



3/19/2020

Titan Solar Power
525 W Baseline Rd
Mesa, AZ 85210

Structural Certification Letter for Residential Rooftop PV Installation

Job: Amanda Preciado

Address: 242 Appleton Way
Sanford, NC 27332

Observation of the condition of the existing framing system was performed by an audit team of Titan Solar Power . 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: 2015 International Building Code
ASCE 7-10

Risk Category: II

Wind, Vult: 117 mph

Ground Snow Load: 10 psf

Exposure Category: B

PV Dead Load: 3 psf

Roof Structure 1

Roofing consists of Comp Shingle over 5/8 OSB Sheathing supported by 2 x 4 @ 24" OC Truss. The roof is sloped at approximately 18 degrees and has a max beam span of 8 ft between supports. The existing roof framing has been determined to be adequate to support the proposed PV installation without structural upgrades.

Sincerely,

Current Renewables Engineering Inc.
Professional Engineer
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