- WAC 194-50-040 ASHRAE Standard 100, 2018—Section 4—Compliance requirements.
- **4.1.1.1** A building or complex of buildings whose majority of gross floor area has activities in Table 7-1 shall comply with the requirements of Sections 4.2 and 4.3.
- **4.1.1.2 For Tier 1 covered buildings,** the *qualified person* determining compliance shall:
- 1. Determine whether or not the building seeking compliance has an energy use intensity target ( $EUI_t$ ) according to Section 7;
- 2. Establish the energy use intensity target (EUI $_{\rm t}$ ) according to Section 7; and
  - 3. Submit forms as specified in Normative Annex Z to the AHJ.
- **4.1.1.3 For Tier 2 covered buildings,** the qualified energy manager submitting compliance documents shall:
- 1. Determine whether or not the *building* seeking compliance has an energy use intensity target  $(EUI_{+})$  according to Section 7;
- 2. Establish the energy use intensity target ( $EUI_t$ ) according to Section 7; and
  - 3. Submit forms as specified in Normative Annex Y to the AHJ.

## 4.1.2 Residential building.

- **4.1.2.1** A multifamily residential building or complex of multifamily residential buildings shall comply with the requirements of Sections 4.2 and 4.3.
- **4.1.2.2 For Tier 2 covered buildings,** the qualified energy manager submitting compliance documents shall:
- 1. Determine whether or not the *building* seeking compliance has an energy use intensity target  $(EUI_{t})$  according to Section 7;
- 2. Establish the energy use intensity target ( $EUI_t$ ) according to Section 7; and
  - 3. Submit forms as specified in Normative Annex Y to the AHJ.
- 4.1.3 Buildings with residential and nonresidential activities Not adopted.
- 4.1.4 District energy systems decarbonization.
- **4.1.4.1** Participating campuses shall comply with the requirements of Sections 4.2 and 4.3.
- **4.1.4.2 For** *participating campuses*, the *qualified person* determining compliance shall:
- 1. Determine whether or not the campus seeking compliance has an energy use intensity target (EUI $_t$ ) according to Section 7;
- 2. Establish the energy use intensity target ( $EUI_t$ ) according to Section 7;
- 3. Submit forms in accordance with Normative Annex W to the AHJ; and
- 4. Submit decarbonization plan as specified in Normative Annex W to the AHJ.
- **4.2.1 Operations and maintenance.** The *building manager* shall comply with the operations and maintenance (O&M) requirements of Section 6.
- **4.2.1.1 For** *Tier 1 covered buildings*, the *qualified person* determining compliance shall state in writing on Form A that the operating and maintenance requirements of Section 6 have been met:

- 1. For first-time *Tier 1 covered buildings* applicants, for the previous year.
- 2. For previously compliant *buildings*, since the previous validation of compliance.
- **4.2.1.2 For Tier 2 covered buildings,** the qualified energy manager submitting compliance documents shall state in writing on Form A that the operating and maintenance requirements of Section 6 have been met:
- 1. For first-time *Tier 2 covered buildings* applicants, by the compliance date.
- 2. For previously compliant *buildings*, since the previous validation of compliance.
- **4.2.1.3 For** *grouped buildings*, the *qualified person* determining compliance shall state in writing on Form J, that the operating and maintenance requirements of Section 6 have been met:
- 1. For first-time grouped buildings applicants, follow the compliance schedules in:
  - a. Section Z3.2 for Tier 1 covered buildings;
  - b. Section Y3.2 for Tier 2 covered buildings; and
- c. For participating campuses only by July 1, 2030, for buildings not covered, connected to the district energy system.
- 2. For previously compliant *grouped buildings*, since the previous validation of compliance.
- **4.2.1.4 For** grouped buildings, the qualified person determining compliance may submit a single O&M program. The O&M program implemented for participating campuses through a decarbonization plan shall include all campus buildings. The O&M program implemented at a connected building or campus-level shall include all covered buildings.
- **4.2.2 Energy management plan.** The *building manager* shall comply with the energy management plan (EMP) requirements of Section 5.
- **4.2.2.1** For *Tier 1 covered buildings*, the *qualified person* determining compliance shall state in writing on Form A that the EMP described in Section 5 has been developed and is being maintained as of the date on Form A.
- **4.2.2.2 For Tier 2 covered buildings**, the qualified energy manager submitting compliance documents shall state in writing on Form A that the EMP described in Section 5 has been developed and is being maintained as of the date on Form A.
- **4.2.2.3 For** *grouped buildings*, the *qualified person* determining compliance shall state in writing on Form J, that the EMP described in Section 5 has been developed and is being maintained as of the date on Form J.
- **4.2.2.4 For** *grouped buildings*, the *qualified person* determining compliance may submit a single EMP. The EMP implemented for *participating campuses* through a *decarbonization plan* shall include all *campus buildings*. The EMP implemented at a *connected building* or campus-level shall include all *covered buildings*.
- 4.3 Building energy use.
- 4.3.1 Measured EUI.
- **4.3.1.1 For Tier 1 covered buildings**, the *qualified person* shall calculate the *building's* measured *energy use intensity* (EUI) by completing Form C according to Section 5.2.

- **4.3.1.2 For Tier 2 covered buildings**, the qualified energy manager submitting compliance documents shall calculate the building's measured energy use intensity (EUI) by completing Form C according to Section 5.2.
- **4.3.1.3 For** *grouped buildings*, the *qualified person* submitting compliance documents shall calculate the *grouped buildings'* measured *energy use intensity* (*EUI*) by completing Form C according to Section 5.2.
- **4.3.2** Buildings with energy targets. Covered buildings with energy targets must meet all the criteria for developing an energy target in Section 7.2 Determining energy use intensity target ( $EUI_t$ ) and provide energy use data as specified by Section 5.2 Building energy monitoring. All other buildings shall comply with Section 4.3.3, Buildings without energy targets. Tier 2 covered buildings are not required to meet the target as they are exempt from Sections 4.3.2.1 through 4.3.2.3.
- **4.3.2.1** Building meets the energy target (EUI<sub>t</sub>). If the Tier 1 covered building's measured weather normalized energy use intensity (WNEUI) is less than or equal to its energy target (EUI<sub>t</sub>), the building complies.
- **4.3.2.2 Tier 1 covered building does not meet the energy use intensity target (EUI**<sub>t</sub>). A qualified energy auditor shall complete an energy audit according to Section 8, and *EEMs* that will reduce energy use to meet the energy target shall be implemented according to Section 9. Upon completion of the implementation of all required *EEMs*, a building shall be granted conditional compliance.

## Exceptions to 4.3.2.2:

- 1. More recently built buildings: For buildings that exceed the target developed in accordance with Section 7.2.1.1, but do not exceed the target developed in accordance with Section 7.2.1, the owner may demonstrate compliance by recommissioning the building using the existing-building commissioning process. The commissioning process consists of the following:
- a. A certified commissioning professional shall implement the building commissioning process specified by the most recent edition of the Washington state energy code. The energy code commissioning process shall be modified by the certified commissioning professional for recommissioning purposes as described in ASHRAE Guideline 0.2-2015 Commissioning Process for Existing Systems and Assemblies and ASHRAE Guideline 1.2-2019 Technical Requirements for the Commissioning Process for Existing HVAC&R Systems and Assemblies.
- b. Washington state energy code (WSEC) exceptions based on mechanical system or service water heating capacity shall not be applied when developing the scope for commissioning. For example, the 2018 WSEC, Section C408.1 General, the exceptions do not apply.
- c. All deficiencies found during the commissioning process shall be resolved including corrections and retesting prior to submitting documentation for compliance or *conditional compliance*.
- d. Building owners may omit capital expenditures identified by the commissioning process that are not cost-effective, as documented using the procedures in Normative Annex X.
- 2. No individual requirement need be met that would compromise the historical integrity of a *building* or part of a *building* designated by a government body for long-term preservation in its existing state, such as historical monuments. *EEMs* that can be implemented

without modifying historical parts of the *building* shall be implemented as required by this standard. Documentation of historic significance must be provided to the *AHJ* by submitting Form G in accordance with Normative Annex Z.

- **4.3.2.3 Verification of compliance.** Within 15 months after the completion of Section 4.3.2.2, the weather normalized energy use intensity (WNEUI) shall be recalculated by the energy manager (EM) from 12 consecutive months of measured energy use, and Form A shall be resubmitted to the AHJ. If the building's post-implementation measured EUI is less than or equal to the energy target (EUI<sub>t</sub>), the building complies with the standard. If the building's post-implementation measured EUI is greater than the energy target (EUI<sub>t</sub>), the building does not comply with the standard and the conditional compliance is suspended until either:
- a. Additional  $\it EEMs$  have been implemented that reduce the subsequently measured  $\it EUI$  to below the energy target ( $\it EUI_t$ ) and a new Form A is submitted to the  $\it AHJ$ ; or
  - b. The AHJ revokes conditional compliance.

## 4.3.3 Buildings without energy targets.

Exception to 4.3.3: Tier 2 covered buildings.

- **4.3.3.2 Implement EEMs.** The entire optimized bundle of EEMs identified shall be implemented. Upon completion of the implementation of the optimized bundle of EEMs and the energy management plan, including the operations and maintenance program, is in place as directed by Section Z4.5, a building shall be granted conditional compliance in accordance with Section 9.1.1.2.
- **Exception to 4.3.3.2:** No individual requirement need be met that would compromise the historical integrity of a *building* or part of a *building* designated by a government body for long-term preservation in its existing state, such as historical monuments. Documentation of historic significance must be provided to the *AHJ* by submitting Form G in accordance with Normative Annex Z.
- 4.3.3.3 Verification of compliance for buildings with building energy monitoring in compliance with Section 5.2. If the building complies with Section 4.2, then within 15 months following the completion of implementation of the optimized bundle of EEMs, building owners with conditional compliance or the qualified person representing the building owner shall submit verification that measured post-implementation energy savings meet or exceed 75 percent of the energy savings projected in the energy audit report to the AHJ. Energy savings shall be compared at the whole-building consumption level in common units for electricity, fossil fuels, and other sources. If the measured post-implementation energy savings of the package of EEMs do not meet or exceed 75 percent of the energy savings projected in the energy audit, the conditional compliance is suspended until one of the following:
- a. Additional cost-effective *EEMs* are implemented that reduce the subsequently measured energy savings of the package of *EEMs* so that it meets or exceeds 75 percent of the energy savings projected in the energy audit; or
- b. Verification of energy savings using the methods of the International Performance Measurement & Verification Protocol, Concepts and Options for Determining Energy and Water Savings Volume I, options A through D. If the measurement and verification protocol identified any

outstanding performance issues, they shall be corrected and the verification protocol shall be repeated to ensure optimal performance; or c. The AHJ revokes conditional compliance.

- **4.3.3.4** Verification of compliance for buildings without building energy monitoring in compliance with Section 5.2. Verification of energy savings using the methods of the *International Performance Measurement & Verification Protocol, Concepts and Options for Determining Energy and Water Savings Volume I options A through D. If the measurement and verification protocol identified any outstanding performance issues, they shall be corrected and the verification protocol shall be repeated to assure savings estimated in the original audit are realized.*
- **4.4.1** Administrative requirements. Building owners shall demonstrate compliance with the standard by following the administrative requirements in Normative Annex Z for Tier 1 covered buildings or Normative Annex Y for Tier 2 covered buildings, including:
  - **Z2/Y2** "Building owner response to notifications."
- **Z3/Y3** "Washington state reporting requirements for *building* owners."
  - Z4/Y4 "Documentation of compliance with the standard."
- **Z5/Y5** "Violations, assessment of administrative penalties, mitigation and review of penalty decisions."
  - **Z6/Y6** "Compliance forms."
  - **Z7/Y7** "Section 7 tables as modified by Washington state."
- 4.4.2 Alternative energy targets (EUI<sub>+</sub>) Not adopted.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-040, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-040, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-040, filed 10/30/20, effective 11/30/20.]