



Tom Petersen

Architects • Planners

NYC Department of Buildings
Queens Borough Office
120-55 Queens Boulevard
Kew Gardens, NY 11424

March 2, 2023

Re: Solar Panel Installation
Jerin Residence
144-45 180th Street
Queens, NY 11434

Dear Sirs,

I've reviewed the proposed solar panel installation at this location to evaluate the existing roof structure and the connection of the panels to the roof.

<u>Criteria:</u>	Applicable codes:	2022 NYC Building Code (IBC 2015 w/ amendments) 2018 Wood Frame Construction Manual
	Design roof load:	20 psf live load, 10 psf dead load, 30 psf total load
	Design wind load:	120 mph, 35 psf; Exposure Category 'B'

My findings are as follows.

1. The new solar panels will imply an additional dead load of 3 psf. The existing roof structure (hip roof, assumed: 2x6 roof rafters @ 16" o.c., with 2x8 hips and ridge, span= +/- 13'-7" at maximum) is sufficient to bear this additional load. Any assumed, inaccessible or concealed structural members not documented during the initial site analysis will be verified by the solar panel system installers prior to the system installation, and any discrepancies will be reported to the Architect in writing.
2. The solar panels are attached to the roof with the rack system, connectors and components as shown on the attached drawings. The rack system, roof connections and connection spacing are rated for 120 mph.

It is a violation of NYSED 7209 for any person, unless acting under the direction of a licensed professional, to alter an item in any way. If an item bearing the seal of a licensed professional is altered, the altering licensed professional must attach the notation 'altered by' with his seal, signature, date of alteration, and description of the alteration.

I therefore certify that this installation complies with the applicable codes and design loads mentioned above, as well as ASCE 7-16, and is acceptable for approval. Please let me know if you have any questions on this information. Thanks!

Sincerely yours,



Tom Petersen

Cc: Swapnil Prabhu, Surf Clean Energy

