

WAC 194-50-090 ASHRAE Standard 100, 2018—Section 9—Requirements.

9.1.1 Requirements. *Buildings* that have an *energy target* shall comply with the requirements of Section 9.1.1.1. *Buildings* that do not have an *energy target* shall comply with the requirements of Section 9.1.1.2. All *buildings* shall implement an energy management plan as described in Section 5. The energy management plan shall be integrated into the *building's capital management plan* as described in Section 5. The energy management plan shall include the elements listed in Section 5.

9.1.1.1 Buildings with energy targets. For buildings having energy targets, energy efficiency measures (EEMs) identified from the energy audit shall be implemented in order to meet the building's energy target. Develop a written plan for maintaining the building's energy-use intensity (EUI) at or below the energy target.

Exceptions to Section 9.1.1.1:

1. Buildings may demonstrate compliance by implementing all of the EEM's that achieve the investment criteria in Normative Annex X.

2. Implementation of *EEMs to campus district heating and/or cooling system(s)* in lieu of *EEMs* implemented directly to campus buildings is acceptable provided the energy audit demonstrates the energy savings from the *campus district heating and/or cooling system EEMs* will be greater than the *EEMs* identified for the buildings. Energy savings shall be measured as a reduction in Btu per year.

9.1.1.2 Buildings without energy targets. *Buildings* that do not have an *energy target* shall implement all of the *EEMs* that achieve the investment criteria in Normative Annex X.

Exception to 9.1.1.2: Implementation of *EEMs to campus district heating and/or cooling system(s)* in lieu of *EEMs* implemented directly to campus buildings is acceptable provided the energy audit demonstrates the energy savings from the *campus district heating and/or cooling system EEMs* will be greater than the *EEMs* identified for the buildings. Energy savings shall be measured as a reduction in Btu per year.

9.1.1.2.1 - Not adopted.

9.1.1.2.2 - Not adopted.

9.1.2.1 Training of Building Staff. An ongoing written training plan shall be implemented. *Building* occupants and staff shall be trained, at a minimum, as established by the operations and maintenance (O&M) program defined in Section 6.

9.1.2.3 Implementation and commissioning of EEMs. *EEMs* shall be implemented and commissioned in accordance with the Washington State Energy Code. 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. The *qualified energy auditor* or *qualified person* shall review the commissioning report and certify that the *EEMs* are functioning as intended.

Informative Note: For guidance on commissioning protocols, refer to 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.

9.1.2.4 Energy efficiency sequencing. Implementation of *EEMs* shall be prioritized to take advantage of the life cycle of *building* systems and to minimize the disruption of *building* occupants. Delayed implementation shall be evaluated using the methodology included in Normative Appendix X and reported in the energy management plan.

9.2.2 Verification of implemented EEMs for Buildings without Energy Targets. Upon implementation of *EEMs*, the affected end-use systems shall be monitored for one year to verify *EEM* energy savings. The *qualified energy auditor* or *qualified person* shall review the results of the *EEM* energy monitoring and certify that the energy savings of the package of *EEMs* meets or exceeds 75% of the energy savings projected in the energy audit as required. For *buildings* unable to meet the requirements of Section 5.2 Building energy monitoring, the *qualified energy auditor* or *qualified person* shall provide verification using the methods of the *International Performance Measurement & Verification Protocol, Concepts and Options for Determining Energy and Water Savings Volume I*¹¹ options A through D.

9.3 Compliance. The *qualified person* shall complete the compliance documentation as required in Normative Annex Z.

ASHRAE Standard 100, 2018—Section 10 - Not adopted.

[Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-090, filed 10/30/20, effective 11/30/20.]