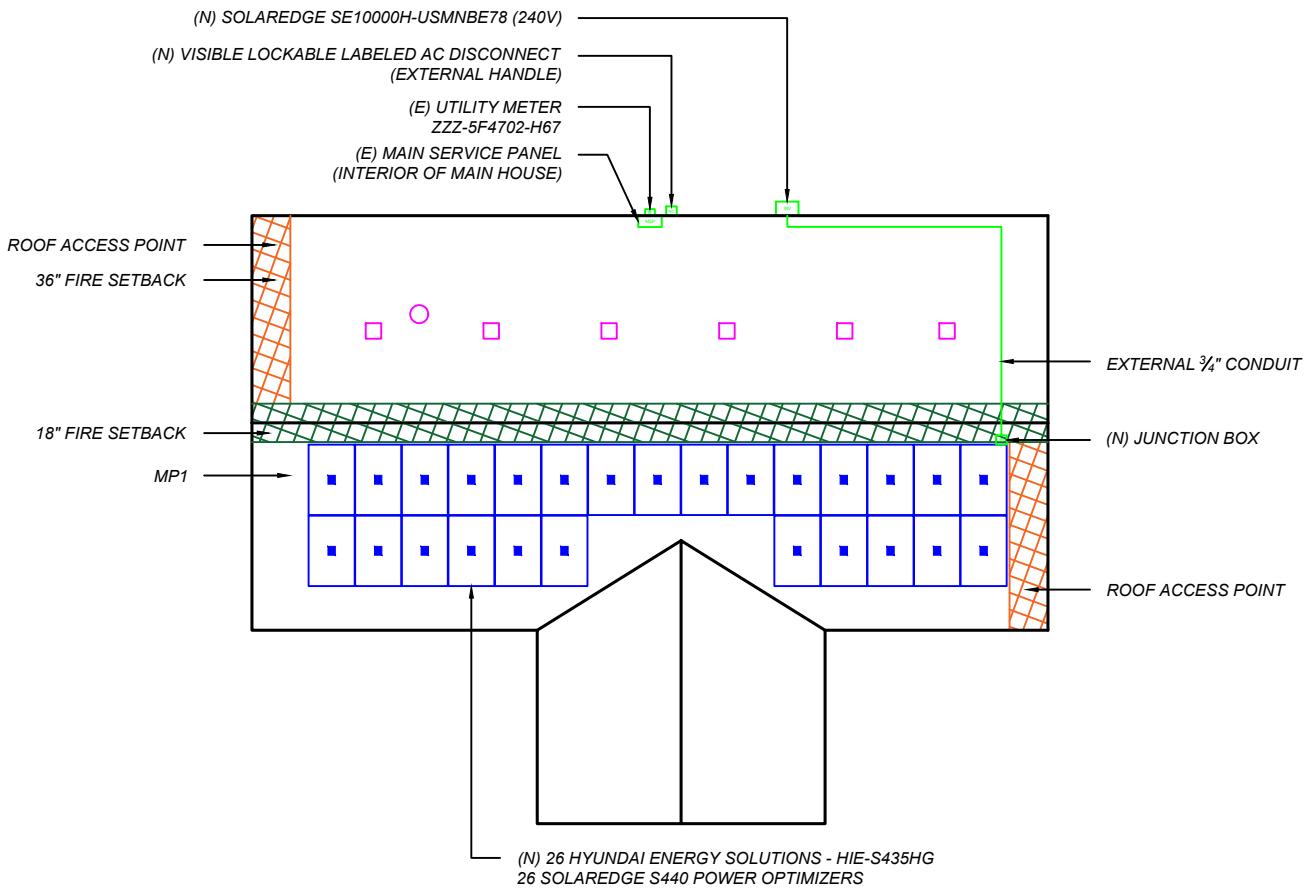
| VICINITY MAP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | AERIAL MAP           |  | SHEET INDEX                                                                                                                                                                                                     |  | SYSTEM INFORMATION |                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | PV-01 - TITLE SHEET                                                                                                                                                                                             |  | SYSTEM SIZE        | 11.310 kW DC / 10.000 kW AC              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | PV-02 - SITE PLAN                                                                                                                                                                                               |  | PV MODULES         | 26 HYUNDAI ENERGY SOLUTIONS - HIE-S435HG |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | PV-03 - ROOF PLAN                                                                                                                                                                                               |  | INVERTERS          | 1 SOLAREDGE SE10000H-USMNB78             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | PV-04 - MOUNTING DETAIL                                                                                                                                                                                         |  | OPTIMIZERS         | 26 SOLAREDGE S440 POWER OPTIMIZERS       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | PV-05 - ELECTRICAL DIAGRAM                                                                                                                                                                                      |  | MOUNTING           | PEGASUS INSTA FLASH 2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | PV-06 - ELECTRICAL EQUIPMENT AND NOTES                                                                                                                                                                          |  | RACKING            | PEGASUS RAIL SYSTEM                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | PV-07 - LABELING                                                                                                                                                                                                |  |                    |                                          |
| <div><div>NOTICE TO CONTRACTOR</div><div>All construction shall comply with current NC Building Codes and is subject to field inspection and verification.</div><div>APPROVED</div><div>09/15/2025</div><div></div><div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                      |  | SCOPE OF WORK                                                                                                                                                                                                   |  |                    |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | INSTALLATION CONSISTS OF 26 HYUNDAI ENERGY SOLUTIONS - HIE-S435HG PV MODULES, 26 SOLAREDGE S440 POWER OPTIMIZERS, 1 SOLAREDGE SE10000H-USMNB78, AND RELATED ELECTRICAL METERING (IF USED) AND SAFETY EQUIPMENT. |  |                    |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | ALL COMPONENTS ARE UL LISTED AND NEC CERTIFIED, WHERE WARRANTED                                                                                                                                                 |  |                    |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | ALL EQUIPMENT WILL BE INSTALLED AS REQUIRED BY APPLICABLE CODES AND LOCAL UTILITY COMPANY REQUIREMENTS.                                                                                                         |  |                    |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | CONDUIT RUN WILL BE INSTALLED EXTERNALLY                                                                                                                                                                        |  |                    |                                          |
| CONSTRUCTION NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                      |  | DESIGN CRITERIA                                                                                                                                                                                                 |  |                    |                                          |
| <ul style="list-style-type: none"><li>A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REQUIREMENTS.</li><li>THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS A UTILITY GRID INTERACTIVE SYSTEM.</li><li>A GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH NEC 690.47, 250.50 THROUGH 60, AND 250.166 SHALL BE PROVIDED. PER CEC, GROUNDING ELECTRODE SYSTEM OF EXISTING BUILDING MAY BE USED AND BONDED TO AT THE SERVICE ENTRANCE. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, OR IS ONLY METALLIC WATER PIPING, A SUPPLEMENTAL GROUNDING ELECTRODE WILL BE USED AT THE INVERTER LOCATION CONSISTING OF A UL LISTED 8 FT GROUND ROD WITH ACORN CLAMP. GROUNDING ELECTRODE CONDUCTORS SHALL BE NO LESS THAN #8 AWG AND NO GREATER THAN #6 AWG COPPER AND BONDED TO THE EXISTING GROUNDING ELECTRODE TO PROVIDE OR A COMPLETE GROUND.</li><li>EACH MODULE WILL BE GROUNDED USING THE SUPPLIED GROUNDING POINTS IDENTIFIED BY THE MANUFACTURER.</li><li>EXPOSED NON-CURRENT CARRYING METAL PARTS OF MODULE FRAMES, EQUIPMENT, AND CONDUCTOR ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC 250.134 OR 250.136(A) REGARDLESS OF VOLTAGE.</li><li>PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED PER NEC 110.26.</li><li>ALL SIGNAGE WILL BE INSTALLED AS REQUIRED BY THE NEC.</li><li>HEIGHT OF INTEGRATED AC/DC DISCONNECT SHALL NOT EXCEED 6' 7" PER NEC 240.24.</li><li>THE GROUNDING ELECTRODE CONDUCTOR SHALL BE PROTECTED FROM PHYSICAL DAMAGE BETWEEN THE GROUNDING ELECTRODE AND THE PANEL (OR INVERTER) IF SMALLER THAN #6 AWG COPPER WIRE PER NEC 250.64(B). THE GROUNDING ELECTRODE CONDUCTOR WILL BE CONTINUOUS, EXCEPT FOR SPLICES OR JOINTS AT BUSBARS WITHIN LISTED EQUIPMENT PER NEC 250.64(C).</li><li>ALL EXTERIOR CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES.</li><li>THE PV CONNECTION IN THE PANEL BOARD SHALL BE POSITIONED AT THE OPPOSITE (LOAD) END FROM THE INPUT FEEDER LOCATION OR MAIN CIRCUIT LOCATION PER NEC 705.12 (B)(3)(2).</li><li>SITE CONDITIONS SHALL PREVAIL IF NO SCALE IS GIVEN. DRAWINGS ARE NOT NECESSARILY TO SCALE. ALL DIMENSIONS SHALL BE VERIFIED BY SUBCONTRACTOR UPON COMMENCEMENT OF CONSTRUCTION.</li><li>PER THE INTERNATION RESIDENTIAL CODE (IRC) § R314 &amp; R315, 10 YEAR BATTERY CARBON MONOXIDE AND SMOKE ALARMS SHALL BE INSTALLED IN EACH SLEEPING AREA AND HALLWAYS LEADING TO SLEEPING AREAS.</li></ul> |  |                      |  | WIND SPEED: 119                                                                                                                                                                                                 |  | SNOW LOAD: 27      |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | EXISTING BUILDING INFORMATION                                                                                                                                                                                   |  |                    |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | STRUCTURE TYPE: RESIDENTIAL OCCUPIED BUILDING<br>ROOF FRAMING: 2'X4' TRUSSES 24".O.C<br>ROOF TYPE: COMPOSITE SHINGLE<br>STORIES: 1<br>UTILITY COMPANY: DUKE ENERGY                                              |  |                    |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | APPLICABLE CODES                                                                                                                                                                                                |  |                    |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                      |  | 2023 NATIONAL ELECTRICAL CODE<br><br>2018 INTERNATIONAL RESIDENTIAL CODE<br><br>2018 INTERNATIONAL FIRE CODE<br><br>2018 INTERNATIONAL BUILDING CODE                                                            |  |                    |                                          |
| SIGN. / STAMP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                      |  |                                                                                                                                                                                                                 |  |                    |                                          |
| PROJECT INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                      |  |                                                                                                                                                                                                                 |  |                    |                                          |
| NAME:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | FELIX MEJIA          |  |                                                                                                                                                                                                                 |  |                    |                                          |
| ADDRESS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | 91 FIELDS WAY        |  |                                                                                                                                                                                                                 |  |                    |                                          |
| CITY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | COATS                |  |                                                                                                                                                                                                                 |  |                    |                                          |
| STATE, ZIP:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | NC 27521             |  |                                                                                                                                                                                                                 |  |                    |                                          |
| AHJ:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | HARNETT COUNTY       |  |                                                                                                                                                                                                                 |  |                    |                                          |
| APN#:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | 71610001513          |  |                                                                                                                                                                                                                 |  |                    |                                          |
| DRAWN BY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | KGONZAGA<br>kgonzaga |  |                                                                                                                                                                                                                 |  |                    |                                          |
| DATE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | 26/08/2025           |  |                                                                                                                                                                                                                 |  |                    |                                          |
| CAPHORA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                      |  |                                                                                                                                                                                                                 |  |                    |                                          |
| DESIGN AND ENGINEERING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                      |  |                                                                                                                                                                                                                 |  |                    |                                          |
| TITLE SHEET<br>PV - 01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                      |  |                                                                                                                                                                                                                 |  |                    |                                          |

| ROOF DETAILS   |         |              |           |         |
|----------------|---------|--------------|-----------|---------|
| MOUNTING PLANE | MODULES | ARRAY HEIGHT | ROOF TILT | AZIMUTH |
| 1              | 26      | 1-STORY      | 28        | 165     |

SITE PLAN - SCALE:1" = 40'



CLOSE UP VIEW - SCALE:1" = 15'



LEGEND:

- 3' SETBACK
- 30" SETBACK
- 18" SETBACK
- INV INVERTER
- LC LOAD CENTER
- JB JUNCTION BOX
- M MAIN SERVICE PANEL
- AC AC DISCONNECT



MJAK COMPANY  
8416 US HWY 158,  
STOKESDALE, NC 27357  
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www.mjakcompany.com  
LICENSE NO : L.18856

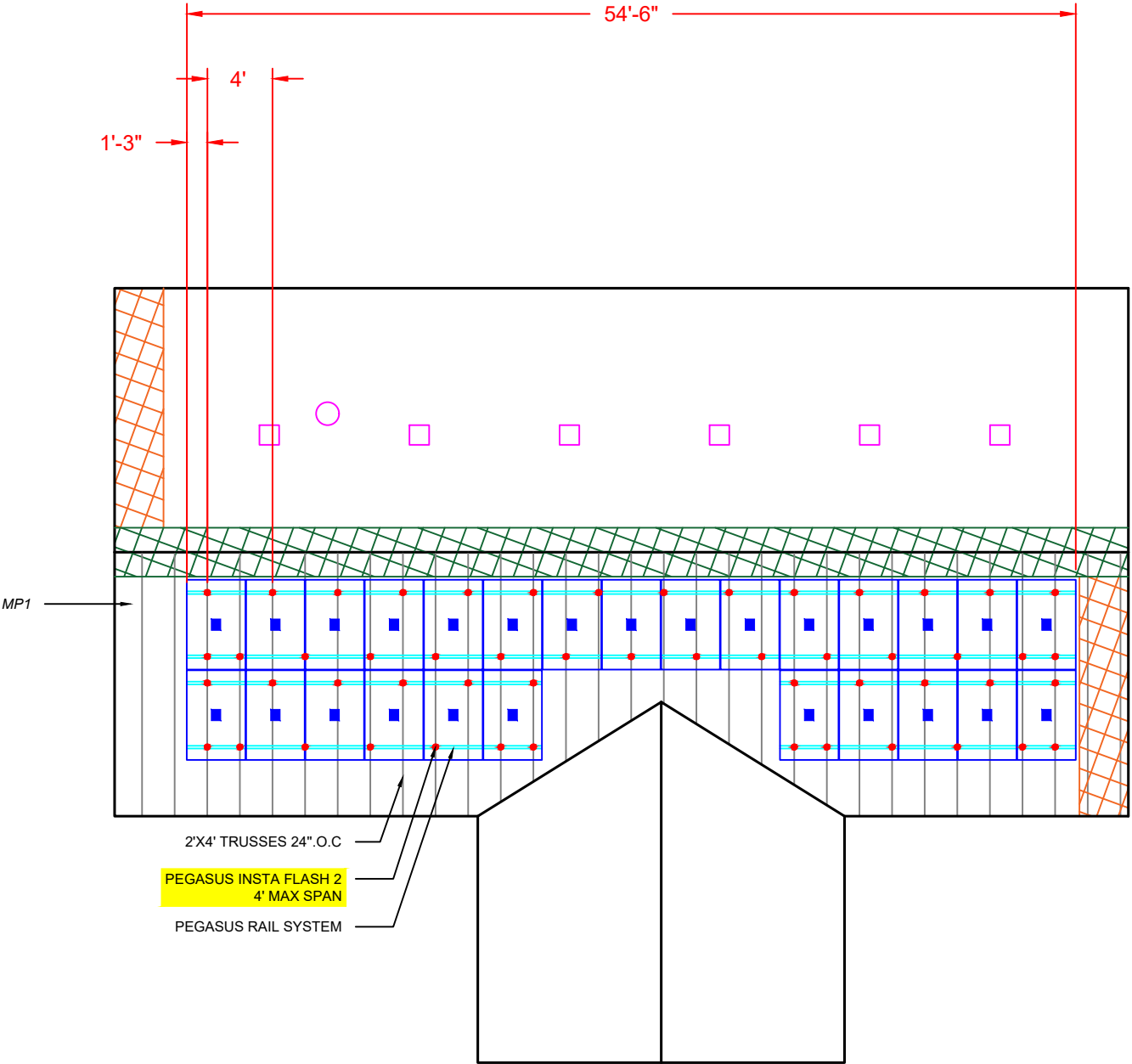
| SIGN. / STAMP       |                      |
|---------------------|----------------------|
| PROJECT INFORMATION |                      |
| NAME:               | FELIX MEJIA          |
| ADDRESS:            | 91 FIELDS WAY        |
| CITY:               | COATS                |
| STATE, ZIP:         | NC 27521             |
| AHJ:                | HARNETT COUNTY       |
| APN#:               | 71610001513          |
| DRAWN BY:           | KGONZAGA<br>Kgonzaga |
| DATE:               | 26/08/2025           |

CAPHORA  
DESIGN AND ENGINEERING

ELEVATION  
DETAIL PV - 02.1

COMPOSITE SHINGLE

| APPROXIMATE DEAD LOAD FIGURES |           |
|-------------------------------|-----------|
| PANEL                         |           |
| WEIGHT (pounds)               | 48.06 LBS |
| WEIGHT (pounds) / SQ FT       | 2.14 PSF  |
| RACKING                       |           |
| WEIGHT (pounds / lin. ft.)    | 4.8 LBS   |
| WEIGHT (pounds) / SQ FT       | 2.1 PSF   |
| TOTAL LBS PER SQ FT           | 4.24 PSF  |



R324.6.2 - PROVING ARRAYS TAKE LESS THAN 33% OF TOTAL ROOF AREA.WHEN THE ARRAYS TAKE LESS THAN 33% WE CAN JUSTIFY AN 18" SETBACK ON BOTH SIDES OF THE RIDGE. WHEN IT TAKES MORE THAN 33% OF THE ROOF AREA WE MUST USE A 3' SETBACK ON BOTH SIDES OF THE RIDGE.

TOTAL ROOF AREA:  
2353 sqft

AREA OF ARRAYS:  
3'-7" x 6'-3" ( PANEL DIMENSIONS)  
43.15" x 74.76" = 22.41 <sup>sqft</sup>/<sub>panel</sub>  
22.41 <sup>sqft</sup>/<sub>panel</sub> X 26 panels = **582.66** sqft  
(TOTAL PANEL AREA)

PERCENTAGE OF TOTAL ROOF AREA:  
(**582.66** sqft / 2353 sqft)(100)= **24.76%**

THE PANELS USE **24.76%** OF THE TOTAL ROOF AREA



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SIGN. / STAMP

PROJECT INFORMATION

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| DATE:       | 26/08/2025           |

CAPHORA  
DESIGN AND ENGINEERING

ROOF LAYOUT  
PV - 03

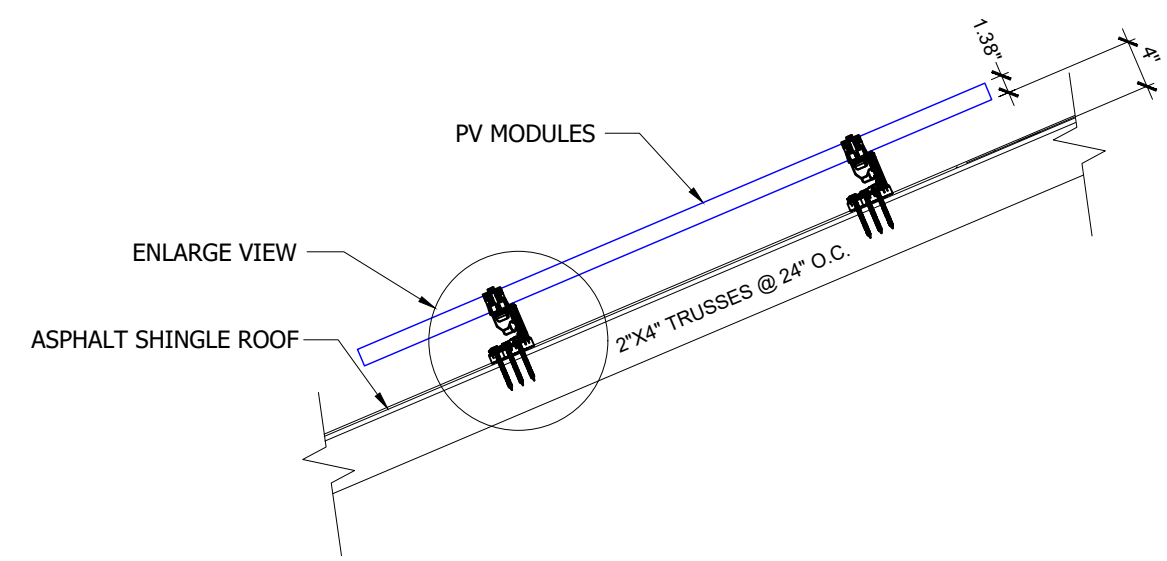
AZIMUTH AND SLOPE

|                |     |
|----------------|-----|
| MOUNTING PLANE | MP1 |
| MODULE COUNT   | 26  |
| AZIMUTH        | 165 |
| TILT (Degrees) | 28  |

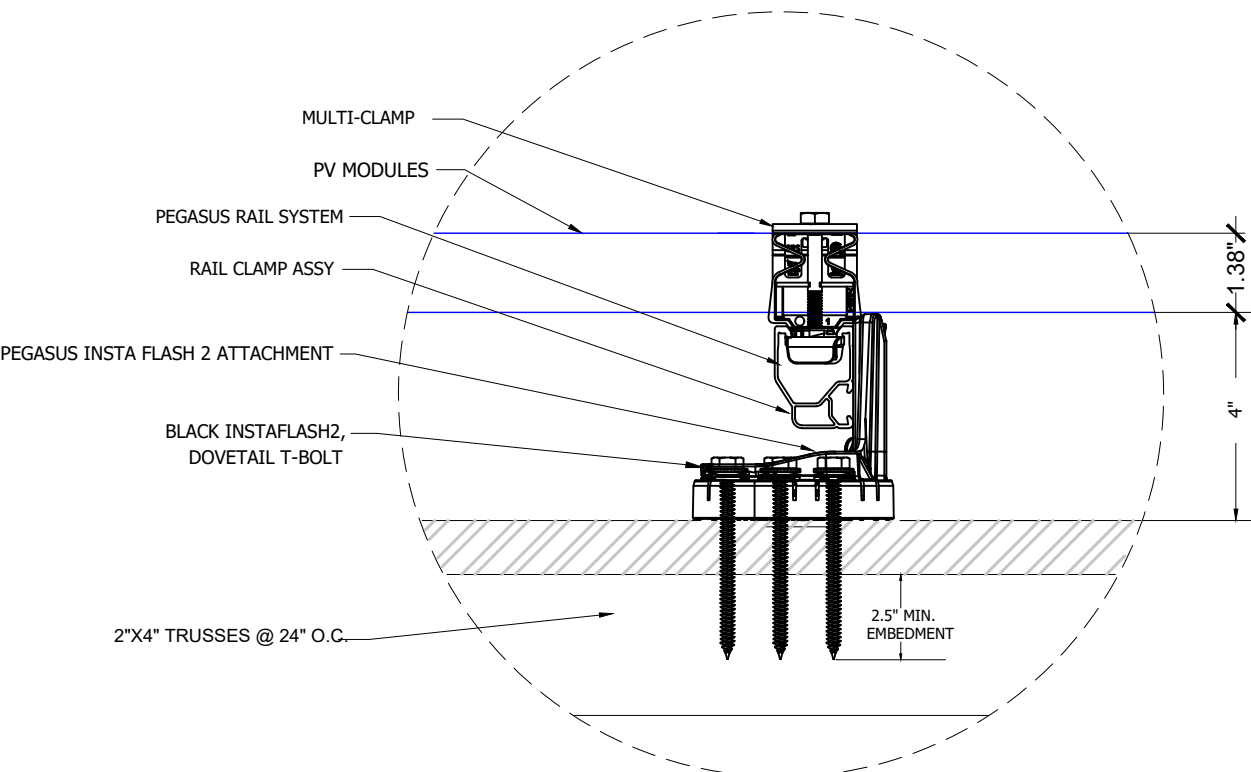


Scale:1" = 10'

COMPOSITE SHINGLE



ATTACHMENT DETAIL  
SCALE: NTS



ATTACHMENT DETAIL(ENLARGE VIEW)  
SCALE: NTS

NOTE: ACTUAL ROOF CONDITIONS AND TRUSSES (OR SEAM) LOCATIONS MAY CHANGE. PLEASE INSTALL PER MANUFACTURER(S) INSTALLATION GUIDELINES AND ENGINEERED SPANS FOR ATTACHMENTS



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| DRAWN BY:           | KGONZAGA<br>Kgonzaga |
| DATE:               | 26/08/2025           |

CAPHORA  
DESIGN AND ENGINEERING

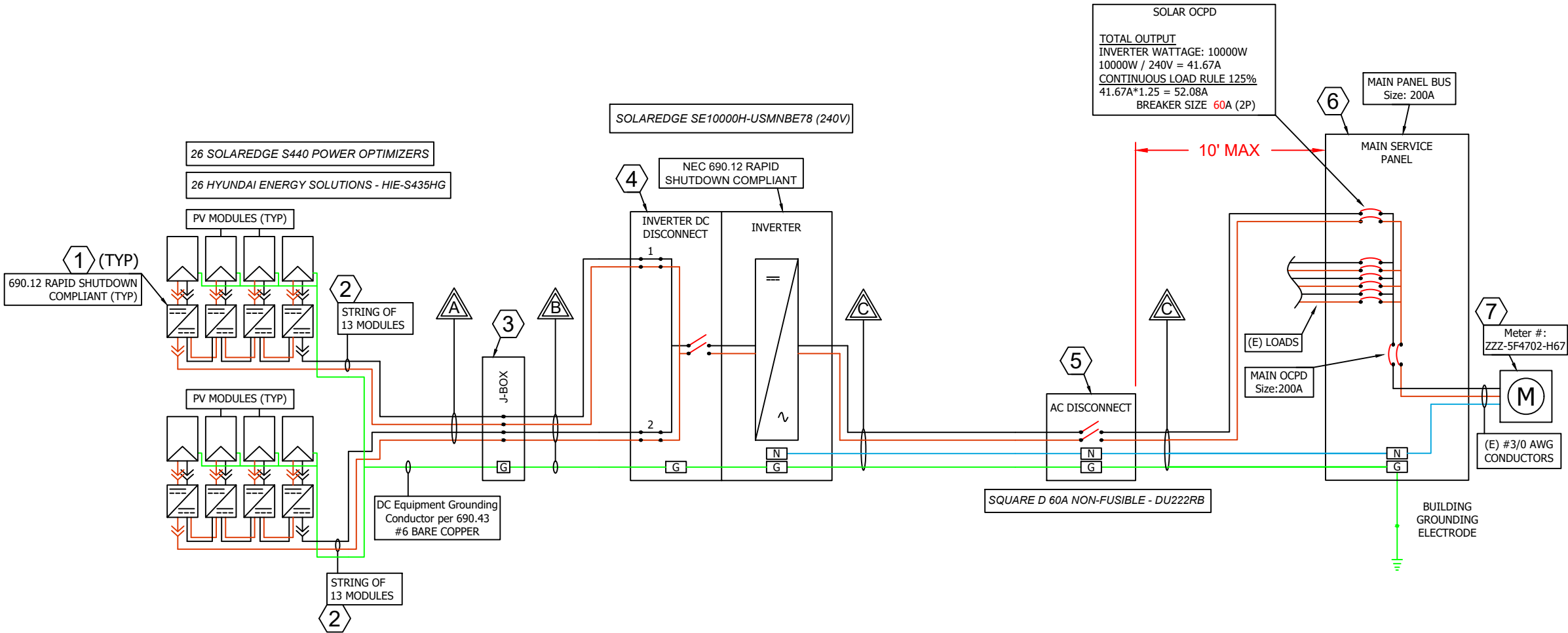
MOUNTING  
DETAIL PV - 04

| OBJ | DESCRIPTION                              | COMPONENT                                    | ELEC. TAG | CONDUCTOR<br><small>(NEUTRAL SIZED THE SAME AS CURRENT CARRYING CONDUCTORS)</small> | CONDUIT CONDUCTOR COUNT ADJ FACTOR |                       | GROUNDING WIRE SIZE = MAX OCPD<br><small>(PROTECTED UNLESS STATED)</small> | CONDUIT SIZE | CONDUCTOR TEMPERATURE DERATING |                   |                                  | ORIG. AMPS * TEMP DER. * CT DER. | =   | CORRECTED AMPACITY |     |
|-----|------------------------------------------|----------------------------------------------|-----------|-------------------------------------------------------------------------------------|------------------------------------|-----------------------|----------------------------------------------------------------------------|--------------|--------------------------------|-------------------|----------------------------------|----------------------------------|-----|--------------------|-----|
|     |                                          |                                              |           |                                                                                     | # OF CURRENT CARRYING CONDUCTORS   | AMP CORR 310.15(C)(1) |                                                                            |              | HEIGHT ABOVE ROOF              | AMBIENT TEMP (°C) | AMPACITY CORRECTION 310.15(B)(2) |                                  |     |                    |     |
| ①   | (N) BRANCH OF POWER OPTIMIZERS IN SERIES | 26 SOLAREEDGE S440 POWER OPTIMIZERS          | ELEC. TAG | 90°C RATED THWN-2 @ 30°C PER 310.16                                                 |                                    |                       |                                                                            |              |                                |                   |                                  |                                  |     |                    |     |
| ②   | (N) SOLAR PV MODULES                     | 26 HYUNDAI ENERGY SOLUTIONS - HIE-S435HG     |           |                                                                                     |                                    |                       |                                                                            |              |                                |                   |                                  |                                  |     |                    |     |
| ③   | (N) J-BOX                                | JUNCTION BOX                                 |           | A                                                                                   | #12 AWG (90°C Cu) = 30A            | N/A                   | N/A                                                                        | #6 AWG (Cu)  | FREE AIR                       | >7/8"             | 35°C                             | N/A                              | N/A | =                  | N/A |
| ④   | (N) INVERTER                             | 1 SOLAREEDGE SE10000H-USMNBET8 (240V)        | B         | #10 AWG (90°C Cu) = 40A                                                             | 4 CONDUCTORS                       | .8                    | #8 AWG (Cu)                                                                | 3/4" EMT     | >7/8"                          | 35°C              | .96                              | 40A * .8 *.96                    | =   | 30.7A              |     |
| ⑤   | (N) AC DISCONNECT                        | SQUARE D 60A NON-FUSIBLE - DU222RB           | C         | #6 AWG (90°C Cu) = 75A                                                              | 2 CONDUCTORS                       | 1                     | #8 AWG (Cu)                                                                | 3/4" EMT     | N/A                            | 35°C              | .96                              | 75A * 1 *.96                     | =   | 72.0A              |     |
| ⑥   | (E) MAIN ELECTRICAL SERVICE PANEL        | 200A RATED, 240V, 2P, WITH 200A MAIN BREAKER |           |                                                                                     |                                    |                       |                                                                            |              |                                |                   |                                  |                                  |     |                    |     |
| ⑦   | (E) DUKE ENERGY UTILITY METER            | DUKE ENERGY UTILITY METER #: ZZZ-5F4702-H67  |           |                                                                                     |                                    |                       |                                                                            |              |                                |                   |                                  |                                  |     |                    |     |



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8416 US HWY 158,  
STOKESDALE, NC 27357  
(336) 317-0114  
www.mjakcompany.com  
LICENSE NO : L.18856

THE SYSTEM WILL BE CONTROLLED BY AN ENERGY MANAGEMENT SYSTEM (EMS) UTILIZING A POWER CONTROL SYSTEM (PCS) IN ACCORDANCE WITH NEC 2023, SECTION 705.13. CONTROL WILL BE ELECTRONIC USING SOLAREEDGE BUSBAR CURRENT MANAGEMENT, LIMITING THE TOTAL CURRENT ON THE 200A BUSBAR TO 80% (160A).



LEGENDS:

|  |         |  |                            |  |                     |  |                  |  |                 |
|--|---------|--|----------------------------|--|---------------------|--|------------------|--|-----------------|
|  | BREAKER |  | CONDUIT RUN                |  | GROUNDING CONDUCTOR |  | GROUND ELECTRODE |  | INVERTER        |
|  | FUSE    |  | CURRENT CARRYING CONDUCTOR |  | NEUTRAL CONDUCTOR   |  | METER            |  | POWER OPTIMIZER |
|  | SWITCH  |  |                            |  |                     |  |                  |  |                 |

SIGN. / STAMP

PROJECT INFORMATION

|             |                      |
|-------------|----------------------|
| NAME:       | FELIX MEJIA          |
| ADDRESS:    | 91 FIELDS WAY        |
| CITY:       | COATS                |
| STATE, ZIP: | NC 27521             |
| AHJ:        | HARNETT COUNTY       |
| APN#:       | 71610001513          |
| DRAWN BY:   | KGONZAGA<br>kgonzaga |
| DATE:       | 26/08/2025           |

CAPHORA  
DESIGN AND ENGINEERING

ELECTRICAL  
DIAGRAM PV - 05



| SOLAR MODULE SPECIFICATIONS |                              | INVERTER SPECIFICATIONS |                   | OPTIMIZER SPECIFICATIONS |               | AMBIENT TEMPERATURE SPECIFICATIONS |                               |
|-----------------------------|------------------------------|-------------------------|-------------------|--------------------------|---------------|------------------------------------|-------------------------------|
| MANUFACTURER / MODEL #      | HYUNDAI SOLAR:<br>HIE-S435HG | MANUFACTURER / MODEL #  | SOLAREGE SE10000H | MANUFACTURER / MODEL #   | SOLAREGE S440 | RECORD LOW TEMP                    | 1°C                           |
| VMP                         | 36.2V                        | POWER RATING            | 10000W            | DC INPUT POWER           | 440W          | AMBIENT TEMP (HIGH TEMP 2% AVE.)   | 35°C                          |
| IMP                         | 12.02A                       | CONT. OUTPUT CURRENT    | 42.0A             | DC MAX INPUT VOLTAGE     | 60V           | DISTANCE ABOVE ROOF (0.5")         | 57°C                          |
| VOC                         | 43.6V                        | MAX. INPUT CURRENT      | 27.0A             | DC MAX INPUT CURRENT     | 14.55         | CONDUIT HEIGHT                     | 7 <sup>o</sup> / <sub>8</sub> |
| ISC                         | 12.79A                       | MAX DC VOLTAGE          | 480V              | DC MAX OUTPUT CURRENT    | 15A           | CONDUCTOR TEMPERATURE RATE         | 90°C                          |
| TEMP. COEFF. VOC            | -0.27% / °C                  |                         |                   |                          |               |                                    |                               |
| MODULE DIMENSION            | 74.76" x 43.15"              |                         |                   |                          |               |                                    |                               |

| MAIN SERVICE PANEL ALLOWABLE BACKFEED                      |     |
|------------------------------------------------------------|-----|
| PANEL RATING                                               | 200 |
| BUS RATING                                                 | 200 |
| MAIN BREAKER RATING                                        | 200 |
| EMS BUSBAR LIMIT SETTING ≥ PV BREAKER RATING<br>160A ≥ 60A |     |

THE SYSTEM WILL BE CONTROLLED BY AN ENERGY MANAGEMENT SYSTEM (EMS) UTILIZING A POWER CONTROL SYSTEM (PCS) IN ACCORDANCE WITH NEC 2023, SECTION 705.13. CONTROL WILL BE ELECTRONIC USING SOLAREGE BUSBAR CURRENT MANAGEMENT, LIMITING THE TOTAL CURRENT ON THE 200A BUSBAR TO 80% (160A).



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ELECTRICAL NOTES

- PHOTOVOLTAIC MODULES AND INVERTERS USED IN THE SYSTEM SHALL BE LISTED AND LABELED FOR THEIR INTENDED USE AS PER CEC 690.4 AND 690.5, ENSURING COMPLIANCE WITH INDUSTRY STANDARDS AND SAFETY REGULATIONS.
- ALL EQUIPMENT SHALL MEET THE MINIMUM CLEARANCES AS REQUIRED BY CEC 110.26
- JUNCTION BOXES AND PULL BOXES ARE PERMITTED TO INSTALL UNDER PV MODULES PER CEC 690.34
- ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE
- WIRING METHODS SHALL FOLLOW CEC GUIDELINES, INCLUDING PROPER RACEWAY SELECTION, CONDUIT SIZING, AND SEPARATION FROM OTHER CIRCUITS TO PREVENT DAMAGE AND MAINTAIN CIRCUIT INTEGRITY. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.
- VOLTAGE DROP IS LIMITED TO 2%
- DC WIRING LIMITED TO MODULE FOOTPRINT. MICORINVERTER WIRING SYSTEM SHALL BE LOCATED AND SECURED UNDER THE ARRAY WITH SUITABLE WIRING CLIPS
- GROUNDING AND BONDING OF PV SYSTEMS SHALL COMPLY WITH CEC REQUIREMENTS. THIS INCLUDES GROUNDING OF METAL COMPONENTS, GROUNDING ELECTRODES, AND PROPER BONDING TO MINIMIZE ELECTRICAL HAZARDS.

- 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 UPPER TERMINALS)
- EMERGENCY DISCONNECTS SHALL BE INSTALLED IN READILY ACCESSIBLE LOCATIONS, ENSURING SAFE AND EFFICIENT SHUTDOWN IN CASE OF EMERGENCIES.
- RAPID SHUTDOWN REQUIREMENTS SHALL BE MET, ENSURING THAT THE PV SYSTEM CAN BE DE-ENERGIZED TO A SPECIFIED VOLTAGE WITHIN A CERTAIN TIME FRAME, FACILITATING FIREFIGHTER SAFETY DURING EMERGENCIES.
- PROPERLY SIZED OVERCURRENT PROTECTION DEVICES SHALL BE INSTALLED TO PROTECT CONDUCTORS AND COMPONENTS. COORDINATION WITH MODULE SHORT-CIRCUIT CURRENTS AND OVERCURRENT DEVICE RATINGS SHALL BE ENSURED.
- SOURCE AND OUTPUT CIRCUITS SHALL BE APPROPRIATELY SIZED AND PROTECTED, WITH PROPER INSULATION AND LABELING TO PREVENT ANY RISK OF ELECTRICAL HAZARDS.
- LOAD-SIDE INTERCONNECTION SHALL BE IN ACCORDANCE WITH CEC 705.12(B)
- SUPPLY SIDE TAP INTERCONNECTION ACCORDING TO CEC 705.12(A) WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH CEC 230.42

SIGN. / STAMP

PROJECT INFORMATION

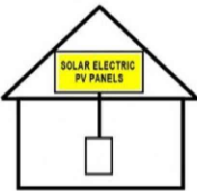
|             |                      |
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CAPHORA  
DESIGN AND ENGINEERING

ELECTRICAL  
EQUIPMENT NOTES  
PV - 06

SOLAR PV SYSTEM EQUIPPED  
WITH RAPID SHUTDOWN

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



**LABEL 1**  
AT RAPID SHUTDOWN SYSTEM  
[NEC 690.56(C)]

⚠ CAUTION

PHOTOVOLTAIC SYSTEM  
CIRCUIT IS BACKFED

**LABEL 2**  
AT MAIN SERVICE PANEL, PULL BOXES  
[NEC 705.12(B)(3)]

⚠ WARNING

POWER SOURCE OUTPUT  
CONNECTION - DO NOT RELOCATE  
THIS OVERCURRENT DEVICE

**LABEL 3**  
AT POINT OF INTERCONNECTION  
OVERCURRENT DEVICE  
[NEC 705.12(B)(2)(3)]

⚠ WARNING

DUAL POWER SOURCES

SECOND SOURCE IS  
PHOTOVOLTAIC SYSTEM

**LABEL 4**  
AT POINT INTERACTION; LABEL, SUCH  
AS LABEL 5 OR LABEL 6 MUST IDENTIFY  
PHOTOVOLTAIC SYSTEM  
[NEC 705.12(B)(4)]

PHOTOVOLTAIC  
AC DISCONNECT

RATED AC OUTPUT CURRENT: 41.67A  
NOMINAL OPERATING AC VOLTAGE: 240V

**LABEL 5**  
AT EACH AC DISCONNECTING MEANS  
[NEC 690.13(B) AND 690.54]

INTERACTIVE PHOTOVOLTAIC SYSTEM  
CONNECTED

**LABEL 6**  
AT UTILITY METER [NEC 690.56(B)]

⚠ WARNING

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

**LABEL 7**  
AT EACH DISCONNECTING MEANS FOR PHOTOVOLTAIC  
EQUIPMENT  
[NEC 690.13 AND 690.15]

RAPID SHUTDOWN SWITCH  
FOR SOLAR PV SYSTEM

**LABEL 8**  
AT RAPID SHUTDOWN SWITCH [NEC 690.56(C)(2)]

WARNING: PHOTOVOLTAIC  
POWER SOURCE

**LABEL 9**  
AT INTERIOR AND EXTERIOR DC CONDUIT EVERY 10 FT,  
AT EACH TURN, ABOVE AND BELOW PENETRATIONS, ON  
EVERY JB/PULL BOX CONTAINING DC CIRCUITS.  
PER CODE(S): [NEC: 690.31(D)(2)]

MAXIMUM DC VOLTAGE 480 VDC  
MAXIMUM CIRCUIT CURRENT 52.08 ADC  
MAX RATED OUTPUT CURRENT OF  
THE CHARGE CONTROLLER OR DC  
TO DC CONVERTER (IF INSTALLED) 15 ADC

**LABEL 10:**  
AT EACH DC DISCONNECTING MEANS  
PER CODE(S): CEC 690.53

SOLAREEDGE

THE MAXIMUM OPERATING CURRENT OF  
THIS SYSTEM MAY BE CONTROLLED  
ELECTRONICALLY. REFER TO  
MANUFACTURER'S INSTRUCTION FOR  
MORE INFORMATION.

WARNING

THIS SENSOR IS PART OF A POWER  
CONTROL SYSTEM.  
DO NOT REMOVE. REPLACE ONLY WITH  
SAME TYPE AND RATING.

PCS CONTROLLED  
CURRENT SETTING:

160 AMPS

**LABELING NOTES**  
1.1 LABELING REQUIREMENTS BASED ON THE NATIONAL ELECTRICAL CODE, INTERNATIONAL FIRE CODE 605.11, OSHA STANDARD 1910.145, ANSI Z535  
1.2 MATERIAL BASED ON THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.  
1.3 LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.  
1.4 LABELS TO BE A MINIMUM LETTER HEIGHT OF 3/8" AND PERMANENTLY AFFIXED.  
1.5 ALERTING WORDS TO BE COLOR CODED. "DANGER" WILL HAVE RED BACKGROUND; "WARNING" WILL HAVE ORANGE BACKGROUND; "CAUTION" WILL HAVE YELLOW BACKGROUND.[ANSI Z535]

**DIRECTORY**  
PERMANENT PLACE OR DIRECTORY PROVIDING THE LOCATION OF THE SERVICE DISCONNECTING AND THE PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS, IF NOT IN THE SAME LOCATION [NEC 690.56(B)] WHERE THE PV SYSTEMS ARE REMOTELY LOCATED FROM EACH OTHER, A DIRECTORY IN ACCORDANCE WITH 705.10 SHALL BE PROVIDED AT EACH PV SYSTEM DISCONNECTING. PV SYSTEM EQUIPMENT AND DISCONNECTING MEANS SHALL NOT BE INSTALLED IN BATHROOMS [NEC 690.4(D)(E)]



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| SIGN. / STAMP       |                      |
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CAPHORA  
DESIGN AND ENGINEERING

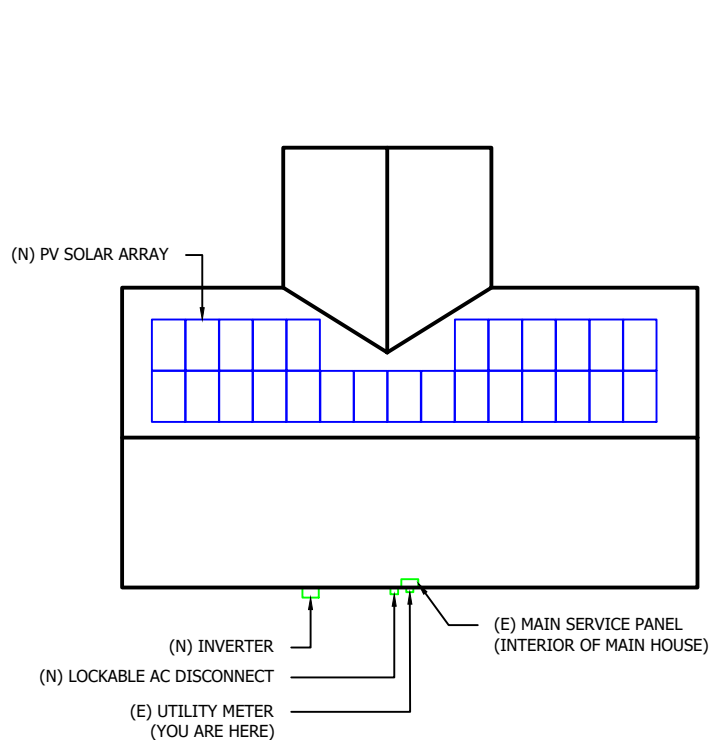
LABELING  
PV - 07

# CAUTION

## MULTIPLE SOURCES OF POWER

POWER TO THIS BUILDING IS SUPPLIED  
FROM THE FOLLOWING SOURCE(S) WITH  
DISCONNECTS LOCATED AS SHOWN.

91 FIELDS WAY





# HYUNDAI SOLAR MODULE

## HG SERIES

### G12 PERC Shingled

HiE-S430HG(FB) HiE-S435HG(FB)

HiE-S440HG(FB)



Shingled  
Technology



For Both Residential  
& Commercial  
Applications



More Power  
Generation  
In Low Light



### G12 PERC Shingled

G12 PERC Shingled Technology provides ultra-high efficiency with better performance in low irradiation. Maximizes installation capacity in limited space.



### Mechanical Strength

Tempered glass and reinforced frame design withstand rigorous weather conditions such as heavy snow and strong wind.



HYUNDAI

### Reliable Warranty

Global brand with powerful financial strength provide reliable 25-year warranty. (Australia and Europe Only)



### UL / VDE Test Labs

Hyundai's R&D center is an accredited test laboratory of both UL and VDE.

### Hyundai's Warranty Provisions



- **25-Year Product Warranty**
- On material and workmanship  
**Australia and Europe Only**



- **25-Year Performance Warranty**
- Initial year: 98.0%
- Linear warranty after second year: with 0.55%p annual degradation, 84.80% is guaranteed up to 25 years

### About Hyundai Energy Solutions Co., Ltd

Established in 1972, Hyundai Heavy Industries Group is one of the most trusted names in the heavy industries sector and is a Fortune 500 company. As a global leader and innovator, Hyundai Heavy Industries is committed to building a future growth engine by developing and investing heavily in the field of renewable energy.

As a core energy business entity of HHI, Hyundai Energy Solutions has strong pride in providing High-quality PV products to more than 3,000 customers worldwide.

### Certification



## Electrical Characteristics

|                                  |      | Mono-Crystalline Module (HiE-S____HG(FB)) |       |       |
|----------------------------------|------|-------------------------------------------|-------|-------|
|                                  |      | 430                                       | 435   | 440   |
| Nominal Output (Pmpp)            | W    | 430                                       | 435   | 440   |
| Open Circuit Voltage(Voc)        | V    | 43.5                                      | 43.6  | 43.7  |
| Short Circuit Voltage (Isc)      | A    | 12.68                                     | 12.79 | 12.90 |
| Voltage at Pmax (Vmpp)           | V    | 36.1                                      | 36.2  | 36.3  |
| Cuurent at Pmax (Impp)           | A    | 11.92                                     | 12.02 | 12.13 |
| Module Efficiency                | %    | 20.7                                      | 20.9  | 21.1  |
| Cell Type                        | -    | PERC Mono-Crystalline Silicon Shingled    |       |       |
| Maximum System Voltage           | V    | 1,500                                     |       |       |
| Temperature Coefficiency of Pmax | %/°C | -0.34                                     |       |       |
| Temperature Coefficiency of Voc  | %/°C | -0.27                                     |       |       |
| Temperature Coefficiency of Isc  | %/°C | 0.04                                      |       |       |

\*All data at STC(Standard Test Conditions). Above data may be changed without prior notice.

\*Tolerance of Pmax:0~+5W.

\*Measuring uncertainty of power:±3%.

\* Performance deviation of Voc [V], Isc [A], Vm[V] and Im[A]:±3%.

## Mechanical Characteristics

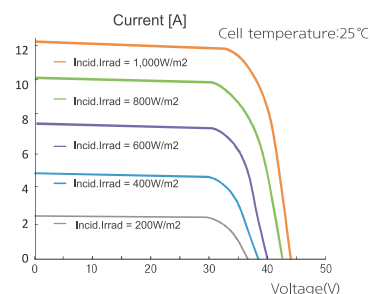
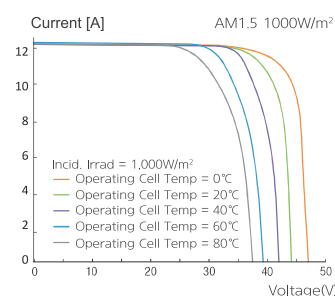
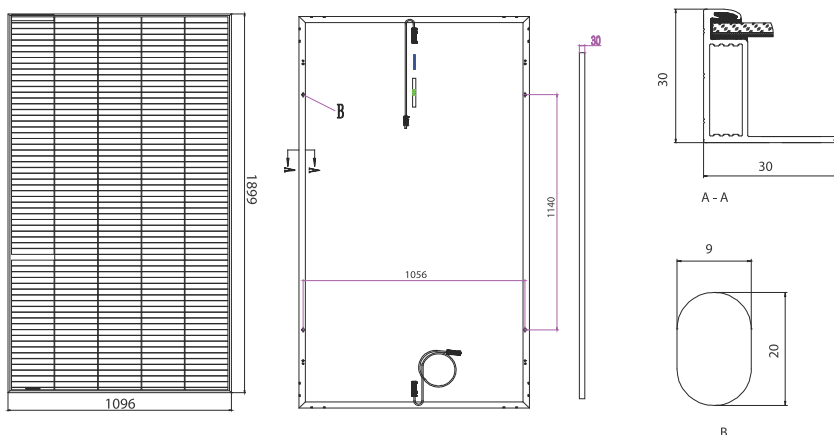
|               |                                                                                             |           |                    |
|---------------|---------------------------------------------------------------------------------------------|-----------|--------------------|
| Dimensions    | 1,899 × 1,096 × 30 mm (L × W × H)                                                           |           |                    |
| Weight        | 21.8kg                                                                                      |           |                    |
| Solar Cells   | 320 Cells, PERC Mono-crystalline Shingled (210 × 210mm)                                     |           |                    |
| Output Cables | 4mm <sup>2</sup> ,+500mm/-1100mm(Vertical), +220mm/-180mm(Horizontal)                       | Connector | Stäubli : MC4-Evo2 |
| Junction Box  | IP68, TUV&UL, two diodes                                                                    |           |                    |
| Construction  | Front Glass: AR Coated tempered glass, 3.2mm<br>Encapsulation: EVA (Ethylene-Vingl-Acetate) |           |                    |
| Frame         | Anodized Aluminum                                                                           |           |                    |

## Installation Safety Guide

- Only qualified personnel should install or perform maintenance.
- Be aware of dangerous high DC voltage.
- Do not damage or scratch the rear surface of the module.
- Do not handle or install modules when they are wet.

|                                    |                                 |
|------------------------------------|---------------------------------|
| Nominal Operating Cell Temperature | 42.3°C ( ±2°C )                 |
| Operating Temperature              | -40 ~ 85 °C                     |
| Maximum System Voltage             | DC 1,500 / 1,000 (IEC)          |
| Fire Rating                        | Class C                         |
| Series Fuse Rating [A]             | 25                              |
| Maximum Surface Load Capacity      | Front 5,400 Pa<br>Rear 2,400 Pa |

## Module Diagram (Unit: mm)



Manufactured in China



## SolarEdge Home Wave Inverter For North America

SE3000H-US / SE3800H-US / SE5000H-US / SE5700H-US /  
SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US



### 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 SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014-2023 per articles 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 Home Wave Inverter

## For North America

SE3000H-US / SE3800H-US / SE5000H-US / SE5700H-US / SE6000H-US / SE7600H-US

| Applicable to inverters with part number                                     | SEXXXHX-XXXXXBXX4                                                                                                        |                            |             |                            |                            |            | Units   |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------|----------------------------|----------------------------|------------|---------|
|                                                                              | SE3000H-US                                                                                                               | SE3800H-US                 | SE5000H-US  | SE5700H-US                 | SE6000H-US                 | SE7600H-US |         |
| OUTPUT                                                                       |                                                                                                                          |                            |             |                            |                            |            |         |
| Rated AC Power Output                                                        | 3000                                                                                                                     | 3800 @ 240V<br>3300 @ 208V | 5000        | 5760 @ 240V<br>5000 @ 208V | 6000 @ 240V<br>5000 @ 208V | 7600       | VA      |
| Maximum AC Power Output                                                      | 3000                                                                                                                     | 3800 @ 240V<br>3300 @ 208V | 5000        | 5760 @ 240V<br>5000 @ 208V | 6000 @ 240V<br>5000 @ 208V | 7600       | VA      |
| AC Output Voltage Min. – Nom. – Max.<br>(211 – 240 – 264)                    | ✓                                                                                                                        | ✓                          | ✓           | ✓                          | ✓                          | ✓          | Vac     |
| AC Output Voltage Min. – Nom. – Max.<br>(183 – 208 – 229)                    | -                                                                                                                        | ✓                          | -           | ✓                          | ✓                          | -          | Vac     |
| AC Frequency (Nominal)                                                       | 59.3 – 60 – 60.5 <sup>(1)</sup>                                                                                          |                            |             |                            |                            |            | Hz      |
| Maximum Continuous Output Current @240V                                      | 12.5                                                                                                                     | 16                         | 21          | 24                         | 25                         | 32         | A       |
| Maximum Continuous Output Current @208V                                      | -                                                                                                                        | 16                         | -           | 24                         | 24                         | -          | A       |
| Power Factor                                                                 | 1, Adjustable – 0.85 to 0.85                                                                                             |                            |             |                            |                            |            |         |
| GFDI Threshold                                                               | 1                                                                                                                        |                            |             |                            |                            |            | A       |
| Utility Monitoring, Islanding Protection,<br>Country Configurable Thresholds | Yes                                                                                                                      |                            |             |                            |                            |            |         |
| INPUT                                                                        |                                                                                                                          |                            |             |                            |                            |            |         |
| Maximum DC Power @240V                                                       | 4650                                                                                                                     | 5900                       | 7750        | 8900                       | 9300                       | 11800      | W       |
| Maximum DC Power @208V                                                       | -                                                                                                                        | 5100                       | -           | 7750                       | 7750                       | -          | W       |
| Transformer-less, Ungrounded                                                 | Yes                                                                                                                      |                            |             |                            |                            |            |         |
| Maximum Input Voltage                                                        | 480                                                                                                                      |                            |             |                            |                            |            | Vdc     |
| Nominal DC Input Voltage                                                     | 380                                                                                                                      |                            |             |                            |                            |            | Vdc     |
| Maximum Input Current @240V <sup>(2)</sup>                                   | 8.5                                                                                                                      | 10.5                       | 13.5        | 16                         | 16.5                       | 20         | Adc     |
| Maximum Input Current @208V <sup>(2)</sup>                                   | -                                                                                                                        | 9                          | -           | 13.5                       | 13.5                       | -          | Adc     |
| Max. Input Short Circuit Current                                             | 45                                                                                                                       |                            |             |                            |                            |            | Adc     |
| Reverse-Polarity Protection                                                  | Yes                                                                                                                      |                            |             |                            |                            |            |         |
| Ground-Fault Isolation Detection                                             | 600k Sensitivity                                                                                                         |                            |             |                            |                            |            |         |
| Maximum Inverter Efficiency                                                  | 99                                                                                                                       | 99.2                       |             |                            |                            |            | %       |
| CEC Weighted Efficiency                                                      | 99                                                                                                                       |                            |             |                            |                            |            | %       |
| Nighttime Power Consumption                                                  | < 2.5                                                                                                                    |                            |             |                            |                            |            | W       |
| ADDITIONAL FEATURES                                                          |                                                                                                                          |                            |             |                            |                            |            |         |
| Supported Communication Interfaces                                           | RS485, Ethernet, wireless SolarEdge Home Network (optional) <sup>(3)</sup> , Wi-Fi (optional), Cellular (optional)       |                            |             |                            |                            |            |         |
| Revenue Grade Metering, ANSI C12.20                                          | Optional <sup>(4)</sup>                                                                                                  |                            |             |                            |                            |            |         |
| Consumption Metering                                                         | Optional <sup>(4)</sup>                                                                                                  |                            |             |                            |                            |            |         |
| Inverter Commissioning                                                       | With the SetApp mobile application using Built-in Wi-Fi Access Point for Local Connection                                |                            |             |                            |                            |            |         |
| Rapid Shutdown - NEC 2014-2023 per articles 690.11 and 690.12                | Automatic Rapid Shutdown upon AC Grid Disconnect                                                                         |                            |             |                            |                            |            |         |
| STANDARD COMPLIANCE                                                          |                                                                                                                          |                            |             |                            |                            |            |         |
| Safety                                                                       | Conforms to UL 1741, UL 1741SA, UL 1741SB, UL 1699B<br>Certified by CSA 22.2#107.1, C22.2#330, C22.3#9, ANSI/CAN/UL 9540 |                            |             |                            |                            |            |         |
| Grid Connection Standards                                                    | IEEE1547 and IEEE-1547.1, Rule 21, Rule 14H                                                                              |                            |             |                            |                            |            |         |
| Emissions                                                                    | FCC Part 15 Class B                                                                                                      |                            |             |                            |                            |            |         |
| INSTALLATION SPECIFICATIONS                                                  |                                                                                                                          |                            |             |                            |                            |            |         |
| AC Output Conduit Size / AWG Range                                           | 1" Maximum / 14 – 6 AWG                                                                                                  |                            |             |                            |                            |            |         |
| DC Input Conduit Size / # of Strings / AWG Range                             | 1" Maximum / 1 – 2 strings / 14 – 6 AWG                                                                                  |                            |             |                            |                            |            |         |
| Dimensions with Safety Switch (H x W x D)                                    | 17.7 x 14.6 x 6.8 / 450 x 370 x 174                                                                                      |                            |             |                            |                            |            | in / mm |
| Weight with Safety Switch                                                    | 22 / 10                                                                                                                  | 25.1 / 11.4                | 27.5 / 12.5 | 26.2 / 11.9                |                            |            | lb / kg |
| Noise                                                                        | < 25                                                                                                                     |                            |             |                            | < 50                       |            | dBA     |
| Cooling                                                                      | Natural Convection                                                                                                       |                            |             |                            |                            |            |         |
| Operating Temperature Range                                                  | -40 to +140 / -40 to +60 <sup>(5)</sup>                                                                                  |                            |             |                            |                            |            | °F / °C |
| Protection Rating                                                            | NEMA 4X (Inverter with Safety Switch)                                                                                    |                            |             |                            |                            |            |         |

(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.

(3) For more information, refer to the [SolarEdge Home Network](#) datasheet

(4) Inverter with Revenue Grade Production and Consumption Meter P/N: SExxxxH-US000BEI4. For consumption metering, current transformers should be ordered separately:  
SEACT0750-200NA-20 or SEACT0750-400NA-20. 20 units per box.

(5) Full power up to at least 50°C / 122°F; for power de-rating information refer to the [Temperature Derating](#) technical note for North America.

# SolarEdge Home Wave Inverter

## For North America

### SE10000H-US / SE11400H-US

| Applicable to inverters with part number                                     | SEXXXXH-XXXXXBXX4                                                                                                        | SE11400H-XXXXXBXX5                                   | Units   |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------|
|                                                                              | SE10000H-US                                                                                                              | SE11400H-US                                          |         |
| OUTPUT                                                                       |                                                                                                                          |                                                      |         |
| Rated AC Power Output                                                        | 10000                                                                                                                    | 11400 @ 240V<br>10000 @ 208V                         | VA      |
| Maximum AC Power Output                                                      | 10000                                                                                                                    | 11400 @ 240V<br>10000 @ 208V                         | VA      |
| AC Output Voltage Min. – Nom. – Max.<br>(211 – 240 – 264)                    | ✓                                                                                                                        | ✓                                                    | Vac     |
| AC Output Voltage Min. – Nom. – Max.<br>(183 – 208 – 229)                    | -                                                                                                                        | ✓                                                    | Vac     |
| AC Frequency (Nominal)                                                       | 59.3 – 60 – 60.5 <sup>(6)</sup>                                                                                          |                                                      | Hz      |
| Maximum Continuous Output Current @240V                                      | 42                                                                                                                       | 47.5                                                 | A       |
| Maximum Continuous Output Current @208V                                      | -                                                                                                                        | 48.5                                                 | A       |
| Power Factor                                                                 | 1, Adjustable – 0.85 to 0.85                                                                                             |                                                      |         |
| GFDI Threshold                                                               | 1                                                                                                                        |                                                      | A       |
| Utility Monitoring, Islanding Protection,<br>Country Configurable Thresholds | Yes                                                                                                                      |                                                      |         |
| INPUT                                                                        |                                                                                                                          |                                                      |         |
| Maximum DC Power @240V                                                       | 15500                                                                                                                    | 17650                                                | W       |
| Maximum DC Power @208V                                                       | -                                                                                                                        | 15500                                                | W       |
| Transformer-less, Ungrounded                                                 | Yes                                                                                                                      |                                                      |         |
| Maximum Input Voltage                                                        | 480                                                                                                                      |                                                      | Vdc     |
| Nominal DC Input Voltage                                                     | 380                                                                                                                      |                                                      | Vdc     |
| Maximum Input Current @240V <sup>(7)</sup>                                   | 27                                                                                                                       | 30.5                                                 | Adc     |
| Maximum Input Current @208V <sup>(7)</sup>                                   | -                                                                                                                        | 27                                                   | Adc     |
| Max. Input Short Circuit Current                                             | 45                                                                                                                       |                                                      | Adc     |
| Reverse-Polarity Protection                                                  | Yes                                                                                                                      |                                                      |         |
| Ground-Fault Isolation Detection                                             | 600k Sensitivity                                                                                                         |                                                      |         |
| Maximum Inverter Efficiency                                                  | 99.2                                                                                                                     |                                                      | %       |
| CEC Weighted Efficiency                                                      | 99                                                                                                                       | 99 @ 240V<br>98.5 @ 208V                             | %       |
| Nighttime Power Consumption                                                  | < 2.5                                                                                                                    |                                                      | W       |
| ADDITIONAL FEATURES                                                          |                                                                                                                          |                                                      |         |
| Supported Communication Interfaces                                           | RS485, Ethernet, wireless SolarEdge Home Network (optional) <sup>(8)</sup> , Wi-Fi (optional), Cellular (optional)       |                                                      |         |
| Revenue Grade Metering, ANSI C12.20                                          | Optional <sup>(9)</sup>                                                                                                  |                                                      |         |
| Consumption Metering                                                         | Optional <sup>(9)</sup>                                                                                                  |                                                      |         |
| Inverter Commissioning                                                       | With the SetApp mobile application using Built-in Wi-Fi Access Point for Local Connection                                |                                                      |         |
| Rapid Shutdown - NEC 2014-2023 per articles 690.11 and 690.12                | Automatic Rapid Shutdown upon AC Grid Disconnect                                                                         |                                                      |         |
| STANDARD COMPLIANCE                                                          |                                                                                                                          |                                                      |         |
| Safety                                                                       | Conforms to UL 1741, UL 1741SA, UL 1741SB, UL 1699B<br>Certified by CSA 22.2#107.1, C22.2#330, C22.3#9, ANSI/CAN/UL 9540 |                                                      |         |
| Grid Connection Standards                                                    | IEEE1547 and IEEE-1547.1, Rule 21, Rule 14H                                                                              |                                                      |         |
| Emissions                                                                    | FCC Part 15 Class B                                                                                                      |                                                      |         |
| INSTALLATION SPECIFICATIONS                                                  |                                                                                                                          |                                                      |         |
| AC Output Conduit Size / AWG Range                                           | 1" Maximum / 14 – 4 AWG                                                                                                  |                                                      |         |
| DC Input Conduit Size / # of Strings / AWG Range                             | 1" Maximum / 1 – 3 strings / 14 – 6 AWG                                                                                  |                                                      |         |
| Dimensions with Safety Switch (H x W x D)                                    | 21.06 x 14.6 x 7.3 / 535 x 370 x 185                                                                                     | 21.06 x 14.6 x 8.2 / 535 x 370 x 208 <sup>(10)</sup> | in / mm |
| Weight with Safety Switch                                                    | 38.8 / 17.6                                                                                                              | 44.9 / 20.4 <sup>(10)</sup>                          | lb / kg |
| Noise                                                                        | <50                                                                                                                      |                                                      | dBA     |
| Cooling                                                                      | Natural Convection                                                                                                       |                                                      |         |
| Operating Temperature Range                                                  | -40 to +140 / -40 to +60 <sup>(11)</sup>                                                                                 |                                                      | °F / °C |
| Protection Rating                                                            | NEMA 4X (Inverter with Safety Switch)                                                                                    |                                                      |         |

(6) For other regional settings please contact SolarEdge support.

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

(8) For more information, refer to the [SolarEdge Home Network](#) datasheet

(9) Inverter with Revenue Grade Production and Consumption Meter P/N: SExxxxH-US000BEI4. For consumption metering, current transformers should be ordered separately: SEACT0750-200NA-20 or SEACT0750-400NA-20. 20 units per box.

(10) SE11400H-USxxxBxx5 is the updated PN, though SE11400H-USxxxBxx4 will still be available. All specifications are similar for both models, **EXCLUDING** the weight and dimensions [HxWxD];

The weight and dimensions of SE11400H-USxxxBxx4 are 38.8 / 17.6 [lb / kg] and 21.06 x 14.6 x 7.3 / 535 x 370 x 185 [in/mm], accordingly.

(11) Full power up to at least 50°C / 122°F; for power de-rating information refer to the [Temperature Derating](#) technical note for North America.



SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

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Cautionary Note Regarding Market Data and Industry Forecasts: This brochure may contain market data and industry forecasts from certain third-party sources. This information is based on industry surveys and the preparer's expertise in the industry and there can be no assurance that any such market data is accurate or that any such industry forecasts will be achieved. Although we have not independently verified the accuracy of such market data and industry forecasts, we believe that the market data is reliable and that the industry forecasts are reasonable.





# JUNCTION BOX

## OPTIMALLY SIZED ELECTRICAL BOX FOR ALL ROOF TYPES

Our Junction Box can be deck-mounted or rail-mounted and is specifically sized to house four strings (DC/AC). The hinged lid is designed to be removed or remain open during installation on roofs up to a 70-degree pitch. Deck-mounted installations do not require cutting around the shingles and feature a watertight attic pass-through option. Integrated weep holes, multiple oriented screw bosses, and pre-drilled guides on three sides (South, East, and West) provide a fast, assisted installation.

### FEATURES & BENEFITS

- Ample room to house four strings (DC/AC)
- Weep holes rated for NEMA 3R compliance
- Includes DIN rail, grounding lug, and mounting screws with multiple bosses for flexibility
- Supports up to two attic pass-throughs
- Minimal components for a fast and easy installation
- Low profile design fits under array

## VERSATILE JUNCTION BOX SIZED TO HOUSE FOUR STRINGS



ROOF TYPE

All



RACKING

Rail-Based  
Rail-Less



ATTACHMENT

Rail-Attach  
Deck-Attach





# JUNCTION BOX

## OPTIMALLY SIZED ELECTRICAL BOX FOR ALL ROOF TYPES



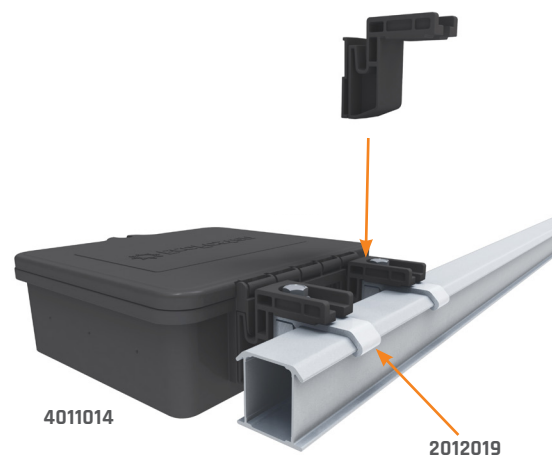
|              | PRODUCT IMAGE                                                                                                                                                                                                                              | PART NUMBER | PART DESCRIPTION           | BOX QUANTITY | PALLET QUANTITY |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|--------------|-----------------|
| JUNCTION BOX | INCLUDES (1) LID SCREW W/ LOCKNUT, (2) #12 DECK SCREWS W/ EPDM SEALING WASHERS, (1) 12" X 8" ALUMINUM FLASHING, (1) DIN 3 RAIL 6 7/8", (1) 4-TERMINAL GROUNDING BAR, (4) #8X3/8" SS DIN RAIL SCREW AND (2) #8 X3/4" SS GROUNDING BAR SCREW |             |                            |              |                 |
|              |                                                                                                                                                           | 4011013     | J-BOX W/DECK MOUNT KIT BLK | 4            | 192             |
|              | INCLUDES (1) LID SCREW W/ LOCKNUT, (2) RAIL CONNECTORS, (1) DIN 3 RAIL 6 7/8", (1) 4-TERMINAL GROUNDING BAR, (4) #8X3/8" SS DIN RAIL SCREW AND (2) #8 X3/4" SS GROUNDING BAR SCREW                                                         |             |                            |              |                 |
| ACCESSORIES  |                                                                                                                                                         | 4011014     | J-BOX W/RAIL MOUNT KIT BLK | 4            | 192             |
|              |                                                                                                                                                         | 2012019     | CF MLPE MOUNT SS           | 50/400       | 17600           |
|              | INCLUDES (1) 2" LAG BOLT AND (1) SS 8-18 X 3/4" TEK SCREW                                                                                                                                                                                  |             |                            |              |                 |
|              |                                                                                                                                                         | 3011010     | CONDUIT BRKT COMP MLL      | 50           | 10350           |
|              | INCLUDES (1) SS 8-18 X 3/4" TEK SCREW                                                                                                                                                                                                      |             |                            |              |                 |
|              |                                                                                                                                                         | 3011011     | CONDUIT BRKT TILE MLL      | 60           | 4320            |

### DECK MOUNT KIT:



### RAIL MOUNT KIT:

Rail connectors easily attach to any MLPE Mount.



The Junction Box includes screw bosses in multiple orientations and screws for installing the included DIN rail and grounding bar.



## Rafter or Deck Attach!

- No pilot holes
- Pre-installed sealant
- No caulking, no ripping shingles



## Pre-installed sealant

**Before:** Sealant contained by protective cage. No contact with hands or tools.



## Instant, watertight seal

**After:** Non-hardening sealant automatically fills all gaps, overlays and butt joints.



## Install in any season

Install in 0 to 170° F weather, including rain and sleet. Watertight for life.

# The Ultimate Comp Roof Attachment

Simple to use. Works for rafter or deck attach. No caulking, no ripped shingles, no mess. Pre-installed sealant acts as a chemical flashing and fills all gaps, voids, and butt joints for an instant, watertight seal.



### 25-Year Warranty

Manufactured with advanced materials and coatings to outlast the roof itself



### Code Compliant

Fully IBC/CBC code compliant  
Exceeds ASCE 7-22 standards  
UL2703 certified



### Self-Healing

Proprietary non-hardening sealant will flex and reseal over years of thermal expansion and contraction

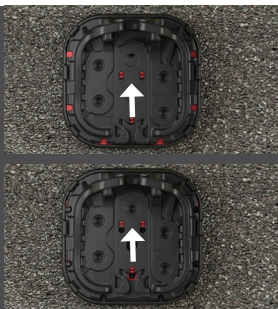


### Larger Spans

Extra-large L-foot and proprietary screws result in larger spans between mounts



**1**  
Release Safety.



**2**  
Install screw through center hole, and drive into roof until InstaFlash2 pushes through cage and seats onto the roof.



**3**  
If screw hits rafter, drive second screw in hole above. Ensure screws are embedded at least 2.5" into rafter. Installation complete.



**4**  
If first screw misses rafter, install second screw into the left or right screw holes over rafter.

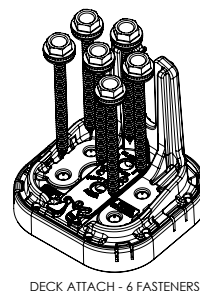
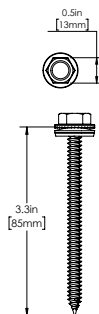
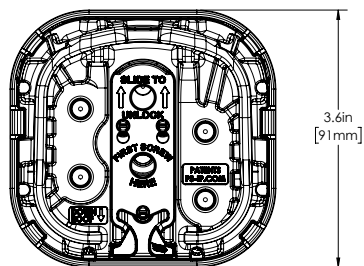
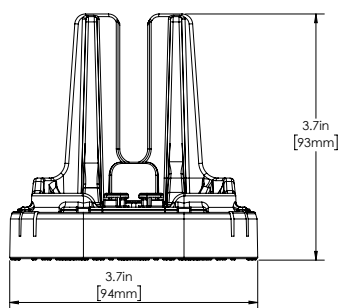


**5**  
Continue until 2 screws are embedded at least 2.5" into rafter.

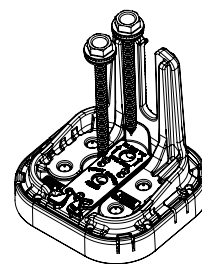


**6**  
For deck attach, use 6 screws.  
*Note: Deck attach may reduce max span.*





DECK ATTACH - 6 FASTENERS



RAFTER ATTACH - 2 FASTENERS

| SPECIFICATIONS           |                                                                                                    | INSTAFLASH KITS                    |                  |                                   |
|--------------------------|----------------------------------------------------------------------------------------------------|------------------------------------|------------------|-----------------------------------|
|                          | PIF2-B0                                                                                            | PIF2-BDT                           | PIF2-M0          | PIF2-MDT                          |
| Finish                   | Black                                                                                              |                                    | Mill             |                                   |
| Kit Contents             | Black InstaFlash2                                                                                  | Black InstaFlash2, Dovetail T-bolt | Mill InstaFlash2 | Mill InstaFlash2, Dovetail T-bolt |
| Attachment Type          | Rafter & Deck Attach                                                                               |                                    |                  |                                   |
| Roof Fasteners           | 1/2" Socket Driven; PF-DRW85 (sold separately in boxes of 24)                                      |                                    |                  |                                   |
| Roof Type                | Sloped Roof: Composition Shingle, Rolled Asphalt   Flat Roof: Modified Bitumen Roof, Built-Up Roof |                                    |                  |                                   |
| Flashing Type            | Factory Installed Non-Drying, Non-Skinning Butyl Based Chemical Flashing                           |                                    |                  |                                   |
| Installation Temperature | 0° F to 170° F                                                                                     |                                    |                  |                                   |
| Cure Time                | Instantly Waterproof; Non-Hardening                                                                |                                    |                  |                                   |
| Service Temperature      | -40° F to 195° F                                                                                   |                                    |                  |                                   |
| Certifications           | IBC, ASCE/SEI 7-16 & 7-22, UL2703                                                                  |                                    |                  |                                   |
| Install Application      | Most Railed Systems                                                                                |                                    |                  |                                   |
| Kit Quantity             | 24                                                                                                 |                                    |                  |                                   |
| Boxes Per Pallet         | 36                                                                                                 |                                    |                  |                                   |



SCAN FOR  
INSTALLATION  
VIDEO



SCAN FOR  
FREE TRIAL

See [www.ps-ip.com](http://www.ps-ip.com) for intellectual property details. All rights reserved. ©2024 Pegasus Solar Inc.

## Instant Bonding

The N-S Bonding Jumper bonds row to row with no tools.

## One Clamp Anywhere

The Multi-Clamp works as mid- or end-clamp, and fits standard 30-40mm frames.

## Lifetime Wire Management

Open rail channel holds and protects wires. Clamps won't pinch wires after tightening.

## Bonding Structural Splice

Connect rails instantly, without tools, interference or limitations.

# Next-Level Solar Mounting

A complete system for hassle-free rooftop installation, from watertight mounts to lifetime wire management.



### Simplicity

1/2" socket for everything.  
One clamp for mid or end.  
No tool splicing and bonding.  
Easy wire management.



### Code Compliant

UL 2703 listed  
LTR-AE-001-2012 listed  
Class A fire rating for any slope  
ASCE 7-16 PE Certified  
FL Cert of Approval FL41396



### Premium Aesthetics

The narrowest panel gap available. Optional Hidden End Clamps and End Caps provide a flush look on the edge of the array.



### Watertight for Life

Secured on industry-leading Pegasus Mounts, for composite shingle and tile roofs. Backed by a 25-year warranty.





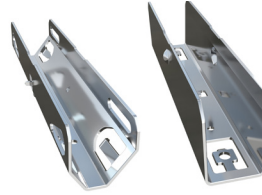
**Pegasus Rail**

Available in 14' and 7' lengths for easy layout and shipping.  
Open-channel design holds MC4 connectors, PV wire and trunk cables.  
Black and Mill finish



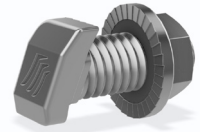
**Pegasus Max Rail**

Maximum-strength design.  
Meets specifications for high snow-load and hurricane zones.  
Black and Mill finish



**Splice and Max Splice**

Installs by hand.  
Works over mounts.  
Structurally connects and bonds rails automatically; UL2703 listed as reusable.



**Dovetail T-bolt**

Dovetail shape for extra strength.  
Uses 1/2" socket.



**Multi-Clamp**

Fits 30-40mm PV frames, as mid- or end-clamp.  
Twist-locks into position; doesn't pinch wires in rail.  
Bonds modules to rail; UL2703 listed as reusable



**Hidden End Clamp**

Offers premium edge appearance.  
Preinstalled pull-tab grips rail edge, allowing easy, one-hand installation.  
Tucks away for reuse.



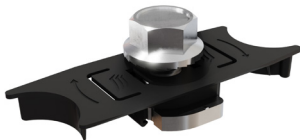
**Ground Lug**

Holds 6 or 8 AWG wire.  
Mounts on top or side of rail.  
Assembled on MLPE Mount.  
UL2703 listed as reusable.



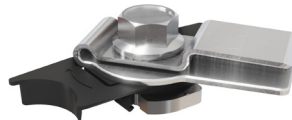
**N-S Bonding Jumper**

Installs by hand, eliminates row-to-row copper wire.  
UL2703 listed as reusable only with Pegasus Rail.



**MLPE Mount**

Secures and bonds most micro-inverters and optimizers to rail.  
Connectors and wires easily route underneath after installation.  
UL2703 listed as reusable.



**Cable Grip**

Secures four PV wires or two trunk cables.  
Stainless-steel backing provides durable grip.  
Eliminates sagging wires.



**Wire Clip**

Hand operable.  
Holds wires in channel.  
Won't slip.



**End Cap and Max End Cap**

Fits flush to PV module and hides raw or angled cuts.  
Hidden drain quickly clears water from rail.

## Certifications:

- UL 2703, Edition 1
- LTR-AE-001-2012
- ASCE 7-16 PE certified
- Class A fire rating for any slope roof
- FL Cert of Approval FL41396



**FREE**  
PEGASUS SOLAR  
Design Tool

Quickly calculate the most efficient layout, spans and materials needed to suit your job. Visit the Pegasus Customer Portal. [pegasussolar.com/portal](https://www.pegasussolar.com/portal)

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| LOAD       |            | SPAN |     |     |     |      |
|------------|------------|------|-----|-----|-----|------|
| SNOW (psf) | WIND (MPH) | 32"  | 48" | 72" | 96" | 120" |
| 0          | 100        |      |     |     |     |      |
|            | 130        |      |     |     |     |      |
| 10         | 140        |      |     |     |     |      |
| 30         | 190        |      |     |     |     |      |
| 50         |            |      |     |     |     |      |
| 100        |            |      |     |     |     |      |
| 120        |            |      |     |     |     |      |

PEGASUS RAIL

PEGASUS MAX RAIL

For reference only. Spans above are calculated using 7-16 for a Gable Roof, Exposure Category B, 0-20deg roof angle, 30ft mean roof height with non-exposed modules. For PE certified span tables, visit [www.pegasussolar.com/spans](https://www.pegasussolar.com/spans).

# Product data sheet

Specifications

SQUARE D



Safety switch, general duty, non fusible, 2 pole, 2 wire, 240VAC, 60A, Type 3R with bolt on hub prov

DU222RB

Product availability: Stock - Normally stocked in distribution facility

## Main

|                           |                                            |
|---------------------------|--------------------------------------------|
| Product                   | Single Throw Safety Switch                 |
| Duty Rating               | General duty                               |
| Device Application        | Residential                                |
| Disconnect Type           | Non-fusible disconnect switch              |
| Factory Installed Neutral | None                                       |
| Number of Poles           | 2                                          |
| Current Rating            | 60 A                                       |
| Voltage Rating            | 240 V AC                                   |
| Enclosure Rating NEMA     | NEMA 3R                                    |
| Motor power hp            | 10 hp at 240 V AC 60 Hz for 1 phase motors |

## Complementary

|                       |                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting Type         | Surface                                                                                                                                                                                                                                                                                                                                                                                                   |
| Electrical Connection | Lugs                                                                                                                                                                                                                                                                                                                                                                                                      |
| Wiring configuration  | 2 wires                                                                                                                                                                                                                                                                                                                                                                                                   |
| Wire Size             | AWG 12...AWG 3 aluminium<br>AWG 14...AWG 3 copper                                                                                                                                                                                                                                                                                                                                                         |
| Tightening torque     | 35 lbf.in (4.0 N.m) 0.003...0.008 in <sup>2</sup> (2.08...5.26 mm <sup>2</sup> ) (AWG 14...AWG 10)<br>35 lbf.in (4.0 N.m) (AWG 14...AWG 10)<br>45 lbf.in (5.08 N.m) 0.01 in <sup>2</sup> (8.37 mm <sup>2</sup> ) (AWG 8)<br>45 lbf.in (5.08 N.m) 0.02...0.03 in <sup>2</sup> (12.3...21.12 mm <sup>2</sup> ) (AWG 6...AWG 4)<br>50 lbf.in (5.6 N.m) 0.04 in <sup>2</sup> (26.67 mm <sup>2</sup> ) (AWG 3) |
| Depth                 | 3.75 in (95.25 mm)                                                                                                                                                                                                                                                                                                                                                                                        |
| Width                 | 7.75 in (196.85 mm)                                                                                                                                                                                                                                                                                                                                                                                       |
| Height                | 9.63 in (244.60 mm)                                                                                                                                                                                                                                                                                                                                                                                       |
| Net Weight            | 17.0 lb(US) (7.7 kg)                                                                                                                                                                                                                                                                                                                                                                                      |

## Environment

|                |                      |
|----------------|----------------------|
| Certifications | UL listed file E2875 |
|----------------|----------------------|

## Ordering and shipping details

|                   |              |
|-------------------|--------------|
| Category          | US1DE1A00106 |
| Discount Schedule | DE1A         |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

|                   |              |
|-------------------|--------------|
| GTIN              | 785901491491 |
| Returnability     | Yes          |
| Country of origin | MX           |

## Packing Units

|                              |                             |
|------------------------------|-----------------------------|
| Unit Type of Package 1       | PCE                         |
| Nbr. of units in pkg.        | 1                           |
| Package 1 Height             | 5.30 in (13.462 cm)         |
| Package 1 Width              | 7.20 in (18.288 cm)         |
| Package 1 Length             | 10.00 in (25.400 cm)        |
| Package weight(Lbs)          | 4.630 lb(US) (2.100 kg)     |
| Unit Type of Package 2       | CAR                         |
| Number of Units in Package 2 | 5                           |
| Package 2 Height             | 10.60 in (26.924 cm)        |
| Package 2 Width              | 10.00 in (25.400 cm)        |
| Package 2 Length             | 23.90 in (60.706 cm)        |
| Package 2 Weight             | 23.199 lb(US) (10.523 kg)   |
| Unit Type of Package 3       | PAL                         |
| Number of Units in Package 3 | 150                         |
| Package 3 Height             | 40.00 in (101.600 cm)       |
| Package 3 Width              | 40.00 in (101.600 cm)       |
| Package 3 Length             | 48.00 in (121.920 cm)       |
| Package 3 Weight             | 725.000 lb(US) (328.854 kg) |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

| Environmental footprint  |                                               |
|--------------------------|-----------------------------------------------|
| Environmental Disclosure | <a href="#">Product Environmental Profile</a> |

Use Better

| Materials and Substances               |                                                                                                                                                                                                                                                                                             |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                                                                                                                                                                                                                         |
| Packaging without single use plastic   | Yes                                                                                                                                                                                                                                                                                         |
| <a href="#">EU RoHS Directive</a>      | Compliant                                                                                                                                                                                                                                                                                   |
| REACH Regulation                       | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| California proposition 65              | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| PVC free                               | Yes                                                                                                                                                                                                                                                                                         |

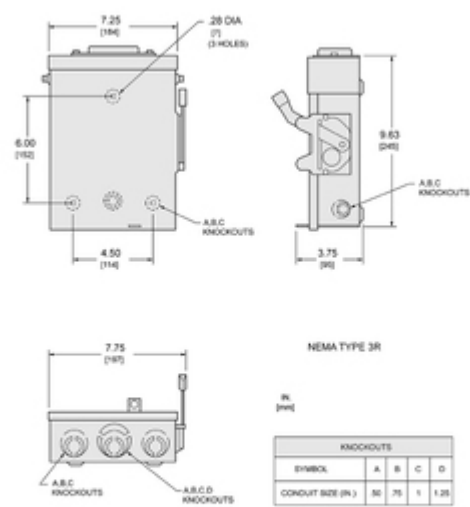
Use Again

| Repack and remanufacture |                                          |
|--------------------------|------------------------------------------|
| Circularity Profile      | No need of specific recycling operations |
| Take-back                | No                                       |



Technical Illustration

Dimensions



TOP OF NEMA TYPE 3R SWITCHES HAVE PROVISIONS FOR MAXIMUM 3 1/2" BOTTOM HUB.  
ALL DIMENSIONS ARE APPROXIMATE. REFER TO TECHNICAL DRAWINGS AND DOCUMENTATION.

Technical Illustration

Wiring diagram

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DU222RB

Image of product / Alternate images

Alternative

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