
REQUIREMENT FOR CARBON DIOXIDE (CO₂) MONITORING IN PUBLIC SCHOOLS

Disciplines: All

History: Issued 01/26/21

Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Publications](#) webpages.

PURPOSE

This Interpretation of Regulations (IR) clarifies the requirements established with the passage of Assembly Bill (AB) 841 that amongst other changes added Section 1625 to the California Public Utilities Code. These requirements became effective January 1, 2021 and are intended to meet energy and sustainability mandates and improve indoor air quality standards.

SCOPE

The provisions of this IR apply to all existing classrooms and projects for the construction of new classrooms, and alteration or modernization of existing classrooms as of January 1, 2021.

BACKGROUND

AB 841 (2019-2020 session) amended Part 1 of Division 1 of the Public Utilities Code. Of these amendments, Section 1625 was added and directs that all classrooms, including existing classrooms be equipped with a carbon dioxide (CO₂) monitor as a mechanism for providing and maintaining proper ventilation and indoor air quality.

1. REQUIREMENTS

As of January 1, 2021, all existing classrooms must be equipped with a carbon dioxide (CO₂) monitoring device meeting all of Section 1625.

As of January 1, 2021, plans submitted to DSA for the construction of new classrooms, and alteration or modernization of existing classrooms must include a carbon dioxide (CO₂) monitoring device meeting the requirements of PUC 1625.

PUC 1625 requires CO₂ monitoring devices to meet the following:

- 1.1** The carbon dioxide monitor is hard-wired and mounted to the wall between three and six feet above the floor and at least five feet away from the door and operable windows.
- 1.2** The monitor displays the carbon dioxide readings to the teacher through a display on the device.
- 1.3** The monitor provides a notification through a visual indicator on the monitor, such as an indicator light or other audible or visual alert system when the carbon dioxide levels in the classroom have exceeded 1,100 parts-per million (ppm).
- 1.4** The monitor maintains a record of previous data that includes at least the maximum carbon dioxide concentration measured.
- 1.5** The monitor has a range of 400 ppm to 2000 ppm or greater.

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1.6 The monitor is certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm carbon dioxide concentration and is certified by the manufacturer to require calibration no more frequently than once every five years.

2. PLAN SUBMITTAL

2.1 Plans shall specify the make and model number of the device and a hard-wired connection to a power source.

2.2 Plans shall clearly indicate the location(s) for the CO₂ monitoring device.

References:

California Energy Code (CCR Title 24, Part 6)

California Green Building Code (CALGreen) (Title 24, Part 11)

This IR is intended for use by DSA staff and by design professionals to promote statewide consistency for review and approval of plans and specifications as well as construction oversight of projects within the jurisdiction of DSA, which includes State of California public schools (K–12), community colleges and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is subject to revision at any time. Please check DSA's website for currently effective IRs. Only IRs listed on the webpage at www.dgs.ca.gov/dsa/publications at the time of project application submittal to DSA are considered applicable.