

## City of Fairfield Community Development Department Building Division Photovoltaic Submittal Requirements

Two complete sets of plans are required at the time of submittal for either type of system.

## **Roof Mount Systems:**

- Roof Plan
  - Identify the location of the panels on the roof of the structure.
    Please provide the location of the street as it relates to the front of the parcel to provide orientation of the panel installation.
  - Identify setbacks from the roof edges, roof ridges & valleys.
    Please note that our office does observe the setback requirements that are listed within the State Fire Marshall PV Guidelines.
  - Identify all roof zones 1, 2 and 3 and panel location within these designations. Please note that each wind zone may have a different rail spans/anchorage requirement.
- Electrical line diagram
- Manufacture specifications for inverter
- Manufacture specifications for solar panels
- System to roof connection details and manufacture's installation manual.
  - o Identify max rail spans/anchorage based on wind zone location and manufacture installation requirements. Rail spans/anchorage shall be designed to meet the City's specific wind load requirements (wind load 110 mph, exposure 'C') and should be noted on engineered span tables accompanying submittal either as an addendum from the manufacture or as part of the manufacture installation manual. Please note if the engineered span tables are not provided, the City of Fairfield will require a maximum 4' between attachments of the railing system.
  - Identify if system is flush mount or the degree of tilt for the system. Please note that if the system is designed with a tilt, the anchoring/span tables noted above shall indicate that the rail spans/anchorage is applicable for that degree tilt. Most manufactures will have a different span table based on the system design. Tilted arrays may require structural engineering.

## **Ground Mount Systems:**

- Site plan identify the location of the solar array & underground electrical running to system. Include setbacks to all property lines and existing structures.
- Engineered Foundation Plan provide foundation cross section outlining the construction in detail (depth, diameter/thickness, rebar, etc). Please note that the city has highly expansive soils and foundation should be designed based on these conditions.
- Elevations provide elevation view outlining the finished height of solar array from grade to top of panel.
- Electrical line diagram
- Manufacture specifications for inverter
- Manufacture specifications for solar panels
- Connection details (panels to rails, rails to support, support to foundation) & manufacture's installation manual.
  - o Identify max rail spans/anchorage based on wind zone location and manufacture installation requirements. Rail spans/anchorage shall be designed to meet the City's specific wind load requirements (wind load 110 mph, exposure 'C') and should be noted on engineered span tables accompanying submittal either as an addendum from the manufacture or as part of the manufacture installation manual.
  - Oldentify if system is flush mount or the degree of tilt for the system. Please note that if the system is designed with a tilt, the anchoring/span tables noted above shall indicate that the rail spans/anchorage is applicable for that degree tilt. Most manufactures will have a different span table based on the system design. Ground mounted systems may require structural engineering.

It is very important ensure that the products utilized are approved by the manufacture. If the system is universal, our office will expect the product specifications for <u>all</u> components to state that they are compatible with third party products. If it does not, your plans will not be accepted.

All systems must be reviewed and approved by the Planning Division before a building permit can be issued. Please contact the Planning Division at (707) 428-7461 to discuss their requirements.