


# DAVID C. HERNANDEZ, PE

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DATE: April 14, 2023

RE: 105 Wrench St, Erwin, NC 28339, USA

To Whom It May Concern,

As per your request, Exactus Energy has conducted a site assessment of the building at the above address.

PV solar panels are proposed to be installed on roof areas as shown in the submitted plans. The panels are clamped to rails which are attached to the roof with a lagged mounting system. The PV system (PV modules, racking, mounting hardware, etc.) shall be installed according to the manufacturer's approved installation specifications. The Engineer of Record and Exactus Energy claim no responsibility for misuse or improper installation.

It was found that the roof systems satisfactorily meet the applicable code standards included in the 2018 North Carolina State Building Code, 2018 North Carolina Residential Code for One and Two Family Dwelling and ASCE 7-10 as well as the design criteria shown below:

Design Criteria:

Risk Category	= II
Exposure Category	= C
Wind speed	= 115 mph
Ground snow load	= 20 psf
Roof dead load	= 9 psf
Solar system dead load	= 3 psf

Overall, the roof systems integrity is adequate to support the PV alteration with no modifications or reinforcements as required per 2018 North Carolina Existing Building Code Sections 402.3 and 402.4.

This letter was completed in accordance to recognized design standards, professional engineering experience, and judgement. Prior to installation, the on-site contractor must notify Exactus Energy if there are any discrepancies, or damages to the members, that was not addressed in the plan set.

If you have any further questions, please do not hesitate to contact me.

Acknowledged by:

David C. Hernandez

Digitally signed by David C. Hernandez  
Date: 2023.04.14 16:51:42 -04:00

