11/07/2023

## Palmetto Solar

997 Morrison Dr, Ste 200, Charleston, SC, 29403



Subject: Structural Certification for Installation of Residential Solar

Job: Joseph Fish

Project Address: 102 Coleshill Road, Angier, NC, 27501

Attn.: To Whom It May Concern

Observation of the condition of the existing framing system was performed by an audit team of Palmetto Solar.

After review of the field observation data, structural capacity calculations were performed in accordance with applicable building codes to determine adequacy of the existing roof framing supporting the proposed panel layout. Please see full Structural Calculations report for details regarding calculations performed and limits of scope of work and liability. The design criteria and structural adequacy are summarized below:

## **Design Criteria**

Code: 2018 NCSBC, IBC 2018, ASCE 7-16

Ult Wind Speed: 117.0 mph Ground Snow: 20.0 psf Min Snow Roof: 0.0 psf

Current Renewables Engineering Inc. Professional Engineer info@currentrenewableseng.com



## **Summaries:**

**Check 1**: Shingle roofing supported by 2x4 Rafter @ 24 in. OC spacing. The roof is sloped at approximately 27 degrees and has a max beam span of 10.0 ft between supports. Roof is adequate to support the imposed loads. Therefore, no structural upgrades are required.