

BUILDING CODE ENFORCEMENTEXAMPLE OF SOLAR PANEL LETTER

[Engineer/Company Letterhead]

[Primary Business Address] [Address Line 2] [Address Line 3]

[Phone: 555-555-555] [Fax: 555-555-555]

[E-mail: someone@example.com]

[DATE]

City of Houston Building Code Enforcement Attention: Structural Inspections P.O. Box 2688 Houston, TX 7725-2688

RE: POST INSTALLATION SPECIAL INSPECTION OF ROOF MOUNTED SOLAR ARRAY SYSTEM

Permit Number: [INSERT CITY PERMIT NUMBER]
Project Address: [INSERT CITY ASSIGNED ADDRESS]

To Whom It May Concern,

This letter is to document compliance with the structural provisions of the *Houston Construction Code* based on a post construction structural inspection of the installation of the photovoltaic (PV) solar panel system and supporting structure at the above referenced address. The structural inspection was carried out by a representative of this company on [Insert Date of Inspection]. The structural review, includes compliance review of the approved Solar Inspection Checklist and applies to the section of roof, supporting structural elements, and the PV system, where it is installed.

The post installation inspection procedure followed the contractor work completion checklist carried out for [Insert Name of Property Owner or Contractor], as well as the Texas engineer sealed general arrangement drawing PV-1, and includes site inspection and confirmation of all the following:

- 1. PV solar panels were placed on top of structural aluminum rails (XR10) which were bolted to the roof rafters as required by the manufacturer's installation specifications or the *Houston Construction Code*, whichever is more restrictive. No existing or new damage to any structural element was observed.
- 2. Rail connection to the roof was done using 5/16" stainless steel (SS) lag bolts every 4 feet on the roof rafters, and with additional bolt at each end of the rail as required by the manufacturers installation requirements or as required to meet the *Houston Construction Code*, whichever is more restrictive.
- 3. To make the connection waterproof, a rectangular aluminum flashing was placed within the existing shingles with an L-Feet aluminum profile with an elastomeric insert hole where the bolt is driven up to 3 inches in the rafters with structural adhesive sealant. In addition, the flashing has a riveted hole where the L-Feet is placed helping avoiding any water entrance.
- 4. The installation of the Solar Panel System does not obstruct the egress path from any egress door or emergency escape and rescue window leading to the public way, or yard or court that opens to a public way in accordance with the *Houston Construction Code*.

Based on the appropriate Houston code and the above specifications, the installation associated with the scope of work under consideration for the project address listed above complies with the structural provisions of the *Houston Construction Code* and ASCE 7-2010 including the specific minimum wind speed design and risk category applicable to this project and address as determined using the ASCE 7 windspeed website: https://hazards.atcouncil.org.

[SIGNATURE, TITLE, AND TEXAS ENGINEER SEAL]

revised: November 17, 2022

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