

Princeton Engineering P. C. Solar, Structural, Electrical and Site Engineering

Date: 03/31/2025

## AHJ: CUMBERLAND COUNTY

Re: PV Solar Post Installation Structural Certification Solar Installer: LuminaSun SmartHome, 114 Morlake Drive, Suite 201, Mooresville, Customer Name: GREGORY P JENSEN Customer Address: 197 COOPER CREEK AVE, SPRING LAKE, NC, 28390 Permit Number: PE Project Number: 66.413346.4 PE Structural Report Date: 03/31/2025

To Code Enforcement Officials:

We prepared a structural assessment of the roof framing for the referenced PV solar panel installation, to determine the adequacy of the roof to support this system. The analysis used the maximum spacing of the PV support points and was based upon the wind and snow loadings indicated by the ASCE. The framing size and spacing was verified to match the size and spacing used in our analysis.

In summary, we analyzed the roof structure by combining the existing dead and live loads, along with the new PV solar panels and found the roof to be adequate to support this new PV solar system as indicated in our structural assessment report. On site personnel inspected the installation and found that the panel support locations and spacing generally conform to that used in preparation of the structural assessment report. No existing or new damage to any structural element was observed.

The PV equipment's structural installation has been inspected and will not create a negative impact on the building's structural design, and the installation is in compliance with the North Carolina Residential Code.

Regards,

Richard J. Pantel, P.E. NC License No. 043326



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