

Benson Design Group
15323 McClure Bridge Rd.
Charlotte, N.C. 28277
Phone # 704-578-8688
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February 13, 2022

Leland Fields
Sustainable Energy and Lighting Solutions
8351 Palmetto Commerce Parkway, STE 203
Ladson, SC 29456

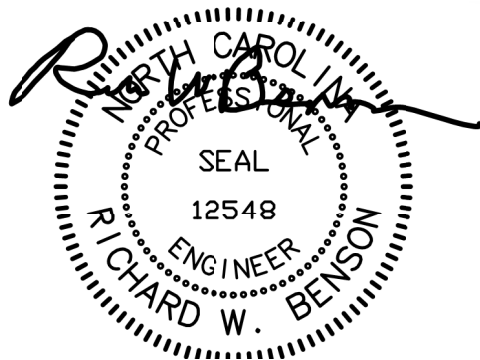
Re: Certification letter for loads, form of attachment (parts and pieces) for 30 solar panels being placed on the roof at 19 Kentucky Derby Ln, Lillington, NC 27546

Leland,

I have completed my review of the proposed installation of solar panels being affixed to the existing roof at the residence mentioned above using the Unirac deck mount system (documentation submitted herewith). The existing roof is supported by 2x4@24"o.c. engineered trusses with a maximum span of 8ft. The deck mount system will consist of (1) 5/16" dia x 3-1/2" long lag screws per attachment for a total of 60 flashings. All of the system components along with the supporting substrate were evaluated for a wind speed of 118 mph, a wind exposure factor of C, a ground snow load of 10 psf and a seismic design category of B and any loads/load combinations prescribed in the 2018 North Carolina residential building code and were all found to be within acceptable allowable material stresses and deflections and to be in compliance with the 2018 North Carolina residential building code.

If you have any questions concerning the content of what is written above please do not hesitate to contact me.

Best regards,



Richard W. Benson, P.E.

February 13, 2022