



10/5/2021

PURE ENERGY GROUP, LLC, 3661 SUNSET AVE #617, ROCKY MOUNT, NC 27804

Subject: Structural Certification for Installation of Residential Solar  
re job: BRITTANY AND JONATHAN CHAPMAN RESIDENCE, 38 DARLEY CT,, LILLINGTON, NC 27546

Attn.: To Whom It May Concern

A field observation was performed to document the existing framing of the above mentioned address. From the field observation, the existing roof structure was observed as:

- ROOF 1:** Shingle roofing supported by 2x4 Truss @ 24 in. OC spacing. The roof is sloped at approximately 34 degrees and has a max beam span of 8 ft between supports.
- ROOF 2:** Shingle roofing supported by 2x4 Truss @ 24 in. OC spacing. The roof is sloped at approximately 23 degrees and has a max beam span of 8 ft between supports.

Design Criteria:

Code: 2018 NC Building Code (ASCE 7-10)

Ult Wind Speed:	117 mph	Ground Snow:	10 psf
Exposure Cat:	B	Min Roof Snow:	NA psf

After review of the field observation report and based on our structural capacity calculations in accordance with applicable building codes, the existing roof framing supporting the proposed solar panel layout has been determined to be:

- ROOF 1:** adequate to support the imposed loads. Therefore, no structural upgrades are required.
- ROOF 2:** adequate to support the imposed loads. Therefore, no structural upgrades are required.

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