



## Covenant Design Review Committee Supplemental Design Criteria

---

# SOLAR UNITS



Solar units consist of two types: solar water heating units, typically for swimming pools, and solar voltaic panels to generate electricity. The Covenant Design Review Committee (C.D.R.C.) must review both types, whether mounted on a roof or on a rack system on the ground. The Covenant Design Review Committee encourages ground-mounted units wherever possible; roof installations are not encouraged because they detract from the appearance of a building's roof. The Rancho Santa Fe Protective Covenant specifically addresses roofs: *"In this hilly country, roofs will be much seen from above, and their form and color are important to the success and attractiveness of the property."* Few roofs are

situated in such a way that they can accommodate a solar unit installation without negatively affecting the building's design.

The Protective Covenant states that *"The design of the building must be such as will, in the opinion of the Covenant Design Review Committee, be reasonably appropriate to its site and harmonize with its surroundings."* It is difficult to make a building with a solar unit on the roof "harmonize with its surroundings." Only in rare instances when a roof installation would not be visible to surrounding neighbors, and there is no alternative location, will panels be allowed on a roof. Fortunately, most properties within Rancho Santa Fe are large enough to accommodate a ground-mounted installation that allows enough room for landscape screening.

The Covenant Design Review Committee has created the attached guidelines to help owners and their professionals design a solar unit installation that will preserve the **"rare landscape features"** of Rancho Santa Fe as described in the Protective Covenant.

All solar facilities must be reviewed by the Covenant Design Review Committee per Paragraph 46 of the Protective Covenant to ensure **"a uniform and reasonably high standard of artistic result and attractiveness..."**

## C.D.R.C. OVERALL DESIGN

The Solar Energy Facility's placement and design should limit as much as possible, views of the facility from roadways or Covenant properties. The visual screening of the facility should be done in a manner that is consistent with the appearance of the property where the facility is proposed as well as with Rancho Santa Fe's community character.

### PLACEMENT

**Ground-mounted locations preferred.** The preferred location for a Solar Energy Facility shall be on the ground rather than a roof location assuming the following:

- There is available property of sufficient size
  - The Covenant Design Review Committee may ask for alternative combinations in smaller, separate groupings of panels when single, large areas of grouped solar panels are found not to be aesthetically satisfactory.
- The available property is in a location that:
  - Minimizes grading.
  - Does not require a large and/or tall support structure to achieve a reasonable orientation to the sun.
  - Is outside of the usual building setbacks for accessory structures.
- The available property is in a location that can be adequately screened to prevent direct views from roadways and Covenant properties

**Roof-mounted locations.** A roof location may be allowed if:

- There is insufficient area on the ground to meet the ground-mounted placement criteria of and provided that the location on the roof complies with the following:
  - The location is not within direct view from roadways or Covenant properties.
  - The location does not require a large and/or tall support structure to achieve a reasonable orientation to the sun.
  - The panels should be parallel to the roof plane.

### MOUNTING DESIGN

#### Ground-mounted

- The height of the facility should be kept as low as possible.
- The design of the support structures should not increase the visibility or visual prominence of the facility.

#### Roof-mounted

Roof Mounted water heating units should **not** have the storage tank on the roof but instead use a unit with the storage tank at ground level.

- Sloped Roofs
  - The panels should be mounted flush with the roofing material.
  - No support structure should be visible below the panels.
- Flat Roofs
  - The height of the facility, relative to the flat roof surface, should be kept as low as possible.
  - The location does not require a large and/or tall support structure to achieve a reasonable orientation to the sun.

- If the panels are elevated above a flat roof surface, a parapet wall should be erected that will be of sufficient height to block views of the facility from the roadway and Covenant properties. The design of the parapet wall should be consistent with the design of the structure and not detract from the structure's appearance.

### **MATERIALS and COMPONENTS**

- Panel material should be dark in color.
- Exposed metal should be bronze anodized or otherwise color treated. Metal that cannot be anodized or similarly treated, wood and other materials should be painted a dark, earth-toned color.
- Conceal all plumbing and electrical lines.
- Treat cover plates and glazing to reduce the reflectance of light.

### **Screening**

- Screen solar energy facilities, including the collectors as well as any ancillary equipment, from direct view of roadways and Covenant properties.
- The screening may consist of landscape materials, fencing, walls, berms or a combination of these methods. Any screening shall be done in a way which is consistent with the character of the property and the community and shall not introduce an unaesthetic element. The screening design components will be evaluated by the Covenant Design Review Committee for artistic result as required by Paragraph 46 of the Rancho Santa Fe Protective Covenant.

### **PROCESS**

All solar facilities require the review and approval of the Covenant Design Review Committee.

- See the attached "Solar Energy Facility – Submission Requirements Checklist"

## **SOLAR ENERGY FACILITY Submission Requirements Checklist**

The following are the minimum materials that must be submitted for an Covenant Design Review Committee application for a solar energy facility.

### All Solar Energy Facilities

- ✓ Professionally drawn site plan showing the location of the proposed Solar Energy Facility as well as other major features on the property including but not limited to property lines, all structures, hardscape, and mature vegetation.
- ✓ Professionally drawn cross-section through the facility illustrating the solar collecting material and all supporting structure. The cross-section shall be drawn to scale, with height and width dimensions, call-outs of all materials and dimensions of materials.
- ✓ Professionally drawn construction details which apply to the specific proposed installation. The details must be drawn to scale and clearly show assembly.
- ✓ Manufacturer's cut sheets of the proposed product.
- ✓ Calculations:
  - Verifying the number and/or area of panels required to heat water (for Solar Water Heaters).
  - Detailing the wattage to be generated and the number of watts used by the household being served (for Photovoltaic).
- ✓ All plumbing and electrical lines shall be illustrated.
- ✓ Samples of anodized metals or metals with similar treatments.
- ✓ Paint chips for any proposed paint.
- ✓ Plans for any associated structures in accordance with the requirements of the Covenant Design Review Committee Application Submittal Checklist.

### Additional requirements for **grounded-mounted** Solar Energy Facilities

- ✓ **All ground-mounted solar arrays must be represented by story-poles on the property in the proposed location. The Covenant Design Review Committee will not review a ground-mounted solar facility without an accurate story pole installation.**
- ✓ Topographic plan of the area in which the ground-mounted Solar Energy Facility is proposed, prepared by a California licensed surveyor or civil engineer.
- ✓ Architectural elevations of the panels and supporting structure(s) from all four sides.
- ✓ Professionally prepared landscape plan showing existing landscaping and proposed landscaping/fencing or walls that will screen the proposed Solar Energy Facility. The landscape plan shall meet the requirements of the Application Submittal Checklist.

### Additional requirements for **roof-mounted** Solar Energy Facilities

- ✓ Roof plan of the structure on which the panels are proposed. The roof plan shall clearly and accurately illustrate the location of the proposed Solar Energy Facility.
- ✓ Architectural elevations of the building on which the facility is proposed, showing the proposed Solar Energy Facility on the roof. All architectural elevations on which the facility is visible shall be submitted.
- ✓ Professionally drawn construction details which apply to the specific installation, showing the attachment to the roof structure as well as the height of the panels relative to the roofing material.

The Covenant Design Review Committee, at its discretion, may request additional information for a particular application if it furthers the Covenant Design Review Committee's understanding of the facility and/or the site and furthers the Covenant Design Review Committee's review and evaluation of the project.