

**INTERPRETATION IC 90.1-2019-17 OF  
ANSI/ASHRAE/IES STANDARD 90.1-2019  
Energy Standard for Buildings Except Low-Rise Residential Buildings**

**Date Approved:** February 18, 2025

**Request from:** Aaron McEwin, Jordan & Skala Engineers, Inc., 6201 West Plano Pkwy, Suite 250, Plano, TX 75093.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2019, Sections 8.4.3.2 and 10.4.6.2, regarding the definition of common area as it relates to *Residential building*.

**Background:** In ASHRAE Standard 90.1-2019 and 2022, Section 8.4.3 and Section 10.4.6 have an exception for *Residential buildings* with less than 10,000 ft<sup>2</sup> of common area.

**8.4.3 Electrical Energy Monitoring**

**8.4.3.1 Monitoring**

Measurement devices shall be installed in new *buildings* to monitor the electrical *energy* use for each of the following separately:

- a. Total electrical *energy*
- b. HVAC systems
- c. Interior lighting
- d. Exterior lighting
- e. Receptacle circuits

For *buildings* with tenants, these *systems* shall be separately monitored for the total *building* and (excluding shared *systems*) for each individual tenant.

---

**Exception to 8.4.3.1**

Up to 10% of the load for each of the categories (b) through (e) shall be allowed to be from other electrical loads.

---

**8.4.3.2 Recording and Reporting**

The electrical *energy* use for all loads specified in Section 8.4.3.1 shall be recorded a minimum of every 15 minutes and reported at least hourly, daily, monthly, and annually. The data for each tenant *space* shall be made available to that tenant. In *buildings* with a digital *control system* installed to comply with Section 6.4.3.10, the *energy* use data shall be transmitted to the digital *control system* and graphically displayed. The *system* shall be capable of maintaining all data collected for a minimum of 36 months.

---

**Exceptions to Sections 8.4.3.1 and 8.4.3.2**

1. *Building* less than 25,000 ft<sup>2</sup>.
  2. Individual tenant *spaces* less than 10,000 ft<sup>2</sup>.
  3. *Dwelling units*.
  4. *Residential buildings* with less than 10,000 ft<sup>2</sup> of common area.
  5. Critical and *Equipment* branches of NEC Article 517.
-

#### 10.4.6 Whole-Building Energy Monitoring

Measurement devices shall be installed at the *building* site to monitor the *energy* use of each new *building*.

##### 10.4.6.1 Monitoring

Measurement devices shall be installed to monitor the *building* use of the following types of *energy* supplied by a utility, *energy* provider, or plant that is not within the *building*:

- a. Natural gas
- b. *Fuel* oil
- c. Propane
- d. Steam
- e. Chilled water
- f. Hot water

##### 10.4.6.2 Recording and Reporting

The *energy* use of each *building* on the *building* site shall be recorded at a minimum of every 60 minutes and reported at least hourly, daily, monthly, and annually. The *system* shall be capable of maintaining all data collected for a minimum of 36 months and creating user reports showing at least hourly, daily, monthly, and annual *energy* consumption and *demand*.

---

##### Exceptions to 10.4.6.1 and 10.4.6.2

1. *Buildings* or additions less than 25,000 ft<sup>2</sup>.
  2. Individual tenant *spaces* less than 10,000 ft<sup>2</sup>.
  3. *Dwelling units*.
  4. *Residential buildings* with less than 10,000 ft<sup>2</sup> of common area.
  5. *Fuel* used for on-site emergency *equipment*.
- 

*Building* is defined in ASHRAE 90.1.

***building***: any structure used or intended for supporting or sheltering any use or occupancy.

*Residential* is defined in ASHRAE 90.1.

***residential***: *spaces* in buildings used primarily for living and sleeping. *Residential spaces* include, but are not limited to, *dwelling units*, hotel/motel guest rooms, dormitories, nursing homes, patient rooms in hospitals, lodging houses, fraternity/sorority houses, hostels, prisons, and fire stations.

**Residential Building** is not defined in ASHRAE 90.1.

The IBC 2021 provides a residential occupancy classification Group R in section 310: Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the International Residential Code. Group R occupancies not constructed in accordance with the International Residential Code as permitted by Sections 310.4.1 and 310.4.2 shall comply with Section 420.

Building Area is defined in IBC 2021:

**AREA, BUILDING**. The area included within surrounding exterior walls, or exterior walls and fire walls, exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above.

**Common Area** is not defined in ASHRAE 90.1 nor IBC 2021.

The IBC 2021 does however define the term *Common use*:

[BE] **COMMON USE**. Interior or exterior *circulation paths*, rooms, spaces or elements that are not for public use and are made available for the shared use of two or more people.

**Interpretation No. 1:** “Common area” is not defined in ASHRAE 90.1. The intent of the 10,000 SF “Common Area” is the area within the building not including *residential spaces* including *dwelling units* or guest rooms. It does not include areas that are outside the *building*. Common areas do not include exterior patios, open breezeways, exterior courts such as a *pool*, pool decks, amenity spaces, dog parks, or other outdoor spaces such as parking lots, car ports, trash enclosures.

**Question No. 1:** Is this interpretation correct?

**Answer No. 1:** Yes

**Interpretation No. 2:** Common area is the amenity spaces that are accessible to the public and *residential* tenants and does not include support spaces elevator shafts, utility rooms, storage closets, maintenance spaces, and other back of house areas that are not accessible to the public or *residential* tenants.

**Question No. 2:** Is this interpretation correct?

**Answer No. 2:** No

**Comments No. 2:** Common Area is intended to include all spaces within *Residential buildings* except *dwelling units* and guest rooms.

**Interpretation No. 3:** *Residential buildings* can be separated by fire walls where separate and distinct utility service is provided from utility meter and disconnect switch.

**Question No. 3:** Is this interpretation correct?

**Answer No. 3:** No

**Comments No. 3:** The answer is no because this interpretation does not fall within the scope of Standard 90.1.