2024 IECC

NBI, representing the California Statewide Utility Codes and Standards Team, has submitted public comments into the ICC process to advance the 2024 IECC. The proposed public comments cover a wide range of measures and improve the code by adding additional efficiency, clarifying requirements, and creating greater flexibility for code users and local jurisdictions. Learn more at newbuildings.org/code_policy/2024-iecc-national-model-energy-code-base-codes.

Revise text as follows:

Efficient HVAC equipment efficiency option in R408 - R408.2.2

(ALL NEW STRIKEOUTS AND NEW LANGUAGE IN RED)

R408.2.2 More efficient HVAC equipment performance option. Heating and cooling equipment shall meet one of the following efficiencies

~~Centrally Ducted Systems:~~

1. Greater than or equal to ~~95 AFUE natural gas furnace and~~ 16 ~~SEER (15.2 SEER2) and 12 EER (11.5 EER2) air conditioner~~ 15.2 SEER2 air conditioner.
2. Greater than or equal to 18 SEER (16.9 SEER2) ~~and 14 EER (13.4 EER2)~~ air conditioner.

~~3. Greater than or equal to 92 AFUE natural gas furnace.~~

~~4~~3. Greater than or equal to ~~95~~ 96 AFUE natural gas furnace and 15.2 SEER2 in Climate Zones 5, 6 and 7

~~5~~4. Greater than or equal to ~~95~~ 96 AFUE natural gas furnace and 16.0 SEER2 in other Climate Zones for air conditioner.

~~6~~5~~.~~ Greater than or equal to ~~95~~ 96 AFUE natural gas furnace and 8.5 HSPF2~~/~~and 16.0 SEER2 air source heat pump.

~~7~~6. Greater than or equal to 96 AFUE natural gas furnace.

~~8. Greater than or equal to 8.5 HSPF2/16.0 SEER2 air source heat pump.~~

~~9~~7. Greater than or equal to 9 HSPF (~~7.6~~ 8.1 HSPF2) ~~/~~and 16 SEER (15.2 SEER2) air source heat pump.

~~14~~8. Greater than or equal to ~~Multi Zone:~~ 8.5 HSPF2~~/~~and 15.2 SEER2 ~~variable speed~~ air source heat pump ~~(Ducted or Mixed Indoor Units)~~

~~10~~9. Greater than or equal to 10 HSPF (8.5 HSPF2) ~~/~~and ~~16~~ 18 SEER (~~15.2~~ 16.9 SEER2) air source heat pump.

10. Greater than or equal to 8.5 HSPF2 and 18.7 SEER2 air source heat pump

11. Greater than or equal to 3.5 COP ground source heat pump.

~~Ductless Systems:~~

~~12. Single Zone: 8.5 HSPF2/16.9 SEER2 variable speed air source heat pump.~~

~~13. Multi Zone: 8.5 HSPF2/16.9 SEER2 variable speed air source heat pump (Non-Ducted Indoor Units).~~

~~14. Multi Zone: 8.5 HSPF2/15.2 SEER2 variable speed air source heat pump (Ducted or Mixed Indoor Units)~~

~~For multiple cooling systems, all systems shall meet or exceed the minimum efficiency requirements in this section and shall be sized to serve 100 percent of the cooling design load. For multiple heating systems, all systems shall meet or exceed the minimum efficiency requirements in this section and shall be sized to serve 100 percent of the heating design load.~~

Reason Statement: We recommend:

1. Option 3: Remove the option as the proposed level of 92 AFUE is below minimum Energy Conservation Standard (ECS) proposed in DOE's current consumer furnace rulemaking which DOE agreed to wrap up by September 2023. The intention of R408 is to go beyond minimum performance and thus we cannot support levels that are likely below levels under consideration for minimum ECS.
2. Option 4, 5 and 6: Update gas furnace efficiency from 95 AFUE to 96 AFUE to keep the option above DOE minimum levels, which is 95 AFUE.
3. Update Option 9 from 7.6 HSPF2 and 15.2 SEER2 to 8.1 HSPF2 and 15.2 SEER2 to align with Energy Star ducted cold climate heat pump levels established in Specification v. 6.1 (revised January 2022, effective January 1, 2023).
4. Introduce an additional option 8.5 HSPF2 and 18.7 SEER2 to align with Energy Star Most Efficient levels for Ductless CAC or heat pumps (effective January 1, 2023).
5. Update Option 10 from 8.5 HSPF2/16 SEER2 to 8.5 HSPF2/16.9 SEER2 to offer an intermediate option for air source heat pump.
6. Remove Option 12 and Option 13. The efficiency levels for Option 12 and 13 will represent the updated Option 9 above. Energy modeling analysis does not account for duct configurations, thus, will not have impact on energy savings or points.
7. Recommend making all options technology neutral and removing the delineation between centrally ducted and ductless systems.
8. Merge Option 14 - 8.5 HSPF2 and 15.2 SEER2 variable speed heat pump and Option 8 - 8.5 HSPF2 and 16 SEER2 air source heat pump such that it is technology neutral and aligns with Energy Star levels. Energy Star recommends 8.5 HSPF2 and 15.2 SEER2 for Heat Pump Split (Non-Ducted) system

