

STANDARD 41A: SOLAR PANELS, 2 STORY BUILDINGS

ADOPTED JULY 2023, RESOLUTION 03-23-76

1.0 GENERAL REQUIREMENTS

See Standard 1: General Requirements

2.0 APPLICATIONS

- 2.1 Solar Panel refers to roof mounted panels that use solar energy to either heat water directly (Solar Water Heating System), or to generate electricity using photo-voltaic cells (Solar Electric System).
- 2.2 This section refers to flat roofs and pitched roofs of two-story dwellings. The system shall be designed so the panel array does not encroach outside of the area allocated on the roof for each owner of a manor. Refer to Pages 5, 6, 7, 8 and 9 for typical roof allocation on flat roofs of 6-, 8-, and 12- unit buildings respectively and Page 10 for Seville style buildings. Roof allocation plans for all other types of roofs will be prepared by Manor Alterations when a request is received. Existing solar systems that have been properly approved are grandfathered in.
- **2.3** All costs and maintenance of the alteration, present and future, are the responsibility of the Mutual Member.
- **2.4** Detailed, site-specific plans for all water and electrical lines for the solar panel installation, including penetrations, shall be submitted to the Manor Alterations Department for approval.
- 2.5 Structural details and calculations for the installation of the proposed solar system existing roof structure, signed and wet-stamped by a California-licensed engineer are required to ensure the solar panel system does not compromise the existing roof structure and that the roof is adequate to accept attachments and to support all applied loadings. Consult with the City for additional requirements.
- 2.6 Solar Panels installed on pitched roofs with light weight tile require that the entire section from roof ridge to the edges be removed and replaced with CertainTeed Landmark TL composition shingle roofing or equivalent in all major aspects (aesthetics, materials and warranty) on the entire roof area where the array will

be located. The roof must then be trimmed with light weight tiles (LWT) to match in materials and appearance of the original roof being replaced. The current composition shingle roofing standards for waterproofing the roof at the time of installation must be followed and will include a single layer underlayment, drip edge metal, step flashings at existing skylights and chimneys, penetration flashings for all vents and vent pipes, and valley metal at valley areas.

- 2.7 PVC Flat roof under warranty with the Mutual's reroofing contractor shall require the roofing contractor holding the warranty to complete the roof tie-in work at the member's expense. PVC Flat roofs that remain under a Johns Manville (JM) materials warranty shall require a Johns Manville (JM) Approved Contractor perform the tie-in work at the member's expense. Solar panel installations onto roofs outside of the warranty periods must be water tight and meet or exceed all current I.C.C. (International Code Council), State and City standards.
- 2.8 Flat roof mounting shall be set with the highest point flush with the top of the parapet wall so as to be hidden from the ground or surrounding properties. The lowest point of the solar array equipment shall be a minimum of 10 inches above the flat roof. The top stanchions and racking used to connect the array to the roof shall be water tight and meet or exceed all current I.C.C. (International Code Council), State and City standards.
- 2.9 The solar panel array must be located away from the edges of roofs and parapets as required by the City but not less than the clear perimeter around the edges of the roof shall be a minimum 2-foot-wide and must maintain sufficient clearance between any architectural features such as, but not limited to skylights, mechanical equipment, vent pipes and for the most direct path to these features in order to enable proper access for maintenance.
- **2.10** Water and electric lines must be set on blocking above the surface to facilitate reroofing.
- **2.11** Detailed plans of the installation of roof jacks (flashing, vents, or planking for installation of Solar). Should be submitted to Manor Alterations for approval, and installation of roof jacks, including hot mopping and/or flashing, is required to be completed during original installation.
- **2.12** Lag screws must have adequate pullout strength and shear capacities.
- **2.13** The member is responsible for the maintenance and repair of the roof penetrations required for the installation of the solar system, and for any damage caused by these alterations.
- **2.14** Connections to the manor's electrical system must be coordinated with the local electric utility.

- **2.15** Solar Electric Panels, and their associated electrical components, must be UL approved, or comply with equivalent international standards.
- 2.16 All solar panel installations located on the roof of a unit that is under warranty must be inspected and approved, in addition to any required City inspections, by a VMS Inc. Roofing Inspector before the solar array is installed, after roof penetrations are complete, and prior to a final inspection of the Mutual Consent. If re-roofing is required for the solar panel installation, in addition to any City-required inspections, inspections by a Mutual inspector will be performed prior to finalizing the mutual consent.
- 2.17 Approved locations for Energy Storage Devices: As per California and City code, all energy storage device installations must be inspected by OCFA. Installation must be on the exterior walls, in the garage, or in a California and City code compliant interior area of the manor. Energy storage devices visible to the members must be painted to match the wall it is mounted on or be screened with an approved enclosure that complements the architecture of the building.
- **2.18** The Mutual Consent processing time for Solar Panel installation requests is to be completed within 45 days from receipt of a **complete application submission**. If Manor Alterations and the Board fail to approve or deny a complete application within 45 days of receipt the application, it auto defaults to an approved application.

3.0 OBLIGATIONS

- 3.1 Due to all exterior locations classified as 'exclusive use common area' or 'common area', a Common Area Exclusive Use Revocable License or equivalent current document for Mutual approval to provide rights to utilize common area must be completed prior to the installation of any solar array. Each Manor is allocated a weighted percentage of available roof space. Each Manor's Solar Panel allocation is estimated at 200 sq. ft. This is not a guarantee of allocation. This is an approximation to provide Members an understanding of the limited amount of roof space available. The Members or their Solar Consultant will submit a complete Mutual Consent application with scope of work and the precise location of the solar system within the allocated space for review and approval by Manor Alterations.
- **3.2** For continuous roofs that cover more than one manor, if the roof is required to be replaced, the member may limit the replacement of roof to the projected area of the manor requesting approval for the solar installation. A 3-ft roof transition will be required between the new roof and the existing roof and said transition will take place within the above described area.
- 3.3 Member accepts responsibility and agrees to pay for repairs to common areas,

including but not limited to roofing, framing, wiring and drywall caused, in whole or in part, by Member's solar panels or their installation, operation, maintenance or removal; and, Member accepts all responsibility for damage to Member's Manor or other Manors or to personal property caused or contributed to by the installation, operation, maintenance or removal of the solar panels.

- 3.4 The Member is responsible for, and will bear all costs associated with removing, altering, covering or reinstalling the alteration as may be necessary or appropriate to allow the Mutual to conduct maintenance or repairs of common area. The Mutual will endeavor to give a minimum of thirty (30) days advance written notice (unless it is an emergency) of the need to remove, alter, cover or replace the solar panel. Failure to complete the required work within the allowed time will require that the Mutual perform the removal, alteration, or covering at the Member's cost, which will be billed as a Chargeable Service to the Member. Re-installation of any components removed by the Mutual as a chargeable service remains the responsibility of the member.
- 3.5 The Member is responsible for, and will bear all costs associated with, clean-up or repair of Mutual owned or controlled property made necessary by or resulting from the alteration.
- 3.6 All costs associated with roof replacement above and beyond the typical cost for roof replacement due to the solar panel installation shall be borne by the Member(s) as per Section 3.4 above. Alternatively, member may assume full responsibility for the future maintenance, repair and replacement of the roof in lieu of removing and re-installing the solar panel system. If this option is selected, the existing roof will be considered an alteration.
- 3.7 The roof area for possible solar panel installation is allocated only to the roof space in a first come first serve capacity. The member's solar panels may not be directly above their Manor. It is Member's responsibility to ascertain and adapt to any roof interference by vents or other roof installations already in place.
- **3.8** Upon sale of Member's Manor, all obligations herein shall apply to all subsequent owners of the Manor.
- 3.9 When applicable, the solar installer and his roofer will provide a copy of the composition shingle manufacturer's warranty and will provide a separate labor and materials warranty of 5 years for the composition shingle roof installation. If any leaks occur on a roof so constructed, the solar installer will remove the solar equipment, repair the roof and put back the solar equipment at no cost to the Mutual. If the solar installer/roofer chooses not to comply with this requirement, then the Mutual Roofing Contractor must be hired to do the roofing work at the member's expense.











