



Efficiency Division Updates

- **Business Meetings agendas and recordings**
 - October 12, 2022
 - Approved National Environmental Management Institution Committee (NEMIC)'s proposed amendments to its ATTCP application in compliance with the 2022 Energy Code
 - Certified the updated 2022 Single-Family Residential and Nonresidential & Multifamily ACM Reference Manuals, which document the modeling methods used in the 2022 compliance software.
 - Certified the updated 2022 public domain residential, nonresidential, and multifamily software (CBECC-Res 2022.2.0 and CBECC 2022.2.0)
 - Next business meeting: November 16
- CEC has released guidance for installation of air conditioners and heat pumps using the new federal efficiency rating system (SEER2, EER2, HSPF2). See attached
- BUILD program **workshop on November 8**. BUILD program provides technical assistance and incentives for new all-electric low-income residential buildings
- CUAC public **workshop on November 8**, regarding the incorporation of the California Utility Allowance Calculator (CUAC) into the CBECC software.
- HERS **workshop on November 15** to discuss proposed changes to the Home Energy Rating System (HERS) regulations in Title 20 and field verification and diagnostic testing regulations in Title 24
- The **California Automated Permit Processing (CalAPP) Program** application window open until May 1, 2023. Grants of \$40,000 to 100,000 are available to local jurisdictions to implement online solar permitting.

Energy Code Training and Events

- **Energy Commission training**
 - November 2: Town of Paradise - 2022 Single-Family Changes
 - November 9: Golden Gate Chapter American Society of Heating, Refrigerating, and Air-Conditioning Engineers – 2022 Multifamily and Nonresidential HVAC Changes
 - November 9: San Diego Chapter International Code Council, Energy and CalGreen Committee Meeting – 2022 Energy Code Updates
 - November 15: San Diego Chapter International Code Council – 2022 What's New for Single-Family Buildings
 - November 15: Institute of Heating and Air Conditioning Industries Trade Show – What's New for HVAC and exhibit booth
 - November 22: Barnum & Celillo – 2022 Nonresidential Indoor & Outdoor Lighting, PV, Battery, and Solar Ready Changes
 - November 29: Barnum & Celillo – 2022 Multifamily PV, Battery, Lighting, and Electrical Power Distribution

- [Energy Code Ace training](#)
- [PG&E training](#)
- [SoCal Gas education](#)
- [3C-REN trainings](#)
- [Local Energy Code resources](#)

Energy Code Resources

- [Online Resource Center](#)
- [Energy Standards Hotline email](#) or call 800-772-3300

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- [Blueprint Newsletter email list](#)
- [Building Standards email list](#)
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This message is to address projects permitted under the 2019 Building Energy Efficiency Standards (Energy Code) in cases where the projects have specified Seasonal Energy Efficiency Ratio (SEER) rated equipment in the design, but the equipment installed uses a SEER2 rating.

The Department of Energy’s (DOE) [published final rule of increased efficiency standards](https://www.regulations.gov/document/EERE-2014-BT-STD-0048-0102) for residential air conditioners and heat pumps takes effect on January 1, 2023, can be found at <https://www.regulations.gov/document/EERE-2014-BT-STD-0048-0102>. The updated [DOE test procedure \(PDF\)](#) is used to determine new product efficiency ratings and is intended to be more representative of installations in homes. The [URL for the test procedures can be found here \(PDF\)](#). As part of the update, SEER, energy efficiency ratio (EER), and heating seasonal performance factor (HSPF) ratings will no longer be used and will be replaced by new ratings SEER2, EER2, and HSPF2. This new system of measurement will apply to all single-phase air conditioners and heat pumps less than 65,000 Btu per hour.

Air conditioners that are installed in California on or after January 1, 2023, must comply with the new standards. Heat pumps are allowed a sell-through provision where the new standards apply to products manufactured on or after January 1, 2023. HVAC manufactures have been preparing for these changes and have products using the SEER2, EER2, and HSPF2 ratings.

In a scenario where SEER rated equipment is specified in the project design on the residential certificate of compliance (CF1R) and equipment with only a SEER2 rating is installed and reported on the certificate of installation (CF2R), Table 1 may be used to convert the manufacturer’s SEER2 rating value to a SEER rating value to determine if the installed equipment is compliant with the Energy Code.

Table 1. Equations Used to Convert Respective Ratings

System Type	Equation
Split System Air Conditioner and Heat Pump	SEER = SEER2 X 1.05
Split System Air Conditioner and Heat Pump	EER = EER2 X 1.04
Split System Air Conditioner and Heat Pump	HSPF = HSPF2 X 1.17
Packaged Air Conditioner and Heat Pump	SEER = SEER2 X 1.04
Packaged Air Conditioner and Heat Pump	EER = EER2 X 1.04
Packaged Air Conditioner and Heat Pump	HSPF = HSPF2 X 1.18

Space Constrained System	SEER = SEER2 X 1.01
Space Constrained System	HSPF = HSPF2 X 1.17
Small Duct High Velocity System	SEER = SEER2 X 1.00
Small Duct High Velocity System	HSPF = HSPF2 X 1.18

Source: California Energy Commission

The installer performs the conversion when completing the CF2R. The actual SEER2 rating value must be included in the form notes as “SEER2 rating = XX.X” and the converted SEER rating value must be entered in the efficiency value field.

The building official must be able to confirm that the SEER2 rating of the equipment installed on site matches the SEER2 rating value included in the form notes and that the SEER rating value is converted accurately using Table 1.

The same method described above can be used to demonstrate compliance for the EER2 and HSPF2 ratings.

The Energy Standards Hotline (title24@energy.ca.gov) is available to help with Energy Code (Title 24, Part 6) questions.

[For more information on the DOE’s new federal standards.](#)

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