



01-31-2023

Enphase Energy Inc

47281 Bayside Parkway

Subject: Structural Certification for Installation of Residential Solar
re job: Damon Mosby

510 Rolling Pines Dr, Spring Lake, NC 28390, USA

Attn.: To Whom It May Concern

Observation of the condition of the existing framing system was performed by an audit team of Enphase Energy Inc

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: 118 mph, Ground Snow: 10 psf, Min Snow Roof: 0 psf

ROOF 1: Shingle roofing supported by 2x4 Truss @ 24 in. OC spacing. The roof is sloped at approximately 29 degrees and has a max beam span of 9.0 ft between supports. Roof is adequate to support the imposed loads. Therefore, no structural upgrades are required.

ROOF 2: 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 7.5 ft between supports. Roof is adequate to support the imposed loads. Therefore, no structural upgrades are required.

ROOF 3: Shingle roofing supported by 2x4 Truss @ 24 in. OC spacing. The roof is sloped at approximately 32 degrees and has a max beam span of 7.5 ft between supports. Roof is adequate to support the imposed loads. Therefore, no structural upgrades are required.

ROOF 4: Shingle roofing supported by 2x4 Truss @ 24 in. OC spacing. The roof is sloped at approximately 33 degrees and has a max beam span of 9.5 ft between supports. Roof is adequate to support the imposed loads. Therefore, no structural upgrades are required.

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