

DOCKETED

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*Comment Received From: Shawn
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Update to Solar Thermal Certification Provisions

Additional submitted attachment is included below.



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August 3, 2018

California Energy Commission
1516 Ninth Street
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To Whom It May Concern,

I am writing in response to the request for comments on the 2019 California Energy Code Compliance Manuals announced in Dockets 18-BSTD-02

The Solar Rating and Certification Corporation offers the following comments regarding the appropriate language for solar water heaters in Section 5.9. Revisions are shown for the highlighted sections using strikeout and underline format.

Proposed Revisions:

5.9 Solar Water Heating

The water heating calculation method allows water heating credits for solar water heaters. Solar thermal water heating systems save energy by using renewable resources to offset the use of conventional energy sources.

Single dwelling unit solar thermal water heating collectors and systems ~~need to must~~ be certified to OG-100 or OG-300 by the Solar Rating and Certification Corporation (SRCC) or IAPMO R&T approved. Accepted ratings procedures include either a fully approved system with OG-300 test results certification or a built up system that uses the collector (OG-100) rating. For multifamily buildings, only systems with OG-100 collectors can be installed. OG-300 performance ratings for the system or ratings for a built-up system incorporating OG-100 performance ratings for the collector must be used. Where OG-300 system ratings are used, they must be the annual ratings for the specific California Climate Zone where the system is to be installed.

Rationale:

The Solar Rating and Certification Corporation has long certified and rated solar thermal collectors under the OG-100 program and solar water heating systems under the OG-300 program. Each program consists of two parts. The first is an assessment of compliance with the safety, durability and performance requirements of the ANSI reference standards ICC 901/SRCC 100 and ICC 900/SRCC 300. The second part is the development of performance ratings to provide key performance parameters for various users.

The proposed changes above seek to establish that fact that collectors and systems are to be "certified" to OG-100 and OG-300 programs, not merely "approved" or "rated". The use of the term "approved" as shown above does not adequately convey the basis of the assessment of the products. Since more than one organization may now provide the certification, it is vital that both use the same basis. The term "certified" conveys the fact that the assessment of the products is to be done on the basis of OG-100 and OG-300, and that it should be completed by a qualified and accredited body. The word "rated" should not be used alone, as it could permit the rating of the performance of a collector or system without ensuring that the safety, durability and performance requirements of Standard 100 and Standard 300 are met.

The term "solar thermal systems" was changed to "solar water heating systems" throughout for consistency. It also reflects the fact that solar PV water heating systems are now available and are certified by SRCC under the OG-100 and OG-300 programs.

The revision to the final sentence seeks to clarify that multi-family residential buildings may utilize an OG-300 certified system or a custom system incorporating OG-100 certified collectors. Either are permissible, since there is no reason an OG-300 certified system cannot be an option for use on many multi-family buildings. Eliminating the current language will offer greater flexibility to system designers and architects.

Lastly, the language pertaining to accepted ratings was revised consistent with the comments above. A final sentence was also added to indicate that the OG-300 performance rating for the specific installation location must be used. SRCC publishes annual ratings for nearly 200 locations throughout the U.S. with the OG-300 certifications, including the 16 CA Climate Zones. It also publishes a daily rating for each OG-300 certification that is intended for national use in the ENERGY STAR program, but does not correspond to the California Zones. The new guidance will help to prevent the inappropriate use of this daily rating rather than the more accurate CA Annualized Rating based on local climate, solar radiation and mains water temperature settings.

Thank you for the opportunity to comment. I would be happy to answer any questions from staff on the revisions proposed and rationale.

Sincerely,

A handwritten signature in black ink, appearing to read "Shawn Hunter". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Shawn E. Martin
Vice President of Technical Services
Solar Rating and Certification Corporation