

To: SunCommon
1155 Flatbush Rd.
Kingston, NY 12401

Date: January 25, 2022
Ref.: 22010213

Subject: Mid-Hudson Islamic Association
125 All Angels Hill Rd.
Wappingers Falls, NY

To Whom It May Concern,

The following references the structural roof analysis of the Mid-Hudson Islamic Association residence located in Wappingers Falls, NY. Westshore Design Engineers has been retained in order to analyze the existing roof structure for adequacy in supporting the proposed additional loading due to rooftop solar panels. The site-specific loadings are as follows: Seismic Design Category B; basic Wind Speed of 115mph; and Ground Snow Load of 30psf, per ASCE 7-16. The analysis is based on the 2020 RCNYS and 2020 IEBC chapter 9. The existing roofs consist of 2x10 at 16"o.c. with a 14'-2" span and 2x10 at 16"o.c. with a 16' span.

Based on structural analysis, it has been determined that the R1,, R1A, R2, R3, R4 and R5 roofs are adequate to support rooftop solar panels with a maximum loading of 3psf.

The panel layout is not restricted within the specified portions of roof. "Snap N Rack" L-foot anchors with 5/16" diameter lags required at 48" on center maximum with 2.5" minimum embed or racking system of equal or greater design values. Rooftech "RT Mini" installed per manufacturer specifications and recommendations for deck attachment method. Ballasted system installed per manufacturer's specifications and recommendations if system is ballasted.

Please don't hesitate to contact us with additional requests.

Thank you.

Westshore Design Engineers

John Eibert
Project Coordinator

1/25/2022
Nicolas Nitti, P.E.
President

