

2021 Seattle Energy Code Key Changes

Key changes to the 2021 Seattle Energy code Commercial provisions are listed below.

[W] indicates a significant WA state code change.

[S] indicates a significant Seattle code change.

- C202 Definition of Residential Building. Residential buildings have been redefined to exclude most low-rise multifamily, so that all multifamily buildings must use commercial energy code (except low-rise buildings with units accessed from exterior walkways). [W]
- **C401.3 Fossil Fuel Compliance Path added**, permitting use of fossil fuel space heating and water heating equipment with additional efficiency credits. [W]
- **C403.3.5.5. Modifications to the DOAS Requirements.** Permits supplemental DOAS heating using electric heat pumps for DOAS serving spaces with only zonal heating systems. [S]
- **C404.3.3. Plumbing code Appendix M for multifamily.** Requires use of Seattle Plumbing Code Appendix M for sizing hot water distribution systems piping. [S]
- Tables C405.4.2(1) and C405.4.2(2) Lighting Power Allowances. Lighting power allowance (LPA) table based on 2022 ASHRAE table, with 5% reduction. This approximates the 2018 Seattle code level of stringency. The ASHRAE LPA values remain unchanged for healthcare, pharmacy, and correctional facilities. [S]
- **C405.14.1 Electric-ready commercial kitchen.** Commercial kitchens in new buildings must have electrical capacity for future electrification of any gas cooking appliances. [S]
- C406 Efficiency credits table. Reorganized and expanded, added "load management" credit requirement. [W]
- C406 Submetering for multifamily: 2021 SEC has an alternative option for multifamily buildings
 large enough to be subject to the state code submetering requirements. Such buildings can now
 provide additional solar or achieve other credits from the C406 efficiency credits table in lieu of
 submetering. This option maintains the stringency of the state code, while still providing alternate
 compliance options. [S]
- C407 Building Performance Pathways. The Building Performance Targets in the 2021 WA code
 have been adjusted for R-1 hotel and R-2 Multifamily. These changes maintain 2018 SEC efficiency
 for R-1 Hotel and R-2 Multifamily occupancies. For all other occupancies, this amendment will
 match WA State Code. The state adjusted targets for most occupancies and added a "site energy
 use" target. [S]/[W]
- **C407.3.1 Limits on substandard building envelopes.** The total UxA for the building envelope is not permitted to be more than 10% higher than allowed by prescriptive compliance [S]
- **C408 Commissioning.** New post-occupancy commissioning compliance rules added to ensure completion of commissioning work. [S]
- **C411.1 On-site renewable energy.** Threshold for compliance is 5,000 sf [S]. The solar requirement is 0.5 W/sf [W], with additional C406 credit systems allowed as an alternative [S]. Affordable housing

- is exempt, and other projects are permitted to gift their required solar to affordable housing [S]. Error in 2021 WSEC Section C411.1.1 corrected [S].
- C503.4.3.1 Addition of new or replacement of existing air-cooled chiller systems. Requires that air-cooled chiller replacements be made with heat pumps, controlled to serve as the first stage of heating [S].
- **C503.4.6** Provides several new compliance options for replacement of central HVAC gas and electric resistance heating equipment with heat pumps [S]:
 - Exempts affordable housing, hospitals, nonprofits, and buildings that would require certain costly utility service upgrades.
 - o Allows buildings to retain 50% of their existing gas heating capacity.
 - Allows emergency replacements of gas equipment, using either a TCO (temporary certificate of occupancy) or a performance bond that requires the heat pump installation within 4 years.
 - Each of the above requires a "future decarbonization plan" that includes an engineered schematic design and cost estimate for future conversion to heat pumps.
- **C503.5.1.** New compliance options for replacement of gas and electric resistance heating equipment for central service water heating systems (similar to C503.4.6) [S].