

**ERRATA SHEET FOR
ANSI/ASHRAE/ICC/USGBC/IES STANDARD 189.1-2020
Standard for the Design of High-Performance Green Buildings
Except Low-Rise Residential Buildings**

July 25, 2022

The corrections listed in this errata sheet apply to all printings of ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020. The first printing of ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020 is identified as “Product code: 86616 12/20” on the outside back cover. Shaded items have been added since the previously published errata sheet dated August 23, 2021 was distributed.

NOTICE: ASHRAE now has a list server for Standing Standard Project Committee 189.1 (SSPC 189.1). Interested parties can now subscribe and unsubscribe to the list server and be automatically notified via e-mail when activities and information related to the Standard is available. To sign up for the list server please visit **Project Committee List Servers for Standard** on the Technology / Standards section of the ASHRAE website at <https://www.ashrae.org/technical-resources/standards-and-guidelines/project-committee-list-servers>.

Page(s) Erratum

- 43 7.4.3.2 [JO] Ventilation Controls for Densely Occupied Spaces.** Revise Section 7.4.3.2 as shown below. Changes are highlighted in yellow.

(Note: Additions are shown in underline and deletions are shown in ~~strike through~~.)

7.4.3.2 [JO] Ventilation Controls for Densely Occupied Spaces. The requirements in this section supersede those in ANSI/ASHRAE/IES Standard 90.1, Section 6.4.3.8. *Demand control ventilation (DCV)* shall be provided for *densely occupied spaces* served by systems with one or more of the following:

- a. An air-side economizer
- b. *Automatic* modulating control of the *outdoor air* dampers
- c. A design outdoor airflow greater than 1000 cfm (500 L/s)

Exceptions to 7.4.3.2:

1. Systems with exhaust air energy recovery complying with Section 7.4.3.7.
2. Systems with a design outdoor airflow less than 750 cfm (375 L/s).
3. *Spaces* where more than 75% of the *space* design outdoor airflow is used as *makeup air* or *transfer air* to provide *makeup air* for other *spaces*.
4. *Spaces* with one of the following occupancy categories as listed in ANSI/ASHRAE Standard 62.1: cells in correctional facilities; daycare sickrooms; science laboratories; barbershops; beauty and nail salons; and bowling alleys (seating).

The *DCV* system shall be designed to comply with ASHRAE Standard 62.1, Section 6.2.6.1. Occupancy assumptions shall be shown in the design documents for spaces provided with *DCV*. All CO₂ sensors used as part of a *DCV* system or any other system that dynamically controls *outdoor air* shall meet the following requirements:

- a. *Spaces* with CO₂ sensors or air-sampling probes leading to a central CO₂ monitoring station shall be provided with at least one sensor or probe for each 10,000 ft² (1000 m²) of floor *space*. Sensors or probes shall be installed between 3 and 6 ft (1 and 2 m) above the floor.
- b. CO₂ sensors shall have a rated accuracy of ±50 ppm at 1000 ppm.
- b.e. *Outdoor air* CO₂ concentrations shall be determined by one of the following:

1. *Outdoor air* CO₂ concentrations shall be dynamically measured using one or multiple CO₂ sensors. The CO₂ sensor locations shall be identified on the *construction documents*.
 2. When documented statistical data on the local ambient CO₂ concentrations are available, a fixed value typical of the location where the building is located shall be allowed in lieu of an outdoor sensor.
- ~~c.d.~~ Occupant CO₂ generation rate assumptions shall be shown in the design documents.

- 53** **7.4.6.1.2 Exterior LPDs.** Revise Section 7.4.6.1.2 as shown below.
(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

7.4.6.1.2 Exterior LPDs. The exterior lighting power allowance shall be determined using ANSI/ASHRAE/IES Standard 90.1, Section 9.4.2 ~~9.4.3~~, with the following modification. The LPDs from ANSI/ASHRAE/IES Standard 90.1, Table 9.4.2-2, shall be multiplied by the appropriate LPD factor from Table 7.4.6.1.2.

- 64** **8.3.1.6 Humidity Control.** Revise Section 8.3.1.6 as shown below.
(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

8.3.1.6 Humidity Control. The requirements in this section supersede the requirements in ASHRAE Standard 62.1, Section 5.10. Mechanical air-conditioning and evaporative cooling systems shall be designed in accordance with Sections ~~8.3.1.4.1~~ 8.3.1.6.1 and ~~8.3.1.4.2~~ 8.3.1.6.2, as applicable.

- 70** **Table 8.3.4.1.2 Soil-Gas Conveyance Components.** In the second column of Table 8.3.4.1.2 add units for the Minimum Diameter of Pits as shown below.
(Note: Additions are shown in underline.)

16 in. (0.40 m) diameter pit

- 84** **10.1 Scope.** Revise Section 10.1 as shown below.
(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

10.1 Scope. This section specifies requirements covering: the construction process, system start-up and commissioning, tests of completed systems and corrective actions, plans for high performance operation and maintenance of the building and site, energy and water performance verification, service life plans, and transportation management. ~~for construction and plans for operation, including the commissioning (Cx) process, building functional and performance testing (FPT), measurement and verification (M&V), energy use reporting, durability, transportation management, erosion and sediment control, construction, and indoor air quality (IAQ) during construction.~~

- 100** **11. Normative References.** Revise Section 11 as shown below.
(Note: Additions are shown in underline.)

Canadian General Standards Board
Place du Portage III, 6B1
11 Laurier Street
Gatineau, Quebec K1A
1G6 Canada
819-956-0425
www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html

CAN/CGSB 149.10-2019 Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method 10.6