

WAC 194-50-070 ASHRAE Standard 100, 2018—Section 7—Energy use analysis and target requirements.

7.1 Building activity type and energy targets.

7.1.1 Building activity type. *Buildings* are divided into activity types as shown in Table 7-1 Normative Annex Z. Building activity types are defined by the *AHJ* in Table 7-4.

7.1.2 Energy targets. Energy targets for each building activity type are listed in Table 7.2a, Normative Annex Z.

7.1.3 Building operating shifts normalization factors. *Building* operating shifts normalization factors for each building activity type are listed in Table 7-3, Normative Annex Z.

7.2.1 For *Tier 1 covered buildings* the *qualified person* or for *Tier 2 covered building* the *qualified energy manager* shall determine the *energy use intensity target (EUI_t)* according to Section 7.2.2 for *single-type/activity buildings* and Section 7.2.3 for *mixed-use buildings*, and shall complete Form B.

Note: *Covered buildings* pursuing compliance at the *connected building* level shall determine the *EUI_t* at the *connected building* level.

Exceptions to 7.2.1:

1. *Tier 2 covered buildings* unable to develop *EUI_t* in accordance with Section 7.2.2 or 7.2.3 of this standard shall report Energy Star portfolio manager median site *EUI*.

2. *EUI_t* programs developed and implemented by the *building's* local government and approved as equivalent or more stringent by the *AHJ* may be used as an alternative to the requirement in Section 7.2.1.

7.2.1.1 Additional target for more recently built buildings: In addition to the requirements of section 7.2.1, *more recently built buildings* shall create a second *EUI_t* that is 15 percent less than the target developed for compliance with section 7.2.1. This shall be the *building EUI_t* and shall be included on Form B.

7.2.2 Energy targets for *buildings* with a single activity shall be calculated as follows:

$$(EUI_t) = S \times (EUI_{t1})$$

where (EUI_{t1}) is the *building* activity energy target value in Table 7-2a for the appropriate *building* activities/types and climate, and S is the *building* operating shifts normalization factor in Table 7-3.

7.2.3 Energy targets for *buildings* with multiple activities shall be determined using weighted averages of *building* activity energy target for each area with a single activity, per the following equation, and reported on Normative Annex C Form B:

$$EUI_t = (A \times S \times EUI_{t1})_1 + (A \times S \times EUI_{t1})_2 + \dots + (A \times S \times EUI_{t1})_i + \dots + (A \times S \times EUI_{t1})_n$$

Where:

- $(A)_i$ = percentage of the *gross floor area* with single *building* activity i
- $(EUI_{t1})_i$ = *building* activity target from Table 7-2a for space i
- $(S)_i$ = operating shifts normalization factor from Table 7-3 for space i
- $(A \times S \times EUI_{t1})_i$ = the weighted space *EUI* target for space i

Exceptions to 7.2.3: The energy use intensity target (EUI_t) of a building may be modified using the following exceptions. None of these exceptions may be used to change the total gross floor area as it applies to Normative Annex Z, Z3.1 Compliance schedule.

1. Spaces where more than 75 percent of the gross floor area has a single building activity listed in Table 7-1 shall be reported as a single-use building or as a multiuse building in accordance with either Section 7.2.2 or Section 7.2.3.

2. Spaces less than 10 percent of the gross floor area with building activity listed in Table 7-1 can combine their floor area with the floor area within the building that has a similar building activity and similar EUI_t as determined by the qualified person.

3. Spaces in buildings with multiple activities that are not listed in Table 7-1 and have a total combined area $\Sigma A_{nontarget}$ comprising less than 10 percent of the building gross floor area A_{gross} can be excluded from building energy target calculations if the energy use of such space is metered separately and the nontarget spaces comply with Sections 4.1 and 4.2. The energy target for the remaining part of the building shall be calculated after deducting the unlisted building type floor area from the building gross floor area ($A_{gross} - \Sigma A_{nontarget}$). Nontarget spaces shall be limited to the floor area occupied by the nontarget activity and shall not include supporting spaces such as corridors, common areas or other space types listed in Table 7-1.

4. Spaces in buildings with multiple activities that are not listed in Table 7-1 and have a total combined area $\Sigma A_{nontarget}$ comprising less than 50 percent of the building gross floor area A_{gross} can be excluded from building energy target calculations if the energy use of such space is metered separately and the nontarget spaces comply with Sections 4.1, 4.2, 4.3.1, and 4.3.3. The energy target for the remaining part of the building shall be calculated after deducting the unlisted building type floor area from the building gross floor area ($A_{gross} - \Sigma A_{nontarget}$). Nontarget spaces shall be limited to the floor area occupied by the nontarget activity and shall not include supporting spaces such as corridors, common areas or other activity types listed in Table 7-1.

7.2.4 Energy targets for vacant and partially vacant buildings.

Exception to 7.2.4 Vacant and partially vacant buildings: If the building did not have physical occupancy by owner or tenant for at least 50 percent of the conditioned floor area throughout the consecutive 12-month period prior to the building compliance date, the building owner may apply for an exemption as specified in Normative Annex Z.

7.2.4.1 The energy target for vacant spaces shall be based on its pre-vacancy activity if the intended use of the building will be unchanged.

7.2.4.2 If the total floor area of a nonheated, noncooled, and nonilluminated vacant part of a building is smaller than 30 percent of the gross floor area, then it shall be excluded from the gross floor area, and the energy target shall be determined based on the remainder of the building as described in Section 7.2.3. This allowance may not be used to change the total gross floor area as it applies to Normative Annex Z, Z3.1 Compliance schedule.

7.2.4.3 If the vacant part of a *building* is heated and/or cooled and the *building* energy use data for 12 consecutive month period when the *building* was occupied within two years prior to the compliance date is not available, compliance for this part of the *building* will be determined after it becomes occupied and energy use data for 12 consecutive months becomes available.

Table 7-1 Building Activity Types/Activities

Table 7-1 adopted as modified and published in Section Z7

Table 7-2a Building Activity Site Energy Targets (EUI_{t1}) (I-P Units)

Table 7-2a adopted as modified and published in Section Z7

Table 7-2a Building Activity Site Energy Targets (EUI_{t1}) (SI Units) - Not adopted

Table 7-2b Building Activity Source Energy Targets (EUI_{t1}) (I-P Units) - Not adopted

Table 7-2b Building Activity Source Energy Targets (EUI_{t1}) (SI Units) - Not adopted

Table 7-2c Building Activity Electricity Site Energy Use Targets (ELUI_{t1}) (I-P Units) - Not adopted

Table 7-2c Building Activity Electricity Site Energy Use Targets (ELUI_{t1}) (SI Units) - Not adopted

Table 7-2d Building Activity Fossil Fuel Site Energy Use Targets (FEUI_{t1}) (I-P Units) - Not adopted

Table 7-2d Building Activity Fossil Fuel Site Energy Use Targets (FEUI_{t1}) (SI Units) - Not adopted

Table 7-3 Building Operating Shifts Normalization Factor

Table 7-3 adopted as modified in Section Z7

Table 7-4 Building Activity Type Definitions Table

[Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-070, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-070, filed 10/30/20, effective 11/30/20.]