March 5, 2025

Lunex Power
4721 N Grady Ave
Tampa , FL 33614

RE Downing Residence
251 Irene Ln, Lake City , FL 32055
Client Project #:251Down
PFE Project #: 251290

On behalf of Lunex Power, Penn Fusion Engineering LLC (PFE) performed a structural analysis of the roof at the above referenced location. The purpose of our analysis was to determine if the existing roof system is structurally sufficient to support the new photovoltaic modules in addition to the code required design loads. Our analysis is based on the information provided by Lunex Power and is limited only to the areas where the modules are intended to be placed.

System Specifications
Panel Specs: (24) Trina Solar - 415 Panels
Racking System: Unirac - NXT Rail

The modules are to be located on the following roof planes:

Roof Planes						
Mounting Plane	**Member Size**	**Member Spacing**	**Horizontal Span**	**Sheathing**	**Roofing Type**	**Roofing Layers**
1	Truss	24"	29'-11"	CDX 1/2"	Asphalt Shingles	1
2	Truss	24"	29'-11"	CDX 1/2"	Asphalt Shingles	1

Design Criteria		
Building Code(s)	**Ground Snow P_g**	**Wind Speed V**
• 2023 Florida Building Code • 2023 Florida Residential Code • ASCE 7-22	0 psf	120 mph

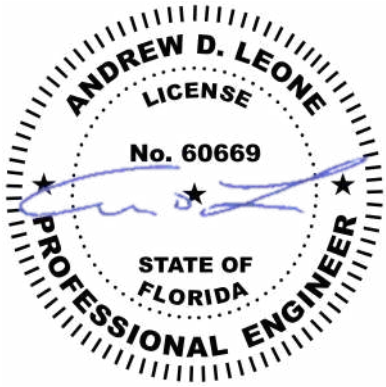
Analysis Results			
Mounting Plane	**Attachment Hardware**	**Max Attachment Spacing**	**Rafter Pass/Fail**
1	Unirac Stronghold (OSB)	48"	Pass
2	Unirac Stronghold (OSB)	48"	Pass

This office has determined that the existing roof as specified above will meet the structural requirements of the above referenced codes in addition to the PV load when installed in accordance with the manufacture's instructions.

If you have any questions regarding this analysis, please feel free to contact us.

Best Regards,
Penn Fusion Engineering, LLC

Andrew D. Leone, P.E.
Principal



03/05/2025

This item has been digitally signed and sealed by Andrew D. Leone on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Andrew D. Leone

Digitally signed by Andrew D. Leone
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