



COMMISSION OF ARCHITECTURAL REVIEW REGULAR MEETING AGENDA

4TH FLOOR CONFERENCE ROOM

August 24, 2023

3:30 PM

A. CALL TO ORDER

B. ROLL CALL

C. NEW BUSINESS

1. Certificate of Appropriateness Application PZ23-00240 filed by John and Mary Kent to install three (3) mini-split HVAC units at 903 Main Street (Parcel 21847).
2. Certificate of Appropriateness application PZ23-00244 filed by Robert Tuthill to install a solar energy system at 830 Green Street (Parcel 24236).
3. Review Special Use Permit request filed by MADS Holbrook LLC for a Short Term Rental at 503 Holbrook Street.

D. MINUTES

1. July 27, 2023 minutes

E. ADJOURN



Commission of Architectural Review

STAFF REPORT

DATE: August 24, 2023
TO: Commission of Architectural Review
FROM: Renee Burton, Division Director of Planning
RE: Certificate of Appropriateness Application PZ23-00240 filed by John and Mary Kent to install three (3) mini-split HVAC units at 903 Main Street (Parcel 21847).

SUMMARY

The applicants, John and Mary Kent, have requested a Certificate of Appropriateness to install three (3) mini-split compressor HVAC units. The proposed units will be placed on the southwest corner of the building. The applicants state that the proposed units will allow the permanent removal of thirteen (13) window units.

The Design Guidelines state that mechanical additions should be screened from view as much as possible. The applicants have proposed using screening to include fencing and vegetation, but specific screening plans have not been submitted.

RECOMMENDATION

Staff recommends that the Commission of Architecture Review approve Certificate of Appropriateness request PZ23-00240 with the condition that all units are screened from view.

ATTACHMENTS

1. CAR Application
2. Supporting Docs



COMMISSION OF ARCHITECTURAL REVIEW

CERTIFICATE OF APPROPRIATENESS APPLICATION

Zoning Ordinance Article 3.R.C.1. No zoning, site plan, subdivision plat, or building permit shall be issued for the erection, reconstruction, exterior alteration, restoration, rehabilitation, razing, relocation or demolition of any building, structure, signs, fences, walls, light fixtures, accessory buildings, pavements, grading, site improvements, significant landscaping features or other appurtenant element in an HP-O District unless and until such building or site element has been approved by the issuance of a Certificate of Appropriateness by the Commission of Architectural Review for the City.

ZONING ORDINANCE CAR APPLICATION STANDARDS

Article 3.R Section C.6: In consideration of a complete application, the Planning Director and the Review Commission may require any or all of the following information and any other materials as may be deemed necessary for its review:

- A. Statement of proposed use and user.
- B. Statement of estimated construction time.
- C. Photographs and maps relating proposed use to the surrounding property and/or the corridor on which it is located. Site plan drawings, prepared to meet the City site development plan submission requirements for a Preliminary Site Plan or
- D. Preliminary Subdivision Plat, and other exhibits showing the location of the existing and proposed building and site improvements, including:
 - (1.) Existing property boundaries, building placement and site configuration;
 - (2.) Existing topography and proposed grading;
 - (3.) Location of parking, pedestrian access, signage, exterior lighting, fencing and other site improvements; (4) Relationship to adjacent land uses;
 - (4.) Proposed site improvements, including location of parking, access, signage, exterior lighting, fencing, buildings and structures and other appurtenant elements;
 - (5.) Proposed building color and materials;
 - (6.) Relationship of building and site elements to existing and planned corridor development;
 - (7.) Relationship of parking, pedestrian facilities, and vehicular access ways to existing and planned corridor development; and
 - (8.) Other site plans and subdivision plats as may be required by Danville for development approval.
- E. Architectural drawings showing plan view and elevations of new planned construction or renovations, including drawings of original building.
- F. A landscaping and buffer plan.
- G. Designs for exterior signing, lighting and graphics, to include description of materials, colors, placement and means of physical support, lettering style and message to be placed on signs.
- H. Graphic exhibits depicting compliance with other design elements.

PLANNING DIVISION PROVIDED INFORMATION

Application #: P223-00240 CAR Meeting Date: August 24, 2023
Date Received: 7-19-23 Received By: Lisa Jones
Parcel ID: 21847 Zoning District: MR Multi-Family Residential
Additional Information: _____

APPLICANT PROVIDED INFORMATION

Property Location (address/ID#): 903 Main Street, Danville VA 25451

Applicant: John and Mary Kent

Applicant's Address: 842 Main Street, Danville VA 24541

Applicant's Phone Number: 337-772-8530

Applicant's E-mail: j.e.kent4@gmail.com

Describe Proposed Improvements: Install 3 mini-split units on the Southwest corner of the apartment
building at 903 Main Street. See attached for project details.

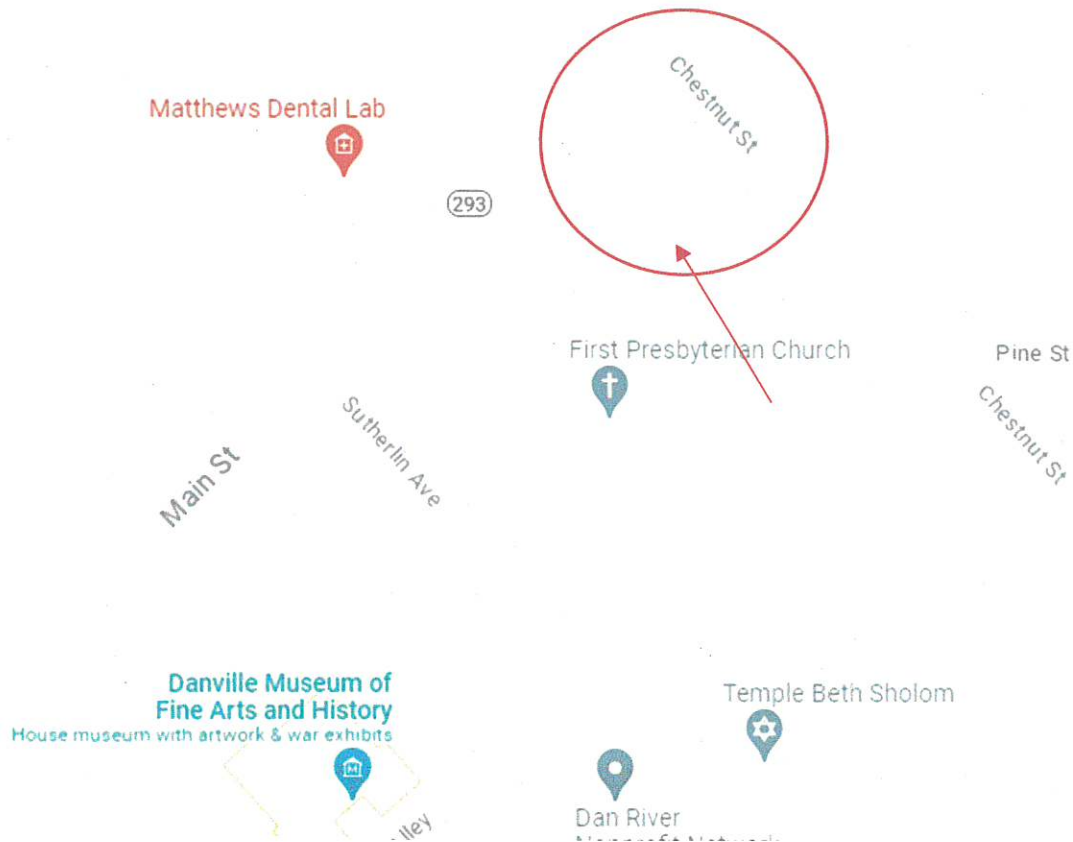

Applicant Signature

7-19-23
date

Property Owner Signature
(if not applicant)

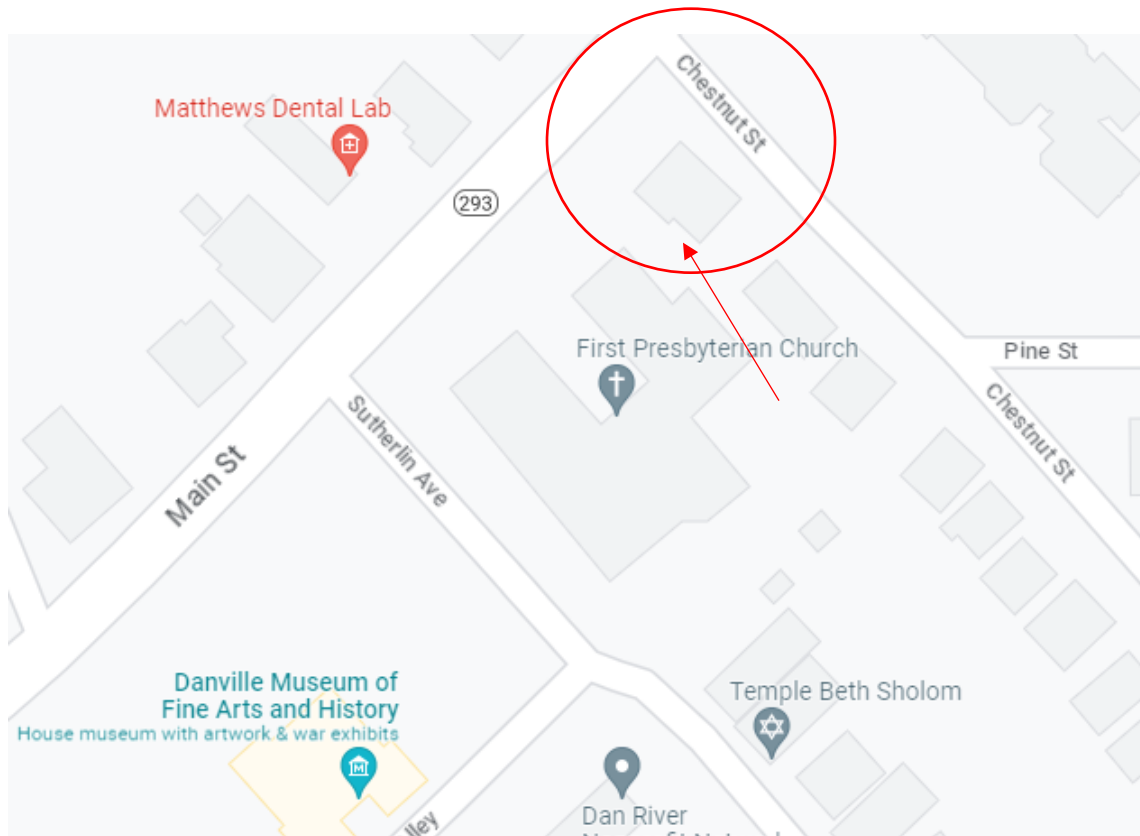
date

The applicants request a Certificate of Appropriateness for the installation of 3 mini-split compressor HVAC units on the southwest corner of the building (as indicated in the drawing below. These mini-split units will allow the permanent removal of 13 window AC units, save energy, and improve both summer and winter livability of the apartments in this building. The units will be wall mounted and screened with fencing and vegetation.



The project received a building permit from the city and work has been initiated. The recent review of a similar project at the church next door has prompted us to request the certificate.

The applicants request a Certificate of Appropriateness for the installation of 3 mini-split compressor HVAC units on the southwest corner of the building (as indicated in the drawing below. These mini-split units will allow the permanent removal of 13 window AC units, save energy, and improve both summer and winter livability of the apartments in this building. The units will be wall mounted and screened with fencing and vegetation.



The project received a building permit from the city and work has been initiated. The recent review of a similar project at the church next door has prompted us to request the certificate.



Location of equipment installation



View of area from Main Street sidewalk.



Commission of Architectural Review

STAFF REPORT

DATE: August 24, 2023
TO: Commission of Architectural Review
FROM: Renee Burton, Division Director of Planning
RE: Certificate of Appropriateness application PZ23-00244 filed by Robert Tuthill to install a solar energy system at 830 Green Street (Parcel 24236).

SUMMARY

The applicant, Robert Tuthill, has requested a Certificate of Appropriateness to install a 9.2 kW solar energy system. The system will be tied to the electrical grid and all panels will be installed on the roof of 830 Green Street. Unfortunately, there was a miscommunication and the installation has begun. Immediately after being notified that work could not begin until a Certificate of Appropriateness had been received, the contractors stopped work, cleaned up the job site and left. The contractors also called the Community Development office to apologize for the mix-up.

Section 3.0 Historic Building Restoration/Renovation Guidelines

B. Technology is an important part of modern life, but it should be shielded from view. All antennas, satellite dishes, solar panels and other such items attached to buildings should be screened from view as much as possible (typically by placing these items where they are not visible from the street).

As the submitted graphic shows, the majority of the panels will be visible from the street. The panels are also particularly conspicuous due to the color of the roof. The Commission can choose to approve as submitted, require new location of the panels, or deny the request.

RECOMMENDATION

The Planning staff recommends denial of this application. The proposal does not meet the Guidelines presented in Section 3. B. and the panel installation would have an adverse effect on the structure itself and the District. The color contrast of the panels against the red metal roof is distracting from the architectural details of a contributing structure built ca 1890. The forward facing roof panels will also negatively alter the streetscape of Green Street.

ATTACHMENTS

1. Signed CAR Fillable Application - Tuthill (1)
2. Robert Tuthill Engineer Letter Plans 6.5.23 - FULL SET - FULL SET (REL23-0781)



COMMISSION OF ARCHITECTURAL REVIEW

CERTIFICATE OF APPROPRIATENESS APPLICATION

Zoning Ordinance Article 3.R.C.1. No zoning, site plan, subdivision plat, or building permit shall be issued for the erection, reconstruction, exterior alteration, restoration, rehabilitation, razing, relocation or demolition of any building, structure, signs, fences, walls, light fixtures, accessory buildings, pavements, grading, site improvements, significant landscaping features or other appurtenant element in an HP-O District unless and until such building or site element has been approved by the issuance of a Certificate of Appropriateness by the Commission of Architectural Review for the City.

ZONING ORDINANCE CAR APPLICATION STANDARDS

Article 3.R Section C.6: In consideration of a complete application, the Planning Director and the Review Commission may require any or all of the following information and any other materials as may be deemed necessary for its review:

- A. Statement of proposed use and user.
- B. Statement of estimated construction time.
- C. Photographs and maps relating proposed use to the surrounding property and/or the corridor on which it is located. Site plan drawings, prepared to meet the City site development plan submission requirements for a Preliminary Site Plan or
- D. Preliminary Subdivision Plat, and other exhibits showing the location of the existing and proposed building and site improvements, including:
 - (1.) Existing property boundaries, building placement and site configuration;
 - (2.) Existing topography and proposed grading;
 - (3.) Location of parking, pedestrian access, signage, exterior lighting, fencing and other site improvements; (4) Relationship to adjacent land uses;
 - (4.) Proposed site improvements, including location of parking, access, signage, exterior lighting, fencing, buildings and structures and other appurtenant elements;
 - (5.) Proposed building color and materials;
 - (6.) Relationship of building and site elements to existing and planned corridor development;
 - (7.) Relationship of parking, pedestrian facilities, and vehicular access ways to existing and planned corridor development; and
 - (8.) Other site plans and subdivision plats as may be required by Danville for development approval.
- E. Architectural drawings showing plan view and elevations of new planned construction or renovations, including drawings of original building.
- F. A landscaping and buffer plan.
- G. Designs for exterior signing, lighting and graphics, to include description of materials, colors, placement and means of physical support, lettering style and message to be placed on signs.
- H. Graphic exhibits depicting compliance with other design elements.

PLANNING DIVISION PROVIDED INFORMATION

Application #: _____ CAR Meeting Date: _____

Date Received: _____ Received By: _____

Parcel ID: _____ Zoning District: _____

Additional Information: _____

APPLICANT PROVIDED INFORMATION

Property Location (address/ID#): 830 Green Street, Danville, VA 24541

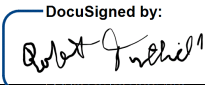
Applicant: Robert Tuthill

Applicant's Address: 830 Green Street, Danville, VA 24541

Applicant's Phone Number: (434) 425-9790

Applicant's E-mail: scrubtut@yahoo.com

Describe Proposed Improvements: Installing a 9.2 kW solar energy system. The system will be tied to the electrical grid and all panels will be installed on the roof of the home.

DocuSigned by:

F759D75C0032463

Applicant Signature date

7/24/2023

Property Owner Signature date
(if not applicant)

6/5/2023

RE: Structural Certification for Installation of Residential Solar
ROBERT TUTHILL: 830 GREEN STREET, DANVILLE, VA 24541

Attn: To Whom It May Concern

This Letter is for the existing roof framing which supports the new PV modules as well as the attachment of the PV system to existing roof framing. From the field observation report, the roof is made of Metal roofing over roof plywood supported by 2X4 Rafters at 16 inches. The slope of the roof was approximated to be 31 degrees.

After review of the field observation data and based on our structural capacity calculation, **the existing roof framing has been determined to be adequate to support the imposed loads without structural upgrades.** Contractor shall verify that existing framing is consistent with the described above before install. Should they find any discrepancies, a written approval from SEOR is mandatory before proceeding with install. Capacity calculations were done in accordance with applicable building codes.

Design Criteria

<u>Code</u>	2018 Virginia Residential Code		<u>Wind Load</u>	(component and Cladding)
<u>Risk category</u>		II		V
<u>Roof Dead Load</u>	Dr	10 psf		130 mph
<u>PV Dead Load</u>	DPV	3 psf		Exposure C
<u>Roof Live Load</u>	Lr	20 psf		
<u>Ground Snow</u>	S	35 psf		

If you have any questions on the above, please do not hesitate to call.

Sincerely,

Vincent Mwumvaneza, P.E.

EV Engineering, LLC

projects@evengineersnet.com

<http://www.evengineersnet.com>



Structural Letter for PV Installation

Date: 6/5/2023
Job Address: 830 GREEN STREET
DANVILLE, VA 24541
Job Name: ROBERT TUTHILL
Job Number: 230605RT

Scope of Work

This Letter is for the existing roof framing which supports the new PV modules as well as the attachment of the PV system to existing roof framing. All PV mounting equipment shall be designed and installed per manufacturer's approved installation specifications.

Table of Content

Sheet

- | | |
|---|---------------------------------|
| 1 | Cover |
| 2 | Attachment Uplift checks |
| 3 | Roof Framing Check |
| 4 | Seismic Check and Scope of work |

Engineering Calculations Summary

<u>Code</u>	2018 Virginia Residential Code	
<u>Risk category</u>		II
<u>Roof Dead Load</u>	Dr	10 psf
<u>PV Dead Load</u>	DPV	3 psf
<u>Roof Live Load</u>	Lr	20 psf
<u>Ground Snow</u>	S	35 psf
<u>Wind Load</u>	(component and Cladding)	
	V	130 mph
	Exposure	C

References

NDS for Wood Construction

Sincerely,

Vincent Mwumvaneza, P.E.
EV Engineering, LLC
projects@evengineersnet.com
<http://www.evengineersnet.com>



projects@evengineersnet.com
<http://www.evengineersnet.com>

Wind Load Cont.

Risk Category =	II	
V=	130 mph	ASCE 7-16 Figure 26.5-1B
Exposure =	C	
K_{zt} =	1.0	ASCE 7-16 Sec 26.8.2
K_z =	0.93	ASCE 7-16 Table 26.10-1
K_d =	0.85	ASCE 7-16 Table 26.6-1
K_e =	0.98	ASCE 7-16 Table 26.9-1
$q_h = 0.00256K_zK_{zt}K_dK_eV^2$ =	33.50 psf	
Pitch =	31.0 Degrees	
γ_E =	1.5	
γ_a =	0.8	

Uplift (W)		Zone(1)	Zone(2r)	Zone(2e)	Zone(3)
Fig. 30-3-2	GC_p =	-1.9	-2.2	-1.6	-1.8
Eq. 29.4-7	$P = q_h(GC_p)(\gamma_E)(\gamma_a)$ =	-76.38	-88.44	-64.32	-72.36
	GC_p =	0.7			
	$P = q_h(GC_p)(\gamma_E)(\gamma_a)$ =	15.48			

Figure 30.3-2

Equation 29.4-7

Rafter Attachments: 0.6D+0.6W (CD=1.6)

Connection Check

Attachment max. spacing=	4 ft	
S-5 Ultimate Withdrawal Value=	900 lbs	Manufacturer Test

	Allowable Capacity=		300 lbs	
Zone	Trib Width	Area (ft)	Uplift (lbs)	Down (lbs)
Zone(1)	4	9.2	241.0	170.0
Zone(2r)	4	9.2	277.6	170.0
Zone(2e)	4	9.2	204.4	170.0
Zone(3)	4	9.2	228.8	170.0
	Conservative Max=		277.6	< 300

CONNECTION IS OK

1. Pv seismic dead weight is negligible to result in significant seismic uplift, therefore the wind uplift governs
2. Embedment is measured from the top of the framing member to the tapered tip of a lag screw. Embedment in sheathing or other material does not count.

Vertical Load Resisting System Design

Roof Framing	Rafters
Snow Load	Fully Exposed
	$p_g = 35$ psf $C_t = 1.1$ $C_e = 0.9$ $I_s = 1.0$ $p_s = 16$ psf $p_f = 24$ psf $p_{fmin.} = 24.3$ psf 21.02 plf
	Max Length, L = 7.0 ft
	Tributary Width, $W_T = 16$ in
	RLL = 20 psf 22.86 plf
	Dr = 10 psf 13.33 plf
	PvDL = 3 psf 4 plf
Load Case: DL	$w = 17$ plf $M = 94$ lb-ft Mallowable = $S_x \times F_b' = 357$ lb-ft > 94 lb-ft OK
Load Case: DL+RLL	$DL+Lr = 36$ plf $M_{down} = 197$ lb-ft Mallowable = $S_x \times F_b' = 495$ lb-ft > 197 lb-ft OK
Load Case: DL+S	$DL+S = 38$ plf $M_{down} = 209$ lb-ft Mallowable = $S_x \times F_b' = 456$ lb-ft > 209 lb-ft OK
Load Case: DL+0.6W	$w = 29.7$ plf $M_u = 162$ lb-ft Mallowable = $S_x \times F_b'$ (wind) = 634 lb-ft > 162 lb-ft OK
Load Case: 0.6DL+0.6W	$w = 23.8$ plf $M_u = 130$ lb-ft Mallowable = $S_x \times F_b'$ (wind) = 634 lb-ft > 130 lb-ft OK
DL+0.45W+0.75(RLL or S)	43 plf $M_{down} = 234$ lb-ft Mallowable = $S_x \times F_b' = 634$ lb-ft > 234 lb-ft OK

Member Capacity

DF-L No.2	Design Value	C_L	C_F	C_i	C_r	K_F	ϕ	λ	Adjusted Value
2X4	900 psi	1.0	1.5	1.0	1.15	2.54	0.85	0.8	1553 psi
$F_b =$	180 psi	N/A	N/A	1.0	N/A	2.88	0.75	0.8	180 psi
$F_v =$	1600000 psi	N/A	N/A	1.0	N/A	N/A	N/A	N/A	1600000 psi
$E =$	580000 psi	N/A	N/A	1.0	N/A	1.76	0.85	N/A	580000 psi

Depth, d =	3.5 in								
Width, b =	1.5 in								
Cross-Sectional Area, A =	5.25 in ²								
Moment of Inertia, $I_{xx} =$	5.35938 in ⁴								
Section Modulus, $S_{xx} =$	3.0625 in ³								
Allowable Moment, $M_{all} = F_b' S_{xx} =$	396.2 lb-ft					DCR = $M_u / M_{all} =$	0.46 < 1		Satisfactory
Allowable Shear, $V_{all} = 2/3 F_v' A =$	630.0 lb					DCR = $V_u / V_{all} =$	0.32 < 1		Satisfactory

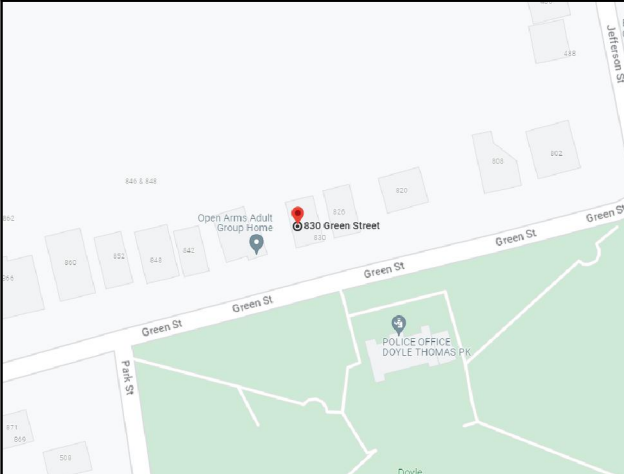
Seismic Loads Check

Roof Dead Load	10 psf
% or Roof with Pv	21.19%
Dpv and Racking	3 psf
Average Total Dead Load	10.6 psf
Increase in Dead Load	2.9% OK

The increase in seismic Dead weight as a result of the solar system is less than 10% of the existing structure and therefore no further seismic analysis is required.

Limits of Scope of Work and Liability

We have based our structural capacity determination on information in pictures and a drawing set titled PV plans -ROBERT TUTHILL. The analysis was according to applicable building codes, professional engineering and design experience, opinions and judgments. The calculations produced for this structure's assessment are only for the proposed solar panel installation referenced in the stamped plan set and were made according to generally recognized structural analysis standards and procedures.

ROBERT TUTHILL - 9.200kW DC, 10.000kW AC																																																			
VICINITY MAP		AERIAL MAP		SHEET CATALOG			ROOF AREA CALCULATION																																												
				<table><tr><th>SHEET</th><th>REVISION</th><th>DESCRIPTION</th></tr><tr><td>CS-01</td><td>A</td><td>COVER SHEET</td></tr><tr><td>CS-02</td><td>A</td><td>GENERAL NOTES</td></tr><tr><td>E-01</td><td>A</td><td>SITE PLAN</td></tr><tr><td>E-01.1</td><td>A</td><td>SATELLITE VIEW</td></tr><tr><td>S-01</td><td>A</td><td>MOUNTING DETAILS</td></tr><tr><td>S-02</td><td>A</td><td>STRUCTURAL DETAILS</td></tr><tr><td>E-02</td><td>A</td><td>SINGLE LINE DIAGRAM</td></tr><tr><td>E-03</td><td>A</td><td>ELECTRICAL CALCULATIONS</td></tr><tr><td>PL-01</td><td>A</td><td>PLACARDS</td></tr><tr><td>SS</td><td>A</td><td>SPEC SHEET(S)</td></tr></table>			SHEET	REVISION	DESCRIPTION	CS-01	A	COVER SHEET	CS-02	A	GENERAL NOTES	E-01	A	SITE PLAN	E-01.1	A	SATELLITE VIEW	S-01	A	MOUNTING DETAILS	S-02	A	STRUCTURAL DETAILS	E-02	A	SINGLE LINE DIAGRAM	E-03	A	ELECTRICAL CALCULATIONS	PL-01	A	PLACARDS	SS	A	SPEC SHEET(S)	<table><tr><td>TOTAL ARRAY AREA</td><td>=</td><td>483.52 sq.ft</td></tr><tr><td>TOTAL ROOF AREA</td><td>=</td><td>2282 sq.ft</td></tr><tr><td>% ARRAY AREA IN ROOF</td><td>=</td><td>21.19 %</td></tr></table>			TOTAL ARRAY AREA	=	483.52 sq.ft	TOTAL ROOF AREA	=	2282 sq.ft	% ARRAY AREA IN ROOF	=	21.19 %
SHEET	REVISION	DESCRIPTION																																																	
CS-01	A	COVER SHEET																																																	
CS-02	A	GENERAL NOTES																																																	
E-01	A	SITE PLAN																																																	
E-01.1	A	SATELLITE VIEW																																																	
S-01	A	MOUNTING DETAILS																																																	
S-02	A	STRUCTURAL DETAILS																																																	
E-02	A	SINGLE LINE DIAGRAM																																																	
E-03	A	ELECTRICAL CALCULATIONS																																																	
PL-01	A	PLACARDS																																																	
SS	A	SPEC SHEET(S)																																																	
TOTAL ARRAY AREA	=	483.52 sq.ft																																																	
TOTAL ROOF AREA	=	2282 sq.ft																																																	
% ARRAY AREA IN ROOF	=	21.19 %																																																	
HOUSE VIEW																																																			
																																																			
ENGINEERING SCOPE OF WORK																																																			
1. ILLUMINE INDUSTRIES INC. HAS ONLY PROVIDED DRAFTING SERVICES FOR THE PERMIT DRAWINGS. NO ACTUAL ENGINEERING WORK, ENGINEERING REVIEW OR ENGINEERING APPROVAL HAS BEEN CONDUCTED BY ILLUMINE INDUSTRIES INC UNLESS NOTED OTHERWISE. 2. WHEN A PROFESSIONAL ENGINEER APPROVES AND SEALS THE DESIGN FOR COMPONENTS OF THEIR RESPECTIVE DISCIPLINE (STRUCTURAL/ELECTRICAL) SHOWN ON THESE PERMIT DRAWINGS, THE PROFESSIONAL ENGINEER a. TAKES FULL DIRECT CONTROL OF THE ENGINEERED DESIGN b. IS GIVEN ACCESS TO PERSONALLY SUPERVISE AND RECTIFY ANY ASPECT OF THE ENGINEERED DESIGN c. HAS FULLY ACCEPTED RESPONSIBILITY FOR THE ENGINEERED DESIGN																																																			
GENERAL NOTES																																																			
1. MODULES ARE LISTED UNDER UL1703/UL61730 AND CONFORM TO THE STANDARDS. 2. INVERTERS ARE LISTED UNDER UL 1741 AND CONFORM TO THE STANDARDS. 3. DRAWINGS ARE DIAGRAMMATIC, INDICATING GENERAL ARRANGEMENT OF THE PV SYSTEM AND THE ACTUAL SITE CONDITION MIGHT VARY. 4. WORKING CLEARANCES AROUND THE NEW PV ELECTRICAL EQUIPMENT WILL BE MAINTAINED IN ACCORDANCE WITH NEC 110.26. 5. ALL GROUND WIRING CONNECTED TO THE MAIN SERVICE GROUNDING IN MAIN SERVICE PANEL/ SERVICE EQUIPMENT. 6. ALL CONDUCTORS SHALL BE 600V, 90°C STANDARD COPPER UNLESS OTHERWISE NOTED. 7. WHEN REQUIRED, A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS. 8. THE SYSTEM WILL NOT BE INTERCONNECTED BY THE CONTRACTOR UNTIL APPROVAL FROM THE LOCAL JURISDICTION AND/OR THE UTILITY. 9. ROOF ACCESS POINT SHALL BE LOCATED IN AREAS THAT DO NOT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT STRONG POINTS OF BUILDING CONSTRUCTION WHERE THE ACCESS POINT DOES NOT CONFLICT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREES, WIRES OR SIGNS. 10. PV ARRAY COMBINER/JUNCTION BOX PROVIDES TRANSITION FROM ARRAY WIRING TO CONDUIT WIRING																																																			
CUSTOMER INFORMATION				CONTRACTOR INFORMATION																																															
NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE				<table><tr><th colspan="2">APPLICABLE CODES</th></tr><tr><td colspan="2"> •ELECTRIC CODE: NEC 2017 •FIRE CODE: IFC 2018 •BUILDING CODE: IBC 2018 •RESIDENTIAL CODE: VRC 2018 </td></tr></table> 						APPLICABLE CODES		•ELECTRIC CODE: NEC 2017 •FIRE CODE: IFC 2018 •BUILDING CODE: IBC 2018 •RESIDENTIAL CODE: VRC 2018																																							
APPLICABLE CODES																																																			
•ELECTRIC CODE: NEC 2017 •FIRE CODE: IFC 2018 •BUILDING CODE: IBC 2018 •RESIDENTIAL CODE: VRC 2018																																																			
DRAWING INFORMATION																																																			
PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"				 COVER SHEET DATE: 06/02/2023 SHEET: CS-01																																															



INSTALLATION NOTES:

1. STRUCTURAL ROOF MEMBER LOCATIONS ARE ESTIMATED AND SHOULD BE LOCATED AND VERIFIED BY THE CONTRACTOR WHEN LAG BOLT PENETRATION OR MECHANICAL ATTACHMENT TO THE STRUCTURE IS REQUIRED.
2. ROOFTOP PENETRATIONS FOR SOLAR RACKING WILL BE COMPLETED AND SEALED WITH APPROVED SEALANT PER CODE BY A LICENSED CONTRACTOR.
3. LAGS MUST HAVE A MINIMUM 2.5" THREAD EMBEDMENT INTO THE STRUCTURAL MEMBER.
4. ALL PV RACKING ATTACHMENTS SHALL BE STAGGERED BY ROW BETWEEN THE ROOF FRAMING MEMBERS AS NECESSARY.
5. ROOF MOUNTED STANDARD RAIL REQUIRES ONE THERMAL EXPANSION GAP FOR EVERY RUN OF RAIL GREATER THAN 40'.
6. ALL CONDUCTORS AND CONDUITS ON THE ROOF SHALL BE MINIMUM 7/8" ABOVE THE ROOF SURFACE (INCLUDING CABLES UNDERNEATH MODULES AND RACKING).
7. THE PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL OR BUILDING ROOF VENTS.
8. ALL SOLAR PANEL ARRAY COMPONENTS SHALL BE INSTALLED PER THE MANUFACTURER'S APPROVED INSTALLATION SPECIFICATIONS.
9. THE EXISTING BUILDINGS STRUCTURE SHALL BE VERIFIED AS PROPERLY CONSTRUCTED AND MAINTAINED IN GOOD CONDITION. NO ALLOWANCE HAS BEEN MADE IN THESE DRAWINGS FOR ANY EXISTING DEFICIENCY IN DESIGN, MATERIAL, CONSTRUCTION, OR LACK OF MAINTENANCE FOR THE EXISTING STRUCTURE OR PROPOSED EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS, PROPER FIT, AND CLEARANCES IN THE FIELD.
10. WATERPROOFING AROUND THE ROOF PENETRATIONS IS THE RESPONSIBILITY OF OTHERS.
11. MISCELLANEOUS ITEMS NOT EXPLICITLY LISTED OR IDENTIFIED IN THESE DRAWINGS HAVE NOT BEEN DESIGNED. IT IS RECOMMENDED THAT MATERIAL OF SUITABLE SIZE STRENGTH TO BE OBTAINED FROM A REPUTABLE MANUFACTURER FOR MISCELLANEOUS ITEMS.
12. IF PROJECT IS STAMPED AND SEALED BY AN ILLUMINE-I STRUCTURAL ENGINEER, SEE ASSOCIATED ILLUMINE-I STRUCTURAL REPORT FOR FULL COMPREHENSIVE SCOPE OF STRUCTURAL ENGINEERING INVESTIGATION AND APPROVAL.
13. IF ANY CONDITION THROUGHOUT THE ASSOCIATED REPORT OR PERMIT DRAWINGS IS NOT ALSO REPRESENTED ON-SITE, CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES AND RECEIVE WRITTEN APPROVAL FROM THE ENGINEER OF RECORD BEFORE PROCEEDING WITH INSTALLATION.
14. CONTRACTOR TO PROVIDE MINIMUM 1/4" GAP BETWEEN ALL SOLAR PANELS.

ROOF ACCESS PATHWAYS AND SETBACKS:

1204.2.1 SOLAR PHOTOVOLTAIC SYSTEMS FOR GROUP R-3 BUILDINGS:

SOLAR PHOTOVOLTAIC SYSTEMS FOR GROUP R-3 BUILDINGS SHALL COMPLY WITH SECTIONS 1204.2.1.1 THROUGH 1204.2.1.3.

EXCEPTIONS:

1. THESE REQUIREMENTS SHALL NOT APPLY TO STRUCTURES DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE INTERNATIONAL RESIDENTIAL CODE.
2. THESE REQUIREMENTS SHALL NOT APPLY TO ROOFS WITH SLOPES OF 2 UNITS VERTICAL IN 12 UNITS HORIZONTAL OR LESS.

1204.2.1.1 PATHWAYS TO RIDGE:

NOT FEWER THAN TWO 36-INCH-WIDE (914 MM) PATHWAYS ON SEPARATE ROOF PLANES, FROM LOWEST ROOF EDGE TO RIDGE, SHALL BE PROVIDED ON ALL BUILDINGS. NOT FEWER THAN ONE PATHWAY SHALL BE PROVIDED ON THE STREET OR DRIVEWAY SIDE OF THE ROOF. FOR EACH ROOF PLANE WITH A PHOTOVOLTAIC ARRAY, NOT FEWER THAN ONE 36-INCH-WIDE (914 MM) PATHWAY FROM LOWEST ROOF EDGE TO RIDGE SHALL BE PROVIDED ON THE SAME ROOF PLANE AS THE PHOTOVOLTAIC ARRAY, ON AN ADJACENT ROOF PLANE OR STRADDLING THE SAME AND ADJACENT ROOF PLANES.

1204.2.1.2 SETBACKS AT RIDGE:

FOR PHOTOVOLTAIC ARRAYS OCCUPYING 33 PERCENT OR LESS OF THE PLAN VIEW TOTAL ROOF AREA, A SETBACK OF NOT LESS THAN 18 INCHES (457 MM) WIDE IS REQUIRED ON BOTH SIDES OF A HORIZONTAL RIDGE. FOR PHOTOVOLTAIC ARRAYS OCCUPYING MORE THAN 33 PERCENT OF THE PLAN VIEW TOTAL ROOF AREA, A SETBACK OF NOT LESS THAN 36 INCHES (457 MM) WIDE IS REQUIRED ON BOTH SIDES OF A HORIZONTAL RIDGE.

1204.2.1.3 ALTERNATIVE SETBACKS AT RIDGE:

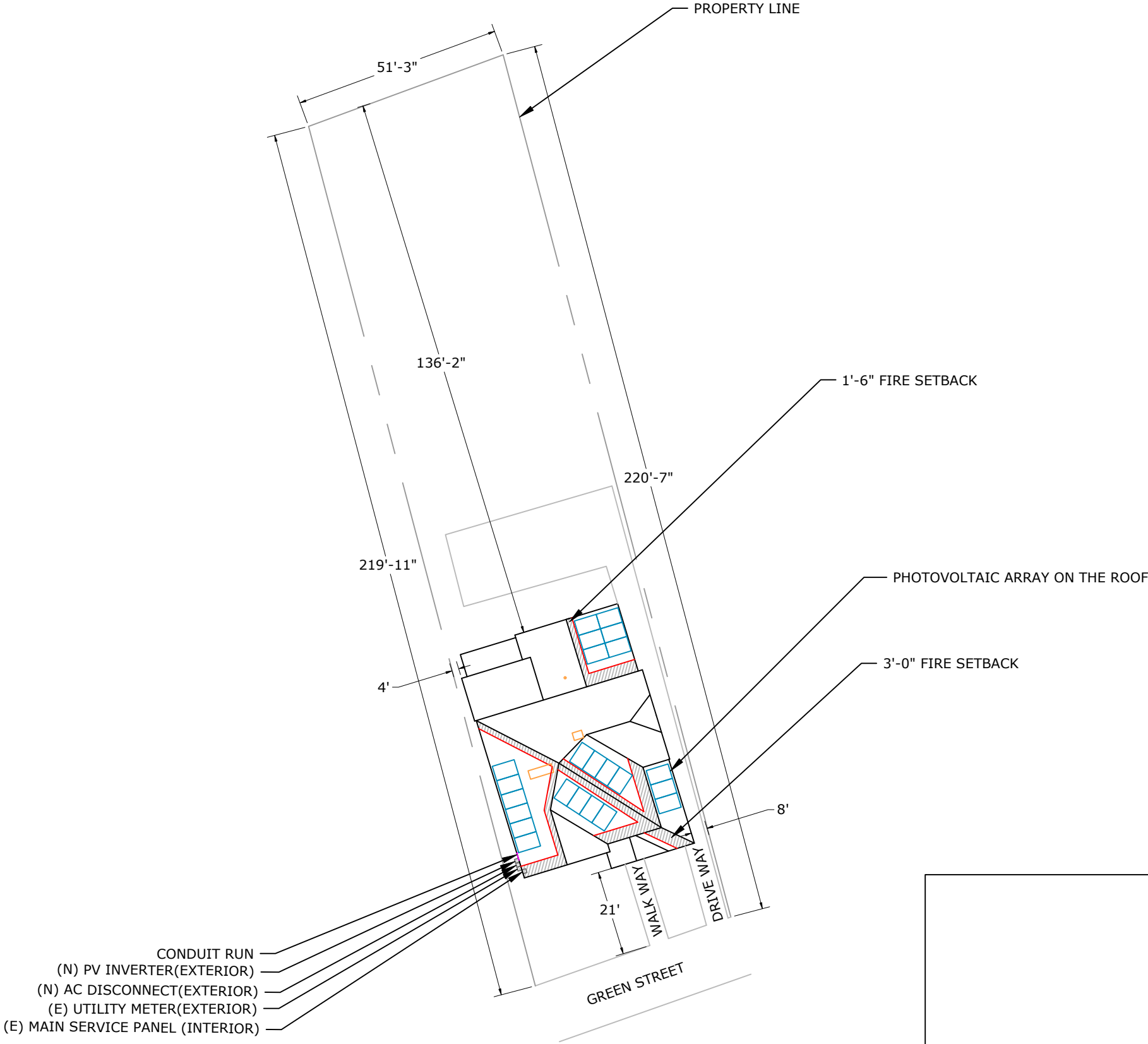
- WHERE AN AUTOMATIC SPRINKLER SYSTEM IS INSTALLED WITHIN THE DWELLING IN ACCORDANCE WITH SECTION 903.3.1.3, SETBACKS AT THE RIDGE SHALL CONFORM TO ONE OF THE FOLLOWING:
1. FOR PHOTOVOLTAIC ARRAYS OCCUPYING 66 PERCENT OR LESS OF THE PLAN VIEW TOTAL ROOF AREA, A SETBACK OF NOT LESS THAN 18 INCHES (457 MM) WIDE IS REQUIRED ON BOTH SIDES OF A HORIZONTAL RIDGE.
 2. FOR PHOTOVOLTAIC ARRAYS OCCUPYING MORE THAN 66 PERCENT OF THE PLAN VIEW TOTAL ROOF AREA, A SETBACK OF NOT LESS THAN 36 INCHES (914 MM) WIDE IS REQUIRED ON BOTH SIDES OF A HORIZONTAL RIDGE.

1204.2.2 EMERGENCY ESCAPE AND RESCUE OPENINGS. PANELS AND MODULES INSTALLED ON GROUP R-3 BUILDINGS SHALL NOT BE PLACED ON THE PORTION OF A ROOF THAT IS BELOW AN EMERGENCY ESCAPE AND RESCUE OPENING. A PATHWAY OF NOT LESS THAN 36 INCHES (914 MM) WIDE SHALL BE PROVIDED TO THE EMERGENCY ESCAPE AND RESCUE OPENING.

CUSTOMER INFORMATION	CONTRACTOR INFORMATION
NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE	
DRAWING INFORMATION	
PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"	
 GENERAL NOTES DATE: 06/02/2023 SHEET: CS-02	

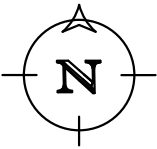
ROBERT TUTHILL - 9.200kW DC, 10.000kW AC

NOTE: NO GATE OR FENCE



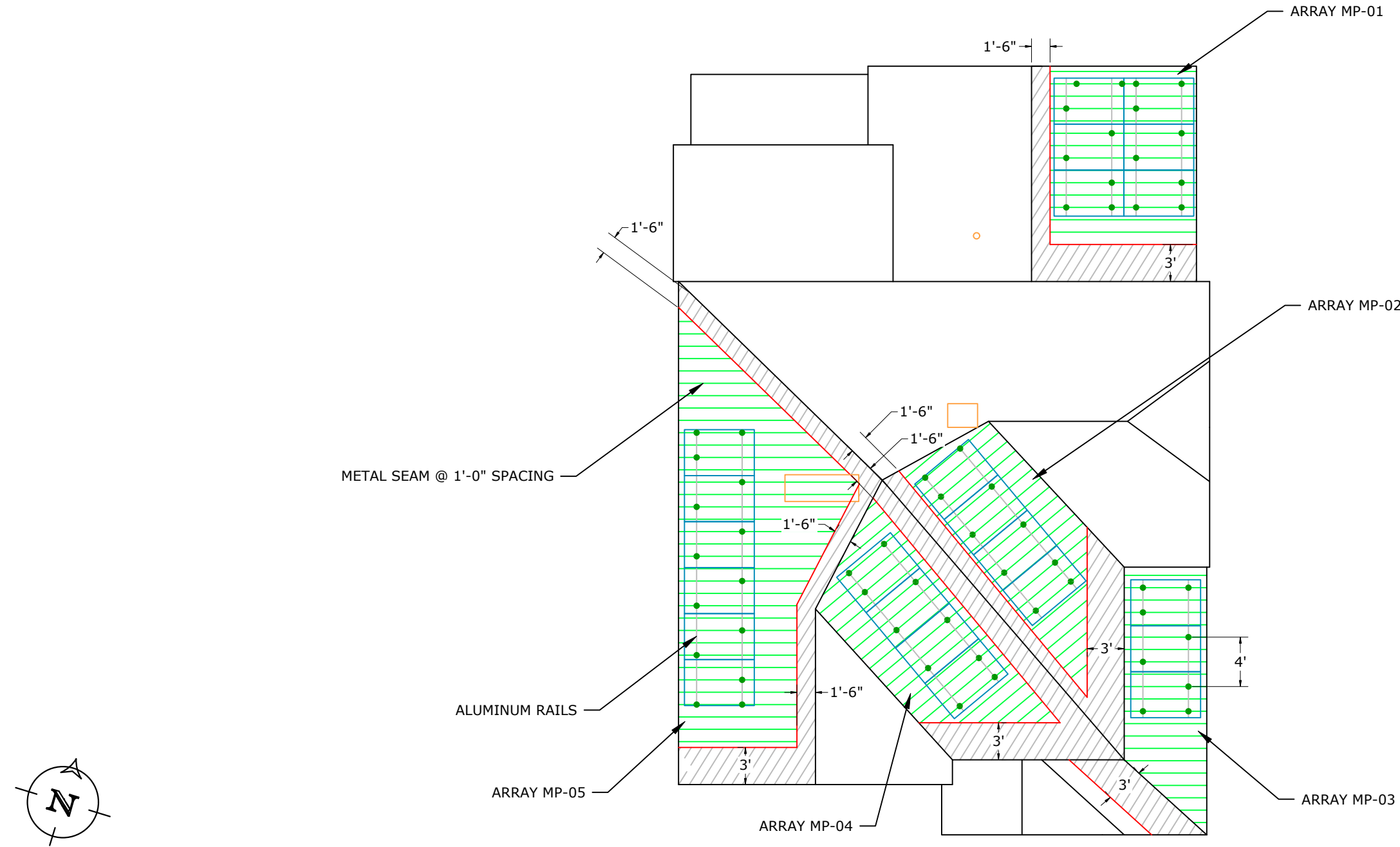
SCALE:1"=30'-0"

CUSTOMER INFORMATION		CONTRACTOR INFORMATION	
NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE		 Benefits Beyond the Bottom Line	
DRAWING INFORMATION			
PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"		 SITE PLAN DATE: 06/02/2023 SHEET: E-01	



CUSTOMER INFORMATION		CONTRACTOR INFORMATION	
NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE			
DRAWING INFORMATION			
PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"		 SATELLITE VIEW DATE: 06/02/2023 SHEET: E-01.1	

NOTE: PENETRATIONS ARE STAGGERED



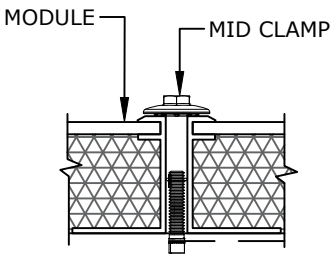
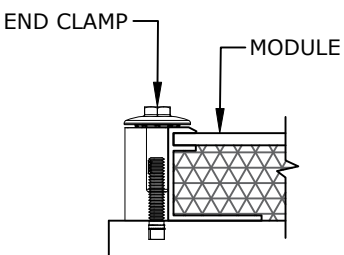
SCALE: 1"=10'-0"

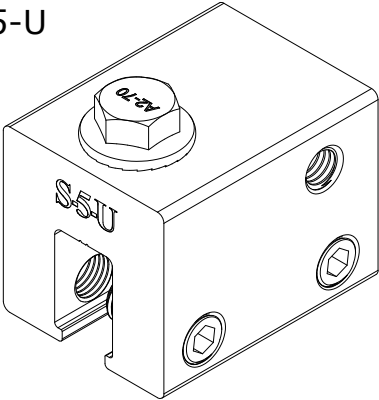
SITE INFORMATION														CUSTOMER INFORMATION	CONTRACTOR INFORMATION	
S.NO	AZIMUTH	PITCH	NO. OF MODULES	ARRAY AREA (SQ. FT.)	ROOF TYPE	ATTACHMENT	ROOF EXPOSURE	FRAME TYPE	FRAME SIZE	FRAME SPACING	SEAM SPACING	MAX RAIL SPAN	OVER HANG	NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE		
MP-01	74°	31°	6	126.14	METAL ROOF	S-5-U CLAMP	ATTIC	RAFTERS	2 X 4	1'-4"	1'-0"	4'-0"	1'-6"			
MP-02	28°	31°	4	84.09	METAL ROOF	S-5-U CLAMP	ATTIC	RAFTERS	2 X 4	1'-4"	1'-0"	4'-0"	1'-6"			
MP-03	74°	31°	3	63.07	METAL ROOF	S-5-U CLAMP	ATTIC	RAFTERS	2 X 4	1'-4"	1'-0"	4'-0"	1'-6"			
MP-04	208°	31°	4	84.09	METAL ROOF	S-5-U CLAMP	ATTIC	RAFTERS	2 X 4	1'-4"	1'-0"	4'-0"	1'-6"			
MP-05	254°	31°	6	126.14	METAL ROOF	S-5-U CLAMP	ATTIC	RAFTERS	2 X 4	1'-4"	1'-0"	4'-0"	1'-6"			
														DRAWING INFORMATION		
														PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"		 DATE: 06/02/2023 SHEET: S-01

DEAD LOAD CALCULATIONS			
BOM	QUANTITY	LBS/UNIT	TOTAL WEIGHT (LBS)
MODULES	23	47.4	1090.2
MID-CLAMP	34	0.05	1.7
END-CLAMP	24	0.05	1.2
RAIL LENGTH	177	0.43	76.11
SPLICE BAR	6	0.36	2.16
S-5-U CLAMP	58	0.59	34.22
TOTAL WEIGHT OF THE SYSTEM (LBS)			1205.59
TOTAL ARRAY AREA ON THE ROOF (SQ. FT.)			483.52
WEIGHT PER SQ. FT.(LBS)			2.49
WEIGHT PER PENETRATION (LBS)			20.79

--	--

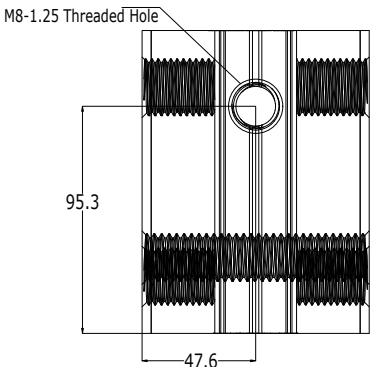
MODULE DATA	
AXITEC AC-400MH-108VB (400W)	
MODULE DIM	67.8"x44.65"x1.38"

MID-CLAMP AND END-CLAMP ASSEMBLY	
	



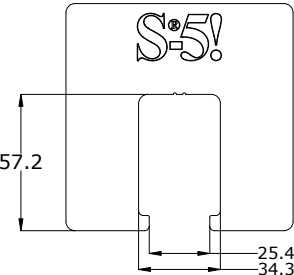
S-5-U

BACK VIEW



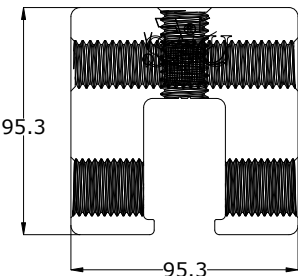
TOP VIEW

LEFT

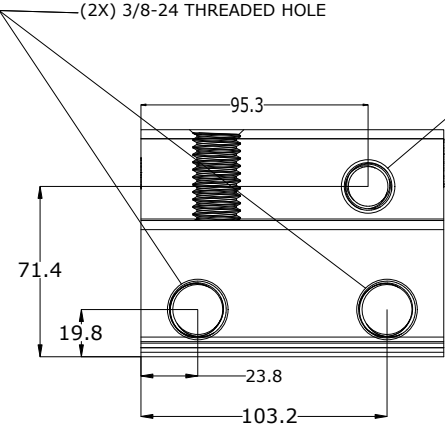


FRONT VIEW

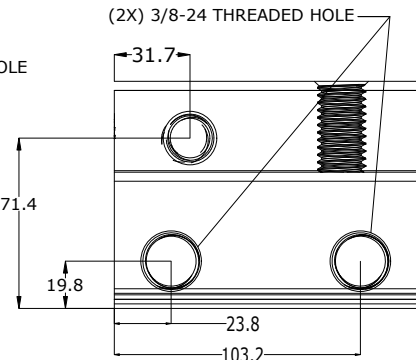
RIGHT VIEW



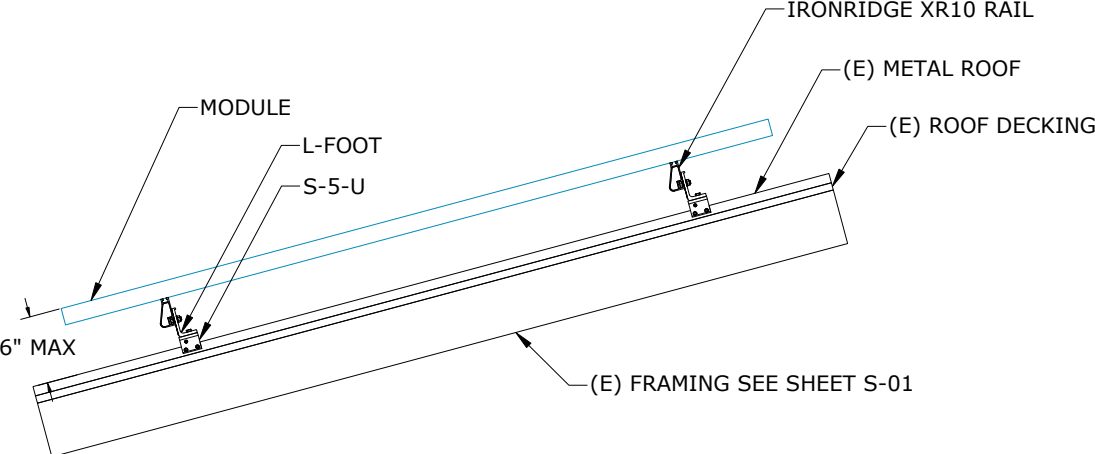
BACK VIEW



LEFT



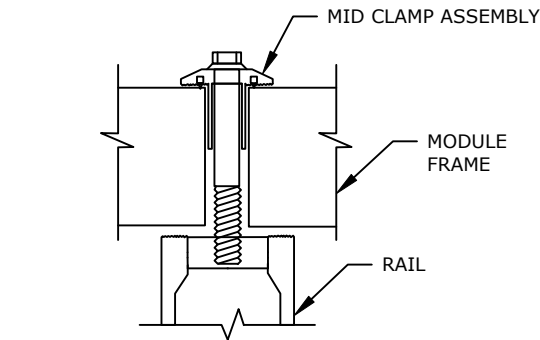
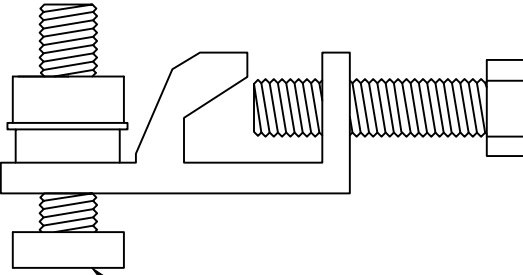
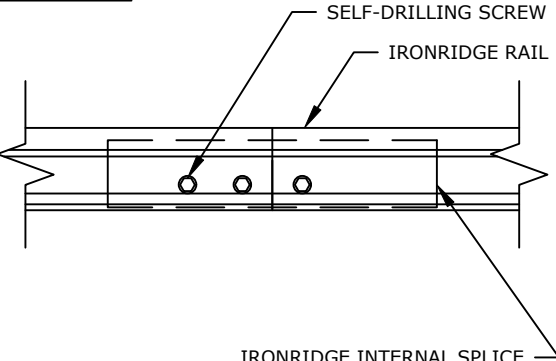
RIGHT VIEW



6" MAX

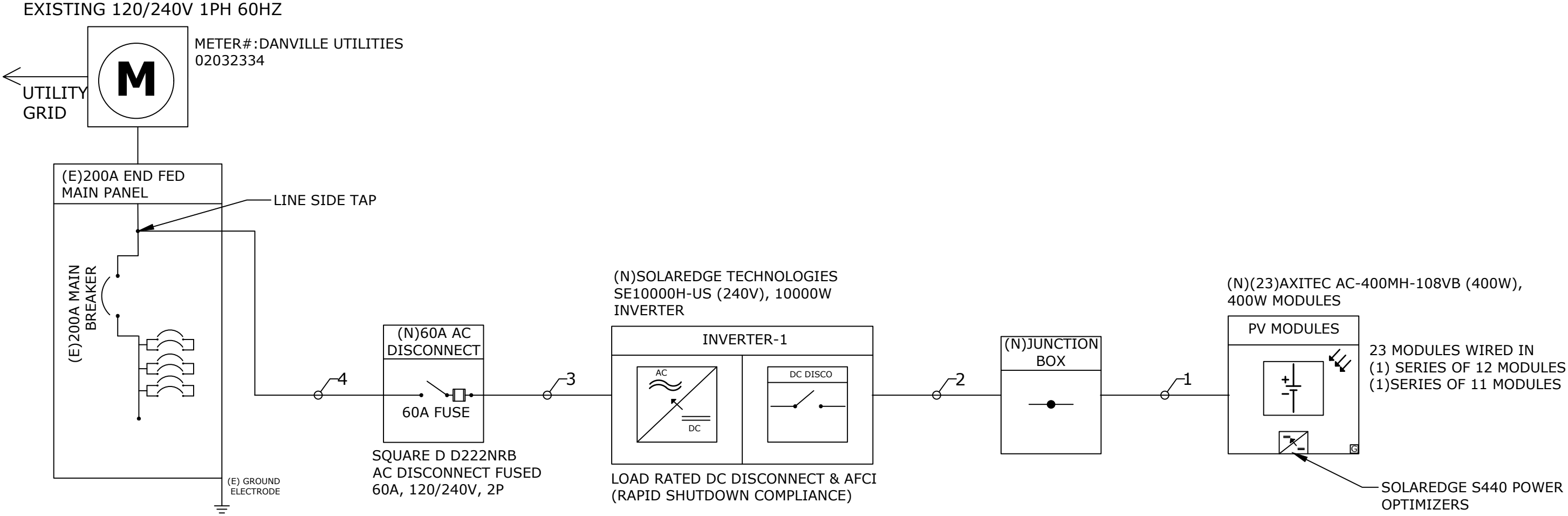


SCALE:NTS

GROUNDING DETAILS		
MODULE TO MODULE & MODULE TO RAIL  GROUNDING MID-CLAMP SCALE: NTS	GROUNDING LUG  SCALE: NTS	RAIL TO RAIL  SCALE: NTS

CUSTOMER INFORMATION	CONTRACTOR INFORMATION
NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE	 CONVERT SOLAR Benefits Beyond the Bottom Line
DRAWING INFORMATION	
PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"	
 ILLUMINE i STRUCTURAL DETAILS DATE: 06/02/2023 SHEET: S-02	

DC SYSTEM SIZE- 9200W, AC SYSTEM SIZE - 10000W



TAG ID	CONDUIT SIZE	CONDUCTOR	NEUTRAL	GROUND		CUSTOMER INFORMATION	CONTRACTOR INFORMATION
1	NONE	(4) 10 AWG PV WIRE	NONE	(1) 6 AWG BARE COPPER		NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541	 Benefits Beyond the Bottom Line
2	METALLIC CONDUIT	(4) 10 AWG THHN/THWN-2	NONE	(1) 8 AWG THHN/THWN-2		36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES	
3	CONDUIT	(2) 6 AWG THHN/THWN-2	(1) 6 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2		AHJ: VA-CITY OF DANVILLE	
4	CONDUIT	(2) 6 AWG THHN/THWN-2	(1) 6 AWG THHN/THWN-2	(1) 6 AWG THHN/THWN-2			
						DRAWING INFORMATION	
						PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"	 SINGLE LINE DIAGRAM DATE: 06/02/2023 SHEET: E-02

DC SYSTEM SIZE- 9200W, AC SYSTEM SIZE - 10000W				
MODULE SPECIFICATION				
MODEL	AXITEC AC-400MH-108VB (400W)			
MODULE POWER @ STC	400 W			
OPEN CIRCUIT VOLTAGE: Voc	37.07 V			
MAX POWER VOLTAGE: Vmp	31.01 V			
SHORT CIRCUIT CURRENT: Isc	13.79 A			
MAX POWER CURRENT: Imp	12.9 A			
INVERTER-1 SPECIFICATIONS				
MODEL	SOLAREEDGE TECHNOLOGIES SE10000H-US (240V)			
POWER RATING	10000 W			
MAX OUTPUT CURRENT	42 A			
CEC WEIGHTED EFFICIENCY	99 %			
MAX INPUT CURRENT	27 A			
MAX DC VOLTAGE	480 V			
SYSTEM CHARACTERISTICS				
DC SYSTEM SIZE	9200 W			
INVERTER STRING VOLTAGE: Vmp	380 V			
MAX INVERTER SYSTEM VOLTAGE: Voc	480 V			
MAX SHORT CIRCUIT CURRENT	30 A			
OPERATING CURRENT	24.21 A			
OPTIMIZER CHARACTERISTICS				
MODEL	S440 POWER OPTIMIZER			
MIN INPUT VOLTAGE	8 VDC			
MAX INPUT VOLTAGE	60 VDC			
MAX INPUT CURRENT	14.5 ADC			
MAX OUTPUT CURRENT	15 ADC			
ELECTRICAL NOTES		OCPD CALCULATION		
1. CONDUCTORS EXPOSED TO SUNLIGHT SHALL BE LISTED AS SUNLIGHT RESISTANT PER NEC 310.10(D). 2. CONDUCTORS EXPOSED TO WET LOCATIONS SHALL BE SUITABLE FOR USE IN WET LOCATIONS PER NEC 310.10(C). 3. MAXIMUM DC/AC VOLTAGE DROP SHALL BE NO MORE THAN 2%. 4. ALL CONDUCTORS SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED. 5. BREAKER/FUSE SIZES PER NEC 240. 6. AC EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC 250.122. 7. AMBIENT TEMPERATURE CORRECTION FACTOR IS BASED ON NEC TABLE 690.31(A). 8. AMBIENT TEMPERATURE ADJUSTMENT FACTOR IS BASED ON NEC TABLE 310.15(B)(2)(a). 9. MAX. SYSTEM VOLTAGE CORRECTION IS PER NEC 690.7. 10. CONDUCTORS ARE SIZED PER NEC TABLE 310.15(B)(16).		ALLOWABLE BACKFEED: MAIN PANEL RATING = 200 A MAIN BREAKER RATING = 200 A LINE SIDE TAP 100% OF ALLOWABLE BACKFEED = 200 A INVERTER OVERCURRENT PROTECTION: INVERTER OVERCURRENT PROTECTION = (INVERTER O/P CURRENT * CONTINUOUS LOAD(1.25)) = (42 *1.25) = 52.5 A PV BREAKER SIZE / FUSE SIZE = 60 A ≥ 52.5 A TOTAL REQUIRED PV BREAKER SIZE / FUSE SIZE ≥ 60 A PV BREAKER		
		WIRE SIZE CALCULATIONS		
		TAG 1: (DC) REQUIRED CONDUCTOR AMPACITY(15 * 1.25) = 18.75 A CORRECTED AMPACITY CALCULATION(0.71 * 1 * 40) = 28.4 A 18.75 A < 28.4 A TAG 2: (DC) REQUIRED CONDUCTOR AMPACITY(15 * 1.25) = 18.75 A CORRECTED AMPACITY CALCULATION(0.71 * 0.8 * 40) = 22.72 A 18.75 A < 22.72 A TAG 3: (AC) REQUIRED CONDUCTOR AMPACITY(42 * 1 * 1.25) = 52.5 A CORRECTED AMPACITY CALCULATION(0.96 * 1 * 75) = 72 A 52.5 A < 72 A TAG 4: (AC) REQUIRED CONDUCTOR AMPACITY(42 * 1 * 1.25) = 52.5 A CORRECTED AMPACITY CALCULATION(0.96 * 1 * 75) = 72 A 52.5 A < 72 A		
		DC WIRE SIZING CALCULATIONS BASED ON FOLLOWING EQUATIONS		
		REQUIRED CONDUCTOR AMPACITY: Isc(A) * #OF PARALLEL STRINGS = MAX CURRENT PER 690.8(A)(5) * 125% = MAX CURRENT PER 690.8(B)(1) CORRECTED AMPACITY CALCULATIONS: DERATED CONDUCTOR AMPACITY PER 690.8(B)(2) = AMPACITY * TEMPERATURE DERATE FACTOR * CONDUIT FILL DERATE DERATED CONDUCTOR AMPACITY CHECK: MAX CURRENT PER 690.8(B)(1)< DERATED CONDUCTOR AMPACITY		
		AC WIRE SIZING CALCULATIONS BASED ON FOLLOWING EQUATIONS		
		REQUIRED CONDUCTOR AMPACITY: INVERTER OUTPUT CURRENT * #OF INVERTERS = MAX CURRENT PER 690.8(A)(3) * 125% = MAX CURRENT PER 690.8(B)(1) CORRECTED AMPACITY CALCULATIONS: DERATED CONDUCTOR AMPACITY PER 690.8(B)(2) = AMPACITY * TEMPERATURE DERATE FACTOR * CONDUIT FILL DERATE DERATED CONDUCTOR AMPACITY CHECK: MAX CURRENT PER 690.8(B)(1) < DERATED CONDUCTOR AMPACITY		
			CUSTOMER INFORMATION	CONTRACTOR INFORMATION
			NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE	
			DRAWING INFORMATION	
			PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"  DATE: 06/02/2023 SHEET: E-03	

DC RACEWAYS

1

SW-1 DISCONNECT
(SQUARE D D222NRB)

13

I1 - INVERTER
(SOLAREEDGE TECHNOLOGIES SE10000H-US (240V))

14

MSP - MAIN SERVICE PANEL

12

UTILITY METER

2

LABELING NOTES	
1	ALL PLAQUES AND SIGNAGE REQUIRED BY 2017 NEC AND 2018 IFC WILL BE INSTALLED AS REQUIRED
2	LABELS, WARNING(S) AND MARKING SHALL COMPLY WITH ANSI Z535.4, WHICH REQUIRES THAT DANGER WARNING, AND CAUTION SIGNS USED THE STANDARD HEADER COLORS, HEADER TEXT AND SAFETY ALERT SYMBOL ON EACH LABEL. THE ANSI STANDARD REQUIRES A HEADING THAT IS AT LEAST 50% TALLER THAN THE BODY TEXT ,IN ACCORDANCE WITH NEC 110.21(B)
3	A PERMANENT PLAQUE OR DIRECTORY SHALL BE INSTALLED PROVIDING THE LOCATION OF THE SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS IF NOT IN THE SAME LOCATION IN ACCORDANCE WITH NEC 690.56(B)
4	LABEL(S) WITH MARKING, "WARNING PHOTOVOLTAIC POWER SOURCE," SHALL BE LOCATED AT EVERY 10 FEET OF EACH DC RACEWAY AND WITH IN ONE FOOT OF EVERY TURN OR BEND AND WITHIN ONE FOOT OF EVERY TURN OR BEND AND WITH IN ONE FOOT ABOVE AND BELOW ALL PENETRATIONS OF ROOF/CEILING ASSEMBLIES, WALLS AND BARRIERS. THE LABEL SHALL HAVE 3/8" TALL LETTERS AND BE REFLECTIVE WITH WHITE TEXT ON A RED BACKGROUND

1

WARNING:
PHOTOVOLTAIC POWER SOURCE

2

 CAUTION

SOLAR ELECTRIC SYSTEM CONNECTED

3

SOLAR AC DISCONNECT

4

SOLAR DC DISCONNECT

CUSTOMER INFORMATION	CONTRACTOR INFORMATION
NAME: ROBERT TUTHILL ADDRESS: 830 GREEN STREET, DANVILLE, VA 24541 36.580821, -79.395343 APN: 24236 UTILITY: DANVILLE UTILITIES AHJ: VA-CITY OF DANVILLE	 CONVERT SOLAR <i>Benefits Beyond the Bottom Line</i>
DRAWING INFORMATION	
PRN NUMBER: COS-78829 REV: A DRAFTED BY: VAIBHAV QC'ED BY: K.NEEL SCALE: AS NOTED PAPER SIZE: 17"X11"	
 ILLUMINE i PLACARDS DATE: 06/02/2023 SHEET: PL-01	



385 - 400 Wp

AXITEC®

AXIblackpremium XXL HC

High performance solar module
108 halfcell, monocrystalline



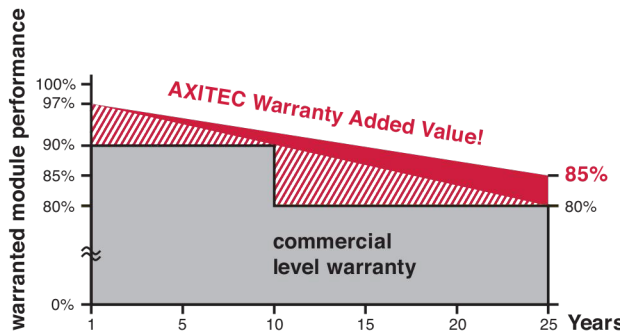
German-American-Engineering

The advantages:

- 25 Years** 25 years Manufacturer's warranty
- HC** High module performance through Half-Cut-technology and selected materials
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 100%** 100% visual electroluminescence inspection in production
- Frame** High stability due to innovative frame design
- IP 68** High quality junction box and connector systems

Exclusive linear AXITEC high performance guarantee!

- 15 years manufacturer's guarantee on 90% of the nominal performance
- 25 years manufacturer's guarantee on 85% of the nominal performance



Conforms to UL STD No.1703
Certified to ULC/ORD Std. C1703

AXITEC, LLC, 510 Pedricktown Road Suite A, Logan Township, New Jersey 08085 USA, www.axitecsolar.com

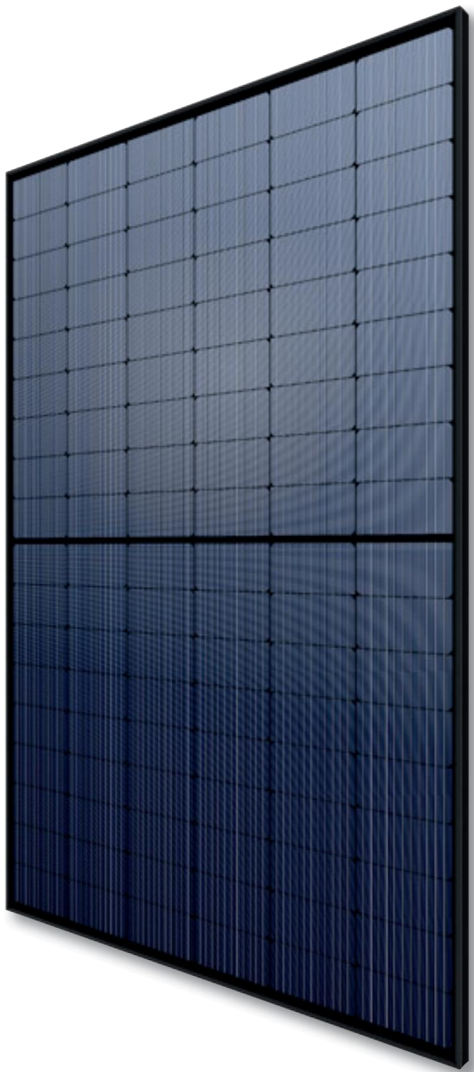


Fig. similar 108MHUSA220608A

AXITEC®

AXIblackpremium XXL HC 385 - 400 Wp

Electrical data (at standard conditions (STC) irradiance 1000 watt/m², spectrum AM 1.5 at a cell temperature of 25°C)

Type	Nominal output Pmpp	Nominal voltage Umpp	Nominal current Impp	Short circuit current Isc	Open circuit voltage Uoc	Module conversion efficiency
AC-385MH/108VB	385 Wp	30.44 V	12.65 A	13.52 A	36.70 V	19.72 %
AC-390MH/108VB	390 Wp	30.64 V	12.73 A	13.61 A	36.85 V	19.97 %
AC-395MH/108VB	395 Wp	30.84 V	12.81 A	13.70 A	36.98 V	20.23 %
AC-400MH/108VB	400 Wp	31.01 V	12.90 A	13.79 A	37.07 V	20.48 %

Design

Frontside	0.13 inch (3.2 mm) hardened, low-reflection white glass
Cells	108 monocrystalline high efficiency cells
Backside	Composite film
Frame	1.38 inch (35 mm) black aluminium frame

Mechanical data

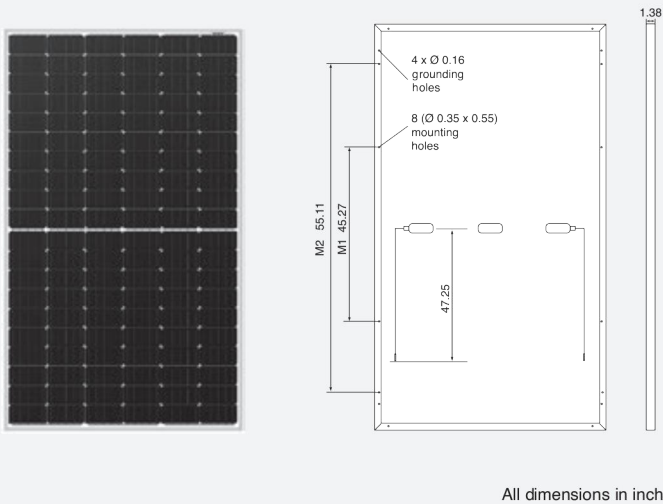
L x W x H	67.80 x 44.65 x 1.38 inch(1722 x 1134 x 35 mm)
Weight	47.40 lbs (21.5 kg) with frame

Mechanical load

Design load (pressure/suction)	75.3 PSF / 33.3 PSF
Test load (pressure/suction)	113 PSF / 50 PSF

Power connection

Socket	Protection Class IP68
Wire	47.25 inch, AWG 12
Plug-in system	Plug/socket IP68, Stäubli MC4 / Stäubli EVO2



All dimensions in inch

Limit values

System voltage	1500 VDC (UL) 1500 VDC (IEC)
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)
NOCT (nominal operating cell temperature)*	45°C +/-2K
Reverse current feed IR	25.0 A

Permissible operating temperature	-40°C to 85°C / -40°F to 185°F
-----------------------------------	--------------------------------

(No external voltages greater than Vo may be applied to the module)

* NOCT, irradiance 800 W/m²; AM 1.5; wind speed 1 m/s; Temperature 20°C

Temperature coefficients

Voltage Uoc	-0.28 %/K
Current Isc	0.045 %/K
Output Pmpp	-0.35 %/K

Low-light performance (Example for AC-400MH/108VB)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	2.64 A	29.84 V
400 W/m²	5.32 A	30.19 V
600 W/m²	7.95 A	30.42 V
800 W/m²	10.51 A	30.68 V
1000 W/m²	12.90 A	31.01 V

Packaging

Module pieces per pallet	30
Module pieces per HC-container	780

Technical data are subject to change without prior notice, errors excepted. The measurement tolerances are +/-3%. Please be aware: All technical data provided in our data sheets are property of Axitec LLC and intended for information purposes for our customers only. We cannot accept any guarantee of completeness or accuracy. These data are prohibited for any kind of commercial use.

SolarEdge Home Wave Inverter
For North America

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



INVERTERS

Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking 99% weighted efficiency
- Quick and easy inverter commissioning directly from a smartphone using SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020 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

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

Applicable to inverters with part number	SEXXXXH-XXXXXBXX4					SE11400H-XXXXXBXX5	Units
	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
OUTPUT							
Rated AC Power Output	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
Maximum AC Power Output	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
AC Output Voltage Min.-Nom.-Max. (211 - 240 - 264)	✓	✓	✓	✓	✓	✓	Vac
AC Output Voltage Min.-Nom.-Max. (183 - 208 - 229)	✓	-	✓	-	-	✓	Vac
AC Frequency (Nominal)	59.3 - 60 - 60.5 ⁽¹⁾						Hz
Maximum Continuous Output Current @240V	16	21	25	32	42	47.5	A
Maximum Continuous Output Current @208V	16	-	24	-	-	48.5	A
Power Factor	1, Adjustable - 0.85 to 0.85						
GFDI Threshold	1						A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes						
INPUT							
Maximum DC Power @240V	5900	7750	9300	11800	15500	17650	W
Maximum DC Power @208V	5100	-	7750	-	-	15500	W
Transformer-less, Ungrounded	Yes						
Maximum Input Voltage	480						Vdc
Nominal DC Input Voltage	380						Vdc
Maximum Input Current @240V ⁽²⁾	10.5	13.5	16.5	20	27	30.5	Adc
Maximum Input Current @208V ⁽²⁾	9	-	13.5	-	-	27	Adc
Max. Input Short Circuit Current	45						Adc
Reverse-Polarity Protection	Yes						
Ground-Fault Isolation Detection	600k Sensitivity						
Maximum Inverter Efficiency	99.2						%
CEC Weighted Efficiency	99					99 @ 240V 98.5 @ 208V	%
Nighttime Power Consumption	< 2.5						W

(1) For other regional settings please contact SolarEdge support.
(2) A higher current source may be used; the inverter will limit its input current to the values stated.

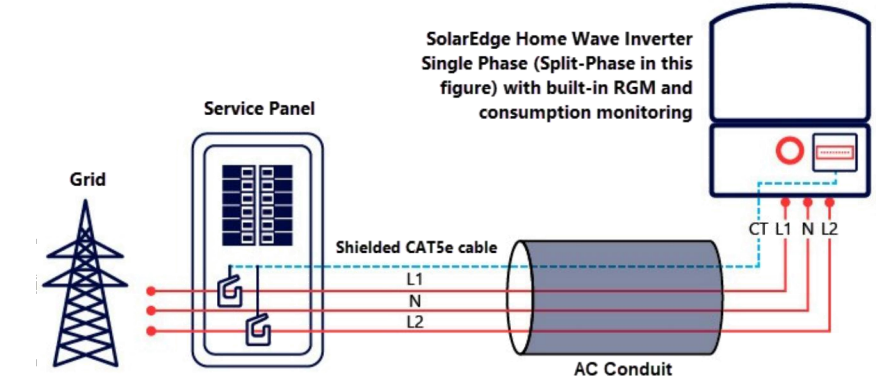
INVERTER SPEC SHEET

/ SolarEdge Home Wave Inverter
For North America
SE3800H-US / SE5000H-US / SE6000H-US/
SE7600H-US / SE10000H-US / SE11400H-US

Applicable to inverters with part number	SEXXXXH-XXXXXBXX4					SE11400H-XXXXXBXX5	
	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
ADDITIONAL FEATURES							
Supported Communication Interfaces	RS485, Ethernet, ZigBee (optional), wireless SolarEdge Home Network (optional) ⁽³⁾ , Wi-Fi (optional), Cellular (optional)						
Revenue Grade Metering, ANSI C12.20	Optional ⁽⁴⁾						
Consumption Metering							
Inverter Commissioning	With the SetApp mobile application using Built-in Wi-Fi Access Point for Local Connection						
Rapid Shutdown - NEC 2014, NEC 2017 and NEC 2020, 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect						
STANDARD COMPLIANCE							
Safety	UL1741, UL1741 SA, UL1741 SB, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07						
Grid Connection Standards	IEEE1547-2018, Rule 21, Rule 14 (HI)						
Emissions	FCC Part 15 Class B						
INSTALLATION SPECIFICATIONS							
AC Output Conduit Size / AWG Range	1" Maximum / 14 – 6 AWG				1" Maximum / 14 – 4 AWG		
DC Input Conduit Size / # of Strings / AWG Range	1" Maximum / 1 – 2 strings / 14 – 6 AWG				1" Maximum / 1 – 3 strings / 14 – 6 AWG		
Dimensions with Safety Switch (H x W x D)	17.7 x 14.6 x 6.8 / 450 x 370 x 174				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 ⁽⁵⁾	in / mm
Weight with Safety Switch	22 / 10	25.1 / 11.4	26.2 / 11.9		38.8 / 17.6	44.9 / 20.4 ⁽⁵⁾	lb / kg
Noise	< 25			<50			dBA
Cooling	Natural Convection						
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁶⁾						°F / °C
Protection Rating	NEMA 4X (Inverter with Safety Switch)						

(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) SE11400H-USxxxBox5 is the updated PN, though SE11400H-USxxxBox4 will still be available. All specifications are similar for both models, **EXCLUDING** the weight and dimensions [HxWxD]; The weight and dimensions of SE11400H-USxxxBox4 are 17.6 [kg] and 21.06-14.6-7.3 / 535-370-185 [in/mm], accordingly.
(6) Full power up to at least 50°C / 122°F; for power de-rating information refer to the [Temperature De-rating Technical Note for North America](#).

How to Enable Consumption Monitoring



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

Power Optimizer
For Residential Installations

S440 / S500 / S500B / S650B



POWER OPTIMIZER

Enabling PV power optimization at the module level

- Specifically designed to work with SolarEdge residential inverters
- Mitigates all types of module mismatch loss, from manufacturing tolerance to partial shading
- Detects abnormal PV connector behavior, preventing potential safety issues*
- Faster installations with simplified cable management and easy assembly using a single bolt
- Module-level voltage shutdown for installer and firefighter safety
- Flexible system design for maximum space utilization
- Superior efficiency (99.5%)
- Compatible with bifacial PV modules

* Functionality subject to inverter model and firmware version

solaredge.com



Power Optimizer
For Residential Installations
S440 / S500 / S500B / S650B

	S440	S500	S500B	S650B	UNIT
INPUT					
Rated Input DC Power ⁽¹⁾	440	500		650	W
Absolute Maximum Input Voltage (Voc)	60	125		85	Vdc
MPPT Operating Range	8 – 60	12.5 – 105		12.5 - 85	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module	14.5	15			Adc
Maximum Efficiency		99.5			%
Weighted Efficiency		98.6			%
Overvoltage Category		II			
OUTPUT DURING OPERATION					
Maximum Output Current		15			Adc
Maximum Output Voltage	60	80			Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)					
Safety Output Voltage per Power Optimizer		1 ± 0.1			Vdc
STANDARD COMPLIANCE ⁽²⁾					
EMC	FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3, CISPR11, EN-55011				
Safety	IEC62109-1 (class II safety), UL1741				
Material	UL94 V-0, UV Resistant				
RoHS	Yes				
Fire Safety	VDE-AR-E 2100-712:2018-12				
INSTALLATION SPECIFICATIONS					
Maximum Allowed System Voltage		1000			Vdc
Dimensions (W x L x H)	129 x 155 x 30	129 x 165 x 45			mm
Weight	720	790			gr
Input Connector		MC4 ⁽³⁾			
Input Wire Length		0.1			m
Output Connector		MC4			
Output Wire Length		(+) 2.3, (-) 0.10			m
Operating Temperature Range ⁽⁴⁾		-40 to +85			°C
Protection Rating		IP68			
Relative Humidity		0 – 100			%

(1) Rated power of the module at STC will not exceed the Power Optimizer Rated Input DC Power. Modules with up to +5% power tolerance are allowed.

(2) For details about CE compliance, see [Declaration of Conformity – CE](#).

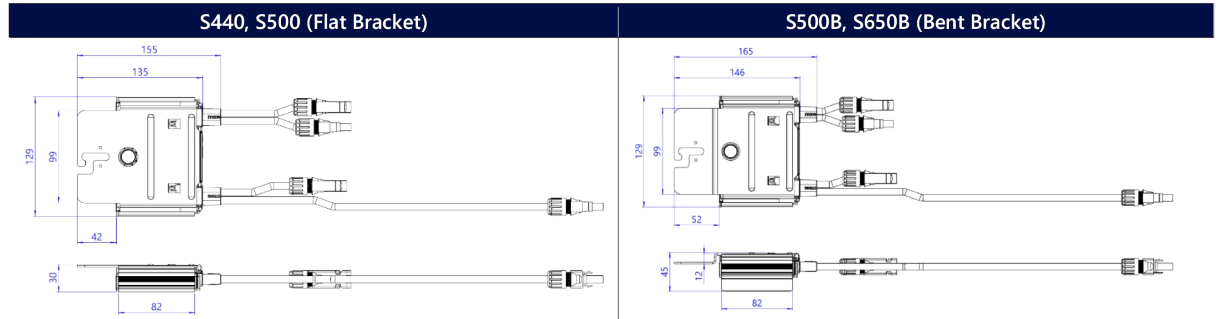
(3) For other connector types please contact SolarEdge.

(4) Power de-rating is applied for ambient temperatures above +85°C for S440 and S500, and for ambient temperatures above +75°C for S500B. Refer to the [Power Optimizers Temperature De-Rating Technical Note](#) for details.

PV System Design Using a SolarEdge Inverter ⁽⁵⁾		SolarEdge Home Wave Inverter Single Phase	SolarEdge Home Short String Inverter Three Phase	Three Phase for 230/400V Grid	Three Phase for 277/480V Grid	
Minimum String Length (Power Optimizers)	S440, S500	8	9	16	18	
	S500B, S650B	6	8	14		
Maximum String Length (Power Optimizers)		25	20	50		
Maximum Continuous Power per String		5700	5625	11250	12750	W
Maximum Allowed Connected Power per String (Permitted only when the power difference between strings is less than 2,000W)		See ⁽⁶⁾	See ⁽⁶⁾	13500	15000	W
Parallel Strings of Different Lengths or Orientations				Yes		

(5) It is not allowed to mix S-series and P-series Power Optimizers in new installations.

(6) If the inverter's rated AC power ≤ maximum nominal power per string, then the maximum power per string will be able to reach up to the inverters maximum input DC power. Refer to [Application Note: Single String Design Guidelines](#).



© SolarEdge Technologies, Ltd. All rights reserved. SOLAREEDGE, the SolarEdge logo, OPTIMIZED BY SOLAREEDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners. Date: February 16, 2023 DS-000091-ENG. Subject to change without notice.

CE RoHS

S-5![®]

The Right Way![®]

S-5-U Clamp

The S-5-U clamp is by far our most popular and most versatile clamp. It fits about 85% of the standing seam profiles manufactured in North America—including most structural and architectural profiles. It can be used on vertically oriented seams and, by rotating the clamp 90 degrees, it can also be used on most horizontal 2" seam profiles.

Its simple design, generous dimensioning, and multiple hole orientations are what make the S-5-U clamp so versatile for use with the S-5![®] snow retention products, such as ColorGard[®], as well as with other heavy-duty applications.

Installation is as simple as setting the specially patented round-point setscrews into the clamp, placing the clamp on the seam, and tightening them to the specified tension. Then, affix ancillary items using the bolt provided with the product. Go to www.S-5.com/tools for information and tools available for properly attaching and tensioning S-5! clamps.

S-5-U Mini Clamp

The S-5-U Mini is a bit shorter than the S-5-U and has one setscrew rather than two. The mini is the choice for attaching all kinds of rooftop accessories: signs, walkways, satellite dishes, antennas, rooftop lighting, lightning protection systems, solar arrays, exhaust stack bracing, conduit, condensate lines, mechanical equipment—just about anything!*

*S-5! mini clamps are not compatible with, and should not be used with S-5! SnoRail™/SnoFence™ or ColorGard® snow retention systems.



The S-5-U clamp is our most popular and versatile clamp, fitting about 85% of the standing seam profiles in North America.

S-5-U and S-5-U Mini

888-825-3432 | www.S-5.com | 

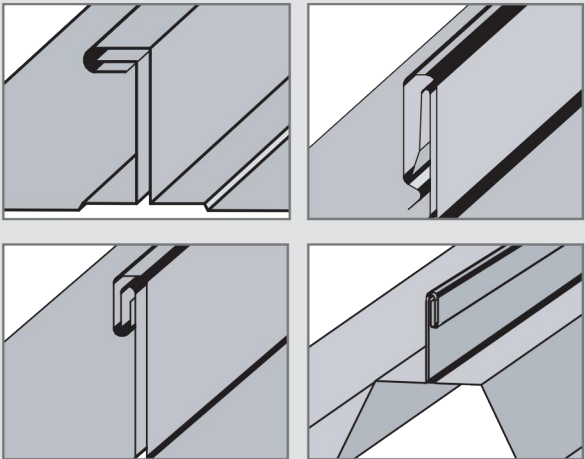


The strength of the S-5-U clamp is in its simple design. The patented setscrews will slightly dimple the metal seam material but not pierce it—leaving the roof manufacturer's warranty intact.

The **S-5-U** and **S-5-U Mini** clamps are each furnished with the hardware shown to the right. Each box also includes a bit tip for tightening setscrews using an electric screw gun. A structural aluminum attachment clamp, the S-5-U is compatible with most common metal roofing materials excluding copper. All included hardware is stainless steel. Please visit www.S-5.com for more information including CAD details, metallurgical compatibilities and specifications.

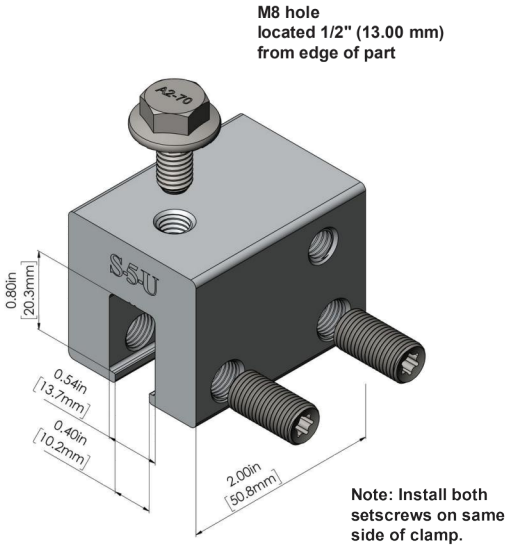
The S-5-U clamp has been tested for load-to-failure results on most major brands and profiles of standing seam roofing. The independent lab test data found at www.S-5.com can be used for load-critical designs and applications. S-5![®] holding strength is unmatched in the industry.

Example Profiles

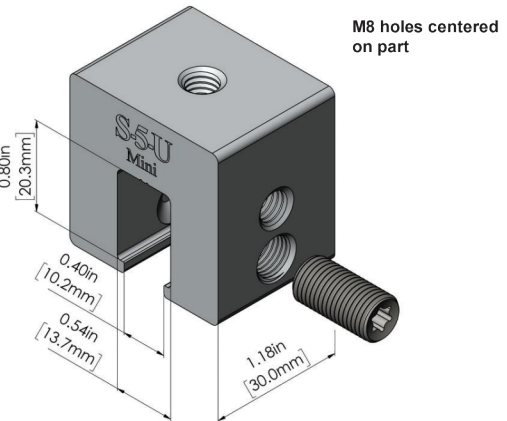


For horizontal seams under 0.65", do not use this clamp. Visit www.S-5.com for more detailed information and proper clamp usage.

S-5-U Clamp



S-5-U Mini Clamp



S-5![®] Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. Visit the website at www.S-5.com for complete information on patents and trademarks. For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Clamp setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel, and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. Consult the S-5! website at www.S-5.com for published data regarding holding strength.

Copyright 2021, Metal Roof Innovations, Ltd. S-5! products are patent protected. S-5! aggressively protects its patents, trademarks, and copyrights. Version 081721.

Distributed by

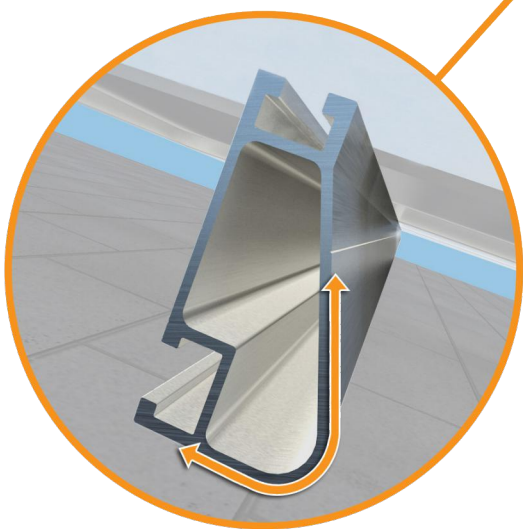
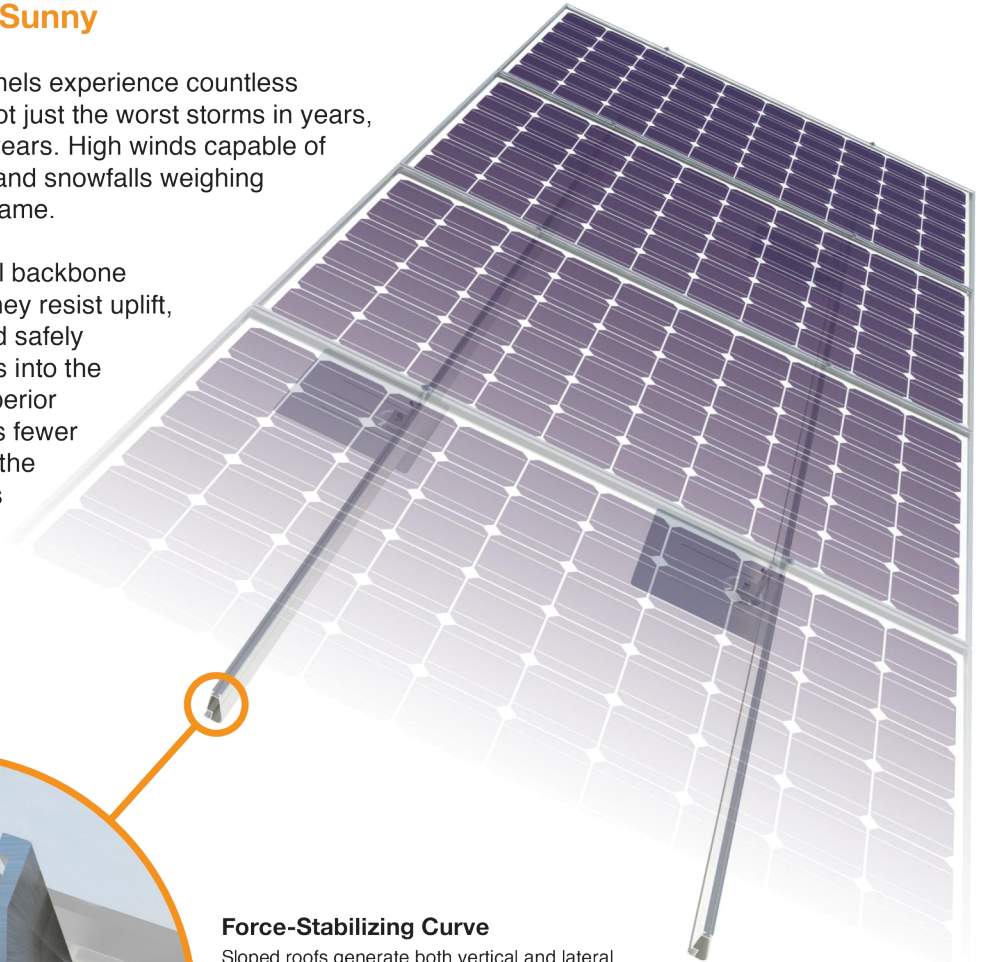


XR Rail® Family

Solar Is Not Always Sunny

Over their lifetime, solar panels experience countless extreme weather events. Not just the worst storms in years, but the worst storms in 40 years. High winds capable of ripping panels from a roof, and snowfalls weighing enough to buckle a panel frame.

XR Rails® are the structural backbone preventing these results. They resist uplift, protect against buckling and safely and efficiently transfer loads into the building structure. Their superior spanning capability requires fewer roof attachments, reducing the number of roof penetrations and the amount of installation time.



Force-Stabilizing Curve
Sloped roofs generate both vertical and lateral forces on mounting rails which can cause them to bend and twist. The curved shape of XR Rails® is specially designed to increase strength in both directions while resisting the twisting. This unique feature ensures greater security during extreme weather and a longer system lifetime.

Compatible with Flat & Pitched Roofs



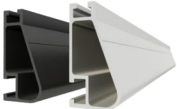
XR Rails® are compatible with FlashFoot® and other pitched roof attachments.



IronRidge® offers a range of tilt leg options for flat roof mounting applications.

Corrosion-Resistant Materials

All XR Rails® are made of 6000-series aluminum alloy, then protected with an anodized finish. Anodizing prevents surface and structural corrosion, while also providing a more attractive appearance.



Tech Brief

XR Rail® Family

The XR Rail® Family offers the strength of a curved rail in three targeted sizes. Each size supports specific design loads, while minimizing material costs. Depending on your location, there is an XR Rail® to match.



XR10

XR10 is a sleek, low-profile mounting rail, designed for regions with light or no snow. It achieves spans up to 6 feet, while remaining light and economical.

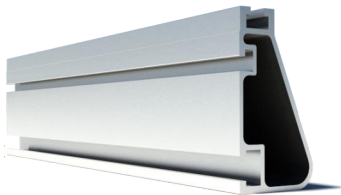
- 6' spanning capability
- Moderate load capability
- Clear & black anodized finish
- Internal splices available



XR100

XR100 is the ultimate residential mounting rail. It supports a range of wind and snow conditions, while also maximizing spans up to 10 feet.

- 10' spanning capability
- Heavy load capability
- Clear & black anodized finish
- Internal splices available



XR1000

XR1000 is a heavyweight among solar mounting rails. It's built to handle extreme climates and spans up to 12 feet for commercial applications.

- 12' spanning capability
- Extreme load capability
- Clear anodized finish
- Internal splices available

Rail Selection

The table below was prepared in compliance with applicable engineering codes and standards.* Values are based on the following criteria: ASCE 7-16, Gable Roof Flush Mount, Roof Zones 1 & 2e, Exposure B, Roof Slope of 8 to 20 degrees and Mean Building Height of 30 ft. Visit IronRidge.com for detailed certification letters.

Load		Rail Span					
Snow (PSF)	Wind (MPH)	4'	5' 4"	6'	8'	10'	12'
None	90	XR10		XR100		XR1000	
	120						
	140						
	160						
20	90						
	120						
	140						
	160						
30	90						
	160						
40	90						
	160						
80	160						
120	160						

*Table is meant to be a simplified span chart for conveying general rail capabilities. Use approved certification letters for actual design guidance.





Commission of Architectural Review

STAFF REPORT

DATE: August 24, 2023
TO: Commission of Architectural Review
FROM: Renee Burton, Division Director of Planning
RE: Review Special Use Permit request filed by MADS Holbrook LLC for a Short Term Rental at 503 Holbrook Street.

A Special Use Permit has been requested by MADS Holbrook LLC to operate a Short Term Rental at 503 Holbrook Avenue. The request will be reviewed by the Planning Commission on September 11, 2023. As the Commission of Architectural Review, it's within your purview to review zoning requests within the boundaries of the OWE. The CAR may submit a recommendation to the Planning Commission.

Article 3.R.C.1

Review Commission Power to Approve: No zoning, site plan, subdivision plat, or building permit shall be issued for the erection, reconstruction, exterior alteration, restoration, rehabilitation, razing, relocation or demolition of any building, structure, signs, fences, walls, light fixtures, accessory buildings, pavements, grading, site improvements, significant landscaping features or other appurtenant element in an HP-O District unless and until such building or site element has been approved by the issuance of a Certificate of Appropriateness by the Commission of Architectural Review for the City (hereinafter "Review Commission").

ATTACHMENTS

1. Special Use Permit Application - 503 Holbrook Avenue



City of Danville
Community Development
Planning Division

Application deadline: Aug 14th

CITY PLANNING COMMISSION

SPECIAL USE PERMIT APPLICATION

Article 6. Section D. Application Requirements for Special Use Permit.

1. An application for a special use permit shall be made by the owner, contract purchaser with the owner's written consent, or the owner's agent, of the property on which the proposed use is to be located. The application shall be submitted to the Director of Planning/Zoning Administrator, and shall be accompanied by the filing fee of \$360.
2. If the request for a special use permit has been denied by City Council, a request in substantially the same form shall not be resubmitted within one (1) year of the date of denial.
3. The application shall include the following information:
 - a. A preliminary site plan in accordance with the Site Plan Regulations.
 - b. A description of the proposed use and, where applicable, the hours of operation and the proposed number of employees/patrons.
 - c. A written statement of proposed project compatibility with the following:
 - (1.) The Comprehensive Plan.
 - (2.) The applicable zoning district.
 - (3.) The surrounding properties.
 - (4.) Current and future neighborhood conditions.
 - (5.) Pedestrian and vehicular traffic patterns, on-site and off-site.
 - (6.) Adequate public facilities.
 - d. When requested by the Director of Planning/Zoning Administrator, the Planning Commission, or the City Council, the following information shall be provided by the applicant:
 - (1.) The architectural elevations and floor plans of proposed building(s).
 - (2.) Traffic impact analysis.
 - (3.) Fiscal impact analysis.
 - (4.) Parking and site circulation analysis.
 - (5.) Photographs of property and surrounding area.
 - (6.) Environmental impact statement.

PLANNING DIVISION PROVIDED INFORMATION

Application #: _____ PC Meeting Date: _____

Date Received: _____ Received By: _____

Parcel ID: _____ Address: _____

Existing Zoning _____ Future Land Use: _____

APPLICANT PROVIDED INFORMATION

Property Location (address/ID#): 503 Holbrook Ave, Danville, VA 24541

Applicant: MADS Holbrook, LLC

Applicant's Address: 325 NW 14th Ave, Camas, WA 98607

Applicant's Phone Number: 360-771-7851

Applicant's E-mail: steve@rydergroupnw.com

Describe Proposed Request: To use the property as a permanent short term rental



Applicant Signature

date

Property Owner Signature
(if not applicant)

date

Special Use Permit Application for 503 Holbrook Ave, Danville, VA 24541

PROPOSED USE:

The proposed use for the property located at 503 Holbrook Ave, Danville, VA 24541 is be short term rental. The property will be available for guest used 24 hours per day, 7 days a week and 365 days per year.

The house will sleep up to 10 people.

C.1

The Comprehensive Plan states as a goals

- 1) "Historic and Cultural Resources – Promote historic and cultural resources by preventing deterioration, promoting rehabilitation and reuse, and promoting heritage tourism in the City"

The property will help achieve that goal. The house has been renovated keeping most of the original details of the home. The floors, stairs, windows, doors and wall placement are still from the original construction of the house. Some newer technology was used for safety and comfort. The electrical, plumbing, HVAC, cabinets have been updated to provide an all-round better and safer stay for short term renters.

The exterior has been repaired and brought to original look using similar materials and painting to match previous colors.

We have tried to keep this in the feel of a 1907 home and in doing so we have kept a valuable asset for the city from being replaced and losing the historical feel of this part of the city. The home is lined with historical pictures of Danville and the surrounding areas to promote the heritage tourism of the Danville.

- 2) "Sustainable Growth & Land Use - Embrace the principles of "sustainable growth" and adoption of the Future Land Use Plan, to promote a balanced mix of residential, commercial, and industrial uses which will accommodate the needs of existing businesses and residents and encourage well-planned development/redevelopment opportunities for new businesses and residents while at the same time protect the historic, architectural, cultural, and natural environment of Danville."

This property adds to sustainable growth. It is new business that will protect the historic, architectural, cultural environment of Danville by offering families a place to visit and explore Danville while preserving the architecture of the property.

- 3) "Economic Development – Support and promote the City's existing economic base while actively recruiting other economic development opportunities in the areas of basic industry; advanced manufacturing; technology; sustainable/green energy, automotive, and aerospace research, development, and production; and tourism in order to strengthen and expand the economy."

This property will support the existing economic base by bringing new families into Danville, spending money on restaurants, exploring the sites of Danville and adding tourists that will boost the economy of the existing businesses.

C.2 The applicable zoning district

The property is zoned single family residence and will continue to meet that zoning requirement.

C.3 The Surrounding Properties

The surrounding properties are residential single family homes. Some are owner occupied, some are vacant and some are rental properties. This property is a single family home and will continue as such which will enhance the surrounding properties by showing the beauty of the existing architecture and promote the historical beauty of Danville.

C.4 Current and Future neighborhood conditions

The current neighborhood conditions are mixed. Several of the houses in the area are vacant (some are unlivable), some are in good condition and some homes are livable but are in need of repair. The work that we have done on the property will hopefully inspire others to upgrade and repair their houses. If our property is an example of what the future conditions can be then this area could be more beautiful than it has been in a very long time.

C.5 Pedestrian and Vehicular traffic patterns

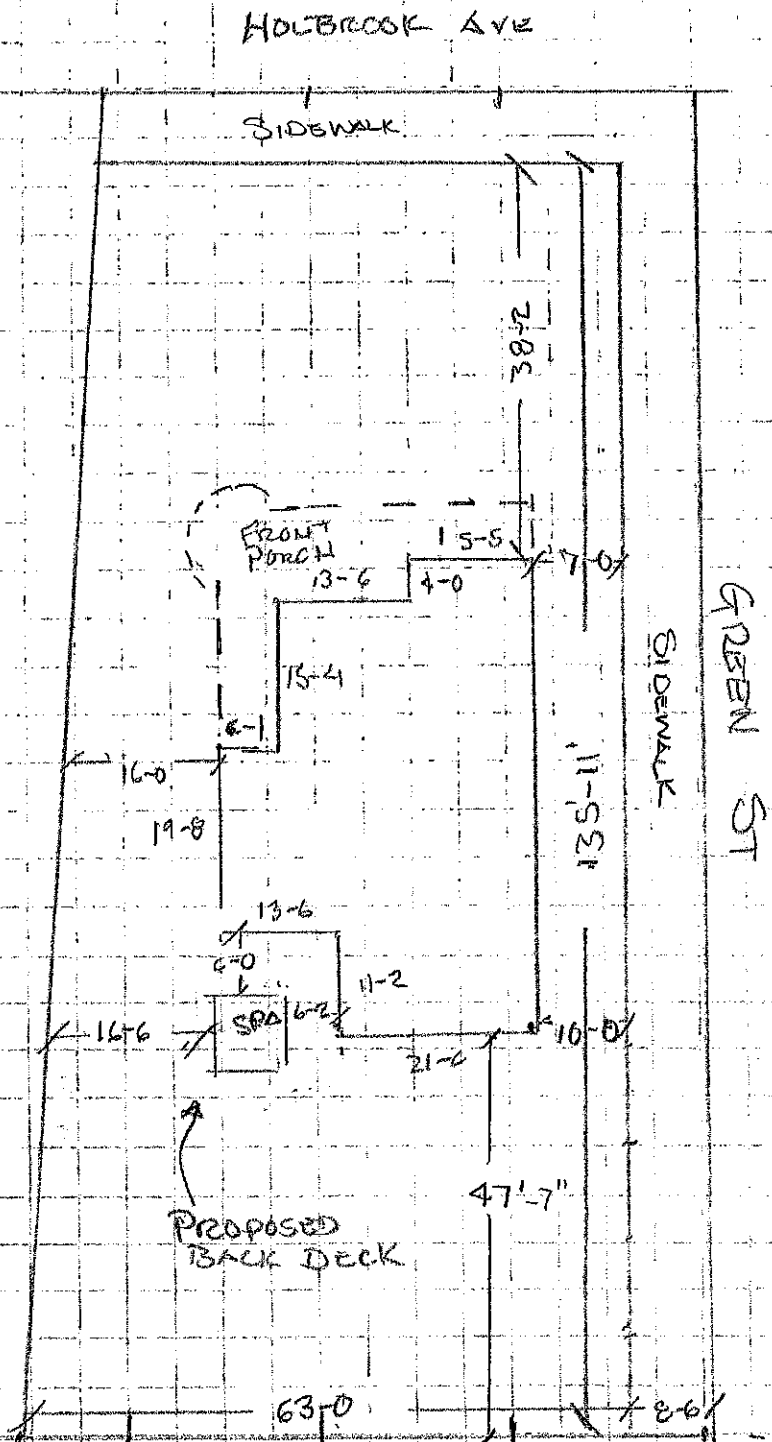
The property will be used by one family of guests at one time. The vehicular traffic will be similar as to what it is now (2 to 3 vehicles). Pedestrian traffic will be minimal as most people will be traveling by vehicle to see the sites of Danville and the surrounding area (as the neighborhood gets rehabilitated and more sites to visit in the local area the pedestrian traffic may increase slightly)

C.6 Adequate public facilities

As of now there are limited public facilities in the local area of this property. The 4 that are in walking distance are Thomas Doyle park, Midtown Market, Crema and Vine restaurant and The Danville Museum of Fine Arts and History. This property will support these public facilities extremely well, additional facilities in the walking distance would be a welcome addition to this neighborhood.

SITE PLAN

503 HOLBROOK AVE
DENVILLE, VA
SCALE 1"=20'



COMMISSION OF ARCHITECTURAL REVIEW

JULY 27, 2023

Members Present

Karl Almquist
Robin Crews
Robert Weir
Jackson Weller

Members Absent

Sonja Ingram
Kathryn Waters
Robert Stowe

Staff

Renee Burton
Cynthia Lester
Ryan Dodson

Ms. Crews called the meeting to order at 3:30 p.m.

ITEMS FOR PUBLIC HEARING

1. *Certificate of Appropriateness Request PZ22-00231, filed by Blair Construction to install two (2) freestanding signs and a wall sign at 990 Main Street.*

Ms. Crews opened the Public Hearing.

Mr. Goodman stated. I am project manager of Blair Construction; we would like to install two (2) monument signs and one wall sign. The wall sign will be installed above the Main Street entrance of the 900 building, and the monument signs will be placed near the entrance on Main and Holbrook Street. We have labeled a drawing showing which sign will go where, the dimensions are found on the detail sheets, the monument signs will be aluminum framing with a bottom graphic, and then build the wall sign with the minimal letters.

Mr. Crews stated. The aluminum is this Holbrook hotel, right.

Mr. Goodman stated. Yes, that's correct. That would be on the face of the building side that faces Chambers Street.

Mr. Weller stated. The wall sign is just lettering.

Mr. Goodman state. Yes, that's correct.

Ms. Crews closed the Public Hearing.

Mr. Weir made a motion to approve Certificate of Appropriateness request PZ22-00231, as submitted Mr. Weller seconded the motion. The motion was approved by a 4-0 vote.

2. *Certificate of Appropriateness Request PZ22-00236, filed by Walter Sean Davis to replace rear window with door at 155 Sutherlin Avenue.*

Ms. Crews open the Public Hearing

Mr. Meder stated. I'm here representing Sean; he is in Charleston. About 10 years ago I came before the board requesting permission to put a door up at 407 Chestnut. For the same reason Sean want to at his place. If he is in the kitchen and there is a fire, they can't get out of the house. The door will give them easy access. Right there is a window in the inside previous picture there's a window from the outside. He has always had those steps there just to get off the porch. But obviously, they would work well if there was a door. There is still a travel door if you are familiar with the house from the front. That travel door is still there symbolizing that there was a travel room, but the door from the inside is sealed. And its now a washer and dryer room. So, there's no way to get out the door. There's a picture of the door he's considering putting there.

Ms. Crews closed the Public Hearing.

Mr. Weir stated. Is that the door he going to replace it with.

Mr. Meder stated. Either that one or one exactly like it.

Mr. Weir made a motion to approve Certificate of Appropriateness request PZ23-00236 as submitted. Mr. Almquist seconded the motion. The motion was approved by a 4-0 vote.

Staff update for commissioners.

Ms. Burton stated on the corner of Holbrook and Gray, this area here on Gray Street property, they are doing some sidewalk work, the brick is in, we are going to say terrible shape. Even when they're trying to save it, it's crumbling. So, the brick will be salvaged on pallets and saved, there will be new concrete on the two sides. It will not be on Holbrook Avenue itself because of its presence in the district. But Gray Street, you will see concrete sidewalks coming in there, the bricks we will save and palletized and kept in our material yard that we have at public works. Hopefully, for a future project, we will find a nice place to use them.

We received an application at 503 Holbrook Avenue. For an Airbnb, short term rental is what we call it in zoning code for an entire home rental. Nothing that the commissioners need to do at this time, it will go before our September 11th Planning Commission agenda. So, this is to notify you that has been submitted. If you want to review it, and then make an official statement, I can send you the application so that you can review it, we just got it yesterday. We want to make sure to at least get it on your radar so you

can look at it, we will send you the full application in your email. When you see it, you'll know what we're doing. We just haven't lost our minds sending you random thing.

Mr. Weir stated. Wasn't long ago that we approved renovation in that home.

Ms. Burton state. They decided to go short term rental with this property.

Mr. Weir stated. So, that will fall under the rental blanket.

Ms. Burton stated. Yes, it will need a certificate of compliance for the rental housing, inspection division as well as the short-term rental program.

So, we're seeing short-term rentals a lot as far as applications popping up more and more. But being in the historic district. I'm certain CAR will have an opportunity to make a statement to that. I'll send that to you. We can review it. If there's a meeting to be called we can certainly make a formal motion then if not we'll be able to do some kind of email statement.

APPROVAL OF THE MINUTES

The JUNE 22, 2023, minutes were approved with corrections by a unanimous vote.

With no further business, the meeting adjourned at 3:40 p.m.

Approved