



# Design Guidelines

Approved by the CROA Board of Directors on 07/28/2009; effective for applications received on or after 09/01/2009.



## SOLAR HEATING, POWER GENERATION & OTHER DEVICES

*Although Florida claims to be “The Sunshine State”, it is not the sunniest of the United States on the continent. That honor goes to Arizona; followed by California; then Nevada; trailed by New Mexico and Texas. Still not bad – ask any resident of Seattle which boasts only 55 days of sunshine per year.*

Plentiful sunshine creates solar energy, captured in a variety of ways to reduce demands for energy from other sources – including electricity and gas (natural, propane, etc.). Different uses (e.g., electricity versus water heating) require different means of collecting solar radiation (e.g., electricity-generating photovoltaic cells versus heat-absorbing tubes). Even similar uses (e.g., heating water for laundry and bathing versus heating water for a swimming pool) generally require separate systems.

While sunshine is incredibly abundant, most Celebration homes have some limitations using solar power. For greatest efficiency, solar collecting panels need a southern exposure. Different types of solar systems have differing tolerances of geographic orientation. Thus, owners should consider how to allocate usable roof space most efficiently. For example, a multi-phase approach might include installing solar domestic water heating now, followed by solar pool heating next year, and generating electricity a few years from now. If 500 square feet of photovoltaic panels (for electricity) are envisioned in the future, it may be desirable to locate solar water heating elsewhere to avoid relocating equipment for “phase III.”

The Florida Solar Rights Act encourages property owners to install solar devices. Although a homeowners association may not deny approval to install solar systems, the association may impose limitations regarding location. Owners are cautioned that contractors may tell them approval is not required. ***Failure to obtain approval may require an installation be relocated at the homeowner’s expense.***

When assessing installation of solar panels on a residence consider:

- Is your household’s schedule compatible with solar energy? For example, if most of your laundry and dishwashing occur in the evening (which may deplete water heated during the day) there may not be enough solar-heated water for showering in the morning. (Utilizing the backup electric heating elements diminishes the cost effectiveness of having a solar system.)
- How many panels (and size) are required and where could they be located?
- Will the roof support the panels (and if used for heating water, the water too)?
- For pool heating, is the existing pool pump powerful enough to pump water to roof level?
- Will residents be home to adjust non-automated systems if necessary?
- Solar generation of electricity does not operate if power from Progress Energy is not available, unless a battery storage system is installed as part of the solar system. (Consider the additional cost, maintenance, and space involved with battery storage.)
- Will the contractor repair any roof leaks due to mounting of panels through the roofing?  
**[PLEASE NOTE: Celebration Service Areas (townhomes, duplexes and triplexes) are not**

responsible for roof maintenance or repairs caused by the installation, presence or removal of solar systems.]



Brochures may claim solar water heating may reduce electric bills up to 30%. Consider your family's current lifestyle to gauge whether this might be true. Have you already changed to doing laundry with cold water? Does your dishwasher heat the water without drawing from the water heater? Have you installed "low flow" showerheads to reduce [heated] water use? Does your household have multiple teens at home that take long showers, or are there just one or two adults in residence? Solar water heating may still make sense with the most unfavorable conditions, but the payback period may be significantly longer.

#### **Design Guidelines for Solar Panels (either heating or power generation):**

- Solar panels should blend into the structure as much as possible. Locate panels in the least conspicuous area that provides satisfactory operation.
- Solar panels mounted on racks are not permitted without explicit approval of the rack system; this does not prohibit the use of brackets which may be necessary as part of the installation. The bottom of solar panels should be within 2" of the roof surface. Brackets which provide more than 2" between the roof surface and the bottom of the panel must be identified on the application with technical specifications to support the requirement.
- Solar panels must have an orientation between 45° east of due south and 45° west of due south. Panels must be in a fixed position flat on the roof.
- Solar panels must be on a roof plane facing the rear of the home. If panels must be located on a roof plane visible from the front or side street owner may be required to provide a certified survey of the roof depicting exact locations of panels and connections.
- Framing or trim – consistent with the architectural style of the structure – may be required in front of or surrounding the solar panels.
- Paint pipes, tubes, cables and wires to match the colors of the underlying surfaces at the time of installation.

#### **Design Guidelines for Line Drying Laundry**

Some residents prefer "line dried" versus "machine dried" laundry. Thoughts of "clothes on the line" usually evokes an image of a single pole in the ground with an inverted umbrella on top with several lines for hanging wet towels and garments. Such an arrangement is often ill-suited to Central Florida's climate with quick-changing weather and summer storms; but convenient alternatives are available which are unaffected by weather changes.

- Indoor drying racks are available in dozens of varieties and sizes from local home improvement centers and online retailers. From simple floor standing racks – requiring just a few square feet (and fold flat when not in use) – to ceiling mounted racks. When line drying indoors consider the moisture added to the room (perhaps welcome in the dry winter, but not so much in the humid summer).
- Clotheslines in the garage may provide the best option – no moisture added indoors, protection from inclement weather, and existing lights to facilitate "hanging out the wash" at any time, day or night.
- No application or approval is required for racks or lines used inside the home or garage.

Outdoor clotheslines generally are located in the Private Zone.

- Most often residents select a location under the solid roof of a porch or patio, which limits exposure to sudden winds and rainstorms. A retractable line installed on a solid wall connects to a bracket or hook mounted on a nearby column or wall.
- If sun drying is desired, the ideal location in the Private Zone will be somewhat protected from wind and rain. A retractable line installed on a solid wall connects to a bracket or

hook mounted on a nearby column or wall. If neither a wall nor column are available, a removable pole may be located a short distance from the structure for temporary use when needed.

- If a freestanding clothes rack is required it must be installed in an in-ground metal sleeve so it may be removed when not in use.
- Landscaping (such as a hedge) is required to screen the clotheslines or racks from public view, which includes streets, alley and adjacent properties.
- Use of exterior clotheslines and racks is limited to daylight hours, from sunrise to sunset. Lines and racks must be stored (either retracted or moved into the garage) when not in use.

**Special notes for Condominiums and Service Areas**

- Condominium owners must obtain approval from their condominium association before submitting an application to the CROA ARC.
- Service Area owners are advised that the Service Area is not responsible for installing, repairing, removing or otherwise maintaining any alterations made by the resident. In addition, the Service Area is not responsible for repairing any water damage which results from mounting devices on the structure.

**Approval Process:**

Applies to:	Method of Review	
All residential properties	None	No approval is required for racks or clotheslines <i>which are contained within the structure (home or garage)</i> .
All condominium properties	Review as determined by the condominium association	The condominium association's Board of Directors (or architectural review panel, if designated) must approve the application before submitting it to CROA. Include documentation of the condominium association's approval with the CROA application.
All residential properties	Streamline review by ARC Coordinator	Applications for solar panels contained entirely within the Private Zone which cannot be seen from in front of the home or from any side streets.
All residential properties	Formal review by ARC team at ARC meeting	All non-standard applications and any applications which the ARC Coordinator believes should be reviewed by the ARC team.

**General Timelines:**

Must <b>begin</b> project within	90 days of date on ARC approval letter
Must <b>complete</b> project within	60 days from start of project

**References:**

Florida Solar Rights Act, Florida Statute 163.04 (part of Intergovernmental Programs) [as amended, effective July 1, 2008]
Florida Solar Energy Center, <a href="http://www.fsec.edu/en/">www.fsec.edu/en/</a>
Florida Solar Energy Industries Association, <a href="http://www.flaseia.org">www.flaseia.org</a>



Celebration Residential Owners Association, Inc.  
 Celebration Non-Residential Owners Association, Inc.  
 851 Celebration Avenue, Celebration, Florida 34747  
 Ph 407-566-1200 • Fax 407-566-1210

[ARC@celebrationtownhall.com](mailto:ARC@celebrationtownhall.com)



## REQUEST FOR APPROVAL (SOLAR HEATING, POWER GENERATION & OTHER DEVICES))

Obtain current Design Guidelines and Application from the Association's offices or download from the Celebration Front Porch (<http://www.celebration.fl.us>) using owner ID and password. Select *Guidelines* under the CROA tab.

**WHICH PROPERTY TYPE:**  Single-Family;  Townhome/Duplex/Triplex;  Condominium

**Property Address:** \_\_\_\_\_

**Property Owner's Name:** \_\_\_\_\_

**Property Owner's Email address:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

*Property Owner's Mailing Address:* \_\_\_\_\_

*(If different from property address):* \_\_\_\_\_

**Project Contractor:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

**[Required If a condo]** Attach letter of approval from Condominium association

**[Required]** Attach a property survey or plot plan showing existing structures with proposed locations for solar panel(s), clotheslines or racks.

**[Required]** Attach scaled drawing with dimensions or proposed panels, clotheslines or racks.

**DESCRIBE PROJECT IN DETAIL (or attach separate sheet)**


( ) By initialing, owner authorizes the Association to release information, upon request, concerning this or a similar project for this property to the Contractor named above.

( ) By initialing, owner requests notifications for this project by email only (no printed copy will be mailed, reducing Association expenses for paper and postage).

Owner hereby authorizes the Association and members of the Architectural Review Committee to enter onto the subject property for purposes of confirming information contained on or collected for processing this application and for inspecting the project during execution, upon completion of the project, or upon expiration of the approval.

**Owner's Signature and Date:** \_\_\_\_\_

**SPACE BELOW IS FOR ARC USE ONLY**

SOLARHTG		LOT
		VIL
RCV      PUR		ACCT
LOT		CENN
ARCH		START      COMP

**Internal Administrative Use**

*(Not published on handouts or electronic versions;  
changes below do not require CROA Board approval):*

**Notes and Revision History:**

Date	Modifications
2009-03-06	Product & Service Provider List: Superior Solar Systems LLC; 275 Hunt Park Cove; Longwood FL 32750. Pam Carter; <a href="mailto:pam@superiorsolar.com">pam@superiorsolar.com</a> ; 407-331-9077 (Ref: 828 Morning Glory Lane)
2009-05-04	Initial draft
2009-05-05	Draft distributed to ARC for review
2009-05-06	Incorporated information similar to Hunter’s Creek Community Association and Suntree Master Homeowners Association standards
2009-05-18	Product & Service Provider List: Everything Solar; 973 Shadick Dr; Orange City FL 32763. Brad Launs, <a href="mailto:energyfl@gmail.com">energyfl@gmail.com</a> ; 407-925-7992 (Ref: 900 Spring Park Loop)
2009-05-19	Add Clotheslines and racks
2009-05-20	Draft distributed to ARC for review
2009-06-01	Merged with Rita’s comments
2009-06-04	Included in ARC review packet for 6/8 meeting which was cancelled. Per email to team, posting on Front Porch for 30 day comment period.
2009-06-28	General update to format and application form.
2007-07-06	More cleanup and clarification
2009-07-13	Approved by ARC to go to CROA
2009-07-20	Updated after workshop to make landscape screen required (versus “may be”) for clotheslines. This version submitted to CROA.
2009-07-28	Approved by CROA Board effective 9/1
2009-09-08	Emailed new Design Guidelines (this topic and the General form) to: <a href="mailto:energyfl@gmail.com">energyfl@gmail.com</a> ; <a href="mailto:brian@superiorsolar.com">brian@superiorsolar.com</a>
2010-12-16	Updated application for 2011
2011-02-09	Removed Product & Service Provider Reference
2011-12-06	Updated application for 2012
2013-01-08	Updated application for 2013 and removed suggestion to print pages selectively at the request of CROA Board Member.

**Standard Letter Clauses:**

- [Special conditions](#)
- [Q1SolarALL](#)
- [Service Area Not Responsible](#) **PLEASE NOTE:** The Service Area is not responsible for installing, repairing, removing or otherwise maintaining any alterations you make.
- [Colors and Finishes](#) The structure may require repainting (or other surface maintenance) to ensure the solar installation is as undetectable as possible.
- [Exterior Services](#) HVAC lines, electrical conduits, plumbing supply and waste lines, communications lines, etc., must be contained within the structure. No externally-mounted conduits or other fittings which are visible from a public area (street, side street, alley) are approved.
- [Landscape Screen](#) All external storage tanks, air conditioning units, water conditioning equipment, mechanical equipment, etc., shall be screened from public view with shrubs, hedges, walls or fences. Screening must be approved – in advance – by the ARC.
- [Foundation Landscape](#) Landscaping in the work areas may need refurbishment or replacement to bring the area to standard.

- **No Visible Storage** Upon completion, all surplus materials (e.g., bricks, fence panels, landscape materials, etc.) must be stored out of sight. No construction materials or equipment nor owner's personal property (e.g., furniture, etc.) may be stored in the Front or Side yards during the project.
- **Dumpster** If a dumpster is required, it is limited to 21 days on site. Dumpster **MAY NOT** be stored on CDD or CROA property, or on neighboring property without the property owner's written permission to the Association. The construction dumpster is to be stored behind the home or in the property owner's driveway. If that is not possible, contact the Covenants Coordinator to determine an alternate acceptable location.
- **General Disclaimers (See General Texts list in ARC Handbook)**
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