

PARKER AND WEST ENGINEERING, PLLC

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March 13, 2023

Sunrun Inc.
133 Technology Dr. Suite 100
Irvine, CA, 92618

Re: Structural Certification for Installation of Solar Panels
Sunrun Job Tracking Number: 216R-011KEEN
Client: TIMOTHY KEENAN
Address: 166-11 24TH AVE, QUEENS, NY, 11357

To Whom It May Concern:

A field observation of the condition of the existing framing system was performed by an audit team from Sunrun Inc. From the field observation of the property, the existing roof structure was observed as follows:

- Composite Shingles over roof plywood is supported by 2x10 @ 16" o.c. SPF #2 at ARRAY 1. The rafters are sloped at approximately 33 degrees and have a maximum projected horizontal span of 9ft 7in. between load bearing supports.
- Composite Shingles over roof plywood is supported by 2x10 @ 16" o.c. SPF #2 at ARRAY 2. The rafters are sloped at approximately 33 degrees and have a maximum projected horizontal span of 8ft 5in. between load bearing supports.
- Composite Shingles over roof plywood is supported by 2x10 @ 16" o.c. SPF #2 at ARRAY 3. The rafters are sloped at approximately 33 degrees and have a maximum projected horizontal span of 9ft 2in. between load bearing supports.

Design Criteria:

- Applicable Codes = 2022 NYC Building Code, ASCE 7-05 & 7-10, NDS-05
- Ground Snow Load = 25 psf
- Basic Wind Speed = 117 mph, Exposure Category C.

As a result of the completed field observation and design checks:

- ARRAY 1/2/3: The roof is adequate to support the loading imposed by the installation of solar panels and modules. Therefore, no structural upgrades are required.

I certify that the capacity of the structural roof framing that directly supports the additional loading due to the solar panel supports and modules had been reviewed and determined to meet or exceed the requirements without structural upgrade in accordance with the 2022 NYC Building Code.

Sincerely,



Walid Abdulla, P.E.
Manager
Parker and West Engineering, PLLC

