



5/2/2025

CAROLINA CONNECTIONS, 422 HUFFMAN MILL ROAD, SUITE 105, BURLINGTON, NC 27215

Subject: Structural Certification for Installation of Residential Solar  
re job: STEVEN RICHARDSON, 81 KNOLL WAY, SANFORD, NC 27332

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 27 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:	116 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 for the proposed 23 PV modules. has been determined to be:

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

AHZ Consulting Engineers Inc.  
Professional Engineer  
projects@ahzengineers.com

